THE MAN WHO SAW 50 YEARS AHEAD

M M HASHIM

NARRATION BY

T RAMASAMI, A FRIEND OF SHRI HASHIM

Dedicated to the ever lasting memory of Thalaivar Hashim

STRUCTURE OF THE NARRATION

- Part 1: Rise and making of Shri Hashim
- Part 2: Leadership traits of Shri Hashim: Evidence narration
- Part 3: Anecdotal experience with Shri Hashim as a good man
- Part 4: Sustainable leather & footwear sector: Retelling of Shri Hashim's dream

PART 1

STORY OF KH GROUP OF COMPANIES IN TAMIL NADU

- 1947: MA Khizhar Hussain (father of MM Hashim) formed the KH group
- 1973: KH group moved into finished leather
- 1976: Shri MM Hashim takes the reign of KH Group
- 1982: KH Group moves into full shoe production
- 2025: Shri MM Hashim bids farewell to life on Earth

JOURNEY OF KH GROUP AS A DIVERSIFIED CONGLOMERATE UNDER ONE UMBRELLA: SHRI MM HASHIM

- 1968: Establishes model ETP; 1973: Starts finished leather production, 1976: MM Hashim envisions the story of KH growth and seeds the changes
- 1982: Diversifies into full shoe production, 1985: Expands into leather goods production, 1986: Establishes fashion glove production
- 1990: Embraces full scale modernisation of tannery; 3rd generation assumes roles
- 1997: Modernizes ETP, 2005: Embraces Zero Liquid Discharge
- 2003: Implements Six Sigma; 2010: 4th generation leaders step in, 2025 emerges as the most diversified conglomerate in leather sector in India

PART 2

MM HASHIM IN THE STORY OF INDIAN LEATHER INDUSTRY

- 1976: Assumes leadership of KH
- 1984: Becomes the founder chairman of Council for Leather Exports (serves 14 years in two slots)
- 1986: India International leather Fair assumes new dimensions, Metamorphosis of Fashion Show
- 1992: Indian Leather 2010 forecast is made, Seed for Leather Technology Mission is sown
- 1996: LTM is launched, the Tannery sector in TN faces a crisis, AISHTMA under MMH leads in pollution abatement

VARIOUS LEADERSHIP INPUTS TO LEATHER SECTOR FROM SHRI HASHIM AT VARIOUS TIMES

Regulations compliance: Pollution control, implementing ZLD, Eco ban norms, Management of RO rejects, Secured landfill arrangements, social forestry, development of HRTS for mitigating TDS problem

Proactive Best Measures: Liaison with PETA, Occupational safety and health, Capacity building through institutions, ILIFO, CEMCOT, etc. ISO certification CETP, ILDP, NLDP, related activities, support of Leather Technology Mission

Policy advocacy: Export Incentives, interest subvention, Modernization of CETPs; sustainability, Import-Export Trade policies

He looked beyond self self-interests of his company and thought about the planned development of the leather sector in India

STORY OF INDIAN LEATHER INDUSTRY GROWING THE WAY MM HASHIM WOULD HAVE LIKED

UNIT VALUE REALIZATION OF INDIAN LEATHER IN 1992 WAS 0.5. QUADRUPLING THE VALUE BY 2010 WAS TARGETED

Export US $ 1618 million

1992

- The leather sector undertakes a technology forecast. The Indian Leather 2010 forecast was made. LTM was conceived

Export US $ 2379 million

1996

- Leather Technology Mission was launched and completed in 2001

Export US $ 2379 million

QUADRUPLING UNIT VALUE BY 2010 WAS REALIZED

2010

- Integrated Leather Development Program concluded

Export US $ 4156 million

2014

Realizes mission goals

TANNERY SECTOR IN TN - REALIZED ENVIRONMENTAL PREPAREDNESS: THANKS TO LEADERSHIP OF SHRI HASHIM

1996, Supreme Court orders closure of 400 tanneries in TN affecting 250,000 jobs, Rs 6000 crores turn over and Rs.3500 crores export. Tanneries in TN embrace Do Ecology Solutions and lead the leather world in 20 years

1997

- Tanneries in TN abates pollution through integrated measures, CETPs emerge

All tanneries embrace Do Ecology solutions

2004

- TN leather sector embraces Zero Liquid Discharge

ZLD becomes industrial practice

2010

- Modernizes CETPs and become global leader in pollution mitigation

Sustainability norms embraced

2020

Going Green initiatives launched

ANECODTAL EXPERIENCE SHARING

SHRI MM HASHIM WITH T RAMASAMI

PART 3

HASHIM AS A GOOD MAN

PARALLEL JOURNEYS OF TWO PROFESSIONAL LIVES

year	Shri MM Hashim	T. Ramasami
1976	Assumes KH leadership	Receives PhD from Leeds University
1984	Assumes Chairmanship of CLE	Returns from abroad. Joins CLRI
1996	Leads Do Ecology Solutions project as President of AISHTMA	Assumes Directorship of CLRI, develops technology plan for TN
2006	Leads implementation of Zero Liquid Discharge in TN tanneries & modernization of CETPs	Becomes Secretary DST, GoI, Presents social benefits of ZLD to GoI
2025	Champions for sustainable footwear and leather sector & salt recovery for reuse	Continues to share dream of Shri MM Hashim for the sector

REAL LIFE STORY OF PRACTICE OF DO ECOLOGY SOLUTIONS IN TANNERY SECTOR IN TAMILNADU

A STORY RETOLD

STORY LINE OF DO ECOLOGY SOLUTIONS FOR TANNERIES IN TN

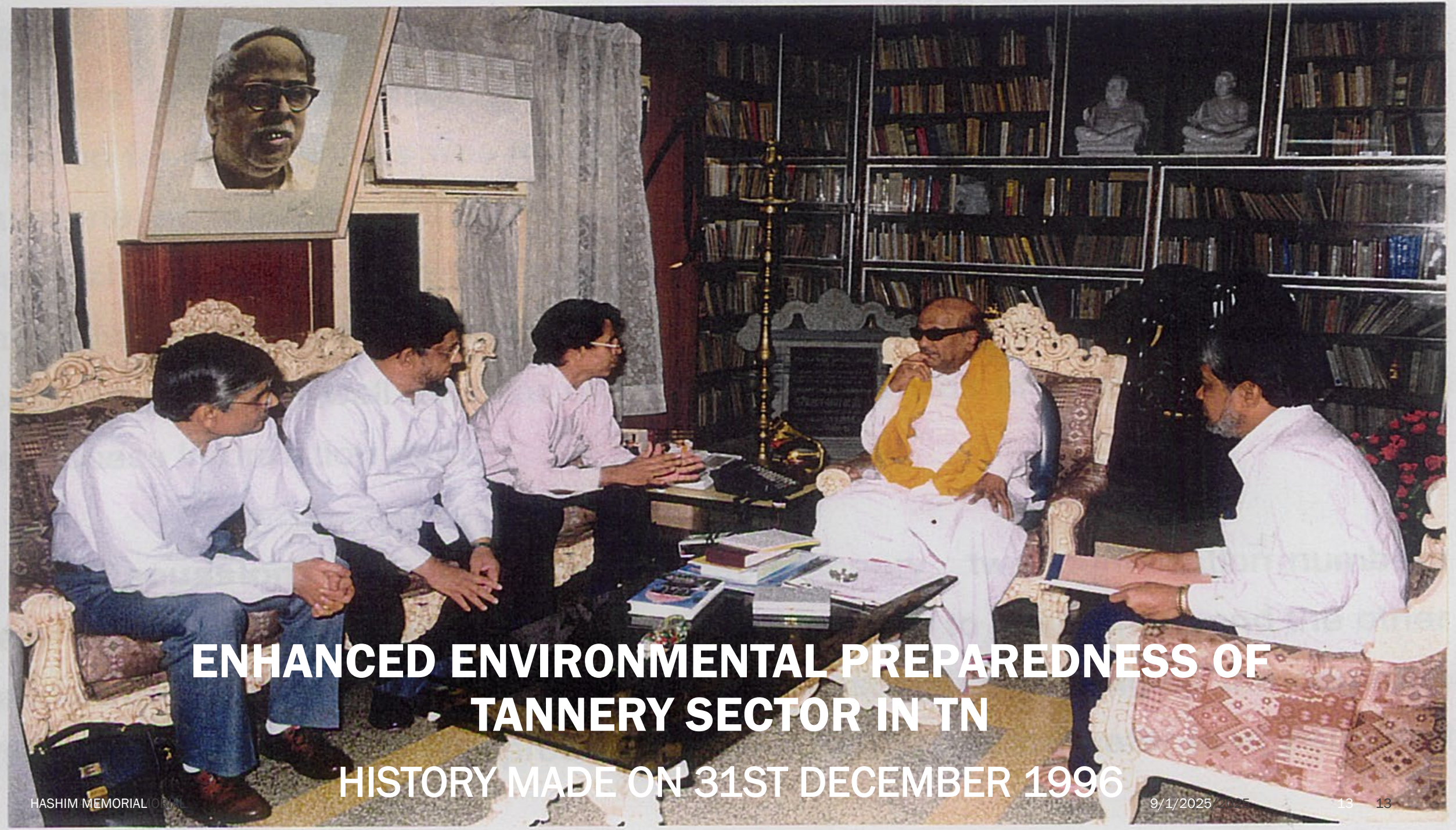
April 1996: Supreme Court orders the closure of about 400 tanneries in Tamil Nadu on account of inadequate preparedness of environmental safeguards against pollution. Meeting of tanners and Director CLRI takes place in the AI Delhi-Chennai flight. Strategy for redressing the challenge is drawn

May-June 1996: Shri MM Hashim and Director CLRI meet and technology plan is drawn; Shri Hashim mobilizes the tanners, Director CLRI earns the support of the Government of Tamil Nadu

July-August 1996: CLRI elicits the cooperation of NEERI, AISHTMA, enrols the tanneries and CETP managements for the implementation of Do Ecology solutions in a period of nine months. Shri Hashim and Shri Rafeeque Ahmed lead

Sep-October 1996: Formalization of action plan and actions by the Government of Tamil Nadu to provide nine months time for CSIR laboratories for implementation of Do Ecology Solutions realised

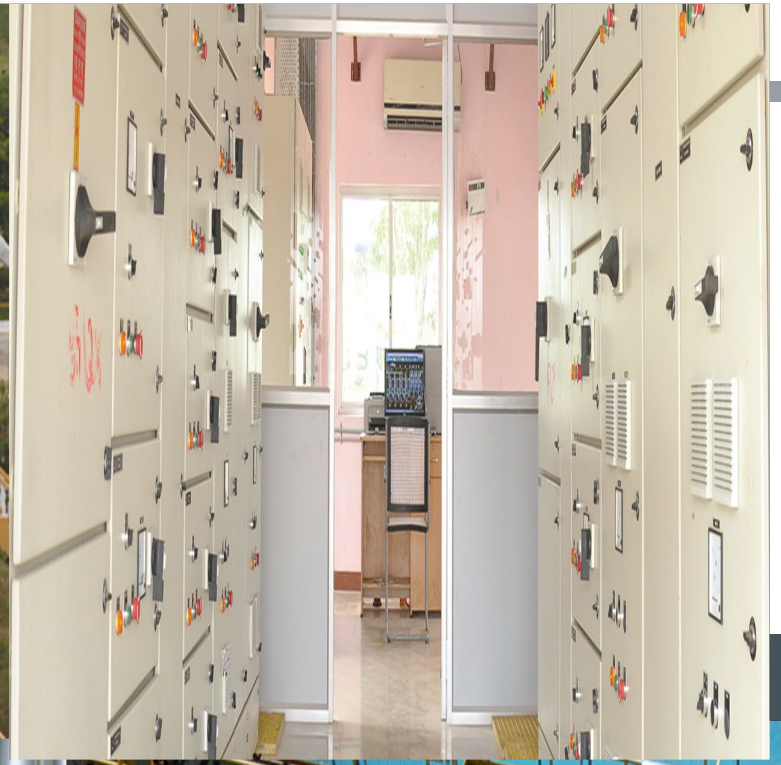
Nov-December 1996: AISHTMA-CLRI-NEERI agreement is finalised, starting January 1 1997 with Shri MM Hashim as the industrial representative. Chief Minister of Tamil Nadu blesses the cooperation

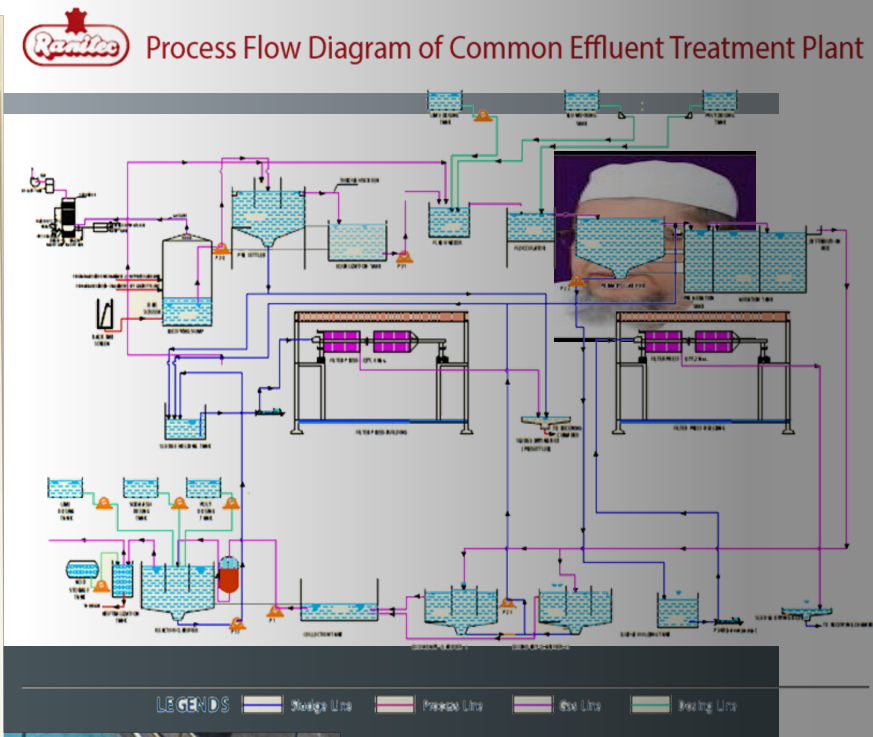


ENHANCED ENVIRONMENTAL PREPAREDNESS OF TANNERY SECTOR IN TN

HISTORY MADE ON 31ST DECEMBER 1996

ZERO LIQUID DISCHARGE SYSTEM IN RANIPET





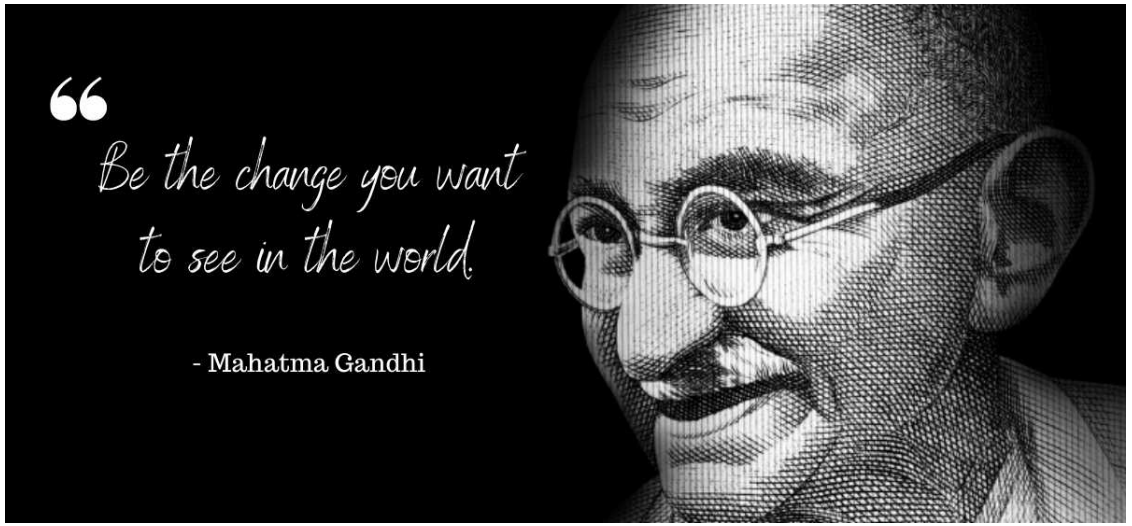
INTER-COMPARISON OF ENVIRONMENTAL PERFORMANCE OF TANNERY SECTOR

Parameter	World	Rest of India	Tamil Nadu
Annual Production in billion Sq ft	20	~1	~1
Volume of water drawn from resources, MLD/ ton of leather	$42M^3$	$50M^3$	$6\text{-}7M^3$ 80% Water from effluent is recovered and reused
Waste Discharge model	Discharge into domestic sewer	Discharge into public facilities	Zero Liquid Discharge into public land & salt recovery praticed.TN sector sets global best practice for tannery
Compliance to BOD, CoD norms	30 BoD, 150 CoD norms	30 BoD, 150 CoD norms	
Compliance to Cr discharge norms	Meets National norms	Meets National norms	
Cost of compliance/ M^3	US$ 4.2 (Italy)* US$ 2(France)*	₹ 50-75 US$ 0.9	₹200-250(minus ZLD) ₹450-500(for ZLD)

* 2000 costs UNIDO report

WHAT SHRI HASHIM FORESAW IN 1990s?

- In the Global footwear trade, leather would emerge as a niche but not a merchandise product
- India should focus on niche product segments and mid and high value market segments
- Synthetics would give run for money for low-value and high-volume footwear
- Indian manufacturing could focus on branded product segments and embrace all elements of sustainability, namely bearable on the planet, viable for industrial units and equitable for society
- Observe all best global practices and be Second to None



SHRI HASHIM NOT ONLY FORESAW BUT ALSO EMBRACED CHANGES THAT HE WANTED TO SEE IN THE SECTOR AND LIFE AS A WHOLE

The very first ETP based on CLRI technology was established as a demonstration plant in the 1960s. He spoke of tannery modernization, ZLD implementation, Full Shoe production, the Sustainable footwear sector and embraced changes first. He invested in business and philanthropy, and all that leads to social harmony. In some sense, he strived to follow the advice of Gandhi in “being the change he wanted to see in the world”

CASE OF LEATHER AND FOOTWEAR MANUFACTURING IN INDIA

- The leather and footwear industry in India has played a significant role in contributions to a) women employment, b) social equity dimensions of sustainability and c) creation of employment at low capital costs
- Some segments of the leather processing industry in India were challenged on account of inadequate preparedness to comply with environmental regulations in the 1990s. Currently, it is one sector that has made zero liquid discharge a commercial reality and is committed to enhancing its compliance to the ecological norms for sustainability in all practical manner in India
- Footwear manufacturing offers scope to connect manpower to the purchasing power of the world, and hence it could lead effectively to an increase in per capita GDP in line with the goals of Viksit Bharat. Hence, footwear manufacturing in India is not just a commercial but a social equity activity

FOOTWEAR AS A CONSUMER PRODUCT OF VALUE AND LEATHER AS A KEY BUT NOT EXCLUSIVE MATERIAL OF CHOICE

Global footwear demand in the year 2024 was 16 billion pairs demanding a material need of about 40 billion sq.Ft

With a global supply of only 20 billion sq ft/ year, leather cannot play the role of exclusive material of choice for footwear. Synthetic and man-made materials fill demand-supply gaps, and more than 70% of footwear manufactured in the world bears non-leather materials. It is a reality of demand-supply gaps

Since footwear demand of the world is only likely to increase further, sustainability of footwear as an end product of consumer value is becoming need of the time.

Leather and footwear sector could focus on sustainability elements of their industrial manufacturing

CASE OF SUSTAINABILITY OF LEATHER AND FOOTWEAR INDUSTRIES

IN THE CHANGING GLOBAL SCENARIO BY 2070

EMPHASIS IN LEATHER PROCESSING AND FOOTWEAR MANUFACTURING ACTIVITIES IN THE WORLD SINCE 1920s

1920s	1970s	2020	2070
Hides and skins obtained from slaughtered or dead animals were processed into leather as by products of meat sector	Leather processing activity faced economic and ecological pressure in Europe. Migration of industry to Asia started	Asia and South America emerged the manufacturing hub for leather and footwear due to cost leadership	Hides and skins supply in the world is likely to decrease or at best remain stagnant
Global Demand for Footwear was low and it remained a major product of use for leather with about 80% utilization	Global demand for footwear started to climb. Leather share in footwear declined. Non leather materials filled gaps. Leather linked to fashion	Global demand for footwear has far exceeded available supply of leather. Non leather materials command low priced segments of footwear	Global demand for footwear would far exceed leather supply. Leather footwear might become a niche product segment. Non leather footwear would dominate
Trading of raw materials was dominant. Leather making was primarily in Europe	Policy driven changes promoted indigenous leather making. Asia emerged as leader	Ecological and sustainability concerns raise questions on leather and footwear sector	Sustainable manufacturing will remain the most critical priority globally

POST 2025 TRENDS IN FOOTWEAR SECTOR IN THE WORLD

Would be dominated by market and price segmentation of leather and non-leather-based materials for footwear

The low-cost footwear segment would be dominated by synthetics. The leather content in footwear would decrease. Leather-only footwear would serve niche segments only by 2040

EMERGING NEEDS OF RESEARCH AND DEVELOPMENT FOR FOOTWEAR SECTOR

Carbon footprint, total life cycle analysis and sustainability indices of footwear as products and adoption of circular economic principles would become paramount. The leather/non-leather divide might gain only academic and not economic value

CHANGING EXTERNAL FORCES ON GLOBAL LEATHER AND FOOTWEAR SECTOR

Europe dominated

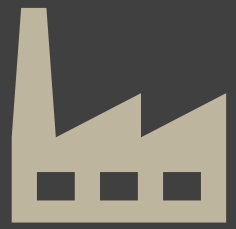
Asia dominates

Who?

1920-1970	• Access to material supply • Access to technologies
1970-2020	• Environmental pressures • Access to low cost labour
2020-2070	• Competition shakeout from synthetics • Carbon footprint and total life cycle analysis

MINIMIZING CARBON FOOTPRINT IN LEATHER AND FOOTWEAR MANUFACTURING: ISSUES INVOLVED

Optimizing carbon footprint of material mobility



Improving material and atom economy of the manufacturing

Circular economy and total life cycle benefits relative to synthetics

INDIAN LEATHER AND FOOTWEAR INDUSTRY

A SCENARIO ANALYSIS FOR OPTIMIZATION OF CARBON FOOTPRINT AND SUSTAINABILITY

STORY OF INDIAN LEATHER AND FOOTWEAR MANUFACTURING

Shri Hashim conveyed the spirit of focus on sustainability of leather and footwear sector

1920–1970

Supplied raw materials and intermediates to Europe: Foreign exchange earning for the country

1970–2020

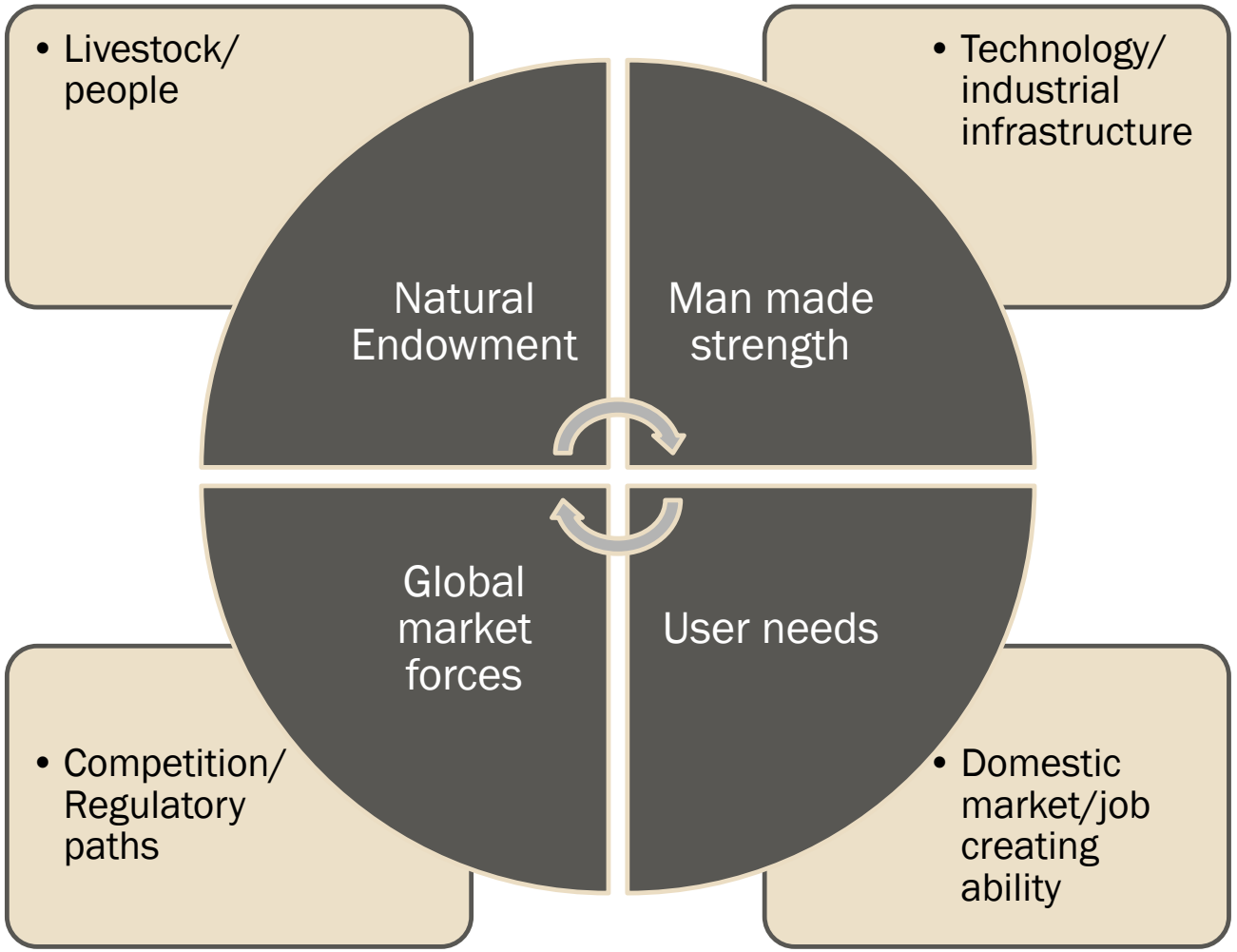
Became a reliable global source for finished products and adopted advanced technologies: Technology Enabled development

2020–2070

Should India look inward and show case benchmarks for carbon footprint & sustainability?: Sustainability leadership focus

Shri Hashim laid the foundation of the tannery sector in India through his own personal examples

SHRI HASHIM SAW STRENGTH FOR INDIA IN FOOTWEAR MANUFACTURING HE COMBINED ACTS OF PHILANTHROPY WITH INDUSTRIAL MANUFACTURING



SUPPLY CHAIN MOVEMENT: CARBON FOOTPRINT

LIVESTOCK SUPPLY & MEAT SECTOR ARE GLOBAL. RAW HIDES & SKINS SUPPLY WORLDWIDE

LEATHER & FOOTWEAR PRODUCTION IS IN GLOBAL SOUTH MOSTLY

SHOE AND FASHION ACCESSORY USE IS MOSTLY IN GLOBAL NORTH

Could India lead the leather world through a sustainability move?

CURRENT CARBON FOOTPRINT OF SECTORAL SEGMENTS OF LEATHER AND FOOTWEAR

CARBON FOOTPRINT OF MEAT SECTOR IS ESTIMATED AT 99.5 KG OF CO_2 EQUIVALENT PER KG OF MEAT

CARBON FOOTPRINT OF LEATHER PROCESSING IS ESTIMATED AT 17 KG PER SQ M OF LEATHER.

CORBON FOOTPRINT OF SHOE MAKING IS 2.9-3.2 KG PER PAIR

Lowering Carbon footprint in leather and footwear to near zero is the goal ahead

MATERIAL EFFICIENCY OF CURRENT PROCESSING METHODS

RAW HIDES TO LEATHER CONVERSION MATERIAL EFFICIENCY IS ~60%

LEATHER TO SHOE CONVERSION MATERIAL EFFICIENCY IS ABOUT 50%

IN A LEATHER SHOE OTHER MATERIAL SHARE BY VOLUME IS 50%

Zero-waste processing and total life cycle analysis are the way forward

ANATOMY OF LEATHER MAKING: SCOPE FOR REVISIT!

Raw hides and skin	• Pelt • Trimmings, Hair, fleshing, lime/ sulfide etc
Pelt	• Leather intermediate • Shaving, trimming, splits
Leather	• Finished leather • Buffing dust. Shaving
Process wastes	• Liquid Effluents • Solid waste • Gaseous emissions

Quantum of wastes generated in leather processing: 12 M^3 - 30-35M^3 of wastewater, 2 Kg of solid wastes per Sq M of leather and sludge per kg of hides processed; Energy used per Sq M of finished leather is 15 KWh

WASTE IN LEATHER PROCESSING UNITS: SCOPE FOR NEW MANAGEMENT THROUGH CIRCULAR ECONOMY PRINCIPLE

Liquid effluents	• Volume of water used per kg of leather • BoD/ CoD/ etc • Total Dissolved Solids, Cr etc
Solid wastes	• Weight of solid wastes produced per kg of leather • In homogeneity of sold waste generated
Sludge from ETPs	• Organic sludge • Inorganic sludge • Potentially hazardous wastes
Treated waste waters	• Level of Recovery for reuse • Management of Total Dissolved Solids • Level of manner of reject management

SHRI HASHIM PRACTISED ELEMENTS OF CIRCULAR ECONOMY IN HIS CONGLOMERATE & CHAMPIONED FOR BEST PRACTICES IN THE SECTOR

CONVERTING PROCESS WASTES INTO PRODUCTS OF VALUE HAS BEEN HIS FORTE

ANATOMY OF INDIAN FOOTWEAR INDUSTRY

A SCENARIO SETTING

STORY OF FOOTWEAR MANUFACTURING IN INDIA

- Estimated annual production is 2065 million pairs; (leather footwear - 909 million pairs, leather shoe uppers - 100 million pairs and non-leather footwear - 1056 million pairs).
- India exports about 115 million pairs and meets about 2% of the global market with a value of US $135 billion
- 95% of production meets the domestic market.
- The Domestic Footwear Industry in India is valued at approximately US$3200 million, projected growth at 11 – 12% p.a.
- Organised retail is 25% and growing fast at 35-40% pa
  - Footwear retailing constitutes about 9% of the total consumer market.
  - Men’s footwear is about 50% of the market
  - Branded footwear (including store labels) is about 50% of the market, driven by men’s footwear largely
  - Ladies and kids’ footwear, Sports Footwear also has vast potential in the domestic market

STRUCTURE OF INDIAN FOOTWEAR MANUFACTURING IN 2025

Organized and mechanized sector

- Capacity to manufacture is limited in leather footwear sector
- Non leather footwear manufacturing units is growing under FDIs
- Largely export focused and supplier to international brands
- Consolidation is ongoing, Women employment and equity element of sustainability is high

Informal and house hold sector

- Unstructured manufacturing in artisanal and small scale production for meeting the large domestic demands of both leather and synthetic footwear
- Low cost production with quality deficits that demand correction
- Domestic market is the focus
- Livelihood craft needs to embrace industrial manufacturing benefits to people

INTEGRATED APPROACH TO ORGANIZE LEATHER AND FOOTWEAR INDUSTRY IN INDIA FOR HARNESSING KNOWLEDGE TO NATIONAL BENEFITS

SEEMS THE WAY FORWARD

STRENGTHENING SYSTEMS OF MANUFCATURING FOR DOMESTIC MARKET

- Currently, footwear production in India is estimated at about 2.1 billion pairs, with an export share of only 115 million pairs a year
- With rising standards of living in India, annual domestic demand is likely to increase to 2.9 billion pairs within 5 years.
- India currently shares only 2% of the global market on volume terms. There may be scope to increase its global share to at least 10% of the market in the next seven years.
- Indian footwear manufacturing capacity could be doubled through an organised mission-mode Program

FOOTWEAR TECHNOLOGY MISSION: IN TRIBUTE TO SHRI MM HASHIM

IN TWO PARTS

TECHNOLOGY UPGRADATION IN DECENTRALIZED PRODUCTION

CAPACITY EXPANSION IN ORGANIZED SECTOR

Footwear Technology Mission

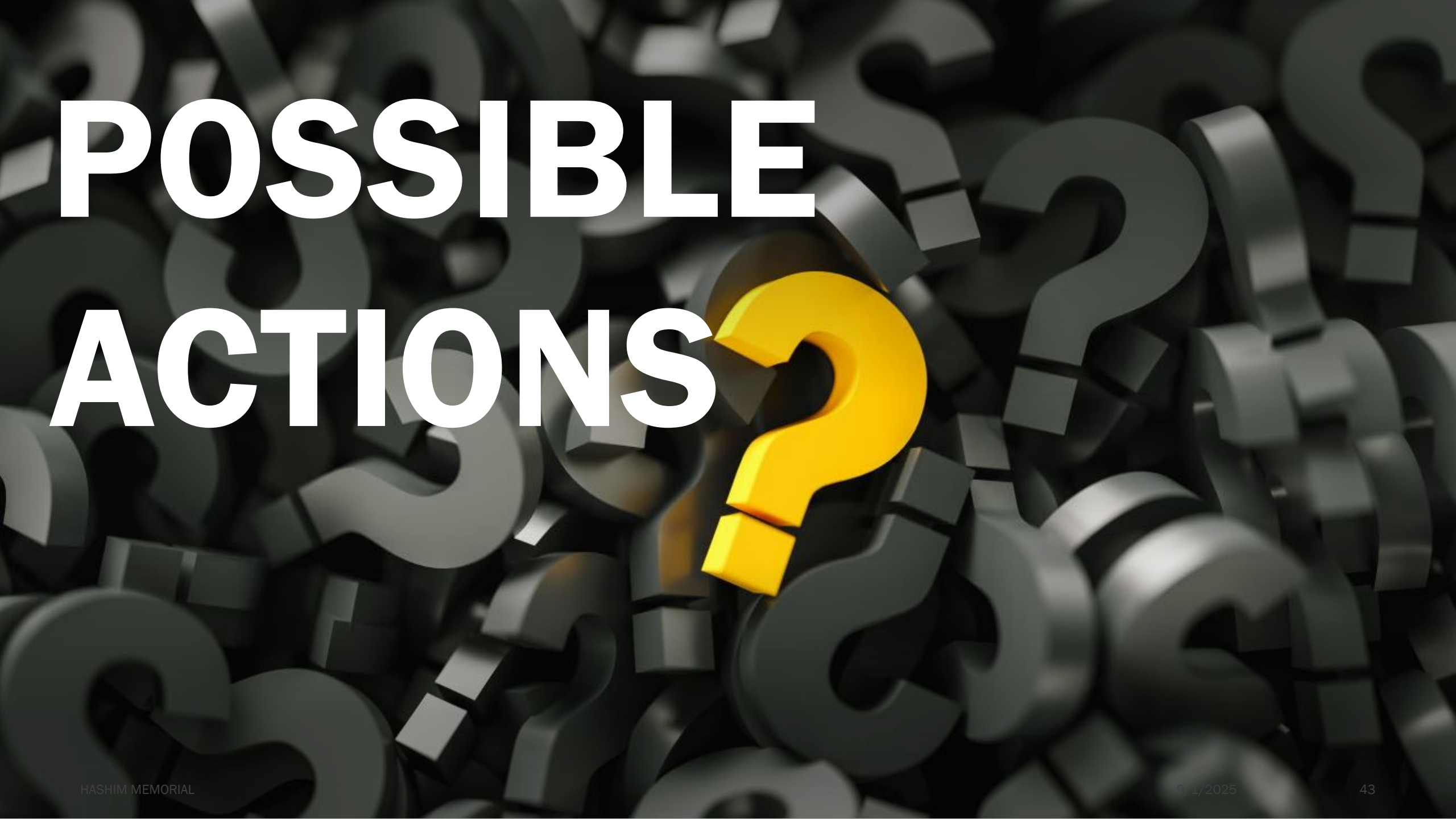
Technology upgradation in decentralized sector

Capacity Expansion in organized sector

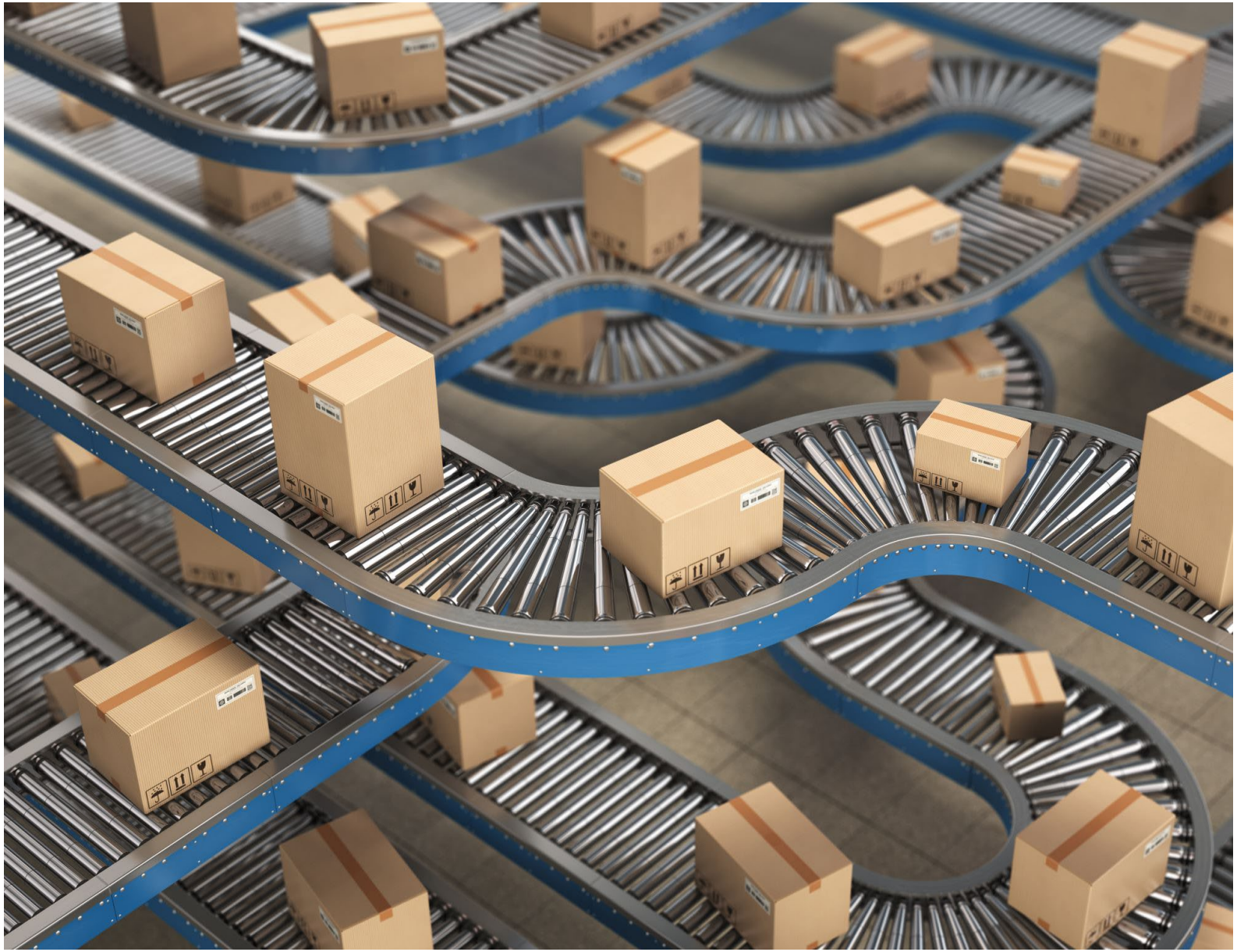
Leather based

Synthetics based

POSSIBLE ACTIONS



- Arrange a conclave of all stakeholders of the leather and footwear sector with provisions for attracting Foreign Direct Investments into footwear manufacturing in India, with a target of 5 billion by 2032
- Prepare a strategy paper and road map targeting 5 billion production, 2 million additional jobs, a combined turnover of 100 billion, and export of 2 billion footwear
- Mount a footwear manufacturing mission
- Interconnect competencies and resources for rendering the leather and footwear manufacturing reach gold standards of sustainability
- Make it an industrial technology mission



ANTHEM ON SHRI HASHIM WHO SAW 50 YEARS AHEAD

East India company set its foot in Tamil Nadu

And rooted themselves through the feud of Arcot

UK spread her wings of power all across Nation

Traded on raw hides from undivided India

Through the port of the then Madras

The Nation at its infancy set its goal and acted on

Converting her natural wealth into value for people

Through addition of technology and capital

Tanners of Tamil Nadu excelled and made gains

Until they were punished by the Apex court for pollution

They acted and wrote a new history in world geography

By embracing "Do Ecology technology" solutions

While searching for sustainable path with zero carbon footprint

In leather and footwear making on the planet Earth

Along the dreams of Hashim who saw fifty full years ahead

Recap

The KH group was formed in 1947

Shri Hashim became chairman in 1976

The tannery sector in TN became compliant in 1997

If the National Footwear Technology mission were to become possible in 2026, it would be 50-year vision of a man whose breadth was footwear.

THANK YOU SHRI HASHIM FOR LEADING US INTO SUSTAINABLE FUTURE

THANK YOU ALL FOR SHARING TIME AND MIND SPACE