



ILTA  
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# JILTA

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# Our Activities

- An Association with over 600 members from India and abroad working since last 68 years for the growth and development of Leather and its allied industries.
- Organize seminars, symposiums, workshops in order to share information, knowledge & latest development and interactions for the benefit of all concerned.
- Organize Human Resource Development programmes on regular basis.
- Publish for over 60 years, a technical monthly journal namely "Journal of Indian Leather Technologists' Association" (JILTA), widely circulated through out the World.
- Publish books for the benefit of the students at various levels of study, for the Research Scholar and the Industry.
- Work as interface between Industry and the Government.
- Assist Planning Commission, various Government Institutions, Ministry and autonomous bodies to formulate appropriate policies for the growth of the Industry.
- Assist small and tiny leather goods manufacturers in marketing their products by organizing LEXPOs in Kolkata and different parts of India.

## Indian Leather Technologists' Association

[A Member Society of International Union of Leather Technologists' and Chemists Societies (IULTCS)]

"Sanjoy Bhavan", 3rd Floor, 44, Shanti Pally, Kolkata- 700 107, WB, India  
Phone : 91-33-2441-3429 / 3459 ✳ WhatsApp +91 94325 53949  
E-mail : [admin@iltaonleather.org](mailto:admin@iltaonleather.org); [mailtoilta@rediffmail.com](mailto:mailtoilta@rediffmail.com)  
Website : [www.iltaonleather.org](http://www.iltaonleather.org)



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**Hony. Editor :** Dr. Goutam Mukherjee

**Communications to Editor through E-mail :**

admin@iltaonleather.org; jiltaeditor@gmail.com

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Indian Leather Technologists' Association

'Sanjoy Bhavan', 3rd floor, 44, Shanti Pally

Kasba, Kolkata - 700 107, WB, India

Phone : 91-33-2441-3429

91-33-2441-3459

E-mail : admin@iltaonleather.org;  
mailto:ilta@rediffmail.com

Web site : [www.iltaonleather.org](http://www.iltaonleather.org)

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# JOURNAL OF INDIAN LEATHER TECHNOLOGISTS' ASSOCIATION (JILTA)

Indian Leather Technologists' Association is a premier organisation of its kind in India was established in 1950 by Late Prof. B.M.Das. It is a Member Society of International Union of Leather Technologists & Chemists Societies (IULTCS).

The Journal of Indian Leather Technologists' Association (JILTA) is a monthly publication which encapsulates latest state of the art in processing technology of leather and its products, commerce and economics, research & development, news & views of the industry etc. It reaches to the Leather / Footwear Technologists and the decision makers all over the country and overseas.

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3rd floor, 44, Shanti Pally, Kasba, Kolkata – 700 107

Phone : 91-33-24413429 / 91-33-24413459

E-mail : admin@iltaonleather.org / mailtoilta@rediffmail.com / iltaonleather1950@gmail.com

Website : [www.iltaonleather.org](http://www.iltaonleather.org)



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# Attention Management



One of the stylish perceptions of what true productivity means in the 21<sup>st</sup> century dates back to 1890. In his book, *The Principles of Psychology*, Vol. 1, William James wrote a simple statement that's packed with meaning "My experience is what I agree to attend to." Our attention determines the guests we have and the guests we have to determine the life we can live. It can be said in another way we must control our attention to control our lives moment, in a world where so numerous guests are blended together where we can work from home (or a train or an aeroplane or sand), watch our kiddies on a nurse-cam from work and distraction is always just a thumb-swipe down has that ever been further true ? To be constantly productive and manage stress more, we must strengthen our skills in attention operation.

Attention operation is the practice of controlling distractions, being present at the moment, finding inflow, and maximizing focus so that we can unleash our genius. It's about being purposeful rather than reactive. It's the capability to fete when our attention is being stolen or has the implicit to be stolen and to rather keep it concentrated on the conditioning we choose. Rather than allowing distractions to ail us, we choose where to direct our attention at any given moment, grounded on an understanding of our precedences and pretentions.

Better attention operation leads to bettered productivity, but it's about much further than checking effects off a to-do list. The ultimate result is the capability to produce a life of choice, around effects that are important to us. It's further than just exercising focus. It's about taking back control over our time and your precedences. The leaders we work with always tell us, "I believe in the way of your mentor and guiding my platoon members. The most important thing I can do as a leader is to support them and encourage their growth. This is how I make difference, and it's what gives me satisfaction at work." But latterly in the day of discussion, we hear how their days go, "I

spend a big knob of my time on dispatch and putting out fires. I started the time with a coaching plan for my platoon, but it's fallen by the wayside amid everything differently that's going on. My one-on-bones with platoon members won't be as frequent as I would like, and the content is too important 'trees' and not enough 'timber'. Indeed if we see you as a passionate advocate for coaching and mentoring, we'd not have the impact, we'd like if your conduct and guests don't reflect these values. As James said, our experience is what we attend to and our guests come into our life. So, if our attention continues getting diverted, and dispatch, meetings, and "firefighting" consume our days, enough soon days or months will have gone in and our life becomes full of the "guests" we no way really intended to have. So why don't we just have the guests we want to have, and produce the lives we most want to lead ? Why does this painful gulf live between the characters we aspire to and how you spend your time ?

The fact that we're allowing this content in the 19<sup>th</sup> century shows that we've long scuffled with the conflict between our pretensions and values and the lure of distractions. But, of course, we live in a world with numerous further distractions than was in the 1890s. When the content was published as *The Principles of Psychology*, the telephone was brand-new moment, we've internet-connected phones and other biases that are always with us, delivering a volume of information and communication you couldn't imagined. There's a lot of further competition for our attention. Let us go back to our mentoring and guiding illustration. We could start each day intending to concentrate on developing our platoon.

But those intentions can snappily get swept down in the rush of demands that characterize our workdays. In this frenzied work terrain, negotiating the most meaningful effects to us doesn't just be. We cannot leave it to chance. Our busy terrain presents choice everyday about what we will attend to – and

what our guests will be. This is where Attention operation offers a result. A deliberate approach puts us back in control rehearsing attention operations means fighting back against distractions and creating openings throughout our day to support our precedences.

First, control external factors – Control of our technology. Flashback, it's there to serve us, not the other way around! Decide to take control by turning off dispatch and “push” announcements, which are specifically designed to steal our attention. This will allow us to engage in further stretches of focused work on tasks and conditioning that we choose. As frequently as possible and especially when we're working, keep our phone silent and out of sight.

Control our terrain, set boundaries with others, especially in an open-office setting. For illustration, use headphones or put up a “do not disturb” subscription when we need to focus. However, try going to a different parts of our office, or indeed another bottom of our structure if that doesn't work. However, we can try teaming up with associates to designate a certain time of day, or day of we are, if the effects are really bad.

But, then lies an overlooked verity, our productivity suffers not just because we're detracted by outside interruptions, but also because our smarts, frazzled by moment's frantic workplaces, come to a source of distraction in and of themselves. For illustration, the problem isn't just that a dispatch interrupts our work. This is where Attention Management offers a solution. A deliberate approach puts us back in control. Practising attention management means fighting back against distractions and creating opportunities throughout our day to support our priorities. First, control external factors :

**Control our technology.** Remember, it is there to serve us, not the other way around! Decide to take control by turning off email and “push” notifications, which are specifically designed to steal our attention. This will allow us to engage in more stretches of focused work on tasks and activities that we choose. As often as possible and especially when we are working, keep our phone silent and out of sight.

**Control our environment.** Set boundaries with others, especially in an open-office setting. For example, use headphones or put up a “do not disturb” sign when we need to focus. If

that does not work, try going to a different part of our office, or even another floor of our building. If things are really bad, we can try teaming up with colleagues to designate a certain time of day, or day of we are, a “no distractions” day for everyone to do heads-down work.

But, here lies an overlooked truth : Our productivity suffers not just because we are distracted by outside interruptions, but also because our brains, frazzled by today's frantic workplaces, become a source of distraction in and of themselves. For example, the problem is not just that an email interrupts our work. It is also the fact that being tethered to our email inbox conditions us to expect an interruption every few minutes, which chips away at your attention span. You then become so afraid of forgetting to do some small task – like sending an email or forwarding a document – that you start to do everything as soon as you have thought of it; but then you end up getting sucked into your overflowing inbox before you know it. Moreover, knowing that you have a catalogue of all the world's knowledge readily available – in terms of the internet on our smartphone – makes it difficult to be comfortable in a state of “I do not know,” and hard to avoid the distracting temptation to “find out now.”

So, we must also learn to control internal factors.

**Control our behaviour :** Use those times when our technology is tamed and our do-not-disturb sign is up to get used to single-tasking : open only one window on your computer screen, and give your full attention to one task until it is complete, or until a designated stopping point. Take breaks throughout the day when we step away from our computer. Try to “unplug” completely (no technology) for at least an hour or more, as often as we can. Let us try it for 15-20 minutes at first; then build up to an hour or even 90 minutes.

**Control our thoughts :** This is the hardest nut to crack for many of us, which is why we have left it to last. Minds are made to wander. Practice noticing when your mind is veering off in its direction, and gently guide your focus back to where you want it. If you think of some important small task while doing focused work, got it down on a notepad and return to it later. Do the same with information you want to look up online.



Practicing attention management will not eliminate distractions from our day. But as we start to recognize when we become distracted, and build our “attention muscle” through habits like those above, we will start to reclaim our life and devote more of our self to what is really important to us. Do not allow distraction to derail our aspirations and intentions. Instead, control your attention to control your life.

Here, we would like to take reverend noted from Swami Sarvapriyananda, a revered monk of Ramakrishna Mission and the present Minister of the Vedanta Society of New York.

In this post, we would share insights from his talk on Shraddha. Shraddha means –

**1. Self-confidence** – Swami Vivekananda said, “He who does not believe in himself/herself is an atheist. Never say I cannot, always tell yourself I can.”

- **Self-efficacy** – Believe “I can do it.”
- **Self-responsibility** –
  - ❖ **Achieving my desire** is my responsibility.
  - ❖ **Quality of my work** is my responsibility.
  - ❖ **Quality of my communication** is my responsibility.
  - ❖ **Quality of my behaviour** is my responsibility.
  - ❖ My **time** is my responsibility.
  - ❖ My **values** are my responsibility.
  - ❖ My **happiness** is my responsibility.
- **Self-direction** – Swami Vivekananda said, “Have a very high goal in life. Follow your own highest ideal.”

**2. 3 H – Head, Heart, and Hand**

- **Head**

To study follow the **SQRRR** methos :

- ❖ **Survey** – Glance at the topics and sub-topics in the chapter
- ❖ **Questions** – Look at the questions. As you read, seek the answers to your questions. It helps us retain better as it satisfies our curiosity
- ❖ **Read – Active reading** – Keep a pen or pencil, mark important points, and write notes
- ❖ **Recite** – Mentally recite the main points after reading 1 or 2 pages
- ❖ **Review / Revise** – Close the page and recall what you’ve studied

- **Heart** – Feelings for family, friends, and community
- **Hand** – Ability to work and serve
- **Technique of development – Kaizen – quality circle and incremental improvement.** Make small improvements every single day in your life. We can be a little better as we operate less than our maximum capacity. Start with the smallest, and practice the easiest. This will avoid your mind from sabotaging you.

**3. Concentration** – Swami Vivekananda said, “The difference between an ordinary person and a great person lies in the degree of concentration.”

How to develop concentration ? Swami Vivekananda says, “Do whatever you are doing with the fullest possible attention.” Sharpen your mind. Do not multitask.

*Goutam Mukherjee*  
**Dr. Goutam Mukherjee**  
Hony. Editor, JILTA



ILTA  
Since 1950

Leather Fraternity 72 years of service to the International

Tell me and I forget, teach  
me and I may remember,  
involve me and I learn

Stahl Campus<sup>®</sup>



As an active proponent of responsible chemistry, Stahl has established the Stahl Campus<sup>®</sup> training institute in its Center of Excellence for sustainable leather technologies in Kanpur. With our Stahl Campus<sup>®</sup> Leather Modules, we can offer training and information, such as responsible chemistry and sustainability in leather production. We believe that in this way, we facilitate transparency that inevitably will lead to a better supply chain with responsible chemistry.

Our approach is modular, making it easy to tailor learning programs to specific needs. Stahl Campus<sup>®</sup> has at its core the drive to unlock human potential and make that new

competitive advantage. By providing the possibility of sharing knowledge, we embrace our role in the dynamic leather and chemical industry. Stahl Campus<sup>®</sup> is a great opportunity to strengthen skills and capabilities in order to make working methods more efficient by sharing experiences and studying products and procedures.

If you're interested to receive more information on Stahl Campus<sup>®</sup>, please contact Prasanna Maduri ([Prasanna.maduri@stahl.com](mailto:Prasanna.maduri@stahl.com)).

If it can be imagined, it can be created.







Stahl

## We imagine sustainable pickle-free leather tanning

If it can be imagined,  
it can be created.

Tanners benefit from higher process efficiency, reduced water, chemical and salt consumption and a reduced environmental impact. This makes it possible for tanners to have an efficient process that is also sustainable and yields ecofriendly premium leathers.

High-quality leather no longer forces a choice between responsible processes and efficiency. The main benefits of a pickle-free system that avoids salt addition during pickling are:

- Reduction of water consumption by up to 40%
- Shorter process time on cow, sheep and goat
- Cleaner effluent, TDS reduction by up to 60%



## STAHL TO STRENGTHEN AND DIVERSIFY SPECIALTY COATINGS ACTIVITY WITH ACQUISITION OF ICP INDUSTRIAL SOLUTIONS GROUP

Stahl, a provider of coatings technologies headquartered in the Netherlands, has agreed to acquire ICP Industrial Solutions Group (ISG), a leader in high-performance packaging coatings. This transaction will strengthen Stahl's position as the global leader in the field of specialty coatings for flexible materials.

ISG, a division of Innovative Chemical Products (the ICP Group), offers a comprehensive portfolio of high-performance coatings used primarily in packaging and labeling applications, notably in the resilient food and pharmaceutical sectors. ISG is mostly present in North America (close to 70% of sales), where it is a recognized technical leader.



ISG's coating technologies support the transition to more sustainable packaging which will be enhanced by Stahl's environmental, social and governance (ESG) leadership position. ISG is expected to report 2022 sales of approximately USD 140 million, and the acquisition will bring Stahl's annual sales beyond the EUR 1 billion mark, with an EBITDA margin above 20%. Stahl has secured a new financing of \$580 million for the acquisition, with a group of relationship banks, extending maturities until 2028. It will also be available to refinance its existing credit facilities and fund future external growth, with a focus on specialty coatings.

**Maarten Heijbroek, CEO of Stahl:** "ISG is a strong strategic fit for Stahl, given the complementary nature of our business models, technologies, and footprints. The acquisition will enhance Stahl's growth profile, diversify our target markets, and broaden our technology base. Specialty coatings now represent approximately 75% of group sales. We are excited about this opportunity and look forward to welcoming the excellent ISG team into the Stahl family."

The transaction is expected to close before the end of Q1 2023, subject to customary conditions.

(Stahl News – 06/02/2023)

## STAHL TO EXPAND LOW-IMPACT AUTOMOTIVE CUSTOMER OFFERING WITH DEDICATED RANGE OF RELCABOND® ADHESIVE AND BONDING SOLUTIONS

Stahl, an active proponent of responsible chemistry, is to offer a dedicated portfolio of low-impact, high-performance adhesive and bonding solutions. As an initial step, Stahl will introduce three dedicated adhesive products, under the RelcaBond® brand name, designed primarily for customers operating in the automotive sector, as well as other markets.

Stahl's expansion into the adhesive and bonding segment builds on the company's longstanding presence in the elastomer coatings market. With the RelcaSil® product range, Stahl has developed a reputation for offering durable, reliable, high-performance coatings.



on environmental stewardship by developing solutions that have a lower environmental impact than traditional market alternatives.

Stahl's adhesive and bonding product offering draws on the company's long-standing research and innovation focus in the automotive space. This is channelled through Stahl's dedicated Centres of Excellence for Automotive, from supporting product development to advanced technologies and testing equipment. Equally, Stahl is able to offer extensive technical and research and development support to automotive customers, including original equipment manufacturers (OEMs) and Tier 1 suppliers.

Mel Micham, Global Market Director, Stahl Performance Coatings: *"At fStahl, our aim is always to remain close to our customers and give them the tools and support they need to keep pace with fast-changing market requirements. This includes improving both the performance and the environmental credentials of products and applications. By building on our strong foothold in adjacent markets, we are proud to offer a unique range of low-impact, high-performance adhesive products that are truly best in class."*

Stahl's expansion into the adhesive and bonding market will begin with the following products:

### **RelcaBond® 815**

RelcaBond® 815 is a low-VOC flock adhesive that provides excellent adhesion to vulcanized rubber and is ideally suited to automotive customers. This adhesive is non-staining, as well as being BTX- and HAP-free. It also offers superior flock density, durability, adhesion, and chemical resistance.

The product is designed for the adhesion of polyester or nylon flock fibers to a variety of elastomer substrates. It protects the rubber sealing from wear, facilitates glass sliding, and contributes to noise reduction and increased passenger comfort.

### **RelcaBond® 650**

RelcaBond® 650 is a glass encapsulation adhesive that offers a more sustainable, water-based alternative to traditional solvent-based solutions. RelcaBond® 650 provides a glass-to-polymer bond for automotive modular windows, including encapsulated side and rear windows and windshields. It works by forming a strong bond between the polymer and the window glass during the encapsulation process. Stahl is initially launching RelcaBond® 650 in selected markets, with roll-out on a global scale.

### **Rubber-to-metal adhesives**

Stahl currently has a portfolio of rubber-to-metal adhesives in the development phase. These innovative solutions work on elastomers that need to be bonded to metal, and their applications extend far beyond the automotive industry. In particular, Stahl is focused on exploring the development of more sustainable, water-based alternatives to the traditional solvent-based products that currently dominate the rubber-to-metal adhesives segment.

Uwe Siebgen, Group Director, Performance Coatings & Polymers: *"With the new RelcaBond® series, Stahl is extending its portfolio of responsible chemicals into the field of adhesives and bonding agents. This represents a natural next step in our successful journey to offer sustainable, high-performing solutions for the coatings industry."*

*(Stahl News – 12/10/2022)*

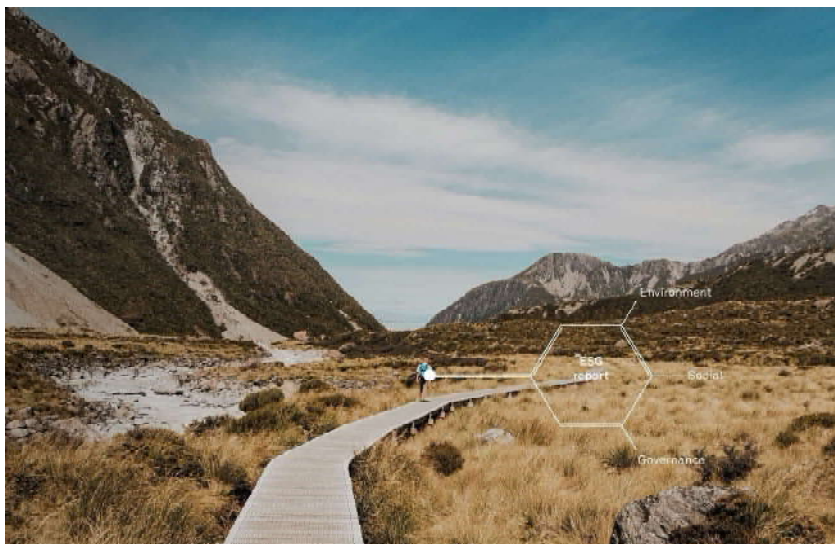




### STAHL UNDERLINES RESPONSIBLE SUPPLY CHAIN COMMITMENT WITH ECOVADIS PLATINUM RATING

**Stahl**, an active proponent of responsible chemistry, has been awarded the highest Eco-Vadis Platinum rating, placing it within the top 1% of companies assessed by Eco-Vadis. The award underlines Stahl's commitment to collaborating with its partners to reduce its environmental impact and build a more responsible and transparent supply chain.

Eco-Vadis is a globally recognized evidence-based assessment platform that reviews the performance of organizations across areas key of more than 90,000 companies including environmental impact, labour and human rights standards, ethics, and sustainable procurement practices. The latest report from Eco-Vadis highlights Stahl's positive progress across all these areas and builds on the Gold rating achieved by the company in 2021. Stahl's 2030 target is to maintain the Eco-Vadis Platinum rating by working closely with its value-chain partners to help them reduce their environmental impact – including by supporting their transition to renewable feedstocks. In 2021, 80% of Stahl's total spend on raw materials was supplied by Eco-Vadis-rated suppliers.



The new Eco-Vadis rating comes as Stahl accelerates its efforts to ensure a more responsible and transparent supply chain. Recent steps have included establishing a dedicated Supply Chain Transparency division within the company's ESG department. The division will be tasked with coordinating a new product development framework that prioritizes the responsible sourcing of raw materials. Furthermore, in July 2022 Stahl submitted a new greenhouse gas (GHG) emissions reduction target, including a specific commitment regarding the company's Scope 3 upstream emissions. Stahl aims to reduce these by at least 25% over the next 10 years, compared with the base year (2021). Stahl expects to achieve this reduction primarily by working with its suppliers to replace fossil-based raw materials with lower-carbon alternatives.

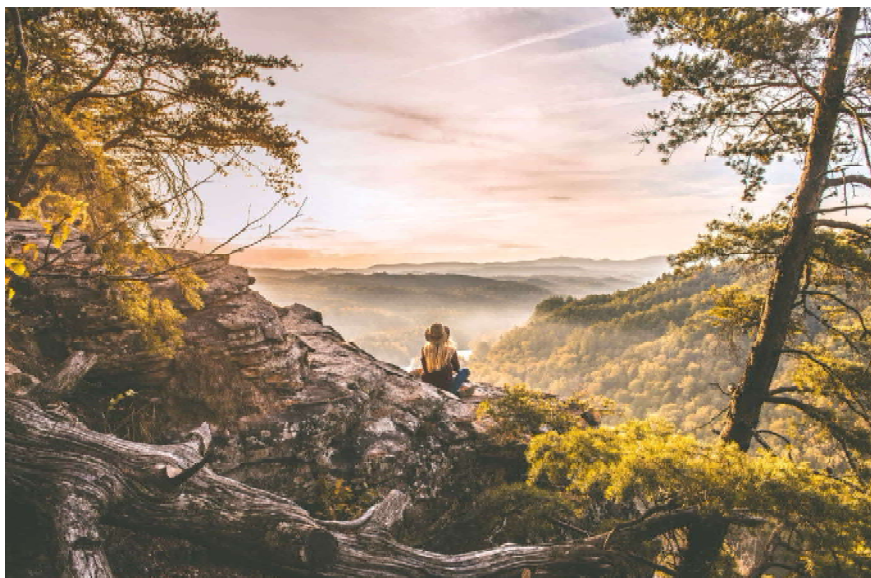
Ingrid Weijer, ESG Performance Manager: *"Achieving an Eco-Vadis Platinum rating is further evidence of Stahl's strengthened ESG focus and our commitment to working with our suppliers and other industry partners to reduce our environmental impact and build a more responsible value chain. By working side by side, we can achieve our common objective of helping limit the global temperature increase to 1.5°C above pre-industrial levels by 2050, as agreed at the 2015 Paris Climate Accords."*

*(Stahl News – 19/09/2022)*



## RESPONSIBLE CHEMISTRY INVOLVES RETHINKING PRIORITIES

Stahl's road to responsible chemistry started in 1978 with the launch of our first water-based leather finishing product. Since then, and over the last 20 years in particular, we have defined Responsible Chemistry and ushered it into our industry. Using our expertise to improve the performance of existing materials and productionize breakout ones, like fruit textiles, for example, that are even more sustainable. But we recognize there are more opportunities to do more. And that starts with our supply chain and the journey our products undergo from raw material to end of life.



Stahl's road to responsible chemistry started in 1978 with the launch of our first water-based leather finishing product. Since then, and over the last 20 years in particular, we have defined Responsible Chemistry and ushered it into our industry. Using our expertise to improve the performance of existing materials and productionize breakout ones, like fruit textiles, for example, that are even more sustainable. But we recognize there are more opportunities to do more. And that starts with our supply chain and the journey our products undergo from raw material to end of life.

### Our vision on responsible chemistry

As a company, we are actively trying to replace petrochemicals with renewable resources. But our road to responsible chemistry doesn't end there. From a sustainability viewpoint, it is equally important to look at what happens when the products we help to make reach the end of their respective roads. We focus on three priorities to improve our environmental footprint and that of our customers:

1. Using low-impact manufacturing chemicals
2. Using biotechnology to replace non-renewable resources
3. Using waste and recycled content contributing to circularity

Using the Life Cycle Assessment methodology, we measure the impact of a product on the environment over the course of its life.

(Source : <https://www.stahl.com/responsible-chemistry/vision>)



## From the desk of General Secretary



### INTERNATIONAL TRAINING WORKSHOP ON EMERGING TRENDS IN MATERIALS, DESIGN, INNOVATION AND INTELLIGENT MANUFACTURING OF FOOTWEAR AND LEATHER PRODUCTS IN DEVELOPING COUNTRIES



The event was organized as a part of the CSIR-CLRI Platinum Jubilee Celebrations on 30 – 31 January' 2022 at the Heritage Hall of CSIR – CLRI, Adyar, Chennai.

The program was jointly organized by the Centre for Science and Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre) and CSIR-Central Leather Research Institute, Chennai with the Co-Sponsorship of Indian Leather Technologists' Association (ILTA) and CSIR – CLRI LERIG Trust.



President, members of Southern Regional Committee of ILTA and attended the two days event and Susanta Mallick. General Secretary, ILTA, attended the event on 31<sup>st</sup> January.

Scientists, Scholars, Academicians, Industrialists from different parts of India along with Indonesia, Vietnam, Palestine, Myanmar, Sri Lanka, Mauritius, Nigeria, Uganda etc. participated in the event.

**30<sup>th</sup> January' 2023:-**

The Inaugural Session of the program started with the Introductory Speech and Welcome Address by **Dr. K. J. Sreeram**, Director, CSIR - CLRI followed by address from **Dr. Amitava Bandopadhyay**, Director General, Centre for Science & Technology of the Non-Aligned and Other Developing Countries (NAM S&T Centre), New Delhi, **Mr. P.R. Aqeel Ahmed**, Chairman, Leather Sector Skill Council, Chennai, and the Chief Guest of the day and **Mr. N.R. Jagannathan**, President, ILTA (Southern Region), Chennai. The session concluded with the Vote of Thanks offered by **Dr. P. Thanikaivelan**, Chief Scientist, CSIR-CLRI.

Topic of the Technical Session **1** was the **Emerging Scenarios in New Material Innovations**. The session was Chaired by **Mr. V. Muthukumaran** (India) and Co-Chaired by **Mr. Tran Van Vinh** (Vietnam). Following speakers delivered Lectures in this session:-

- Mr. V. Muthukumaran** on 'Emerging Scenarios in New Material Innovations' from India.
- Mr. P.S. Sureshkumar** on 'Using Natural Fabrics as Alternative Materials in Footwear Production' from India.
- Mrs. K. Ambika** on 'Design & Development of Palm Leaf and Leather Combination Products- A New Makeover to Indian Palm Leaf Crafts' from India.
- Mr. Raden Agus Sampurna** on 'Commercialization of Leather Based Technologies' from Indonesia



- e) **Dr. Than Than Aye** on 'Investigation for Preparation of Wild Riding Boots by Foot Wear Recycling Process' from Myanmar.

Topic of the Technical Session 2 was the **Intelligent Manufacturing including Artificial Intelligence and Industry 4.0 Concepts**. The session was Chaired by **Mr. M. Elangovan** (India) and Co-Chaired by **Dr. Jerry Tagang** (Nigeria). Following speakers delivered Lectures in this session: -

- a) **Mr. M. Elangovan** on '3P and IOT in Footwear Industry' from India.
- b) **Mr. Ramesh Subramanian** on 'Intelligent Manufacturing including Artificial Intelligence and Industry 4.0 concepts' from India.
- c) **Dr. D. Suresh Kumar** on 'Automation of Footwear Design & Manufacture Using Sophisticated CAD/CAM Tool' from India.
- d) **Mr. S. Nithiyanantha Vasagam** on 'Prediction of India's Leather Footwear Export for the year 2030 in terms of Quantity using Recurrent Neural Network based Model' from India.
- e) **Mr. Chikumbi Chungu** on 'Leveraging Open Innovation to Enhance Value Addition in Leather Value Chains: A Case for Zambia', from Zambia.
- f) **Mr. Vishnu Kumar** on 'Towards Next-generation Manufacturing in Footwear Industry' from India.
- g) **Mr. Asem G Abuomar** on 'Leather and Shoes in Palestine-Leather and Shoe Cluster' from Palestine.

## 31<sup>st</sup> January' 2023:-

Topic of the Technical Session 3 was the **Trends in the Design of Footwear and Leather Products and Accessories for Fashion and Value Addition**. The session was Chaired by **Dr. Kaustav Sengupta** (India) and Co-Chaired by **Mr. Asem G. Abuomar** (Palestine). Following speakers delivered Lectures in this session: -

- a) **Dr. Kaustav Sengupta** on 'Trends in the Design of Footwear and Leather Products', from India.
- b) **Mr. M. Akshaya Raman** on 'Standardisation of Leather Product Sample Development Process Through Industrial Engineering Techniques', from India.

- c) **Mr. K. Karthikeyan** on 'Additive Manufacturing Driven Fashion Products Design and its Futuristic Applications in Wearable Lifestyle Accessories Exclusively for Footwear Sector', from India.
- d) **Dr. (Mrs.) Anagha Vaidya Soocheta** on 'Eco-Design Modular Flat Pack Travel Shoes' from Mauritius
- e) **Dr. G. Saraswathy** on 'Footwear Based on Person's Gait: Recent Trend in the Design of Footwear' from India.
- f) **Mrs. K. Ambika** on 'Design Interventions for Sustainable Fashion Lifestyle Products – A Case study on Project GOAT by CSIR-CLRI', from India.

Topic of the Technical Session 4 was the **Quality Control, Testing and Standards for Materials in Footwear and Leather Products**. The session was Chaired by **Mr. C Anbu Malar** (India) and Co-Chaired by **Dr. Than Than Aye** (Myanmar). Following speakers delivered Lectures in this session: -

- a) **Mr. C. Anbu Malar** on 'Quality Control, Testing and Standards for Leather in Footwear and Leather Products', from India.
- b) **Mr. C.M. Rajesh** on 'Quality Control in Footwear by Using Best Practices', from India.
- c) **Mr. G. Bharathkumar** on 'Physical Testing Standards for Footwear Components', from India.
- d) **Mr. Tran Van Vinh** and **Mr. Le Quang Tuan** on 'Vietnam's Leather and Footwear Industry: Overview Status Report and Circular Economy Trend' (*Joint Paper*) from Vietnam.
- e) **Mr. Lutalo Richard Bosco** on 'Uganda's Efforts to Support MSMEs in the Leather Sub-sector: The Case of the Technology Innovation and Business Incubation Centre (TIBIC)' from Uganda.

Topic of the Technical Session 5 was the **Ethics, Social Responsibility and Sustainability for the Manufacturing Sectors**. The session was Chaired by **Mr. M. Abdul Wahab** (India) and Co-Chaired by **Dr. (Mrs.) Anagha Vaidya Soocheta** (Mauritius). Following speakers delivered Lectures in this session: -

- a) **Mr. M. Abdul Wahab** on 'Ethics, Social Responsibility and Sustainability for the Manufacturing Sectors', from India.
- b) **Dr. Jerry Tagang** on 'Investigation into Preferred Type of Footwear Out-Sole for People Living with Diabetes', from Nigeria.

- c) **Mr. Suresh Aluvihara** on 'An Advanced Review on the Impact of the Leather Tannery Waste Materials on the Environment and Mitigation Methods', from Sri Lanka.
- d) **Mr. Geoffery Sempiri** on 'Uganda's Efforts to Support Local Micro, Small, Medium -Scale Enterprises for Footwear and Other Leather Goods' from Uganda.

Concluding Session of the 2 days program started with the **Adoption of Chennai Resolution** followed by Feedback from Participants and distribution of Certificates by Dr. K. J. Sreeram, Susanta Mallick & Amitava Bandyopadhyay. The session came to end with the conclusive remarks offered by **Dr. Amitava Bandopadhyay** and **Dr. K.J. Sreeram**.



## 4<sup>TH</sup> PROF. S. S. DUTTA MEMORIAL LECTURE

The 9<sup>th</sup> Seminar (since 2014 on the occasion of IILF at Chennai) named as the **4<sup>th</sup> Prof. S. S. Dutta Memorial Lecture** was organized by the Southern Regional committee of Indian Leather Technologists Association (ILTA) in association with CSIR-CLRI, GCELT, ILPA and also Indian Leather & Leather Age magazine as media partners at the Hall-A of Convention Center in the Chennai Trade Center campus on Thursday the 2<sup>nd</sup> February' 2023 during 36<sup>th</sup> India International Leather Fair (IILF – 2023).



The following dignitaries were invited on the dais for their respective seats.

1. Mr. N. R. Jagannathan, President, ILTA (SR)
2. Padmashree & Padmabhushan Dr. T. Ramasami, Former Secretary, Department of Science & Technology, Govt. of India.
3. Dr. K. J. Sreeram, Director, CSIR – CLRI & the Speaker of the day
4. Mr. Susanta Mallick, General Secretary, ILTA



The event commenced with garlanding to the portrait of Prof. S. S. Dutta by the dignitaries and the representatives of various Associations, Organizations, Institutes and Industry followed by the Welcome Address delivered by Mr. N. R. Jagannathan. In his address Mr. Jagannathan sincerely remembered the contribution of Late Prof. S. S. Dutta as a teacher of leather technology during his student hood. He welcomed all the dignitaries present who responded ILTA to join hands with the activities and interested to play active role in development of modern Leather Industry. He expressed hope that this way ILTA could be able to remain and develop more relevancies to the industry.



Mr. Mallick in his address remembered Prof. S. S. Dutta as one of the great teachers of Leather Technology in his student hood at GCELT. The book authored by Prof. Dutta titled “An Introduction to the Principals of Leather Manufacture” has been most popular among the different leather institutes throughout the country and ILTA has already printed 2500 copies of this book since its publication around 40 years ago. He remembered the contribution of Prof. Dutta to our beloved association.



Dr. Ramasami in his address very emotionally mentioned that Indian Leather Industry is Indebted to Prof. S. S. Dutta not for only as a stakeholder but also a Devoted Guru to the students of Leather Science & Technology. In this respect he recalled that in his student hood he was keenly interested to get the ‘Student Corner’ through the Journal of Indian Leather Technologists’ Association (JILTA), where Prof. Dutta was a routine author of this segment and was highly useful for the students of leather technology. In relation with this he wholeheartedly praised the Journal (JILTA) for its rapid development. He wished a great success of the program and assured that he would remain a part of ILTA forever, not as a Guest but as a Host.

Thereafter, the name of the students was announced who were nominated for felicitation with Prof. S. S. Dutta Memorial Medal for submitting their projects in M. Tech and B. Tech, Leather and Leather Footwear Technology Examination – 2022 and adjudged as the ‘Best Project’. All the awards were handed over to the awardees by the dignitaries present in the event.

- a) **Mr. Soumajit Das**, M.Tech, Leather Technology, GCELT-Kolkata, project titled “**Hair on Tanning of Rabbit Skin**”
- b) **Ms. Kritika Vagmi**, B.Tech, Leather Technology, GCELT-Kolkata, project titled “**Antifungal screening of Methanolic Extracts : A promising approach towards development of antifungal phytochemicals for leather application**”
- c) **Ms. Sarika Kumari**, M.Tech, Footwear Engineering & Management, Anna University, project titled “**Design & Development of Innovative Footwear from the Waste Emerging from Footwear Industry**”
- d) **Ms. Afreen A, Ms. Ananthi S, & Ms. Azhagu Parvathi K**, B.Tech, Leather Technology, Anna University, project titled “**Manufacture of Playing Cards using Leather**”

Then the names of the three export houses, who would be felicitated by ILTA for securing 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> places respectively as winner of Best Export Award 2021-22 for their overall export performance in the country as declared by Council for Leather Exports (CLE).

Names of the houses are as follows :

- 1<sup>st</sup> Place - M/s Feng Tay India – Chennai
- 2<sup>nd</sup> Place - M/s K. H. Exports (I) Pvt. Ltd., Chennai
- 3<sup>rd</sup> Place - M/s TATA International, Chennai





Thereafter, all the dignitaries lead by Dr. T. Ramasami, joined hands to release the 'ILF-2023 Special Issue' of Journal of Indian Leather Technologists' Association (JILTA), February' 2023 and the first copy was handed over by Dr. Sreeram to Dr. Ramasami.



Dr. K. J. Sreeram was then welcomed with a Bouquet and *Angabastam* and invited to the podium for delivering the 4<sup>th</sup> Prof. S. S. Dutta Memorial Lecture titled ***Technology Roadmap for Indian Leather Sector***. He started his lecture with offering heartfelt homage to Prof. S. S. Dutta and then he expressed his gratitude to ILTA for inviting him to deliver the prestigious Prof. S. S. Dutta Memorial Lecture. The whole audience was mesmerized with his highly informative and contemporary lecture.



At the end of the lecture Dr. Sreeram was honoured with a Memento and Citation by Mr. Susanta Mallick.

Dr. Ramasami, Dr. Sreeram and Mr. Mallick then joined hands for the Curtain Raiser of the **"One Week One Lab"** (OWOL) event to be organized by CSIR – CLRI at Kolkata, Ladakh and Chennai from 2<sup>nd</sup> to 6<sup>th</sup> May' 2023. They also unveiled an Event Profile (Brochure) of the program and the first copy of the same was handed over by Dr. Sreeram to Mr. Mallick.



Dr. S. Rajamani, Vice President - SR, ILTA thereafter delivered few words to the audience along with his heartfelt tribute to Prof. S. S. Dutta.



Md. Shoaib, Project Associate and Ms. H. K. Sanjana, Project Assistant both from CSIR – CLRI acted as the masters of the ceremony and Ms. Sanjana then offered the Vote of Thanks to the gathering. She on behalf of ILTA offered heartfelt thanks to all the dignitaries present, CSIR-CLRI, GCELT, ILPA as the Co-organizers and to the Indian Leather and Leather Age Magazine as the media partner of the event. She also offered thanks to ITPO and the Event Management group for their all-out support to the event. She concluded her speech with requesting all to join in refreshment arranged outside the seminar hall.

A good audience consisting of around 100 people were present in the audience.

## 12<sup>TH</sup> MONI BANERJEE MEMORIAL LECTURE

This is scheduled to be held on Wednesday the 15<sup>th</sup> March' 2023 at Seminar Hall of Science City, Kolkata. All are invited to participate in the programme. Details report of the programme will be published in the April' 2023 issue of JILTA.





## Indian Leather Technologists' Association

(A Member Society of IULTCS)

### 12<sup>th</sup> Prof. Moni Banerjee Memorial Lecture



**Prof. Moni Banerjee**

The Executive Committee requests the pleasure of your company at

#### 12<sup>th</sup> Prof. Moni Banerjee Memorial Lecture

at the Seminar Hall of Science City, Kolkata, on Wednesday, the 15<sup>th</sup> March, 2023 at 15.00 Hrs. (Registration from 14.30 Hrs.)

Mr. N. Viswanathan,  
GM - R&D, Pon Pure Chemical India Pvt. Ltd.,  
Chennai  
has kindly consented to deliver the prestigious  
Prof. Moni Banerjee Memorial Lecture titled  
"Acrylic Emulsion Polymers: Science,  
Challenges and Future Perspective"



**Mr. N. Viswanathan,**  
GM - R&D,

Pon Pure Chemical  
India Pvt. Ltd., Chennai

**Arnab Jha**  
President

**Susanta Mallick**  
General Secretary



**(Susanta Mallick)**  
General Secretary

### FEW SNAPSHOTS OF THE 4<sup>TH</sup> PROF. MONI BANERJEE MEMORIAL LECTURE AT CHENNAI ON 2<sup>ND</sup> FEBRUARY'2023

#### Garlanding to the portrait of Prof. S.S. Dutta







**Presentation of Prof. S. S. Dutta Memorial Award**



## RECEIVING PRINTED COPY OF JILTA EVERY MONTH

We have started to post Printed copy of JILTA from April' 2022 to members and all concerned as it was before Covid period. Simultaneously we have been sending the e-copy of JILTA through email also to all the concerned receivers.

If you are not receiving JILTA by Post or through email, may please verify your Postal Address and/or Email Id with our office at the earliest.

## PUBLISH YOUR TECHNICAL ARTICLE

Faculties, Research Scholars and students of various Leather Institutes may wish to publish their Research / Project papers in an Article form in this monthly technical journal, JILTA.

Interested author may sent their paper (in MS Word format) along with a PP Photograph and Contact details like Email, Mobile etc. to our email IDs : [admin@iltaonleather.org](mailto:admin@iltaonleather.org) / [jiltaeditor@gmail.com](mailto:jiltaeditor@gmail.com)

## Members are requested to :-

- a) Kindly inform us your '**E-Mail ID**', '**Mobile No**', '**Land Line No**', through E-Mail ID: [admin@iltaonleather.org](mailto:admin@iltaonleather.org) or over Telephone Nos. : 24413429 / 3459. This will help us to communicate you directly without help of any outsiders like Postal Department / Courier etc.
- b) Kindly mention your **Membership No.** (If any) against your each and every communication, so that we can locate you easily in our record.

## YOUTUBE CHANNEL & FACEBOOK PAGE OF ILTA

An official **YouTube Channel** namely **ILTA Online** and a **Face Book Page** namely **Indian Leather Technologists' Association** has been launched for sharing the activities of our Association since November' 2020 and July' 2021 respectively.

You may find all the Lives / Video recordings of different Seminar, Symposiums & Webinars on both of these social medias along with our website [www.iltaonleather.org](http://www.iltaonleather.org) time to time.

You are requested to kindly do **Like & Subscribe** the YouTube Channel and "**Follow**" the FaceBook Page to get regular updates on the activities of our Association.

**General Secretary and the Members of the Executive Committee are available to interact with members at 18.30 hrs, at our Registered Office on every Thursday**





ILTA  
Since 1950

### Solidaridad

With over 50 years of experience in developing sustainable solutions to make communities more resilient, Solidaridad has been working on many different issues, from supporting marginalized communities to fostering a more sustainable supply chain.



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Sugarcane



Leather



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Aquaculture



Dairy



Fruits &  
Vegetables



Gold



Soy



Cocoa



Coffee



Livestock



Medicinal Plant

**Solidaridad**

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GRANTS PROGRAMME

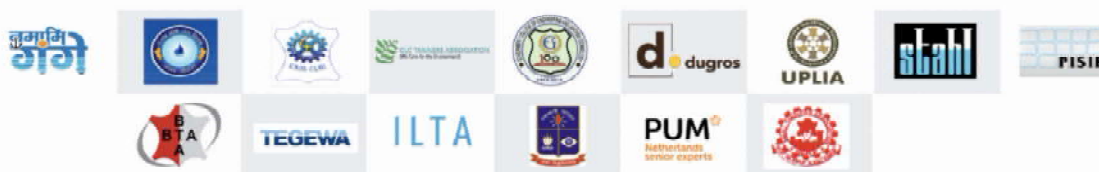


**EFFECTIVE WASTE MANAGEMENT AND SUSTAINABLE  
DEVELOPMENT OF MSME TANNING COMPANIES IN KOLKATA  
LEATHER CLUSTER (BANTALA)**

**2022-2023**



**PROJECT PARTNERS IN ASIA**



**Pradipta Konar, Programme Manager-Leather(Kolkata):** [pradipta.konar@solidaridadnetwork.org](mailto:pradipta.konar@solidaridadnetwork.org)

**Solidaridad Regional Expertise Centre**

158/5, Prince Anwar Shah Road, Kolkata-700045 | Contact: 033-40602211, +91-9830279866

# Sustainable and Circular: Solidaridad Shows the Way Ahead for Leather at IILF Chennai

After two years of Covid, the India International Leather Fair (IILF) was back this year, with Chennai Trade Centre hosting the event from 1-3 February, 2023. In a first for Solidaridad, we participated in the 36<sup>th</sup> edition of the fair, considered by the leather industry to be one of the best and biggest showcase events in Asia.

The Solidaridad stall at the fair created awareness about sustainable production of leather through eco-friendly technologies; building capacity of medium and small-scale units to adopt occupational health and safety (OHS) best practices; innovative,



solutions for solid waste management; and adoption of better tanning practices. More importantly, the Solidaridad team showcased solutions promoting the principles of circular economy – through ‘Waste to Value’ bags, fashion accessories etc. Solidaridad also showcased a common digital portal on sustainability, which can foster knowledge sharing among various stakeholders in the leather industry. This year, the event saw participation of more than 400 domestic and overseas companies displaying a range of products, from raw material to finished goods. Auxiliary products such as finished leather, shoes, shoe components – uppers, soles, heels, counters, lasts – leather garments, fashion accessories, machinery, chemicals and technology were also on display.

On the inaugural day, the Solidaridad stall was visited by R. Gandhi, Minister for Handlooms and Textiles, Government of Tamil Nadu, Siva V. Meyyanathan, Minister for Environment and Climate Change, Government of Tamil Nadu and other delegates. They praised the holistic approach Solidaridad has taken to utilize industry waste and create value-added products from it – and promoting circularity through sustainability in the leather industry.

Industry players, entrepreneurs as well as students from premier institutes like Central Leather Research Institute, National Institute of Fashion Technology (NIFT), Footwear Design and Development Institute made enquiries about the technology interventions of Solidaridad to reduce pollution, save water and bring a positive socio-economic change in and around the leather clusters. Leather industry representatives of Ethiopia, Nigeria, Iran, Italy, Netherlands, Spain, among others, also visited the stall.

In a double win for Solidaridad, the leather team also got an opportunity to showcase its interventions at the Leather Fashion Show in Chennai, organized by the Indian Finished Leather Manufacturers & Exporters Association (IFLMEA), on 1 February, at ITC Grand Chola.



The 'Waste to Fashion' initiative – fashion accessories made from industrial leather waste – was appreciated by Supriya Sahu, Additional Chief Secretary to Government of Tamil Nadu and the 750 visitors attending the show. Made through eco-friendly technologies, these accessories are sustainable and environment-conscious.

Solidaridad has more than 52 years of experience in developing sustainable solutions to make communities more resilient and supply chains sustainable. Solidaridad initiated its efforts in the leather geographies in 2017 with the '**Pollution Prevention and Efficient Water Use in Kanpur-Unnao Leather Cluster**' project, supported by RVO (Netherlands Enterprise Agency). Within three years, another project, funded by the European Union, was launched in Kolkata – '**Effective Waste Management & Sustainable Development of MSME Tanning Companies in Kolkata Leather Cluster (Bantala)**'. The initiative was lauded by EU, paving the way for a new project, also funded by EU, in the Tamil Nadu leather cluster : '**Promoting Circularity in the Tamil Nadu Leather Cluster**'.



With these, Solidaridad is working towards sectoral transformation in almost 80% of the leather geographies in India. The sustainable interventions have also received encouragement from the government, including the National Mission for Clean Ganga, Ministry of Jal Shakti and MSME Department, Government of West Bengal.

*"Technologies and interventions presented by Solidaridad are extremely useful for companies which want to walk the path of sustainability and adopt eco-friendly practices. In fact, this should be our new path to prosperity. I am very interested in adopting these clean and green practices for my tannery"*

**- Mahumud Yusuf (Berbera Tannery Pvt. Ltd., Djibouti)**

*"It is very interesting to see the products made from waste. We all know that tannery industry produces a lot of waste, which is a huge problem. My buyers are demanding sustainable products, regenerative products and your products made from tannery waste are an answer to that"*

**- Adil Siddiqui (Tack Exim Pvt. Ltd., Kanpur)**

# Solidaridad



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## Solidaridad Corner



CLC TANNERS ASSOCIATION  
(We Care for the Environment)



**Solidaridad**

**switchasia**  
GRANTS PROGRAMME







**Solidaridad**



Council for Leather Exports  
चर्म निर्यात परिषद्

**TATA INTERNATIONAL**



**switchasia**  
GRANTS PROGRAMME







INTERNATIONAL UNION OF LEATHER  
TECHNOLOGISTS AND CHEMISTS SOCIETIES  
([www.iultcs.org](http://www.iultcs.org))

## Winners of three IULTCS Young Leather Scientist Grants for research announced

The Executive Committee of the IULTCS is pleased to announce the winners of the 2023 IULTCS Research Commission (IUR) Young Leather Scientist Grants. The research grants are awarded to three young scientists, under the age of 35. The monetary awards help support the work of young talent in the leather sector.

This is the ninth year of the grants which have been generously supported by industry. The Selection Committee of IUR, chaired by Professor Dr Michael Meyer, is pleased to announce the following recipients:



### **Tyson Foods: Young Leather Scientist Grant 2023 Basic Research**

Tyson Foods has provided the sponsorship of a € 1,500 grant for Basic Research to Dr Ilaria Quaratesi from the Leather and Footwear Research Institute (ICPI), Bucharest, Romania. The title of the project is 'Non-toxic and biodegradable supramolecular additive with flame retardant and antimicrobial properties for the tanning industry'.

The project's main objective is to develop an antimicrobial flame retardant, which can as well be used in the leather industry basing on hydroxyl apatite and cyclodextrines using an ultrasound assisted continuous flow process. Flame retardancy and antimicrobial activity will be tested according to standardised procedures.

### **Erretre: Young Leather Scientist Grant 2023 Machinery / Equipment**

Erretre has provided the sponsorship of a € 1,000 grant for Machinery / Equipment research to PhD candidate Vasanth Swaminathan from Anna University, Chennai, India. The title of the project is 'Reduction of carbonization and gas emissions using mechanotronics based intelligent laser beam machining, with machine learning, for cutting leather with better environmental measures for operator health'.

The project's main objective is to optimise leather cutting by variation of the distance and pulse width of a laser diode assisted machining. Effects on different parameters as carbonization, rate of material removal, kerf width and emission rate will be investigated, and carbonization will be followed by using image processing.



INTERNATIONAL UNION OF LEATHER  
TECHNOLOGISTS AND CHEMISTS SOCIETIES  
([www.iultcs.org](http://www.iultcs.org))

### Dr Mike Redwood: Young Leather Scientist Grant 2023 Sustainability / Environmental Award

Leather Naturally has provided the sponsorship of a € 1,000 grant for Sustainability / Environment research to Dr Yue Yu from Sichuan University, Chengdu, China. The title of the project is 'Controllable oxidation and degradation of lignin via  $H_2O_2/O_3$  from biomass into a retanning agent for sustainable leather manufacturing'.

The project's main objective is to develop a light-coloured, lignin-based retanning agent which can be used as a green substitute for aromatic syntans using  $H_2O_2/O_3$  synergistic oxidation technology. The oxidation mechanism has to be investigated, followed by research about the interaction mechanism between oxidized lignin and Cr-tanned leather. Finally a new retanning process is to be developed and its environmental impact will be evaluated.

The grants have been very successful and well received by industry. Referring to the awardees of the 2023 grants Dr Meyer said "All three project proposals show technological knowledge at a very high level and demonstrate the competitiveness of the leather industry with other industries worldwide. We are very happy that the profile of the Young Leather Scientist Grants continues to grow and thank our sponsors for the support that they continue to give. It will enable our young scientists to contribute their scientific knowledge, to the benefit of the leather community. We look forward to seeing the research outcomes of the projects we are supporting and wish them every success as they contribute to expanding our industry knowledge."



(Source : Email from IULTCS - 28/02/2023)



INTERNATIONAL UNION OF LEATHER  
TECHNOLOGISTS AND CHEMISTS SOCIETIES

# Upper Manipulation in Industrial Shoe Making Process

Mrs. Moumita Mukherjee<sup>1</sup>, Mr. Sourav Mitra<sup>2</sup> & Mr. Arup Poddar<sup>3</sup>

<sup>1</sup>Ordinance Factory Board, Ayudh Bhawan, Kolkata - 700001

<sup>2</sup>Manager Production, Pu Dept., Bata India Ltd., Kolkata - 700140

<sup>3</sup>Manager Commercial, Pu Dept., Bata India Ltd., Kolkata - 700140



## INTRODUCTION

Upper manipulation in shoe production as it is the first step of shoe preparation which involves the expensive raw materials. In this article the cutting department of the Bata Shoe Pvt. Ltd. is been highlighted. The upper manipulation process including skiving, cutting and capacity of cutting machine as per the oxford style has been discussed briefly. This article helps in basic understanding of the upper manipulation process, its need and effects in an industrial shoe making process.

## RULES FOLLOW TO CUT THE UPPER

- ❖ Leather is drawn from the stock as per the article requirement against plan division.
- ❖ Loading of cutter is organized as per the size requirement.

- ❖ Best possible cutting is done by interlocking the pattern (Vamp, toe cap, tongue, quarter & counter etc) to minimize the wastage.
- ❖ More important part of the shoe (Vamp, toe cap, apron, quarter etc) is cut from the best portion of the leather.
- ❖ Cutting should be done row wise to maintain the stress strain direction of the leather & also to minimize the wastage.
- ❖ During cutting need understanding of the defects & blemishes otherwise it will affect the final shoe.

## PROCESSES THAT ARE RUNNING IN THE UPPER MANIPULATION DEPARTMENT

### CUTTING MACHINE

Operation	Machine Name	No of Machine	Purpose of the Operation
Cutting	Cutting Machine	55	To cut the leather according to the pattern using proper knife.
Skiving	Skiving Machine	17	To reduce the thickness for folding, lasting, raw edge, underlay etc.
Perforation	Perforation Machine	3	For decoration purpose & also to stitch the apron to the vamp
Splitting	Splitting Machine	1	To split the leather to the required thickness as per the final product.
Stamping	Stamping Machine	2	Size no & brand is stamp using gold foil in leather.
Conveyor	Pre-fitting Conveyor	4	For cutting operation. It's one way conveyor double sided.
Conveyor	Belt Drive Conveyor	6	For stitching operation. Its two way conveyor. it is also double sided.

Corresponding author E-mail : moumita.bubu@gmail.com



It is manufactured by Bata India Limited on 1970 – 1971.

The machine may be supplied with cast steel or cast aluminum (alloyed) cutting arm. Aluminium cutting arm is recommended for cutting with cold bent steel units.

The press is used for cutting various types of material sole leather, card boards, folded textiles etc.

The machine is provided with electromagnetic tripping arrangement. The height of the cutting arm over the table is adjusted by means of a hand wheel with locking device which ensures such adjustment remains intact during working operation.

## MACHINE SPECIFICATION

- ❖ R.P.M of the Machine: 1430.
- ❖ Volt of the Machine: 400~440 V.
- ❖ Power: 1.5 H.P, 1.1 KW.
- ❖ Pressure: 8TN.
- ❖ Height: 1640x1840x1850cm.
- ❖ Cutting table working surface: 30x60cm.
- ❖ Cutting arm working surface: 30x60cm.

- ❖ Poly propylene Board is used to cut the material.
- ❖ Cutting Bed is generally 18inch. But for cutting the piping it is thinner.
- ❖ Module knife is generally use for cutting purpose.
- ❖ Its operation should follow the specific rules to avoid the accident.\

## SAFETY

- ❖ All belts and pulleys are covered with a wire mesh guard which should not be removed except when adjustments are required.
- ❖ There is no emergency switch for safety purpose.
- ❖ The machine should be operated according to the manual properly.
- ❖ Need to operate the cutting arm left and right very carefully according to the machine manual.
- ❖ Need to wear apron.

Sl. No.	Types	Purpose	Made By	Capacity	Knife Edge
1	19 mm	55	For uppers and leathers lining	It can click one single piece	Single Edge
2	32 mm	17	For foam, cloth etc	According to thickness For 3mm tricot - 8pcs / layer. For 6mm tricot - 4 pcs / layer. For 6mm cloth - 8 pcs / layer.	Single Edge
3	140 mm	3	For rubbers	According to thickness. Maximum 24 pcs	Double Edge

## MAKING PROCESS

- ❖ Moulded steel knife.
- ❖ Casted steel knife.
- ❖ Casted steel knife has strength low so it is not using any more.

## MECHANISM & SOME IMPORTANT PARTS OF THE MACHINE

- ❖ Cutting Arm:
- ❖ With aluminium plate - for leather upper.
- ❖ Without aluminium plate - for lining.
- ❖ Tripping Handle



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Since 1950

## CUTTING KNIFE / MODULE KNIFE

Three types of knife are available –

- ❖ Push Switch
- ❖ Fly wheel
- ❖ Pressing
- ❖ Working table
- ❖ Side manipulation tables
- ❖ Hand Wheel

## ADJUSTMENT OF THE CUTTING ARM

The position of the arm is adjusted according to the height of the cutting block and the cutting knife being used. Unlock and turn the hand wheel to raise or lower the cutting knife being used. Unlock and turn the hand wheel to raise or lower the arm too much as it will force the die through the material. Do not lower the arms too much as it will then cause the die to stick in the cutting block. Lock the hand wheel (you may have to reset the tripping arm in the tripping ring, loosen screw, adjust tripping lever so that the tripping handle can move freely; tighten screw, manual tripping only).

If the cutting die is exchanged with one of a different height or the cutting block is changed (when planed), adjust the arm to proper height as explained above.

## TRIPPING THE CUTTING ARM

To trip the arm, simply press the button on top of the arm which actuates the solenoid.

## PROCESS

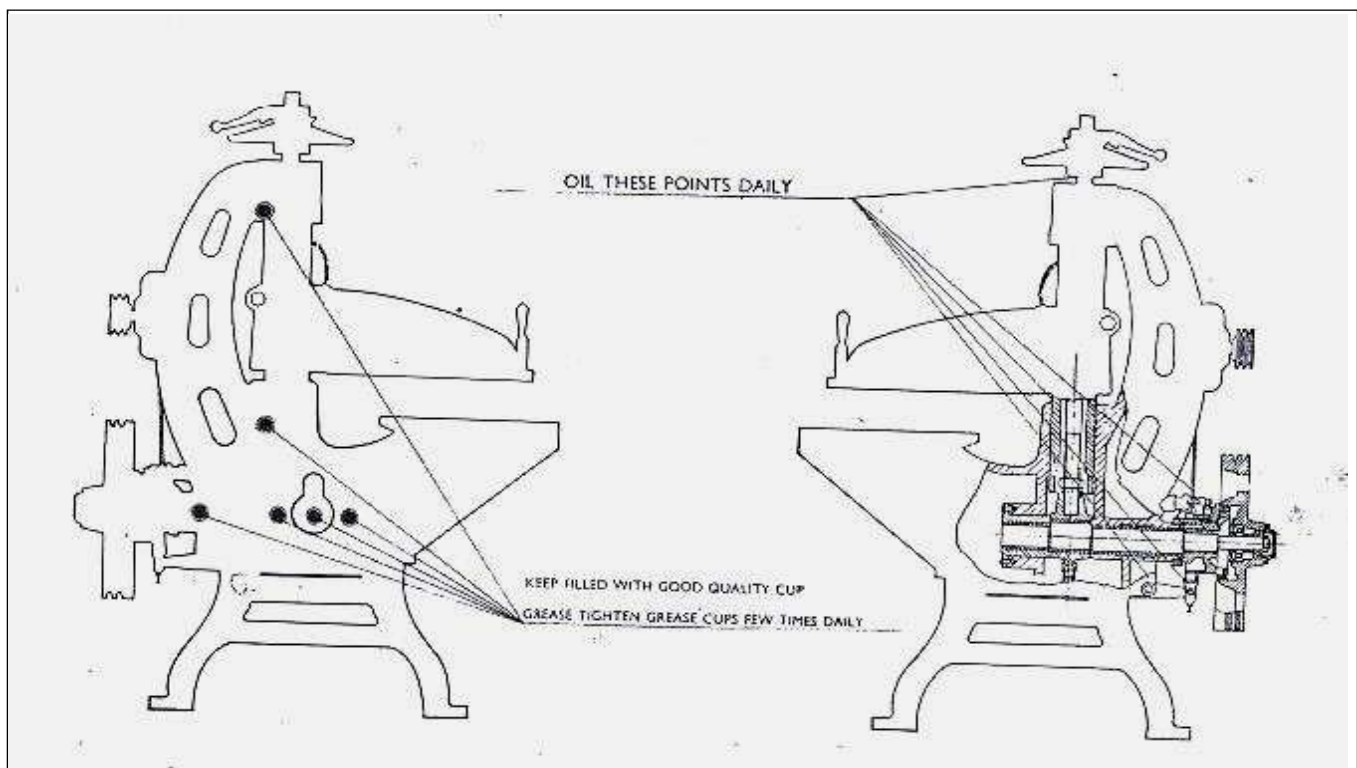
Pressing the arm or handle will connect /fixed the crank shaft then down the cutting arm will create the pressure and cut out the material.

Arm will generate a magnetic field which will help to attach the plunger will controller key lever clutch.

Key lock will initiate the function.

One pressure hand by which pressure is giving by hand is attached to aluminium plate the height between the cutting board and ram is adjusted by a key in the head of the machine.

There is a handle key to adjust the height of the handle.



## CAPACITY OF THE CUTTING MACHINES

### OXFORD SHOE

Serial no (each content 1 min / 60sec)	No of Stroke (times)
1	6
2	8
3	5
4	6
5	4
6	9
7	6
8	7
9	6
10	5
TOTAL 10 Minute	62
In 1 Minute (Average)	$62/10 = 6.2$ times
In 60 Minute	$6.2 \times 60 = 372$ times
In 1 shift = 8 hour	$372 \times 8 = 2976$
1 person 8 hour cutting capacity as per no of stroke	2976 times

According to the above calculation the capacity of a cutter will depend on the number of components per pair to be cut for a particular article.

For example: If number of components is 5. That is for an oxford shoe - Toe cap, Vamp, Tongue, Quarter, and counter.  
For a pair number of component is  $5 \times 2 = 10$ .

As the number of stroke for 8 hr is 2976 times,

Then the capacity of the cutter for 8 hr in a day is  $2976 / (5 \times 2) = 298$  pair (round of).

So, the capacity per will depend upon on the number of components per pair need to be cut for a particular article.  
The average total capacity of cutting per week is – 20000 pairs.

Total head count for cutting upper materials /lining materials/ skiving /perforation/ arranging - 75.

### Checking/Inspection

Each of cut pieces is then inspected thoroughly to ensure good quality upper materials. Followed by the inspection the cut pieces are bundled by mentioning pieces with white pencils.

### Wastage Calculation

The total sqft of the leather will transfer in to currency how much money one cutter is saving from their cutting will be calculated.

### Conclusion

Upper manipulation is an important component of footwear production. It consists of several operations like cutting, shorting, inspection etc. A proper understanding and measurements of upper manipulation at very early stage ensures quality footwear delivery at very early stage.

### Reference

1. Comprehensive Footwear Technology by Somnath Ganguly;

## LEATHER CUTTING



- Handle
- Cutting Arm
- Aluminum Plate
- Leather
- Polypropynene Board



Safely handling of the cutting arm



Movement of the cutting arm towards right side



*Read and Let Read*

**JILTA**

(Encapsulated Leather Knowledge)



## ARUP KUMAR MITRA

(6<sup>th</sup> April' 1948 - 30<sup>th</sup> January' 2023)

Late Arup Kumar Mitra born in Kolkata. Second son of Late Amarendra Nath Mitra and Late Ashima Mitra. Passed Matriculation from Collins Institute, followed by Graduation from College of Leather Technology in 1970, Kolkata. First job as a trainee in National Tannery. Worked for TAFCO (Tanning and Footwear Corporation), Kanpur; Punjab Tanneries ( Jalandhar). After that worked as a self employed Consultant Leather Technologist in Kolkata and was associated with various Leather Tanning and finishing units. Continued to work till 2020 March. As a person he was very fun loving and passionate about sports and driving. Left for his heavenly abode on 30th January, 2023 at his residence in Beliaghata Trikon Park. He is survived by his wife Mrs Anusri Mitra and son Anindya Mitra.

We prey to the Almighty to bestow enough courage to his family and near and dear ones to bear with this irraparable loss and let his departed soul rest in peace.



# Leather from Invasive Species

(Part-2)

**Subrata Das**, M. Tech (Leather Technology)

Freelance Leather Technologist & Consultant, Chennai



## Cane Tod



In Australia, the first viable plantation of sugar cane was established in 1862 near Brisbane. (1) The cultivation slowly expanded along the northern coast of Queensland, across the river valleys and plains of Australia's 2100 km long eastern and northeastern coastline. (2)

The sporadically occurring cane beetles in these plantations soon assumed the dimension of serious agricultural pests. They gorged on sugar cane stalks, resulting in misshapen holes thereby weakening load-bearing capacity. The larvae and grubs subsisted on the subterranean segments of cane, stunting growth, reducing yield, leading to the eventual death and decay of the crop. (3)

Buoyed by the effectiveness of toads in containing the menace posed by cane beetles in the sugarcane fields of Puerto Rico, Hawaii, the Philippines, Martinique and Barbados, one hundred

and two cane toads were brought from Hawaii to Australia in 1835 and released in the plantations. (4)(5)

Renowned Queensland agricultural scientist and entomologist of the time, Reginald Mungomery is credited with transporting from Hawaii to Cairns, the first and only consignment of one hundred and two cane toads, comprising of fifty-one specimens of each gender. The number of amphibians diminished by one, when upon unpacking the crate, three weeks after sailing from Hawaii, it was found that a male had died.

The toads were acclimatized and housed to breed, in a custom-built enclosure at the Queensland Bureau of Sugar Experiment Stations, located at Meringa, near Cairns. The female amphibians commenced spawning within a week of arriving in Australia. As many as 62000 toadlets were released in cane fields around Cairns, in two years' time.

Corresponding author E-mail : [katasraj@hotmail.com](mailto:katasraj@hotmail.com)



Unfortunately, the gambit was unsuccessful and the introduced species soon assumed the proportions of an invasive one, wrecking widespread damage on the ecosystem - outmaneuvering other annelids, reptiles and amphibians by poisoning and preying on them. The toads multiplied exponentially. Today, their total number in Australia alone is presumed to be more than 200 million. (6)

Females of the species lay up to 90000 eggs a year, in 20m long strands. Eggs hatch in about 48 hours and tadpoles develop into toadlets in about one month. Only one in 200 of the eggs survive to maturity. Those that do have a life span as long as sixteen years. Toxins are produced from glands on a toad's shoulders which, if squeezed, can shoot the poison up to one meter. If it enters the eyes it causes great pain and temporary blindness. Most of the toad's body is poisonous.

Cane toads have colonized much of Queensland and are taking over Northern Territory at the rate of 40km a year. Their natural habitat is fairly dry, so they move through dry areas more easily than through rainforests. The biggest toads and largest numbers are found on the invasion fronts where they gorge on new food sources. There are actually fewer toads in the areas where they were originally released because populations there have stabilized. (7)

Cane toad leather first came into global prominence on 29 July, 1981 when Prince Charles married Lady Diana Spencer. The then Prime Minister, on behalf of the Government of Queensland, presented the royal couple, a book bound in cane toad leather. In his "Thank You" note, The Prince of Wales, wrote, it would give them much pleasure in their married life. (8)

The abundant presence of the cane toad has enthused many creative and innovative designers to work with skins of the culled amphibians and make leathers for commercial exploitation. The accessories made of these wild, wacky and warty leathers, 8-9 cm from neck to butt and 15-16cm from flank to flank, soon created a niche for themselves.

The kitsch objects and their "future-facing" designs fanned the flames of an apocalyptic joy in Australians. It was as if justice had been served to the seemingly invincible environment orcs. (9)

While the world searched for diverse, ethical and sustainable products, the hideous Australian cane toad leathers took on

the mantle of a luxury fashion item. Since cane toad has been classified as an invasive, non-indigenous species and agricultural pest in Australia, exports of merchandise made from cane toad does not necessitate governmental certification or customs clearance.

Cane toads are highly poisonous in all four stages of their lives (spawn, tadpoles, juveniles and adults) and toad leather is a difficult leather to manage and manipulate into articles. Government regulations stipulate all amphibians, for commercial exploitation, have to be sourced from the wild. (15)

Although sporadic work had been attempted towards commercially launching souvenirs such as coin purses and key rings made of cane toad leather, the endeavour received significant fillip, with the launch of "Vermin" – the Label as a cane toad leather brand, in Melbourne.

Its co-founders Lia Tabrah and Perina Drummond began styling and experimenting with bags for both men and women, wallets and stubby holders (special holders for the 375ml, broad-in-the-beam, stubby beer bottles).

Vermin – the Label collaborates with Bush tannery (10), situated in the CERES (Coalition for Environmentally Responsible Economies) community environmental Park, Brunswick East, Victoria (11) in sourcing cane toads from the wild and converting their skins, using traditional tanning techniques, into environmentally friendly leather.

Marino Leather Exports based in Cairns, Queensland, is the second Australian wholesaler of products made of cane toad. Their complete collection of articles is handcrafted and is fortified with pigskin for enhanced ability to withstand wear, pressure and damage. (12)

Zambasul mercantile, a tannery in Zamboanga City, Philippines, has commenced manufacturing cane toad leather, which it supplies as coin purses, shoulder bags, hats, belts, sun visors and key rings to Chichester Inc – International merchants of exotic natural products since 1992 – for the US market. (13)(14)(15)

Another designer and innovator, who has been assiduously experimenting with high end products made with cane toad leather is the Polish designer, Monika Jarosz. Cane toads are collected from the wild, and their skins are cured with the

technical assistance of a taxidermist in Cairns, the temporarily preserved skins are shipped to Mégisserie Alric in Millau, located in France's Midi-Pyrenees, to be tanned and processed into leathers of beauty and quality.

The toad aniline leathers, dyed and finished in a vibrant array of saturated colors - mint green, vermilion red, sky blue, emerald green, turquoise, fuchsia and black - are fabricated in Monika Jaresz's atelier into wallets, wristlets, purses, belts, bags and luxurious accessories. Normally entire skins, including the head are used, as seamlessly as feasible - with the articles embellished with semi-precious stones or Swarovski crystals in place of the eyes - to radiate material, structural and functional integrity. (15)

It is versatile and strong in equal measure and tends to become visually more luxuriant with use. Possessing denser fiber weave than lambskin, toad skins readily absorb dyes of vivid and saturated colors readily.

The collections are sold in luxury goods shops or concept stores from Tokyo to New York, Paris to Pretoria and Beijing to Berlin, under the brand name "Kobja". Toad skin purses retail between Euro 275-300 each, clutch bags are priced at Euro 525 and customized handbags may cost as much as Euro 1700. (16)(17)

There have been numerous other inspired and creative attempts by individuals and companies in Australia to popularize cane toad integument.

Therese O'Hehir, a seamstress from the Northern Australian city of Darwin, fashioned a denim jacket made of cane toad leather in 1993. (18)

Gideon Shoes manufactures and sells shoes made of cane toad leather to fund social enterprise and youth development projects in Western Sydney. The sneakers are handcrafted in Australia, from cane toads shipped to Indonesia for leather making. Each pair of sneakers retails for AUD 500. A shoemaker needs more than six skins to make a pair of shoes, which makes it very expensive. (19)

APN Crafts, Manila, Philippines specializes in sundry accessories made of cane toad leather – purses, key holders, wallets, bags, and phone cases. One of its most popular items on offer is a clip-on bow tie made from toad leather. (20)

Ties are made of cane toad skin and sold to tourists visiting Australia, The knot in the middle is the toad's head with its steely gaze transfixed in a rictus. Apart from full toad boots, also available are stylish pairs made with two of Aussies iconic creatures – Kangaroo leather footwear with cane toad wingtips and counters. (21)(22)

Adam Parker of Parker Knives Australia hand-tan leather to make knife sheaths from cane toad leather. (23)

Frances Bunji Elcoate creates shoes, handbags and other leather goods made of cane toad leather. (24)

Burringbar artist Linelle Stepto turns the gnarled skins of cane toads into exquisite replicas of iconic Australian flowers such as banksias and waratahs. Eight of her pieces have been acquired for the Tweed River Regional Art Gallery. They are sent to her from a company in Cairns. (25)

The Tesla Skeleton Tourbillon model, from renowned watchmakers Arya, is engraved using lightning from a Tesla coil, meaning no two pieces are the same. The watch comes with a cane toad skin strap because, according to an Amazonian legend, lightning cannot harm the cane toad. Rolex Milgauss has followed with customized cane toad straps. (26) (27)

All over Northern Territories of Australia, cane toad taxidermy pieces can be seen, with the toads featured with a cricket bat, travel bag or beer in hand for AUD 25 each. The amphibians are also available as backscratchers, hat bands, fridge magnets, knife sheaths, outback hats, paperweights, pick pouches, golf ball holders, skin caps and bottle openers. (28)

Cane toad leather has also marked its presence in non-fine jewelry, with small amulet pouches produced from cane toad leather and Knotless Netting technique and pendants with cane toad feet. (29)

Toad shop based in Beaver Cove, Maine, US, imports Australian cane toad skins for sale in USA comprising purses, wallets, key rings, accessories and stuffed toads. They also sell visually appealing, durable and strong, matt-finished toad skins, with their warts highlighted with black dye. The company offers two types of toad skins – bleached, which can be dyed to customized colors and saddle brown tipped skins, significantly darker than the natural color of the creature, with the knobs

and bumps merging with the shade of the skin. While most skins have a distinctive pattern and shape – all measure approximately 16.5 cm from flank to flank. (30)

The Queensland Museum showcases the gravity of the cane toad menace through a permanent display at its premises. Cane toad diorama is the brainchild of Kevin Ladynski, a taxidermist who created multiple miniature exhibits of cane toads with human forms and personalities.

In the scaled-down display at the Queensland Museum, various anthropomorphized representations of cane toads depict them as convicts serving jail time with rigorous labour; as pugilists in a boxing ring and as bouncers in a night club. (31)(32)

Currently, Australia, Vietnam, Indonesia and China are the four countries involved in the commercial production of toad leather.

Pilot efforts to harness the potential of cane toad skins have been successful in Fiji. Further work is underway to convert this success into a viable commercial enterprise to manufacture tanned skins and handcrafted accessories both for tourists and export.

With the goal of producing 15000 cane toad skins each year, only mature toads measuring in excess of 10 cm were harvested from the wild. Fijian artisans were incentivized to produce handcrafted objects and accessories with indigenous designs. A reputed Fijian shoe brand evinced interest in featuring the island's cane toad leather in its footwear. However, despite the initial optimism, in 2012, during the commencement of the program. It sadly died a natural death. (33)

The Australian Government has formulated unambiguous and sharply defined laws for culling cane toads. Clobbering, thrashing, bludgeoning, drowning and drenching with dettol are expressly forbidden.

The preferred and most endorsed method is to secure each toad, collected from its natural habitat in a single zip-lock or plastic bag and refrigerate the amphibians at 4 degrees Celsius for twelve hours. It has been observed that at this temperature the toads go into hibernation mode. After ascertaining their complete immobility, they are moved into freezers (20 degrees below zero) to be painlessly killed.

To irrefutably establish the humaneness of the processes, detailed research has been carried on the pain response of toads

by inserting data loggers in their brains. The inference across the entire spectrum of the scientific community is that at prolonged exposure to low temperatures, the toads slip into torpor and become unconscious. By the time their bodies shut down totally in the freezer, their brains do not register any indication of pain, as the amphibians had become brain-dead much earlier.

Other suggested methods include the application of proprietary chemicals, available for the purpose, such as Eugenol (e.g. Croaked) and Hop stop (both registered trademarks) Both are aerosols, which function as sedatives and anesthetic, leading to death without distress.

Decapitation after stunning is permitted solely by professionals who have received appropriate training in toad slaughter techniques.

Extended exposure to Carbon dioxide is allowed, for a large number of toads to be killed at a single time. A suggestion by the Royal Society for the Prevention of Cruelty to Animals, to kill toads by applying hemorrhoid cream on them, did not take off. (34)

The sustainable and ethical sourcing of cane toad leather indicates significant potential for this natural material to be used extensively not only in Australia's fashion industry but also elsewhere to a niche clientele. The time seems just right for global commercialization of the introduced species. In the meanwhile, not to be deterred, some Australians have kept up the good fight by having a little fun in the process.

Some pubs offer beers priced at one bag of dead cane toads per pint; golf courses often have late-night tee-offs with toadlets as balls; some cricket clubs have fun games with batters cover driving or square-cutting toads instead of balls. (35) (36)

The last word, on cane toad skins, should undoubtedly belong to Hippies and vagabonds on Australia's outback (The vast expanse of wilderness spanning Central Australia, interior and non-coastal areas of the Northern territory, Western Australia, South Australia, Queensland and NSW is known as the Australian outback).

In the late 70s and early 80s, whenever heroin, cannabis, marijuana or heroin were unavailable, in short supply or prohibitively priced, the bohemians, caught cane toads from the wild, boiled them in a pot and quaffed the bufotenine-





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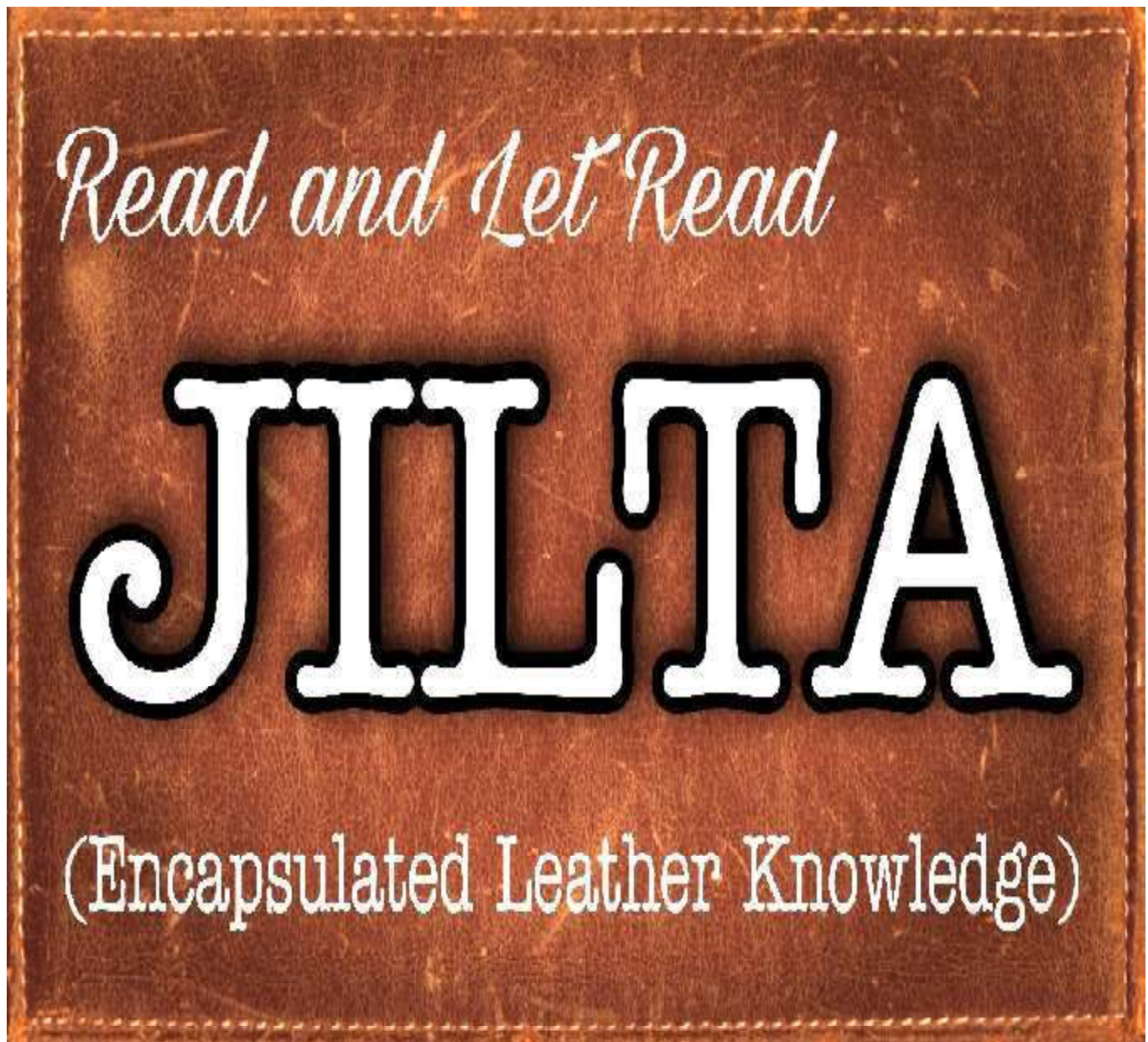
infused water after discarding the amphibian, for euphoria. akin to snorting LSD.

Perhaps the most innovative application of cane toad skin by the outback naturalists, was in chewing, masticating, smoking and inhaling them as a catalyst for hallucination. — thereby transforming slime into sublime. (37)

## Reference :

- (1) <https://www.sugarmuseum.com.au/the-history-of-the-sugar-industry/#:~:text= Sugarcane%20was%20brought%20to%20Australia,at%20Port%20Macquarie%20in%20N>
- (2) <https://www.planthealthaustralia.com.au/industries/sugarcane/>
- (3) <https://www.farms.com/field-guide/pests/sugarcane-beetle.aspx>
- (4) [https://en.wikipedia.org/wiki/Cane\\_toad#As\\_an\\_introduced\\_species](https://en.wikipedia.org/wiki/Cane_toad#As_an_introduced_species)
- (5) <https://www.taipeitimes.com/News/world/archives/2020/03/21/2003733123>
- (6) <https://www.wetropics.gov.au/site/user-assets/docs/03Frogs.pdf>
- (7) <https://www.brisbanetimes.com.au/national/queensland/80-facts-to-mark-80-years-of-cane-toads-20150625-ghxwo9.html>
- (8) <https://studylib.net/doc/8907872/cane-toads—the-conquest>
- (9) <https://pethelpful.com/wildlife/The-Cane-Toad-Australias-Greatest-Pest>
- (10) <https://www.chichesterinc.com/CaneToadLeather.htm>
- (11) <https://www.facebook.com/thebushtannery/>
- (12) <https://ceres.org.au/>
- (13) <http://www.toadfactory.com/>
- (14) <https://www.facebook.com/people/Zambasul-Mercantile/100067037356363/>
- (15) <https://www.adelaidenow.com.au/lifestyle/fashion/designer-monika-jarosz-creates-luxury-bags-using-dyed-cane-toad-skins-sell-for-up-to-360/news-story/f52122eb35a3b832c1fd5c4709a4594d>
- (16) <https://reptilesmagazine.com/paris-fashion-house-kobja-creates-cane-toad-inspired-handbags/>
- (17) <https://www.abc.net.au/news/2015-06-09/transforming-barramundi-chicken-and-cane-toad-leather-to-fashion/6439890>
- (18) <https://www.taipeitimes.com/News/biz/archives/2010/12/19/2003491303>
- (19) <https://www.trendhunter.com/trends/toad-skinned-bow-ties>
- (20) <https://cobblaustralia.com.au/collections/boots>
- (21) <https://cobblaustralia.com.au/collections/boots>
- (22) <https://www.weeklytimesnow.com.au/country-living/adam-parker-of-parker-knives-australia-has-sharp-skills-for-knife-making/news-story/fe1b8ec56b3f859213db72bfc81073f3>
- (23) <https://www.abc.net.au/news/2016-03-22/ bespoke-shoemaker-frances-bunji-elcoate-in-her-darwin-studio/7264912>
- (24) [https://sculptureprize.woollahra.nsw.gov.au/sculptures/2006/colonise\\_-\\_waratah](https://sculptureprize.woollahra.nsw.gov.au/sculptures/2006/colonise_-_waratah)
- (25) <https://www.trustedwatch.com/news/top-watches/7139/The-Tesla-Skeleton-Tourbillon-by-Yvan-Arpa>
- (26) <https://m.facebook.com/twoonefourstraps/posts/2640182232910263>
- (27) <https://www.travelchannel.com/interests/shopping/articles/worlds-wackiest-souvenirs>

- (28) <https://canetoadleather.weebly.com/cane-toad-leather.html>
- (29) <https://toadshop.com/the-story-of-cane-toads>
- (30) <https://www.theguardian.com/artanddesign/2022/mar/27/the-10-strangest-artefacts-in-australian-museums-sorted>
- (31) <https://z-p3-upload.facebook.com/wamuseum/posts/10158427742832312>
- (32) <https://intracen.org/news-and-events/news/cane-toads-creating-employment-from-a-pest>
- (33) <https://kb.rspca.org.au/knowledge-base/what-is-the-most-humane-way-to-kill-a-cane-toad/>
- (34) <https://www.protect-us.com.au/pages/hopstop-home>
- (35) <https://www.outdoorlife.com/blogs/newshound/2012/02/invasive-cane-toad-turned-purses/>
- (36) <https://apnews.com/article/75af08a002ced3946a7bdabc4d439ce2>



## 36<sup>TH</sup> INDIA INTERNATIONAL LEATHER FAIR CHENNAI' 2023



### IILF Chennai 2023 : Event Profile

The 36<sup>th</sup> edition of India International Leather Fair (IILF 2023) Chennai, was organized by Indian Trade Promotion Organization (ITPO) from February 01 – 03, 2023 at Chennai Trade Centre, Nandambakkam, Chennai. There was display of the entire range of products relating to leather industry from raw material to finished products and auxiliary products such as finished leather; shoes; shoe components – uppers, soles, heels, counters, lasts; leather garments, fashion accessories, leather goods, machinery and equipment and chemicals. IILF 2023 was all along a vivid presentation of the leather industry. Latest expressions of the trends, styles, designs and colours in world fashion were exhibited. The business visitors were highly attracted to the exhibits displayed by more and more companies, including more and more from different foreign countries.

### IILF Chennai 2023 : Exhibitors Profile

IILF 2023 had a wide display of the entire range of products relating to leather industry from raw material to finished products and auxiliary products such as finished leather, shoes, shoe components – uppers, soles, heels, counters, lasts, leather garments, fashion accessories, leather goods, machinery & equipment and chemicals.

### IILF Chennai 2023 : Visitor Profile :

- Overseas Business Delegations and Visitors

- Manufacturers & Importers
- Buying Houses
- Suppliers, Consultants, Opinion makers
- Retailers, Shop owners
- Equipment & Machinery Suppliers & Importers
- Marketing & Direct Selling companies

Huge Number of visitors visited the fair on those 3 days.

([exhibitions.com/leather/iilf](http://exhibitions.com/leather/iilf) - 07/02/2023)

## BANTALA LEATHER COMPLEX WILL GET RS 10,000 CR ADDITIONAL INVESTMENT : CM MAMATA BANERJEE



West Bengal Chief Minister Ms. Mamata Banerjee on Thursday said the Bantala leather complex in Kolkata will get an additional investment of Rs 10,000 crore.

In the last one year, 92 new tanneries have been given land lease for setting up units in the complex, she said. "At Bantala, Rs 30,000 crore have been invested that generated employment for three lakh people. Another Rs 10,000 crore will be invested," Banerjee said at a programme here in Howrah district.

There are 50 units at Bantala and 50 more are coming up, the CM said. Banerjee on Thursday also laid the foundation stone of several projects and extended government services to six lakh people in five districts - Howrah, Hooghly, South 24 Parganas, North 24 Parganas and Nadia.

She said the Duare Sarkar' (government at doorstep) scheme will be held every three months. Nine crore applications for the



scheme were received by the state government, of which seven crore have been considered, the chief minister said. Efforts are underway to provide tap water access to all in West Bengal by 2024, Banerjee said, as she laid the foundation stone for a 100-bed hospital at Furfura Sharif and 208 water projects.

The Trinamool Congress supremo also said that more than 30,000 MSMEs have come up in Howrah district and two parks - jewellery and hosiery - have been set up there. She said a Rs 2,700-crore flood relief project has been taken up, which would provide relief to the residents of Howrah, Hooghly and Midnapore.

Banerjee added that her government has invested Rs 35,000 crore in the Deocha Pachami coal block in Birbhum district, and Rs 10,000-crore worth rehabilitation package has been provided. Three industrial corridors are also coming up in south Bengal — Dankuni-Kalyani, Dankuni-Haldia and Dankuni-Raghunathpur — the CM said.

*(Business Standard – 14/02/2023)*

### LEATHER MAINTAINS HEALTHY EXPORT GROWTH DESPITE GLOBAL CRISIS



The year 2020 brought with it a series of events that changed the ways of human existence considerably. For the first time since globalization, worldwide lockdowns brought everything and everyone to a standstill, a state of being that affected everyday lives and also changed the face of international Trade. The shipping container shortage, Suez Canal issue, and now the Russia-Ukraine war have further changed the trajectory on which the global export and import now move amid caution and uncertainty that can perhaps neither be fully predicted nor

assessed. However, there have been certain business sectors that provided a respite despite the economic downturn that we've been experiencing for the third year running.

Despite what was expected and anticipated, the global leather industry has managed to thrive amidst the current economic climate. Leather goods are among the 25 most exported commodities in the world. The global trade value of leather was US\$ 407.92 Billion in 2021 and the assessments of the last three quarters have shown that the growth is not significantly hampered by the way of things, in fact governments have provisioned reliefs and strategies that not only allow to maximize output but also provide the MSMEs an opportunity to take their business global.

As per the current numbers, China is the world leader in production and export of leather and leather goods. About 23 billion square foot of leather is produced annually, a number that Asia significantly contributes to with a whopping 57% share, followed by Europe's 17 percent and Africa's 4 percent with countries like Nigeria accelerating the production of leather and leather goods.

As the top honors are reserved with Asia, thanks to China's 32% share of global leather exports, countries like India and Bangladesh are also in the race with India, despite securing a meager 2% of global export share has been preferred by the European buyers of late. Kanpur, the leather capital of India and country's most populated state UP's major business hub has been dealing with some issues though as the gas and chemicals sourced from Russia in the large scale production of leather and leather goods is currently hampered. Additionally, chemicals exported from Europe were also sourced from Russia, a trade route which is now indefinitely closed with European exporters and suppliers looking for sourcing agents from other countries including from South America.

As per the current scenario, even though the exports bounced back in the aftermath of Covid-19 and returned to the 2018-19 numbers, any significant improvement in numbers and UP's Chief minister Yogi Adityanath's pledge to make the state a Trillion Dollar economy in this decade are severely affected by the war.

With the last quarter of the year still generating hopes amidst the exporters due to the Christmas and holiday season in Europe and America, government's support and strategic trade

agreements could definitely improve the situation for India. It is the same support from the government however, that is turning India's neighbor Bangladesh into a solid global exporter of leather and leather goods. With the aim to make leather a US\$10 Billion industry, the government of Bangladesh is leaving no stones unturned in increasing the production and export of leather.

Despite the ongoing global economic crisis, Bangladesh's leather sector witnessed a staggering 17.56% y-o-y growth, an improvement that was motivating enough for the government to introduce the bonded warehouse facility to help small businesses with limited investment become more competitive in the international trade arena.

Several industries have been directly hit by the ongoing war and the effects of pandemic are still reeling in, but leather industry has given a ray of hope to hundreds of thousands of business units who are looking at the next big export order to help solidify the global economy.

(Source : Tol – 11/02/2023)

### A BAD YEAR FOR MSMEs: OVER 10,000 CLOSED IN 2022-23



This data was revealed by the Union government in response to a question raised in the Rajya Sabha.

As many as 10,655 micro, small and medium enterprises closed down in the financial year 2022-23 – the highest in the last four years. This data also misses one year of the month, since the year is still ongoing – so the actual number may be even higher. In 2021-22 that number was 6,222, which in 2020-21 it was far lower at 175 and in 2019-20 it was 400.

This data was revealed by the Union government in response to a question raised in the Rajya Sabha, *Business Standard* reported. According to the data, the ratio of closures to new firms opening has also been worsening. "There were over 11,000 new firms started for every one of the 175 that shut down in 2020-21. This was down to 349 new firms for every shutdown in 2021-22. The current year has seen 167 firms open for every closure," *Business Standard* reported.

Economists have been raising concerns for a while now about the health of MSMEs in India and concern this poses for the economy as a whole and unemployment, particularly after the twin shocks of demonetisation and a poorly implemented GST regime, and then the COVID-19 pandemic and lockdowns it brought with it.

Former chief statistician of India Pronab Sen recently told Karan Thapar in an interview that the condition of the MSME sector, which accounts for 30% of the economy and perhaps 40% of employment, is the most worrying and critical problem that must be tackled. A lot critically depends on whether new MSMEs are created to replace the approximately 20% that died and disappeared during the pandemic, he added.

(The Wire.In – 08/02/2023)

### 67% INDIAN MSMEs SHUT DOWN TEMPORARILY IN LAST 12 MONTHS; 50% LOST 25% REVENUES





In a survey conducted by Small Industries Development Bank of India (SIDBI), it has been found that the pandemic and lockdown had a very decremental impact on Indian startups and small businesses. In fact, around 67% of Indian MSMEs were temporarily shut down in the last 12 months, and around 50% lost 25% of their revenues. Here are more details.

### **Pandemic Impact : 67% Indian MSMEs Temporarily Shut Down**

MSME Minister Narayan Rane shared the survey results conducted by Small Industries Development Bank of India (SIDBI), and shared some depressing news. The survey was conducted across 1029 enterprises in India, categorized under MSME. As per the report, 67% of the Indian MSMEs were shut down for at least 3 months in FY21, while 50% of the MSMEs lost 25% of revenues.

As per the new classification, businesses with Rs 1 to Rs 5 crore revenues are classified as Micro Businesses; businesses with investment up to Rs 10 crore and revenues less than Rs 50 crore are classified as small enterprises and businesses with investment up to Rs 50 crore and turnover up to Rs 250 crore are classified as medium enterprises. Govt of India has asked SIDBI to conduct this research to find out about the impact of lockdowns and the pandemic.

### **What Causes This Loss in Business**

As per the survey results, stable fixed costs and decline in revenue caused 66% of the MSMEs to have reduced revenues, while 65% of the MSMEs availed Emergency Credit Line Guarantee Scheme (ECLGS) to run their businesses. Approximately, Rs 2.88 lakh crore of loans were disbursed under ECLGS scheme. At the same time, around 36% of the MSMEs availed loans under Credit Guarantee Fund trust for Micro and Small Enterprises. Primary issues faced by the MSMEs include: liquidity issues, fresh orders, availability of labour, logistics issues and availability of raw materials.

*(Trak.In – 08/02/2023)*

### **LEATHER, FOOTWEAR EXPORTS TO REACH \$6 BN; TARGET SET FOR \$14 BN BY 2030**

In the current fiscal year, the exports of Indian leather and footwear sector is expected to touch USD 6 billion, said Sanjay Leekha, Chairman, Council for Leather Exports.



This will happen as against USD 5 billion in the previous year as there is a good growth momentum, he said. While announcing the 36th India International Leather Fair to be held in Chennai from February 1 to 3, he said the target is to reach around USD 14 billion exports by 2030.

During April to December, exports of leather, leather products and footwear have registered a 'substantial' growth this fiscal, reaching USD 4.25 billion. "Buyers are looking at India as a major and reliable supplier of value-added products," he said. Commenting on the annual international leather fair, Leekha said it would have on display the entire range of products relating to the leather industry.

*(knnindia.co.in – 01/02/2023)*

### **INDIAN LEATHER INDUSTRY TO GROW THREE-FOLD BY 2025 : IFLMEA CHAIRMAN**



Chairman KR Vijayan says the industry needs to invest and equip themselves to meet the growing demand.



The Indian leather manufacturing and trade industry is expected to witness a three-fold jump in the next 2-3 years due to strong domestic demand and exports due to China plus one strategy adopted by major export markets like the US and Europe. "The Indian leather industry will see a three-fold jump by 2025," said KR Vijayan, Chairman, Indian Finished Leather Manufacturers & Exporters Association (IFLMEA).

With European and US brands starting to explore Indian leather manufacturing facilities, the Indian finished leather product exports is likely to increase three times in the next two years.

K R Vijayan, Chairman, Indian Finished Leather Manufacturers and Exporters Association (IFLMEA) informed the media on Tuesday that the domestic market is increasing enormously and is expected to increase thrice by 2025. About USD 5 billion worth of the manufactured goods are exported out of the USD 10 billion size of the Indian leather trade and products.

Shoes are the major products exported in this segment from India with most of the exports headed to Europe and the US. Vijayan said that currently the American business with the domestic leather business has reached over 5 per cent which was not even 1 per cent earlier. "The development comes in the backdrop of leather product manufacturers in Europe and US, who were sourcing finished leather products from facilities in China and Vietnam have started shifting their focus to other Asian countries post-Covid," he added.

*(thehindubusinessline.com & knnindia.co.in – 25/01/2023)*

### AUSTRADE SIGNS MOU WITH LEATHER SECTOR SKILL COUNCIL ON TRAINING STANDARDS



Under the MoU, the Future Skills Initiative team in Austrade India will focus on job roles relating to 3D printing, product design, automation engineering and so on.

The Australian Trade and Investment Commission (Austrade) on Thursday signed a memorandum of understanding (MoU) with the Leather Sector Skill Council to collaborate on Technical Vocational Education and Training (TVET) programmes and introduce Australian training standards in the leather sector. Leo Bremanis, Trade Commissioner, Austrade, and Rajesh Ratnam, CEO, Leather Sector Skill Council, exchanged copies of the MoU. Sarah Kirlaw, Consul-General, Australian Consulate, Chennai; and Sanjay Leekha, Chairman, Council for Leather Exports, were present.

The MoU will be implemented through the Future Skills Initiative team in Austrade India and focus on job roles relating to 3D printing, product design, automation engineering, 3D scanning, computerised stitching machine operations, computerised cutting machine operations, automatic machine programming, AI-driven quality inspection and other areas as agreed to by both the parties.

There will be specific focus on aspects such as sustainability, net zero, industry 4.0, virtual and augmented reality and other applications. Both partners will seek to facilitate mutual exchange of knowledge related to Technical and Vocational Education and Training in the leather sector.

*(thehindu.com – 02/02/2023)*

### SUSTAINABLE LEATHER MARKET REWRITING LONG TERM GROWTH STORY: BADER, SCOTTISH LEATHER, DANI



Latest Study on Industrial Growth of Global Sustainable Leather Market 2023-2029. A detailed study accumulated to offer the Latest insights about acute features of the Sustainable Leather market. The report contains different market predictions related to revenue size, production, CAGR, Consumption, gross margin, price, and other substantial factors. While emphasizing the key driving and restraining forces for this market, the report also offers a complete study of the future trends and developments of the market. It also examines the role of the leading market players involved in the industry including their corporate overview, financial summary, and SWOT analysis.

The Major Players Covered in this Report: Eagle Ottawa, Bader GmbH, Boxmark, GST Autoleather, Wollsdorf, Mingxin Leather, Scottish Leather Group, Dani S.p.A., Sichuan Zhenjing, Shandong Dexin, Zhejiang Tongtianxing, Xingye, Feng An, Guangdong Tannery & Gan Su Hong Liang

Sustainable Leather Market Study guarantees you to remain/stay advised higher than your competition. With Structured tables and figures examining the Sustainable Leather, the research document provides you with a leading product, submarkets, revenue size, and forecast for 2029. Comparatively, it also classifies emerging as well as leaders in the industry. Click To get SAMPLE PDF of Sustainable Leather Market (Including Full TOC, Table & Figures)

This study also covers company profiling, specifications and product picture, sales, market share, and contact information of various regional, international, and local vendors of Global Sustainable Leather Market. The market proposition is frequently developing ahead with the rise in scientific innovation and M&A activities in the industry. Additionally, many local and regional vendors are offering specific application products for varied end-users. The new merchant applicants in the market are finding it hard to compete with international vendors based on reliability, quality, and modernism in technology.

The titled segments and sub-section of the market are illuminated below :

In-depth analysis of Global Sustainable Leather market segments by Types: , Market Data Breakdown by Type, Cow Leather, Pig Leather & Sheep Leather. Detailed analysis of Global Sustainable Leather market segments by Applications: Furniture, Automotive, Shoes & Accessories & Other

Major Key Players of the Market: Eagle Ottawa, Bader GmbH, Boxmark, GST Autoleather, Wollsdorf, Mingxin Leather, Scottish Leather Group, Dani S.p.A., Sichuan Zhenjing, Shandong Dexin, Zhejiang Tongtianxing, Xingye, Feng An, Guangdong Tannery & GanSu HongLiang

Regional Analysis for Global Sustainable Leather Market :

- APAC (Japan, China, South Korea, Australia, India, and the Rest of APAC; the Rest of APAC is further segmented into Malaysia, Singapore, Indonesia, Thailand, New Zealand, Vietnam, and Sri Lanka)
- Europe (Germany, UK, France, Spain, Italy, Russia, Rest of Europe; Rest of Europe is further segmented into Belgium, Denmark, Austria, Norway, Sweden, The Netherlands, Poland, Czech Republic, Slovakia, Hungary, and Romania)
- North America (U.S., Canada, and Mexico)
- South America (Brazil, Chile, Argentina, Rest of South America)
- MEA (Saudi Arabia, UAE, South Africa)

Furthermore, the years considered for the study are as follows :

Historical year - 2017-2022E, Base year – 2021, Forecast period\*\* - 2023 to 2029 [\*\* unless otherwise stated]

Moreover, it will also include the opportunities available in micro markets for stakeholders to invest, a detailed analysis of the competitive landscape, and product services of key players.

Key takeaways from the Global Sustainable Leather market report :

- Detailed consideration of Sustainable Leather market-particular drivers, Trends, constraints, Restraints, Opportunities, and major micro markets.
- Comprehensive valuation of all prospects and threats in the In-depth study of industry strategies for growth of the Sustainable Leather market-leading players.
- Sustainable Leather market latest innovations and major procedures.

- Favourable dip inside Vigorous high-tech and market latest trends remarkable the Market.
- Sustainable Leather Market, by Application [Furniture, Automotive, Shoes & Accessories & Other]
- Conclusive study about the growth conspiracy of Sustainable Leather market for forthcoming years.
- Sustainable Leather Industry Chain Analysis

What to Expect from this Report On Sustainable Leather Market :

1. A comprehensive summary of several area distributions and the summary types of popular products in the Sustainable Leather Market.
- Sustainable Leather Market, by Type [, Market Data Breakdown by Type, Cow Leather, Pig Leather & Sheep Leather]
2. You can fix up the growing databases for your industry when you have info on the cost of the production, cost of the products, and cost of the production for the next future years.
- Industry Manufacture, Consumption, Export, Import by Regions (2017-2022E)
3. Thorough Evaluation of the break-in for new companies who want to enter the Sustainable Leather Market.
- Industry Value (\$) by Region (2017-2022E)
4. Exactly how do the most important companies and mid-level companies make income within the Market?
- Sustainable Leather Market Status and SWOT Analysis by Regions
5. Complete research on the overall development within the Sustainable Leather Market that helps you select the product launch and overhaul growths.
- Major Region of Sustainable Leather Market
  - i) Global Sustainable Leather Sales
  - ii) Global Sustainable Leather Revenue & market share

Detailed TOC of Sustainable Leather Market Research Report :

- Sustainable Leather Introduction and Market Overview *(openpr.com – 13/02/2023)*
- Conclusion





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## Modernisation of Indian Leather Goods Industry\*

By N. LAKSHMINARAYANAN, Scientist,  
Leather Goods Division, Central Leather Research Institute, Madras.

### Introduction :

INDIAN Leather Industry presents a spectrum with various facets viz. Tanning, Footwear, Leather Goods, Garments, Sports Goods, Industrial Leather products and Harness and Saddlery that remain in different stages of growth. Orchestration of efforts for the harmonious integrated growth of leather industry is really a stupendous task that calls for meticulous short and long term planning and involvement of thousands of units and more than a million people. The major characteristics of the industry is the wide geographical spread throughout rural and urban India, predominance of small size and employment of large number of socially and economically backward persons for whom finding alternative employment would be difficult.

In the last six plan periods, however, from a mere Rs. 25 crores in 1952 the value of export of leather industry had increased to Rs. 662 crores in 1985-86.

The share of leather goods/garments had exceeded 9% in 1985-86 from a poor share of less than 1% in 1952 out of the total exports of leather group.

The share of leather products including footwear in the exports had touched 49% in 1985-86 compared to less than 8% in 1956-57. It is likely to reach 60% in 1986-87.

In the global trade India's share is around 1% in the case of garments and hand bags though the share is more than 9% for shoe uppers and Harness and saddlery.

The internal market is also growing in the last decade with the expansion of corporate sector. In this process, however, out of date layout, obsolete and modern machines, trained technologists and those by experience co-exist in many units, though few units have been started afresh with modern layout to process leathers and leather products. The technology practised is also the mixture of old, new and in some cases defective or admixture of all.

### Modernisation of Leather Products Industries :

i. Modernisation of any industry would imply improving the productivity, introducing

techniques that would make the job less or without drudgery, pollution and health hazards and command more facilities. This will also ensure standardisation and quality improvement thereby reducing the empirical nature of techniques of production and returns.

ii. Modernisation programme should take into consideration the availability of raw materials in quantum, quality, type and supply source. This is a major determinant for suggesting production capacities in the industry.

iii. Leather product industry is dotted throughout the country in the various sectors following different processing methods. Creating proper linkages of various sectors and segments to their mutual advantage is *sine quo non*.

iv. Indian leather industry has grown mainly owing to higher demand conditions for leather and leather products in the overseas countries. In this process, the industry is to produce leather products of international standards and substantial changes in the technical, financial and commercial managements are necessary with adequate additional investment.

v. The industry is mainly in the small and medium scale and majority of the units are pro-

\* Paper presented at the Seminar-Cum-Workshop on Modernisation of Leather Footwear and Leather Products Industry in West Bengal.

prietary or partnership firms. In 1982-83, 79% of the exports of leather industry have emanated from the small scale sector as against 24% for all commodities.

- vi. The internal market is growing in India with an annual increase of 2% of population and with changes in occupational pattern, educational level and effective increase in the purchasing power.

The modernisation of Leather and Leather Product industry can be realised if an integrated approach to link the various segments of the industry is followed. The efforts are essential from the stage

of mobilisation and preservation of raw materials to processing of leathers, fabrication of multiple end products to cater to the internal and external market. In this long chain different functionaries are engaged and there is scope to improve each functionary and also integrate several functionaries to their mutual benefit.

## Indian Leather Goods Industry— Brief Profile :

Indian Leather Goods units numbering around 2000 engaged in the manufacture of small leather goods, solid leather goods, hand bags, garments and belts are largely located in the metro-

politan centres viz. Calcutta, Madras, Bombay, Bangalore, Kanpur, Delhi, Srinagar and few smaller towns. In this garment units account for about 100. The tannery backed units and those units that are diversified from Footwear do better in this field. Large number of merchant exporters have now entered in arena and some of the smaller units enter exports through them. The products exported in the order of importance are wallets, hand bags, garments and belts.

The export pattern of Leather Goods and Garments are shown in Table 1.

Table—1

## India's Export of Leather Goods and Garments

(Rs. in millions)

Item	79-80	80-81	81-82	82-83	83-84	84-85	85-86
Saddlery and Harness	34	37	31	29	46	49	77
Hand Bags and Wallets	86	98	205	246	295	355	587
Belts and Watch straps	03	07	01	02	03	02	02
Leather Garments	56	54	61	73	103	95	167
Other Leather Goods	03	05	02	01	Neg.	Neg.	01
	182	191	300	351	447	501	834

Source : Council for Leather Exports.



The value of exports of items that include saddlery and harness, wallets, hand bags and leather garments had appreciated from Rs. 18 crores in 1979-80 to Rs. 83 crores in 1985-86 i. e. an increase of 360% with an annual average of 60%. The export of leather group as a whole had increased in the eighties by about 100% with an annual average of 16%, thereby signifying four-fold relative performance of leather products.

## Leatherware Industry— Constraints :

The Leatherware industry is marked by low productivity, indifferent quality, poor financial management, inadequate marketing know-how and in some cases obsolete technology. Most of the units adopt traditional system of management by family members. The other characteristics are isolated efforts, lack of designs and proper workmanship, lack of modern merchandising methods, many sellers chasing few buyers particularly overseas

thereby under selling the products and lack of efforts to constantly improve the quality.

## Leather quality :

The problems on the leather quality identified are :

- Inefficient anti mould protection of leather.
- Reduced visco elastic properties of upper leathers due to excessive stretch during drying.
- Low hydrothermal stability.
- Poor ageing properties of some vegetable tanned leather with fungal growth in winter.
- Smelly and developing cracks in winter.

## Fabrication Defects :

In the Leather Goods production the technical defects noticed are :

Using finger than brushes for applying adhesives, excessive or wrong use of adhesives, improper

staining at edges, improper method of assembling and final machining, drawing and cutting more than the pattern thereby allowing for waste, using thicker needle with a thin thread which leaves big holes and using unsuitable threads, fittings and embellishment. Even imported fittings are affected by weather in India and sometimes not in shape by the time it reaches the consumer.

## Marketing :

In the case of leather goods and garments, visual appeal, fashion content, performance characteristics, colour, shape, treatment with embellishments, lining materials used are some of the additional attributes that determine the quality of the products.

India is largely catering to the high volume low priced products in the overseas trade. The much value added areas are still dominated by selected developed countries such as Italy, France and Germany. Comparative prices of some of the overseas and Indian products are given below :

	(In U. S. Dollars)	
	U. S. A. (Retail Prices)	Indian (Export Prices)
Hand Bags (Gucci)	200	8 to 15
Leather Jackets (Anneklain & Co.)	1120	40 to 70
Leather Coat	2330	60 to 80
Fur Coats (Rivellon)	17000 to 30000	200 to 500
Sable Fur Coat	69000	Kashmir Fur Coats
Nirch Watch straps	30 to 150	1 to 2

(Various issues of 'Vogue' Journal)



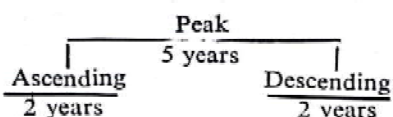


The prices are not strictly comparable as the retail mark up is more than 300 to 400% in the advanced countries. Moreover the materials may not be comparable such as Indian and overseas fur coats. However price variations only suggest the sizeable gap in reaching the sophisticated segments of overseas markets.

## Fashion and Design :

The manufacturers generally follow the existing patterns and those supplied by the importers. Designs and fashions serve as marketing determinants particularly in the developed markets. As per a study based on 60 years records that a major fashion cycle occurs once in 9 years. A major new cycle goes into ascending for about two years, peaks approximately for five years, then descends over the next two years.

### Fashion Cycle



This study reveals that nothing happens abruptly and one can watch carefully the ascending period of fashion cycle to reach and remain the long time five years spell of peak. Fashion changes occur as a result of combination of political, social and economic forces which establish new life styles. This study further reveals that though fashions change, the basic styles are same for a longer period. New fashions are not cycles but only ripples of changes.

As per another study, the market is segmented as follows :

Segment	Percentage	Period
i. Conservative	40	Frequency of styles change once in seven years
ii. Middle Field	35	Changes once in two years
iii. Fashion	25	Changes once in six months

According to a Dupont study about 40% of the market is truly responsive to fashion changes, 18% is termed as classic individualistic middle of the fashion sensitive—insensitive and the rest is classical.

New fashion is the result of practical research based on "Plodding leg work analysis and an unique 'sixth sense' of fashion judgement and an intuitive ability to spot a trend in a bud stage and anticipate this movement to bloom".

It is essential to make further studies on this vital area. In India most of the production is carried out based on buyers' designs and not much creative designs are introduced. There is scope to introduce designs with Indian motifs.

## SECTION—2

In the earlier section, constraints in the materials, production, management and marketing of leather products have been described. The areas that require attention are detailed in the ensuing section.

**Materials : Leather—essential characteristics :**

The main raw materials for

leather goods and garments are finished leathers of different types

and grades. The essential physical characters expected from leathers used in Leather goods are : high degree of scuff resistance, water and perspiration proof, soft, medium soft and firm leathers, stain resistance, high tensile strength, adequate elongation, flexibility, tear strength, puncture resistance, colour fastness, breathing and insulatory qualities. In the case of garments, matching physical surface with regard to grain pattern, soft and pliable, matching colour, flame proof, heat and water resistance, draping quality, feel, fullness and grain smoothness are some of the qualities expected of leathers.

The performance characteristics of leather to match the end products have to be further studied and measures taken to process requisite leathers. A small booklet entitled 'What is Leather?' describing various visual and physical characteristics of leather with sample bits and photograph can be prepared for the use of mainly non leather entrepreneurs and managers.

**Fittings and Embellishments :**

In the Leather Goods fittings and ornamental embellishments



serve significant role in the value added and sales. Efforts to produce such quality fittings with foreign collaboration or independently are essential. The Leather Development fund cannot be better utilised than setting up of production facility for export quality fittings and linings. An exclusively functional industrial estate for different fittings including combination locks, certain linings, small tools and machines to cater to leather products would be ideal for helping the export production and the state level corporations can take up this work. The value of fittings and linings used in the country would more than Rs. 100 millions for Leather Goods alone.

The import duty on exclusive accessories for Leather Goods such as combination locks may be reduced to the minimum or removed so that export products acceptable to the developed markets with proper fittings can be manufactured.

## Work Space—Work Culture and Tools :

The quality of workmanship, particularly when the work is done by using largely manual technology depends on proper physical work environment, scientific schedule of work and convenient and efficient tools.

## Multi storeyed Industrial Estates for Leather Products :

The Leather Goods units are mostly located in the metropolitan cities where finding work space is difficult and expensive. The problem is all the more greater in the cities like Calcutta and

Bombay. The answer for this problem is the establishment of multi storeyed industrial estates for Leather products. This industry does not involve installation of any heavy machinery nor there is any problem of pollution. This can be done by the State Leather Industry Development Corporations.

## Work Environment :

The workers now mostly squat on the floor and work with hand. The adhesives are applied by hand which causes waste besides uneconomical and unhygienic. It is necessary to train the workers to sit comfortably by providing necessary furniture to ensure better comfort and resultant productivity.

Ergonomics is the science of fitting the task to human beings. It evaluates the strengths and weaknesses of human beings to the layout and facilities of the working environment. Ergonomic studies can be undertaken to ensure better work environment for quality output.

## Better Tools :

The artisans use age old tools in the fabrication of Leather Goods. The prototype Development and Training Centre, Madras has developed a number of new tools such as bottom cutting knife, clicking knife, eyeletting tool, stitching Awl, straight backing knife and an economic container for adhesive application. Such tools ensure increased work turn over with less drudgery, better and careful material usage and longer life in relation

to cost. The State Level Leather Development Corporations can initiate steps to popularise the use of such new tools even at a subsidised price.

## Common Facility Centre :

It is *sine quo non* for Leather Goods industry to produce quality products for overseas markets. A reasonably modern unit requires Rs. 5 lakh worth of machines which would be expensive for new entrants. As such common facility centres with machines and other facilities for sample making and design reproduction are essential in the big centres such as Calcutta, Bombay and Madras.

## Testing and Certification for Leather Goods and Garments :

There is no facility to test and issue certificates indicating the physical inputs and performance levels for Leather goods and Garments. Such facility would infuse confidence among importers about the quality and facilitate placing orders based on specifications. *Prima facie* broad physical and performance norms based on importers' requirements have to be evolved.

## Training and Employment :

In the skill intensive leather product industry, human resource plays a key role in the quality fabrication and hence efforts are essential to improve the syllabi and methods and facilities of instruction in the existing institutions.

- i. There is need for advanced level training programmes for Leather Goods and





- Footwear to meet the middle and top management levels.
- ii. Additional training facilities for Leather garments and Sports goods are essential to meet the growing needs.
  - iii. The training institutions should have a product library of Leather Goods and Footwear of all ranges and also facilities for pattern reproduction. The product libraries should have latest catalogues and magazines on leatherware industries.
  - iv. There is growing need for technical manpower for leather industry. It is essential to provide for registering with an agency those who seek jobs and want technical manpower i. e. a sort of exclusive employment exchange for leather technologists, managers etc. Even C. L. R. I. can do this service, after notifying in the leather and other press.
  - v. In getting technical experts from overseas countries particularly from Italy and Germany, it is advisable to get foreman level persons to train the core staff of training institutions in India. The Indian Leather Goods makers are interested to know the techniques of imparting fineness and excellence to the products.

## Management and Entrepreneurial Guidance :

The small and even some medium units do not have resources and expertise to follow modern

management and marketing methods. Such units can be helped by institutions like state Leather Development Corporations with the following services.

### i. Management Audit and Accounting Service :

The small scale units may be provided with scientific costing and accounting services to know their position periodically and plan efficient management of the units. This service can be done on a retainer basis for a small annual fee for the small and other needy units.

### ii. Entrepreneurial Guidance Courses :

Short term courses to the existing and new entrants on procedures and documentation necessary for starting new units, production methods and marketing can be organised.

- iii. Professional management, material control, work study, methods of collecting market intelligence etc. can be imparted to the small units by short term courses.

- iv. Periodic refresher courses on machine maintenance and repair may also be conducted for the benefit of small units.

### v. Leather Awareness Course :

There are considerable number of non leather persons operating in the production and training area of Leather Goods industry. Such persons may be helped by organising short term courses on leather awareness in which techniques of identifying and evaluating the quality of leathers can be taught and an album of leathers with description can be supplied.

## Investment Requirements towards Modernisation :

The additional investment requirement towards modernisation of leather and leather product industries in the seventh plan has been estimated at Rs. 2978 millions. The details are given in Annexure 3.

The investment required for leather product sector total to Rs. 2123 millions and the details are as follows :

(In million Rs.)				
	Machinery	Total F.C.	Working Capital	Total
i. Leather Footwear	511	826	972	1798
ii. Leather Garments	15	30	95	125
iii. Leather Goods	50	75	125	200
			Total	2123

Around 40% of the additional requirement is earmarked for machinery.





## Marketing :

### India's position in the global trade :

India's position in the global trade of Leather and Leather products is given in the Annexure 2. India had significant share in the case of goat finished leather. In respect of products Harness and Saddlery and prepared parts of Footwear account for around 10% in the global trade.

India is faring poorly in the export of travel goods and hand bags with around 1%. The full footwear which accounts for 50% of the global trade in the products, India had a meagre share of 0.39% in 1982. The performance is no better in the recent years.

In order to promote exports the following suggestions are made :

#### i. Incentives to Import of Leather :

As per the seventh plan working group on leather shortage to the extent of 272 million sq. feet of leather by 1989-90 is expected and this huge deficit is to be met by augmenting internal availability and imports of raw and finished leathers. A freight subsidy for imports of finished leather through air as well as import of raw hides by sea can be considered to make available leather at competitive prices.

#### ii. Buyer Seller Meet—National level :

India is a vast country with certain centres turning excellent in chosen fields. The leather product manu-

facturers in Kanpur, Calcutta, Bangalore and Delhi find it difficult to procure right type of leathers available in Tamil Nadu and Calcutta. Similary requirement of sole and Kattai leather from Kanpur to other region is enormous. The buyer seller meets are organised in the overseas countries and the C.L.E. T.D.A. can organise buyer seller meets in the important centres in India to link the various interests in the country. This will also help export production.

#### iii. Wholesale 'Marketing Estates' for Leather Goods & Garments :

As an adjunct to Industrial Estates that are meant for promoting production, 'Marketing Estates' in multi storeyed structures can be established in the metropolitan centres to facilitate wholesaling of leather products. Such estates will help the now scattered leather product units, to find central marketing outlets. The Indian and overseas buyers can shop in centralised places. This is essentially linking the sellers and buyers and such estates can also be provided with liason offices of R & D and other promotional institutions, communication facilities, display room etc.

#### iv. Fashion Dissemination Centre—Leather Products :

There is lack of knowledge

about the latest fashion trends particularly among the small scale producers who cannot afford to go abroad and observe the Fashion Shows and Fairs. Centres for compiling and disseminating of latest in colours, materials, shapes, fashion trends in respect of garments and leather goods can be established. The latest magazines and catalogues can be displayed with facilities for reproduction by the client industrialists. A magazine incorporating creative new designs as well as those prevalent in the target markets can be published by this centre. The Council for Leather Exports, State Trading Corporation and Trade Development Authority can help this centre by supplying latest designs of products from the overseas countries.

#### v. Computer Aided Design :

Computer Aided Design centre has been recently started in the Central Leather Research Institute. The industry can make use of this centre for evolving newer designs, improving the existing styles etc. with advantage. This National centre possesses the latest and modern computer devices to help the industry.

#### vi. Joint Ventures :

Joint ventures with marketing tie up for garments and leather goods can be explored with the producers of



well known world renowned brand names in the overseas countries to turn out quality products for the high value export markets.

## vii. Joint Common Sales Offices in overseas countries :

Exporters of different product lines without competition such as garments, wallets, hand bags and even footwear can set up joint sales offices in the different important overseas capitals such as Frankfurt, New York and Tokyo to promote direct business with less sales overheads.

## viii. Other Market Promotion Measures :

1. 'Italian Shoe Centre' in New York is a joint venture of the Italian Government and industry. It is linking the manufacturers and retailers to eliminate the middleman to the advantage of exporter. Indian Trade associations can think of starting an Indian Leather Centre in New York or Germany.
2. Colourful catalogue with price list is essential to contact the potential buyers. The units can figure in the catalogues published by TDA and also advertise in the journals abroad.
3. Participation in the fairs held in France, Germany, Italy, U.K. Hong Kong and U.S.A. The exporters can participate through C.L.E., S.T.C., T.D.A. and also direct in such fairs.
4. The intending exporters can make use of the Indian com-

mercial attaches in the diplomatic missions abroad to find buyers for the Leather Goods by sending samples and catalogues.

5. The units should have a well furnished sample room displaying the latest for the proper appraisal of the buyers from India and abroad.
6. It is worth exploring to start mail order business in India.
7. The international trade centre of UNCTAD at Geneva is issuing periodically monographs on Leather Goods indicating the market size, type of products demanded, trade practices and channels, tariff and non-tariff regulations, details about fairs, journals, useful addresses of the potential buyers for selected countries.
8. The Indian Trade Centre at Brussels is having a leather wing and bringing out market potential publications for the benefit of Indian exporters of leather goods.
9. S.T.C. is having a common display centre for Indian products at Frankfurt, Germany and Indian Leather Goods makers can display in the centre.
10. In U.K. and Sweden there are state sponsored organisations to help the exports from the developing countries.
11. In Japan 'JETRO' and Japanese International Co-operation agency are interested to help the export promotion

and joint ventures from India and other developing countries.

12. It is essential to have personal contact for the export of Leather Goods and hence frequent visits to overseas countries are essential. As a part of the incentive it is suggested that a portion of the overseas sales turnover may be given as incentive to meet the travel cost besides normal export incentives to encourage new entrants in the field.
13. Finishing and packing—The leather goods made should be cleared of solution, loose thread etc. and packed to maintain the shape of the products.

## Concluding Observation :

India's strength lies in the availability of inexpensive but abundant leather and labour. The other infrastructural needs like work space, power, transport etc. are also available at comparatively less cost to the developed countries.

India's weaknesses are isolated efforts, lack of designs and proper workmanship, lack of modern merchandising methods, too much competition among exporters leading to under cutting and lack of strong organisational structure in the industry.

The opportunities for Indian Leather and Leather Goods industry are plenty. U.S. with 6% of the global population consumes around 16% of the world leather and leather products. India is yet to touch even more than 1% of the U.S. market.





Japan is a billion dollar market for leathers, shoe uppers, leather goods and garments. India's share in the market is around 1.4% for wallets and 0.01% in the case of garments. Germany is yet another market wherein India is doing well over the years but there is immense scope for expansion.

In fine our harping on export promotion and publicising the incentives for export promotion and import restrictions generally irritate the developed countries that provide the market. Japanese call it as overseas trade promotion for mutual interest and not

export promotion. The Japanese way of interpreting an exhibition is not focus on exports but an attempt to show how Japan and other countries would work together for their common benefit.

## References :

1. Export Prospects of Leather and Leather Products, N. Lakshminarayanan— 'Voice'—Jan. 1987.
2. Fashion cycles and how they work  
William A. Rossai—Footwear Magazine—Oct. 18, 1982.
3. Leather—London—April 1974.

4. Fashion Research—The silent trend on matter.  
William A. Rossai—Leather and Shoes Vol. 168—Page 9—Sep. 1975.

5. Various issues of 'Vogue'.

6. Indian Leather Goods and Garment Industries.

7. Measures for quality improvement  
S/Shri G. Thyagarajan, N. Lakshminarayanan and T. K. Parthasarathi.  
Modernisation of Indian Leather Industry,  
Sub Committee Report of the Planning Commission.

Opinions expressed in this paper are the author's only and do not necessarily reflect the views of the Institute in which he is employed.

## ANNEXURE—1

### India's Export of Leather and Leather Products

(Rs. in crores)

Sl. No.	1957	1967	1977	1982-83	1983-84	1984-85	1985-86
1. Raw hides & skins	7.0 (22)	15.7 (20)	0.8 (neg.)	—	—	—	—
2. Semi finished leathers	20.2 (65)	56.1 (69)	149.5 (49)	54.45 (13)	53.34 (12)	49.2 (8)	49.1 (8)
3. Finished leathers	1.4 (5)	2.0 (2)	105.2 (34)	199.90 (50)	195.58 (45)	308.5 (54)	288.2 (43)
4. Leather products	0.2 (1)	0.4 (1)	27.4 (9)	46.75 (12)	50.08 (12)	66.5 (11)	102.0 (15)
5. Footwear	2.3 (7)	6.7 (8)	25.8 (8)	19.58 (5)	23.48 (5)	26.8 (5)	33.0 (5)
6. Footwear components	—	—	—	79.27 (20)	113.56 (26)	132.8 (22)	190.4 (29)
	31.1 (100)	80.9 (100)	308.7 (100)	399.95 (100)	436.04 (100)	583.8 (100)	662.7 (100)

Source : CLE-MADRAS

(Figures in brackets indicate percentage share to total)

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## ANNEXURE-2

### India's Share in the World Imports of Leather & Leather Products

(In Million US Dollars)

	World		India's Share		India's % Share	
	1972	1982	1972	1982	1972	1982
<b>1. Leather</b>						
Calf leather	109	223	16	21	14.26	9.48
Leather Bovine	345	1221	17	49	4.81	3.99
Sheep leather	179	334	30	40	16.90	12.13
Other leather	77	199	1	5	0.82	2.26
Goat leather	164	292	64	91	39.19	31.27
Leather patent (Metalised)	30	28	neg.	neg.	0.03	0.81
	904	2297	128	206	14.08	8.98
<b>2. Leather Products (SITC)</b>						
Leather belting (6121)	7	13	0.03	0.3	0.43	2.57
Harness makers goods (6122)	28	63	1	6	3.60	9.65
Prepared parts of footwear (6123)	99	559	1	55	1.23	9.92
Leather manufactures (6129)	27	102	—	0.3	—	0.33
Travel gllds, hand bags (8310)	443	2604	3	29	0.76	1.12
Leather clothes & accessories (8413,8481)	393	1622	0.2	22	0.06	1.37
Fur etc. clothes and products (8483) 0.842	172	1139	0.04	3	0.02	0.30
Leather footwear (8510)	1793	7792	9	31	0.52	0.39
	2962	13894	15	147	—	—
Total of Items (1) & (2)	3866	16191	143	353	—	—

## ANNEXURE—3

**Summary of Additional Investment for the Modernisation of Leather and Allied Industries, 1985-86 to 1989-90 : Seventh Five Year Plan Period**

(In million Rs.)

Industry group	Total investment	Working capital	Fixed capital		Foreign exchange requirement for machinery
			Total	Other fixed capital	
1. Tanning	1221	337	884	238	410
2. Leather Footwear	1798	972	826	315	305
3. Leather garments	125	95	30	15	10
4. Leather goods	200	125	75	25	25
5. Industrial training centres	5	1	4	1	0.5
6. Testing labs.	3	1	2	—	0.5
7. Accessories	100	50	50	17	30
8. R & D (other than CLRI)	100	25	75	25	25
9. Modernisation of training Institutes	30	5	25	—	15
10. Effluent disposal	396	36	360	216	—
	3978	1647	2331	852	821

The total requirement is estimated to be Rs. 3978 millions for a period of five years ending 1989-90.

The average annual requirement would be Rs. 796 millions.

The machinery component is around 40% of the total investment since machinery is the prime factor in the programme of modernisation.

Source : Working Group Report on Leather of the Planning Commission.

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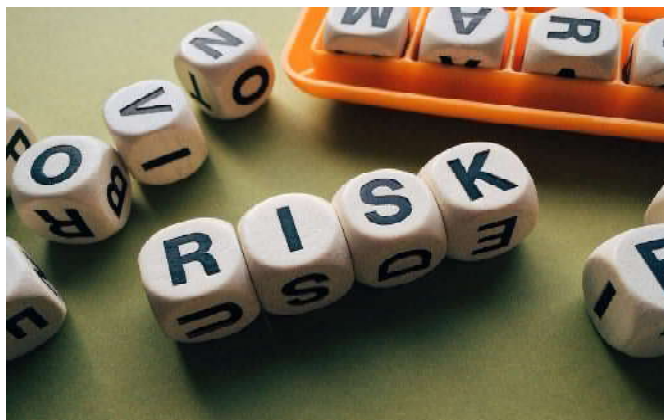
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### HOW MSMEs CAN UNDERTAKE RISK MANAGEMENT IN BUSINESS



**Ease of doing business for MSMEs:** 10,655—that's the number of Micro, Small, and Medium Enterprises (MSMEs) that have shut down in the last 10 months (April to February 2023) alone. This is also the highest number of MSME closures in the last 3 years! Granted that the Covid-19 pandemic wrecked the business landscape, but the government has made multiple efforts to keep India's small and medium businesses going. So, why are MSMEs flailing? For starters, though MSMEs are subject to the same kind of risks as large companies, most of them do not have the financial means required to mitigate and manage these risks. This makes staying afloat a big challenge in a harsh business environment. This also makes MSMEs risk-averse because a single mistake can cause the business to fail.

MSME risks can be classified into two types: internal risks and external risks. Internal risks include all risks that can be controlled by the business and its owners, e.g., internal fraud, compliance risk, over-leverage, concentration risk, etc. External risks are the risks that are beyond the control of the business, e.g., black swan events, rising inflation and interest rates, changes in laws, natural disasters, etc.

MSMEs can survive and grow only if they have adequate risk management plans to identify, assess, monitor, manage, mitigate and control these risks. These risk management plans should focus on the following:

1. **Aim to make the company agile:** "What can we quickly scale up in case of an opportunity? What can we rapidly scale down if there is a slowdown, thus conserving cash? Which are the areas in which we need to be more agile?", are questions that MSMEs need to ask themselves while developing their risk management policy.
2. **Take informed risk decisions:** Making risk decisions based on independent and verified data is now easier than ever before. Taking a blind leap of faith and making uninformed decisions is a strict no-no in today's volatile environment. Plenty of risk management tools and platforms are available to help MSMEs make informed decisions.
3. **Focus on human capital:** Employee attrition is a big risk for MSMEs, as is internal fraud committed by employees. Both are linked to employee satisfaction with working conditions and compensation. When employees are unhappy, they leave, which means losing trained resources and incurring additional costs in recruiting and training their replacements. For a small business, these costs can be significant. Ensuring that employees are paid and treated fairly and made to feel a part of the company's growth story will help address employee attrition and also reduce the motivation to commit fraud. There also needs to be an effective whistle-blower mechanism to ensure timely reporting of fraudulent activities without the fear of repercussions.
4. **Scenario Analysis for better Risk Management:** For a risk management plan to be successful, there needs to be a thorough understanding of all aspects of the business and how one risk is interconnected with another. For eg., spiralling cost of raw materials, forex rate changes, escalating freight costs etc, can destroy a business – very often, they occur simultaneously. MSMEs need to conduct detailed scenario analyses for different risks and develop plans to mitigate them.
5. **Build a network of peers:** Experience is the best teacher and MSMEs can learn from the experiences of others. Being a part of an association or peer group of small business owners helps MSMEs learn from the failures of others and they can avoid making similar mistakes.
6. **Build an emergency nest egg or keep a credit line on standby:** For an MSME, having that little bit of financial buffer to tide over a really difficult time can make the difference between survival and death. The Indian Government's Emergency Credit Line Guarantee Scheme (ECLGS), introduced during the COVID-19



period has benefitted nearly 1.2 crore MSMEs. Creating a contingency fund is really important for MSMEs as they are vulnerable to sudden changes in business conditions.

7. **Monitor cash flow carefully and optimise working capital:** MSMEs need to implement solutions and processes that can shorten their Days Sales Outstanding (DSO) and ensure that their cash flow is positive, thus reducing excessive reliance on external funding. MSMEs can also leverage the TReDS platforms to quickly generate cash against their supplies to corporate entities.

There are several risk management platforms that MSMEs can use to manage their risk better. Let us look at some potential scenarios in which these platforms are very useful:

## Use Case 1: Credit Risk Management

8. **Problem Statement:** An MSME has a limited ability to provide credit and cannot afford bad debts. How does it decide to whom should the credit be given?
9. **Solution:** The MSME can deploy a plug-and-play automated third-party credit risk management platform that will evaluate and score the counterparty credit risk for each customer, distributor, or dealer. The platform also recommends credit limits for them depending on their risk scores. By using such platforms, MSMEs can allot credit limits optimally to their customers and ensure that bad debts are avoided and cash flow is effectively managed.

## Use Case 2: New Customer Onboarding

10. **Problem Statement:** An MSME is usually in a hurry to drive new sales and very often does not bother checking the antecedents of its prospective customers. How can it avoid onboarding dodgy customers who can defraud it?
11. **Solution:** The MSME can use a third-party KYC validation platform to quickly conduct KYC checks of prospective customers before onboarding them. Such platforms deploy efficient and inexpensive Video KYC and e-KYC Solutions which help validate the identity

of prospective customers by checking statutory databases via API. These platforms also help reduce onboarding time by 75 per cent making the customer's experience very smooth and seamless.

## Use Case 3: Supplier Risk Monitoring

12. **Problem Statement:** MSMEs work with several suppliers, some of which are mission-critical. So, how does an MSME monitor the risk of its suppliers to anticipate any potential disruption in supply?
13. **Solution:** Disruptions at the supplier's end can prevent the flow of materials to the MSME, resulting in costly production delays and cash flow problems. The MSME can deploy a plug-and-play Early Warning System (EWS) to detect changes in the risk profile of its suppliers by monitoring parameters such as statutory compliances, rating downgrades, bankruptcy alerts, new litigation etc. MSMEs can, thus, identify suppliers whose risk profile is deteriorating and work on developing alternate suppliers to preempt supply disruptions.

While there is no denying that MSMEs are very vulnerable to changes in the risk environment, in today's world they have access to efficient and inexpensive tools that allow them to better manage risk. Awareness and adoption of such risk management platforms by MSMEs is the key to their long-term survival and success.

*(Financial Express – 04/03/2023)*

## INDIA'S FOREX RESERVES FALL FOR FOURTH WEEK IN A ROW, AT 3-MONTH LOW



India's forex reserves slid by \$325 million to \$560.94 billion for the week ended February 24, data from the Reserve Bank of India (RBI) showed on Friday. India's reserves have seen negative movement for the fourth straight week.

India's forex reserves had dropped by \$5.681 billion to \$561.267 billion for the week ended February 17.

In October 2021, the country's forex kitty reached an all-time high of \$ 645 billion. The reserves have been declining as the central bank deploys the kitty to defend the rupee amid pressures caused majorly by global developments.

For the week ended February 24, the foreign currency assets, a major component of the reserves, decreased by \$166 million to \$495.906 billion, according to the Weekly Statistical Supplement released by the RBI.

Expressed in dollar terms, the foreign currency assets include the effect of appreciation or depreciation of non-US units like the euro, pound and yen held in the foreign exchange reserves.

Gold reserves decreased for the fourth week running and were \$66 million down to \$41.751 billion, the RBI said. The Special Drawing Rights (SDRs) were also down by \$80 million to \$18.19 billion, the apex bank said.

The country's reserve position with the IMF was down by \$12 million to \$5.098 billion in the reporting week, the apex bank data showed.

### How is the Rupee performing?

The rupee appreciated by 63 paise to close at a one-month high of 81.97 (provisional) against the US dollar on Friday, as fresh foreign fund inflows and positive domestic equities supported investor sentiments.

Forex traders said positive PMI services data also boosted investor sentiments. The Indian rupee touched a one-month high on hot services PMI data, said Anuj Choudhary - Research Analyst at Sharekhan by BNP Paribas.

The Indian services sector expanded at the strongest rate in 12 years in February supported by favourable demand conditions and new business gains, a monthly survey said on Friday. The seasonally adjusted S&P Global India Services PMI Business

Activity Index rose from 57.2 in January to 59.4 in February — its highest level in 12 years.

"We expect the rupee to trade with a slight positive bias on improved global risk sentiments and fresh FII inflows. Weak crude oil prices may also support the domestic currency," Choudhary said.

However, any pullback in the US dollar amid rising expectations of hawkish Federal Reserve and concerns over slowdown in India's GDP growth rate may cap the upside and weigh on rupee at higher levels, he added.

The Indian rupee will remain at its current level three months from now and gain only marginally by the end of February 2024, barely recouping any of its losses from last year, a Reuters poll of foreign exchange strategists found.

The rupee has steadied after falling more than 10% in 2022, when it was one of the worst performing Asian currencies. It is expected to trade at 82.54 per dollar at the end of May, according to the median forecast in a Feb. 28-March 2 Reuters survey of 34 respondents.

In the near-term, much will depend on interest rate differentials, mainly driven by the U.S. dollar. The Reserve Bank of India (RBI) is nearing the end of its tightening campaign with one last 25 basis point hike expected in April to take its main interest rate to 6.75%.

*(The Economic Times – 03/03/2023)*

### INDIA'S FY24 GDP GROWTH RATE PREDICTED IN 6-6.5% RANGE BY AGENCIES



India's economic growth for 2023-24 is estimated to be in the band 6-6.5 per cent by experts in various agencies with difference only in the decimal point. The 4.4 per cent growth (down from

6.3 per cent in the previous quarter) logged during the third quarter of FY23 was predicted by the Reserve Bank of India (RBI) couple of months back while the markets had estimated it at a slightly higher level — again difference only in the decimal point.

In December 2022 announcing the RBI's Monetary Policy Committee's (MPC) decision to hike the repo rate by 35 basis points to 6.25 per cent, Governor Shaktikanta Das said the real GDP growth for FY23 is projected at 6.8 per cent, with Q3 at 4.4 per cent and Q4 at 4.2 per cent. Last month after the MPC meeting, Das said the economic growth for FY24 was projected at 6.4 per cent with Q1 at 7.8 per cent; Q2 at 6.2 per cent; Q3 at 6.0 per cent; and Q4 at 5.8 per cent.

As to the reasons for the 6.4 per cent growth Das said the expected higher rabi output has improved the prospects of agriculture and rural demand. The sustained rebound in contact-intensive sectors should support urban consumption. "Broad-based credit growth, improving capacity utilisation, government's thrust on capital spending and infrastructure should bolster investment activity. According to our surveys, manufacturing, services and infrastructure sector firms are optimistic about the business outlook," Das said. He said the protracted geopolitical tensions, tightening global financial conditions and slowing external demand are the downside risks.

On the other hand, credit rating agency CARE Ratings estimate India's economic growth for FY24 at 6.1 per cent. "Government focus on capex and improving intent of the private sector to invest should be supportive of investment demand. We expect GDP growth to moderate to 6.1 per cent in FY24," Rajani Sinha, Chief Economist, CARE Ratings, told IANS. For FY23, CARE Ratings estimates the GDP to grow by 7 per cent.

"As the external demand conditions remain weak, it is critical that domestic demand should accelerate. Improving rural demand and rising rural wages are the positive developments for aggregate demand. However, there is expected to be some fizzling out of the pent-up domestic demand seen in the last

few quarters," CARE Ratings said in a report. The credit rating agency added that the Indian government's focus on capex and improving intent of the private sector to invest should be supportive of investment demand but lower external demand and raising interest rates poses downside risks for investment revival.

Meanwhile, global credit rating agency Moody's Investors Service has projected India's growth rate at 6.5 per cent for 2024 and 5.5 per cent for 2023. In the case of inflation rate, Moody's has predicted 6.1 per cent for 2023 and 5.5 per cent for 2024 for India. Moody's said the primary drivers of economic growth in 2023 and 2024 will be the Central banks' decisions regarding how much to raise interest rates, for how long, and when to begin to lower them.

Moody's expects the global growth to continue to slow in 2023, with increasing drag from cumulative monetary policy tightening on economic activity and employment in most major economies. "We forecast G20 global economic growth will downshift to 2.0 per cent in 2023 from 2.7 per cent in 2022, and then to improve to 2.4 per cent in 2024," Moody's said. According to Acuite Ratings & Research's Chief Analytical Officer Suman Chowdhury, India's economic growth in FY23 will be close to 7.0 per cent.

"Going ahead into the next fiscal however, the factors that will play an important role are the impact of higher interest rates on urban demand, the stability of the monsoon, and the absence of the base factor; we have kept our GDP growth forecast for FY24 at 6 per cent for now without factoring in any additional risks from monsoon and external factors," Chowdhury said.

India's macroeconomic stability indicators will gradually improve in FY24 owing to a combination of factors like easing in global commodity prices (YoY terms), healthy growth mix (more capex driven), and fiscal and monetary policy on a consolidating path, said Morgan Stanley.

*(Business Standard - 04/03/2023)*

### -: JILTA :-

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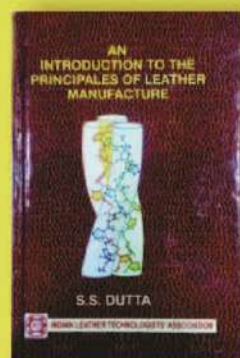
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'Sanjoy Bhavan', 3rd Floor, 44, Shanti Pally, Kolkata- 700 107, WB, India

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E-mail : admin@iltaonleather.org; mailto:ilta@rediffmail.com

Website : www.iltaonleather.org



# History and Activities of Indian Leather Technologists' Association

The Indian Leather Technologists' Association (ILTA) was founded by Late Prof. B. M. Das, the originator of Das-Skinner theory and father of Indian Leather Science on 14<sup>th</sup> August 1950.

The primary objectives of the oldest Leather Technologists' Association which celebrated its Diamond Jubilee year in the 2010, are:

- ❖ To bring all concerned with the broad spectrum of the leather industry under one umbrella.
- ❖ To organize seminars, symposiums, workshop in order to create information, knowledge and latest development for the benefit of all concerned. To offer a common platform for all to interact with each other in order to understand each other's problems and prospects.
- ❖ To publish a monthly journal as a supplement to those above objectives. The monthly journal of ILTA is known as journal of Indian Leather Technologists' Association and is the most widely circulated technical journal concerning leather technology.
- ❖ To publish text books for the benefit of students at various levels of study, for the researchers and industry.
- ❖ To have interface between urban and rural sector.
- ❖ To assist Planning Commission, various Government Institutions, Ministry and autonomous bodies to formulate appropriate policies acceptable and adoptable to the industry.
- ❖ To organize practical training and to provide skilled manpower and to motivate good students for study.
- ❖ To conduct activities related to the growth of the export of leather and leather goods from India.
- ❖ As the part of many social activities ILTA has donated Rs. 1 lac to Consul General of Nepal towards relief of earthquake effected of Nepal on 15<sup>th</sup> Sept. 2015.

## INTERNATIONAL & NATIONAL SEMINAR

- ❖ ILTA is the Member Society of International Union of Leather Technologists & Chemists Societies (IULTCS), a 115 years old organization and for the first time the IULTCS Congress was organized in January 1999 outside the developed countries in India jointly by ILTA and CLRI.
- ❖ 2017 IULTCS Congress is scheduled to be held in India again.
- ❖ 8<sup>th</sup> Asian International Conference on Leather Science & Technology (AICLST) was organized by ILTA in 2010 during its Diamond Jubilee Celebration year.

## SEMINAR & SYMPOSIUM

ILTA organizes Seminar & Symposiums on regular basis to share information, knowledge & latest development and interactions for the benefit of all concerned. Few are as under:

- ❖ Prof. B. M. Das Memorial Lecture every year during the Foundation Day Celebrations on 14<sup>th</sup> August every year.
- ❖ Sanjoy Sen Memorial Lecture on 14<sup>th</sup> January every year, the birthday of our late President for several decades.
- ❖ Prof. Mori Banerjee Memorial Lecture on 15<sup>th</sup> March every year, the birthday of this iconic personality.
- ❖ Seminar on the occasion of India International Leather Fair (IILF) at Chennai in February every year.

It has also organized:

- ❖ Prof. V. Nayudamma Memorial Lecture.
- ❖ Series of Lectures during "Programme on Implementing Emerging & Sustainable Technologies (PIEST)".
- ❖ Seminars on occasion of India International Leather Fair, 2014 and 2015 at Chennai etc. Many reputed scientists, industrialists and educators have delivered these prestigious lectures. Foreign dignitaries during their visits to India have addressed the members of ILTA at various times.

## PUBLICATION

ILTA have published the following books:

- ❖ An Introduction to the Principles of Physical Testing of Leather by Prof. S. S. Dutta
- ❖ Practical Aspects of Manufacture of Upper Leather by J. M. Dey
- ❖ An Introduction to the Principles of Leather Manufacture by Prof. S. S. Dutta
- ❖ Analytical Chemistry of Leather Manufacture by P. K. Sarker
- ❖ Comprehensive Footwear Technology by Mr. Somnath Ganguly
- ❖ Treatise on Fatigues and Fatigue of Leather by Dr. Samir Dasgupta
- ❖ Synthetic Tanning Agents by Dr. Samir Dasgupta
- ❖ Hand Book of Tanning by Prof. B. M. Das

ILTA has a good Library & Archive enriched with a few important Books, Periodicals, Journals etc.

## AWARDS OF EXCELLENCE

- ❖ ILTA awards Prof. B. M. Das Memorial, Sanjoy Sen Memorial, J. M. Dey Memorial and Mori Banerjee Memorial Medals to the top rankers at the University / Technical Institute graduate and post graduate levels to encourage the brilliant to evolve with the industry.
- ❖ J. Sinha Roy Memorial Award for the author of the best contribution for the entire year published in the monthly journal of the Indian Leather Technologists' Association (ILTA).

## LEXPOs

To promote and provide marketing facilities, to keep pace with the latest design and technology, to have better interaction with the domestic buyers, ILTA has been organizing LEXPO fairs at Kolkata from 1977, Siliguri from 1992 and Durgapur from 2010. To help the tiny, cottage and small-scale sectors industries in marketing, LEXPO fairs give the exposure for their products. Apart from Kolkata, Siliguri & Durgapur, ILTA has organized LEXPO at Bhubaneswar, Gangtok, Guwahati, Jamshedpur and Ranchi.

## MEMBERS

The Association's present (as on 31.03.2018) strength of members is more than 600 from all over India and abroad. Primarily the members are leather technologists passed out from Govt. College of Engineering & Leather Technology, Anna University, Chennai, Harecourt Butler Technological Institute, Kanpur; B. R. Ambedkar National Institute of Technology, Jalandhar and Scientists from Central Leather Research Institute.

## ESTABLISHMENTS

In order to strengthen its activities, ILTA have constructed its own six storied building at 44, Shanti Pally, Kasba, Kolkata - 700 107 and have named it "Sanjoy Bhavan". This Association is managed by an Executive Committee duly elected by the members of the Association. It is absolutely a voluntary organization working for the betterment of the Leather industry. None of the Executive Committee members gets any remuneration for the services rendered but they get the satisfaction of being a part of this esteemed organization.



ILTA

Since 1950

## Indian Leather Technologists' Association

[A Member Society of International Union of Leather Technologists' and Chemists Societies]

'Sanjoy Bhavan', 3rd Floor, 44, Shanti Pally, Kolkata- 700 107, WB, India

Phone : 91-33-2441-3429 / 3459 • WhatsApp +91 94325 53949

E-mail : admin@iltaonleather.org; mailtoilta@rediffmail.com

Website : www.iltaonleather.org