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JILTA

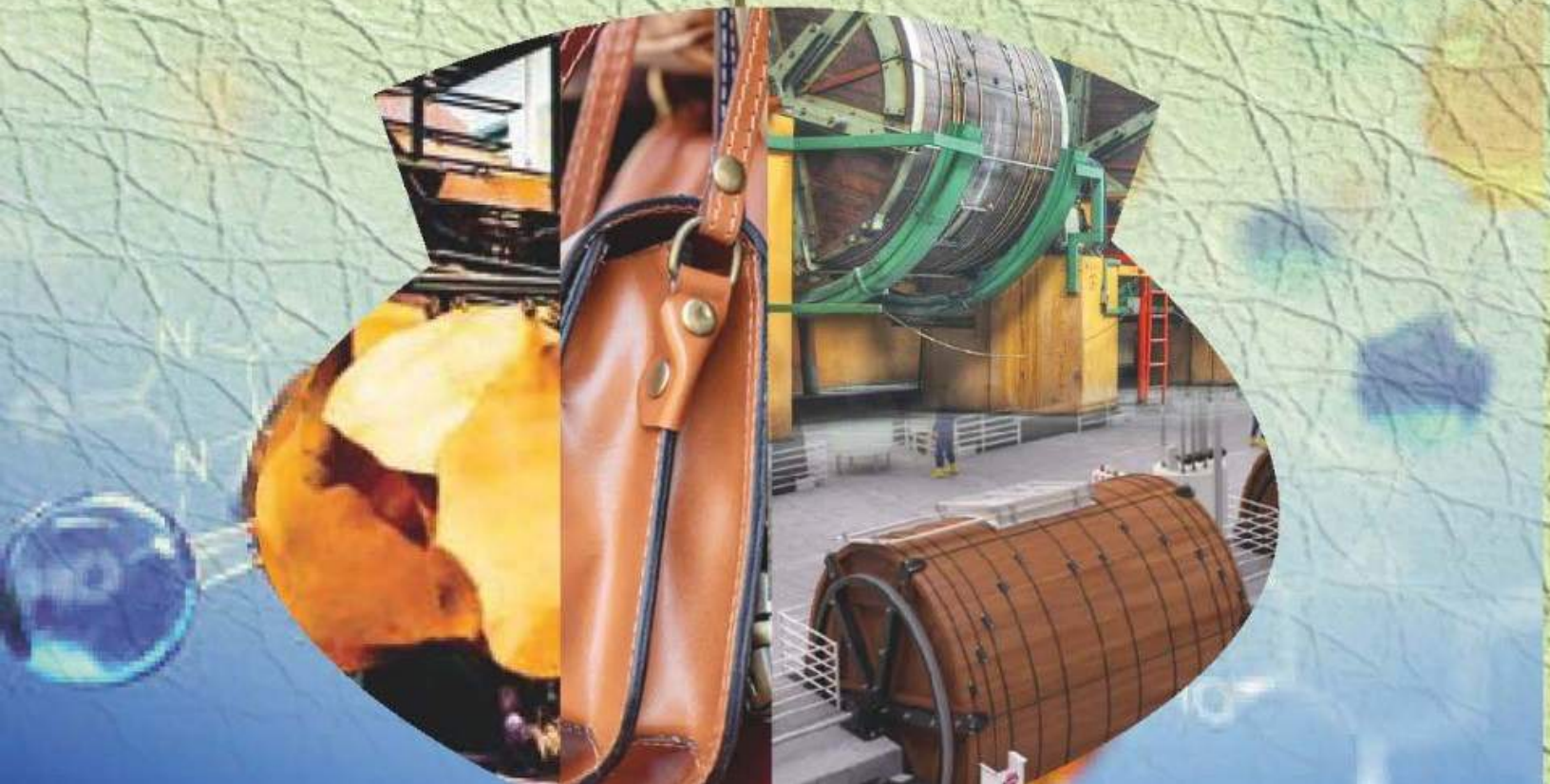
Journal of Indian Leather Technologists' Association

JILTA 2022 2023

VOLUME : LXXIII NO :05 MAY, 2022

Rgtn. No. KOL RMS/074/2022-24
Regd. No. ISSN 0019-5738
RNI No. 2839/57
Date of Publication: 6th

₹50.00



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)]

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JOURNAL OF INDIAN LEATHER TECHNOLOGISTS' ASSOCIATION (JILTA)

MAY, 2022 VOL.: LXXIII NO.: 05 RNI NO.: 2839/57 REGD.NO.: ISSN 0019-5738

Contents

Hony. Editor : Dr. Goutam Mukherjee

Communications to Editor through E-mail :

admin@iltaonleather.org; jiltaeditor@gmail.com

Cover Designed & Printed by :

M/s TAS Associate

11, Priya Nath Dey Lane, Kolkata - 700 036

Published & Printed by :

S. D. Set, on behalf of Indian Leather Technologists' Association

Published from :

Regd. Office : 'Sanjoy Bhavan', 3rd Floor,

44, Shanti Pally, Kasba, Kolkata - 700 107

Printed at :

M/s TAS Associate

11, Priya Nath Dey Lane, Kolkata - 700 036

Subscription :

Annual	Rs.(INR)	400.00
Foreign	$ (USD)	45.00
Single Copy	Rs.(INR)	50.00
Foreign	$ (USD)	4.00

All other business communications should be sent to :

Indian Leather Technologists' Association

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Kasba, Kolkata - 700 107, WB, India

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91-33-2441-3459

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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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Full Page / per anum

Front inside (2nd Cover)	Rs. 96,000/-
3rd Cover	Rs. 84,000/-
Back Cover	Rs. 1,20,000/-

Mechanical Specification

Overall size	:	27 cm X 21 cm
Print area	:	25 cm X17 cm

Payment should be made by A/c. Payee Cheque to be drawn in favour of :

Indian Leather Technologists' Association
and Payable at **Kolkata**

Send your enquiries to :

Indian Leather Technologists' Association
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(Member Society of International Union of Leather Technologists and Chemists Societies)

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JOURNAL OF INDIAN LEATHER TECHNOLOGISTS' ASSOCIATION (JILTA)

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Economic Turbulence on Energy Perspective

(Part - I)

GDP growth in India eased in Q4 as domestic demand dynamics softened. Both private consumption and fixed investment growth moderated in the fourth quarter (Q3 FY 2021), while government consumption also expanded at a slower rate. On the external front, exports of goods and services increased at a quicker pace, which resulted in the external sector having a less negative impact on the headline reading. Moreover, authorities had released a second advanced estimate for FY 2021 GDP growth (April 2021 to March 2022), which suggested a healthy rebound in output. In Q1 this calendar year, economic output will have likely lost some momentum, as a spike in Covid-19 cases weighed on output in January. That said, conditions seemingly firmed in February: Both the manufacturing and services PMIs ticked up. However, elevated energy prices and renewed supply bottlenecks will have likely weighed on activity in March. GDP growth is projected to moderate in FY 2022 (April 2022–March 2023), as the low base effect fades. That said, healthier household spending amid upbeat fiscal expenditures should keep the economy growing briskly. Uncertainty over Covid-19, supply chain difficulties, elevated oil prices and twin deficits pose risks. Economic panelists project GDP to expand 7.9% in FY 2022, which is down 0.1 percentage points from the previous month's forecast. In FY 2023, our panel expects growth of 6.4%.

Energy prices continued to increase in March, and they did so at a faster rate than in the prior month. The West changed its tactics and unleashed a slew of sanctions on the Russian energy sector, having previously spared it from the measures taken in response to the country's invasion of Ukraine. Heading into April, oil and coal prices have eased somewhat from their mid-March highs but remain extremely elevated.

In order to shield the economy from the negative impact of the recent surge in crude oil prices, India is exploring the possibility of importing additional oil at discounted rates from Russia, which is facing sanctions and global backlash due to the Ukraine conflict. According to commodities data and analytics firm Kpler, India's import of crude oil from Russia in March this year so far is nearly four times higher when compared with the corresponding period of last year. India's import of crude oil from Russia stood at around an average of nearly 3,60,000 barrels a day in the first half of this month. As per the current shipment schedules, the average oil trade between the two countries is estimated to be around 203,000 barrels per day. "Already committed oil cargoes from Russia that can't find buyers in Europe are being bought by India," Financial Times quoted Alex Booth, head of research at Kpler, as saying. "Exports to India surged in March before any official announcement by New Delhi," Booth said. There is no government-to-government (G2G) arrangement for oil trade between India and Russia. The majority of the crude oil purchase from Russia for India has been done by Indian Oil Corporation. Although the United States has acknowledged that crude oil purchases by India would not violate US sanctions, it has warned that it would put India on the wrong side of history. The US has been putting increasing pressure on India to distance itself from Russia. White House Press Secretary Jen Psaki said on Friday in Washington that the United States is in touch with the Indian leaders at various levels over the issue of India's decision to buy oil from Russia at discounted rates.

"We will project and convey to any leader around the world is that the rest of the world is watching, where you are going to stand, as it relates to this conflict, (and) whether it is support for Russia, in any form as they are illegally invading Ukraine," Psaki said. India has so far adopted a neutral approach in the Russia-Ukraine conflict. It is among the few countries that have not condemned Russia's invasion of Ukraine. India also abstained from voting on a US-sponsored UN Security Council resolution deploring Russia's aggression against Ukraine. India's decision to increase crude oil trade and economic engagements with Russia would have huge diplomatic and economic ramifications. It is important to note that India is heavily dependent on imports to meet its oil requirements. Nearly 85 per cent of the country's average daily crude oil requirement of around 5 million barrels is met through imports.

The rise in crude oil prices put huge pressure on the Indian economy. High crude oil prices pose inflationary, fiscal, and external sector risks. India's budget calculations for the financial year 2022-23 have been made with an assumption of crude oil price of $70 to $75 per barrel. Crude oil prices have surged due to the Russia-Ukraine conflict. It soared to near $140 a barrel earlier this month. Being a major importer India has to keep exploring competitive prices. A heavy discount offered by Russia is an opportunity. It is extremely important from the perspective of the Indian economy. Commenting on the India-Russia oil trade, spokesperson for the Ministry of External Affairs Arindam Bagchi said being a major importer of oil India looks at all options at all points of time. "India does import most of its oil requirements, it's met by imports. So, we are always exploring all possibilities in global energy markets because of this situation that we face importing our oil requirements," Bagchi said.

Russia is the second-largest exporter of crude oil behind Saudi Arabia. Nearly three-fourth of Russia's crude oil exports go to OECD member countries. Major European countries like Germany, France and Italy, who are also members of the North Atlantic Treaty Organization (NATO), are heavily dependent on the Russian oil supply. If the NATO member countries continue to import Russian oil due to economic reasons, India must also give primacy to the economic interest. One major challenge in the India-Russia oil trade is the payment system. According to sources, the two countries have been exploring the possibility of setting up a rupee-rouble trade mechanism for paying for oil and other goods. Apart from the payment mechanism, there are several other issues that need to be worked out. It includes insurance and freight. In the time of military conflict, the insurance cost goes up substantially. India's import of oil from Russia has traditionally been low due to high freight costs. Union Minister for Petroleum and Natural Gas Hardeep Singh Puri said in the Rajya Sabha recently that the Indian government was evaluating the Russian offer of crude oil import at discounted rates. "Discussions are currently underway. Several issues are required to be gone into, like how much oil is available either in Russia or in new markets or with new suppliers that may be coming into the market. Also, there are issues relating to insurance, freight, and a host of other issues, including the payment arrangements," the minister had said. Russia has been among the closest and most reliable allies of India. It is by far its biggest arms supplier to India. According to data available with the Ministry of External Affairs, Russian Investments in India stand at $18 billion while the Indian investments in Russia stand at $13 billion. The trade balance is in favour of Russia. India's imports from Russia stood at $7.75 billion while India's exports to Russia stood at $3.22 billion in 2018.

Despite the threats of US sanctions, Prime Minister Narendra Modi government in 2018 entered into a $5.43 billion deal with Russia to buy S-400 defence system. The delivery of the missile system began in 2021. However, India needs to make a cautious move. The United States and other western allies are also crucially important.

Goutam Mukherjee

Dr. Goutam Mukherjee
Hony. Editor, JILTA

As an active proponent of responsible chemistry, Stahl has established the Stahl Campus® training institute in its Center of Excellence for sustainable leather technologies in Kanpur. With our Stahl Campus® 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® 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® 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®, please contact Prasanna Maduri **(Prasanna.maduri@stahl.com)**.

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Seize the opportunities
of renewable chemistry
Stahl Impact®
Today's leather tanneries not only have to deliver high-quality durable products – they must also deliver them with minimal environmental impact and without compromising on the health and safety of people. At Stahl, we saw this as an opportunity to support our customers and the entire leather industry in driving responsible products and sustainable living. In close cooperation with our partners, we recently launched Stahl Impact®, a family of leather chemical solutions made with renewable feedstocks. Stahl Impact® will help tanneries to reduce their environmental footprint without compromising on the quality and performance of their products since these ZDHC-compliant solutions deliver the same or improved function performance to conventional alternatives.
After the introduction of 7 product solutions of renewable carbon polyurethanes for base- and topcoats in leather finishing, we now also introduced 15 specific solutions of renewable carbon wet-end products for leather processing.
If you would like more information about Stahl Impact® or how we can support you to embrace the opportunities of an evolving leather industry, visit stahl.com or get in touch with us at communicationsteam@stahl.com.
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NSC/TN/OHSE AWARDS/2022 March 9th, 2022

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Dear Sir,

Sub: National Safety Council - Tamilnadu chapter's Occupational Health, Safety and Environment Awards 2020

National Safety Council – Tamil Nadu chapter pleased to convey our Appreciation for your continued patronage towards the council activities. We thankfully record your participation in "Occupational Health, Safety and Environment Awards 2020" and highly commend your efforts in highlighting the EHS performance and achievements.

The committee of experts duly constituted by the Chairman, National Safety Council – Tamil Nadu Chapter has evaluated the applications in stages, site visit to the shortlisted industries and arrived at the final recommendations.

The recommendations of the committee along with the process of methodology submitted to the Chairman of National Safety council – Tamil Nadu Chapter after a detailed scrutiny, approval accorded.

On behalf of Chairman and National Safety Council – Tamil Nadu Chapter, I am pleased to inform you that your organization has been adjudged for the

"Occupational Health, Safety and Environment Awards 2020" – "APPRECIATION AWARD"

We would like to Congratulate you and your team for bagging this Prestigious Award.

The Occupational Health, Safety and Environment Awards 2020 & Safety Competitions-2020, date of Award Ceremony will be intimate Soon.

Thanks and Regards

P. Rajmohan

(Dr. P. Rajmohan)
Chairman – Occupational Health, Safety and Environment Awards 2020

Secretary, National Safety Council-Tamil Nadu Chapter

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STAHL INTRODUCES SENSORY COATINGS FOR NEXT-LEVEL PACKAGING APPLICATIONS

Stahl, an active proponent of responsible chemistry, announces the launch offlStahl Sensora®, a portfolio of high-performance coatings for packaging, designed to offer a unique sensory experience. The five Sensora® products use Stahl's proprietary PolyMatte® technology, a polyurethane dispersion method for creating water-based, custom-made coatings at the pinnacle of aesthetics, performance, and sustainability.

The sense of touch can generate a strong emotional response that has been shown to play a role in consumer purchasing behaviors. With theflSensora®flportfolio, Stahl offers customers the chance to differentiate their products by more than appearance alone. The specialists in Stahl's haptic testing team identified the most desirable sensations for paper and film packaging (including BOPP and PET), resulting in the development of the five Sensora® coatings. Each one has its own sensory profile – either velvety, rubbery, silky, dry, or textured – opening up a wide range of possible packaging applications, from luxury items and technology to cosmetics and food and drink.

The Sensora®flrange has been created in line with Stahl's sustainable development strategy, with the responsible chemistry of the PolyMatte®fltechnology underpinning each of the new products. PolyMatte® forms a smooth, matte surface structure, cutting out the need for fillers, while also providing top-quality scratch resistance, abrasion resistance, and flexibility. This ensures the Sensora®flcoatings keep their unique character for longer, whether they are applied by offset printing, flexography, or rotogravure printing.

Kahina Ouchaou, Market Manager Film & Paper:fl"The Sensora®flportfolio is an exciting new addition to the Stahl family of performance coatings, enabling our customers to easily add a new dimension to their packaging. After sight, touch is the sense through which we take in most information about the world around us, so tactile coatings are an ideal way for customers to make their products stand out in a crowded marketplace. With five different coatings to choose from, our customers will be sure to find the perfect touch experience for their brand."

For more information about Sensora®, please visit:flhttps://www.stahl.com/performance-coatings/sensora.

(Stahl News – 28/04/2022)

From the desk of General Secretary

ELECTION SCHEDULE FOR RECONSTITUTION OF EXECUTIVE COMMITTEE OF ILTA AND THE REGIONAL COMMITTEES FOR THE TERM 2022 - 2024

The Executive Committee of ILTA at its 548th Meeting held on 24/02/2022 approved the following schedule for Election of Executive Committee of ILTA and the Regional Committees for the term 2022-2024.

Sl. No.	Events	Election Schedule for 2022-2024	Day
01	Mailing of Nomination Papers & Voter's List on or before	02.05.2022	Monday
02	Last Date for receipt of Nomination Papers	24.05.2022	Tuesday
03	Last Date for receipt of Consent	13.06.2022	Monday
04	Last Date for withdrawal of candidature	17.06.2022	Friday
05	Mailing of Ballot Papers on or before	06.07.2022	Wednesday
06	Last Date for receipt of Ballot Papers from Voters residing outside KMDA Area & 24-Pgs (N & S)	03.08.2022	Wednesday
07	Casting of Votes by Voters residing in KMDA & 24-Pgs (N & S) Area at ILTA Administrative Office 10-00 to 17-00 Hrs. LUNCH BREAK : 1-30 to 2-30 PM	02.08.2022 & 03.08.2022	Tuesday & Wednesday
08	Counting of Votes at ILTA Administrative Office from 11-00 Hrs. onwards	05.08.2022	Friday

(***Susanta Mallick***)
General Secretary

BEREAVEMENT

With profound grief and a heavy heart, we announce the sad demise of Mr. Basudeb Ray, a Senior Life Member of our Association on 10th April' 2022.

May his soul rest in peace and May God give strength to the Members of the bereaved family to bear this irreparable loss.

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** 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.

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Members want to have the hard copy of JILTA every month or any particular issue, kindly inform us by email or post, whichever is convenient.

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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 / 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 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.

General Secretary and the Members of the Executive Committee are available to interact with members at 19.30 hrs, over Phone / Conference call on every Thursday

BASUDEB RAY

(16th October, 1954 – 10th April, 2022)

Basudeb Ray @ Basu, Basuda or Ray Babu", born on 16th October, 1954, formerly at Chingrighata, Kolkata, passed away on Sunday the 10th April, 2022 at 67 years of age. He was completed his schooling from Barasat Government High school, first in his class, in the year 1970 at the early age of 16 years. He received his B.Tech degree in Leather Technology from Government College of Engineering & Leather Technology, Kolkata in 1974 at the age of 20 years. He was always been a man of perfection, dedication and discipline. With his work in leather technology, he has pioneered some of the best leathering techniques used worldwide. His greatest professional achievement was the development of **Eco Leather**.

Late Basudeb Ray left behind his very happy family having wife Mrs. Sujata Ray, Daughter Ms. Moutrisha Ray and Son Mr. Kaushik Ray. He was very careful and passionate to his children and groomed them properly for their successful life. His wife Mrs. Sujata Ray was his beloved real-life partner who stood always with him in every joy and sorrow of their conjugal life and making his family happy in all respect. Late Ray also left behind his two grandchildren, Ariya Mackenzie Ray and Ajit James Ray, who live in Canada with their parents.

Late Basudeb Ray was very fond of motorbike and car and very often he used to travel by car with his family members. Late Ray was keen attached with nature and he very much loved to take tours to the remote places of the country with his family members. Photography was one of his passions.

Late Basudeb Ray was a senior Life Member of ILTA and was deeply involved with all the activities of ILTA all the times.

Late Ray was taken much too early and many of us were not ready to tell him good-bye. Despite this tragedy, he will live in the hearts of his family, friends and colleagues forever. We miss him dearly and pray to the almighty for peace of his departed soul.

XXXXX

Why Start a *Green Business?*

Show You Care

75% of consumers **consider sustainability** before buying a product.

Support Your Community

Local partners can **reduce packaging and Co2** while supporting small businesses.

Change Business

Just **25 companies** are responsible for **51%** of global carbon emissions.

Green is Here to Stay

61% of Millennials and **58%** of Gen Z will **spend more to buy green.**

Focus on the Future

52% of consumers agree **manufacturers are responsible** for our environmental future.

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Solidaridad Network is a global civil society organization providing efficient, scalable and economically effective and innovative sustainability solutions in various agricultural and industrial commodities such as:

Tea Sugarcane Soy Leather Livestock Gold Textile Fruits & Vegitable Dairy Cotton Aquaculture Castor Palm oil

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2020 -2023

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Robust public- private partnership

Efficient water consumption practices

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DESIGN AND DEVELOPMENT OF SAFETY JACKET FOR WOMEN

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[1]Student, Dept. of Footwear Technology, [2]Professor & Head, Dept. of Footwear Technology & Faculty of Engineering, [3]Research Assistant, Dept. of Footwear Technology
Dayalbagh Educational Institute (Deemed to be University), Dayalbagh, Agra - 282 005 (U.P.)

ABSTRACT

In today's world, Women Security has become a major social concern in the society. It is high time where our women need a change. This project is made keeping women security as a prime reason. In each field there is a special impact of women like sports, dance, education, business, and politics also. Women are leading in each field. Are girls in India really safe? Unfortunately, we always get NO as the answer. So, this project intends to present a unified combination of wearable jacket and mobile technology for Safety of women in the society. This technique helps to alert family members and people closest to the victim by using GPS and GSM module and Buzzer respectively. On activating the system, a GPS module captures the current location of the victim and sends an emergency alert message to the registered contact using GSM Module. The Buzzer is used to grab attention of nearby public and throw the attacker off-guard. The main advantage of this system is that the user does not require a smartphone unlike other applications developed earlier. This project depicts a dedicated security framework for women. A camera on the jacket is incorporated for capturing if not clear but just a glimpse of the perpetrator. Electrical shock or jerk is incorporated for giving the perpetrator a little jerk so that the woman gets some amount of time to run away from the situation We truly accept that this undertaking will have some kind of effect in today's women's life.

Keywords : Women Security components, GSM, GPS, Buzzer, Electric Shock, Power Supply, Microcontroller(Arduino), Camera, Relay Unit, Battery Unit.

1. INTRODUCTION

The status of women in India has undergone many changes over the past few decades. Since ancient times the history of Indian women has been eventful. Although, women have acquired top positions in job and society, yet they are facing unethical physical harassment and sexual assault. According to a global poll by Thomson Reuters, India is the 4th most dangerous country in the world for women and the worst country for women among G20 countries.[1] Therefore, different types of security systems are designed for providing security to women in every aspect. This paper presents a unified combination of a wearable jacket at optimum results with the minimum hardware components and mobile technology, to help the victim in any kind of emergency situation.

1.1 Motivation

Women face much physical harassment on streets, public transport and parks, in and around schools and workplaces. It is found that most of these cases happen with women who are alone. Hence it becomes important to develop systems which help the women to fight even if she is alone. If a system could inform the victim's family about her current location along with the people around her, the chances of the victim being helped are greatly improved. Such invention allows the victim to alert other people present in fixed radius along with family members. Regular rape crimes are the greatest motivation. It is high time that women needed a change.

Loaded with security apps for women, your smartphone can

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help you send emergency alerts to chosen people and also let people know about your whereabouts if anything goes wrong. Many preventive measures have been taken by the government to stop these misbehaving activities but it still has remained unaffected. A Woman gets kidnapped every 44 minutes, raped every 47 minutes, so hopefully our project has the capability to curb all these crimes to a certain extent.

1.2 Problem Statement

Women are still confronting numerous social difficulties in India and are regularly exploited to brutal violations. In Worldwide situation too, the Prime Inquiry in each young lady is about her Security and the provocation issues. Working women especially while going or coming back from work have to deal with all kinds of difficult situations. Women contribute to 49.5% of the total world population and yet 80% of these must have had an appalling experience such as harassment, stalking, molestation and even worse rape, murder. So, we see in emergency situations like these women feel helpless and are partially not able to do anything. So, for protecting the modesty of our women, we desperately need to take some evident action and this proposed system's objective is a step forward in that direction for safeguarding our women, which may give them some courage to take some action against the perpetrator.

1.3 METHODOLOGY

The proposed system is to design a portable device which resembles a normal jacket. It consists of AVR microcontroller, GSM-GPS modules, buzzing alarm, camera and electric jerk. The prototype includes two independent systems controlled using one switch. When the switch is pressed, the device will get activated, immediately the location of the victim will be tracked with the help of GPS and emergency message along with latitude and longitude value will be sent to stored contacts every one minute with updated location. Simultaneously the screaming alarm unit will be activated and will send out sirens to call out for help or just to alert some people around the victim. The key objective is to develop a low-cost system which can store the data of the members in the particular locality and provide immediate alert in case of crime against women. This objective is achieved by the analysis of the physiological signal in conjunction with body position. The physiological signals that are analyzed are GPS and GSM module, shock sensor. Acquisition of raw data makes the Arduino controller function by activating the GPS to send alert messages via GSM and the camera captures images. The alarm is employed to alert the surroundings by its sound and meanwhile, she can also use the little electric jerk incorporated in the jacket as a self-defence mechanism.

2. LITERATURE REVIEW

Almost two decades since countries across the world adopted United Nations Security Council (UNSC) Resolution 1325 – which calls on all parties in a conflict to protect women and girls from violence – little has changed for women. Women's safety isn't only threatened or violated during wars and conflicts. It's threatened in their daily lives in both public and private spheres, including in stable democracies and during times of peace.

Globally, 35% of women have experienced physical or sexual intimate or non-partner sexual violence,70% of women experienced physical or sexual violence. Adult women account for 51% of all human trafficking victims, and girls represent three out of every four child victims.[3]

Crimes against women are a blot on our conscience and we must spare no effort to punish the perpetrators of such crimes. The protection of women from all forms of abuse and oppression is now a national duty and a national task.

This literature review examines what all research and actions has been taken till now in this area i.e., Women's Safety. Additionally, it illustrates how much work more has to be done in this area of research and creates more dimensions to what has been experienced by women in the public places.

Besides the laws, acts and resolutions that have been implemented in favour of women, various safety devices, apparels and tools have been launched lately in the market.

After the 2012 Nirbhaya case, a new anti-rape law came into action which recognized the structural and graded nature of sexual crimes against women and redefined rape to include all forms of non- consensual, penetrative sexual acts that violated a woman's bodily integrity.

New technologies have multiple implications for women's safety and well-being. As emerging scholarship begins to capture the scope and psychosocial impact of technology-related violence, the literature can become outpaced by the rapid development of technologies, some of which are designed to protect women. This exploratory study conducted a series of online searches to document and describe new technologies that can be used to enhance or reduce women's safety. A total 23,100 web-based articles, including but not limited to news stories and marketing materials, were identified and screened; 495 were reviewed and key constructs were coded. Two thirds of the articles addressed how technology could protect women and over half addressed perpetration; 18.8% addressed both. Protection focused largely on two technologies –mobile telephones (37.2%) and wearable devices (19.4%) – and sexual or physical assault (57.2%).

Perpetration focused on mobile telephones (58.4%) and e-mail (43.9%) and cyber- or in-person stalking (63.2%). Women are advised to alter their online behavior; negligible attention is given to tech companies' responsibilities. Of the 98 products identified, most (80.2%) – typically a wearable device or app – were described as protecting women from sexual or physical assault. The products are marketed, with little evidence, as a way for women to protect themselves from assault. The introduction of corporate messaging and profit into the long-standing issue of violence against women is changing the means by which women can be abused and simultaneously and perhaps inadvertently is reinforcing norms that hold women accountable for their victimization.[3]

After the laws and the acts, a huge wave of safety tools came into play. Many kinds of technologies came to the market which is handy, quick and a needy woman can easily use it. Some of them are :

SIP CHIP: Sip Chip is a most uncommon but highly effective technology to detect silently added drugs or some that kind of chemicals in food or drinks. In many cases, perpetrators trap women by drugging their food or spiking their drink. If the woman has any kind of doubt or feels something is wrong, she can check with this Sip Chip. It simply indicates user if the food is added with drugs or not. To apply Sip Chip user first have to remove the cover of it, take a drop of the suspected food in a finger and drop to the Sip Chip. If it indicates Single Line [–] that means it detects something harmful and if it shows Double line [=] that means the food is totally safe. Size of Sip Chip is just like a coin so that needy one can use it in disguise.[6]

Sonata ACT: Sonata combines Safety and style. Their Safety watch called Sonata ACT comes in different models that a lady can choose as per her choice. Sonata ACT was the first safety watch in India in 2016. A user needs to follow only four easy steps to take its service. Firstly, the user has to download the app of it, pair this watch with the smartphone via Bluetooth, keep phone's GPS on and add contacts of a maximum of ten Guardians. And the last, the most important one press the Safety Key at the 8th Position consecutively if feel any danger or get panicked.[6]

Safer Smart Pendant: The Policy of Safer Smart Pendant is similar to the Titan ACT. Only the Watch becomes Pendant here. There is a button behind the pendant. In emergency situations the user can send an alert about her condition, locate herself to the trustable persons whose contacts will be saved previously by only clicking a single button.[6]

Safety Torch with Shock Effect: This Safety Torch is a tremendous tool. It basically looks like an ordinary rechargeable Torch. All the above words about it are true, the only thing is it is not ordinary. It includes a powerful LED Light, inbuilt battery backup and the main feature capability of giving Shock to make attacker injured for a while. Proper use of this torch can prevent maximum of violence over women.[6]

Pepper Spray Gun: Pepper Spray is the most common weapon across the period. The Gun shape is only an approach to make its use easier.[6]

BSafe: BSafe is an App having the protocol of Titan ACT and Safer. In this case no need for other hardware devices. A smartphone, Bsafe app properly installed and configured. That's all. Protection protocol is ready for service.[6]

Letstrack: Letstrack is a GPS and vehicle security system by enabling hardware and software solutions to power the Internet of Things (IoT). It is the First Voice integrated vehicle security system. Lets track offers - real-time tracking, 24-hour history, zone alerts, SOS alarm, and better connectivity.[7]

My Safety Pin: Safety Pin app acts as a guide in choosing the safest route. While reaching an unsafe location, the app gives alerts, and one can invite family or friends to track the ride. The safety of an area is measured using various parameters like public transport, visibility, and security among others, the company mentioned.[7]

Safelet: It is a wearable women safety device with two buttons on the side that can be used to send a message or contact the guardian member. It also syncs with the user's cell phone to start audio recording. In case of a risky situation, the concerned member who receives the alert can immediately dial the emergency number 911 from within the app. [7]

2014: SMART GIRLS SECURITY SYSTEM: The proposed system [12] is to design a portable device which resembles a normal belt. It consists of Arduino Board, GSM/GPS modules, screaming alarm and pressure sensors. When the threshold of the pressure sensor crosses, the device will get activated automatically. Immediately the location of the victim will be tracked with the help of GPS and emergency messages will be sent to three contacts and one to police control room every two minutes with updated location. The screaming alarm unit will be activated and will send out sirens to call out for help. The system is also capable to generate an electric shock to harm the attacker which may help the victim to escape.

2015: USING WEARABLE TECHNOLOGY TO ANSWER WOMEN'S SAFETY: The prototype system [13] includes two independent systems working in sync with each other. The first is a wearable device, a wristband/watch and the second a smart phone application. The wearable device is built using GPS, ZigBee and GSM modules. On triggering this system, the GPS data is acquired by the GPS module and is encoded into a valid Google maps link and sent through text messages to enlisted family, friends and the authorities. Then the data is sent using ZigBee wireless communication protocol to alert other wearable wristband owners with the coverage range.

2016: AVR Microcontroller Based Wearable Jacket for Women Safety: The proposed system [14] is to design a portable device which resembles a normal jacket. It consists of AVR microcontroller, GSM/GPS modules, screaming alarm, LED modules and two switches.

2018: Women's Safety Jacket: The system [15] consists of various modules such as GSM, GPS, memory card, shock circuit, buzzer, camera, Raspberry pi- 3 modules. In this project wireless technology for security purpose is used. An electronic jacket for women safety means that allow users to protect while traveling odd hours or when they feel helpless.

2020: WOMEN SAFETY JACKET: The proposed system [16] works on Raspberry Pi B module designing a portable device which resembles a jacket with gloves. It consists of GPS, GSM, Sim 800, Buzzer, camera and shock circuit. We have used a single button in this system.

3. DESIGN AND DEVELOPMENT OF SAFETY JACKET

3.1 INTRODUCTION

The project is powered by a 6V DC power supply, it consists of atmega328 microcontroller which is a 24 pin IC. The circuit consists of two switches which functions differently to give different output and activate the circuit. The circuits include GPS and GSM module, LED and buzzer. The GPS module is connected to the RX pin of the microcontroller through its TX pin and sends the location via the GSM module. The GSM module which is connected to the TX pin of the microcontroller through its RX pin. The output devices include the Camera module and the buzzer. The GPS & GSM is used to show the longitude and latitude value which is not the part of the end product. The buzzer is used to grab attention of nearby people and throw the attacker off-guard. When emergency or jerk switch is pressed all these features i.e., the location of the victim, the buzzer starts working simultaneously, and the location of the victim is sent to the emergency contacts.

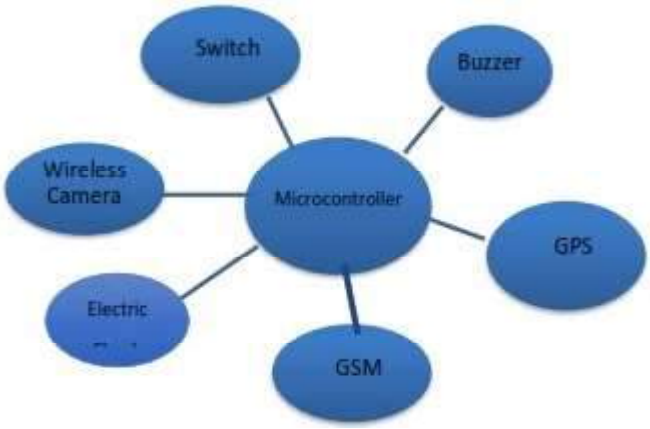

Fig. 3.1 Block diagram of Microcontroller

3.2 GPS TECHNOLOGY

In order to determine speed, position, direction and time, GPS technology is used which is based on a global navigation satellite system. The GPS receiver gets activated by an accurate microwave signal which is transmitted by a constellation of 24/32 active satellites in Earth orbit. To calculate the distance and figure out its latitude and longitude dimensions, a GPS receiver needs at least three or four satellite.

3.3 GSM TECHNOLOGY

The SIM900 GSM modem used in the prototype, accepts the SIM card of any GSM network operator and which has its own unique mobile number. Through this GSM technology, which is a tri band 900/1800/1900 MHz, we can develop embedded application of SMS based remote control.

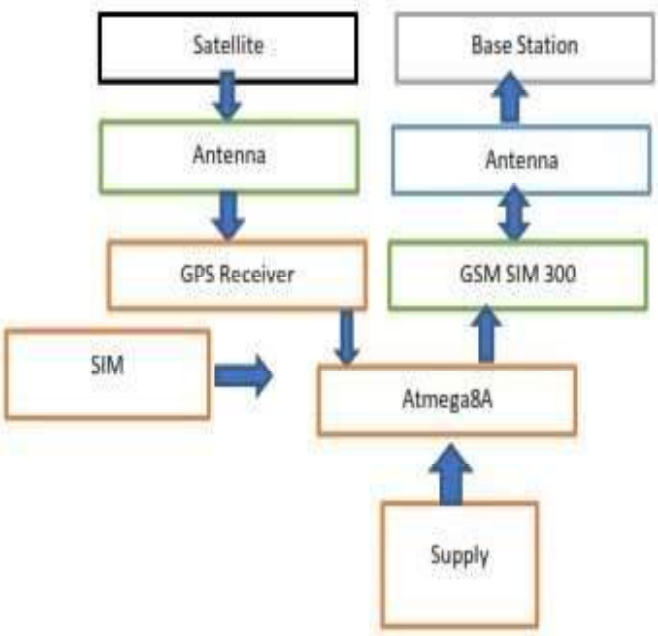

Fig. 3.2 Architecture of Transmission unit

3.4 RECEPTION UNIT

An Android GSM mobile with a web-based Android ap-plication supporting it makes the reception unit. The GSM mobile will receive an SMS which includes a "HELP" message and another SMS which includes location (longitude and latitude) of the victim. By opening the SMS received in the mobile phone with an internet plan, we can search the exact location of the victim directly by using Google Maps.[18] The pointer pointing towards the location is the exact current location of the wearer. The other modules of the reception unit include Camera and Buzzer.

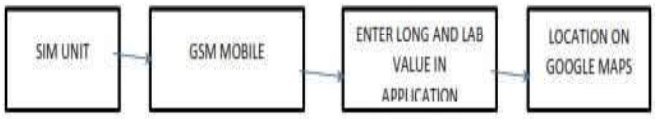

Fig. 3.3 Reception unit

4. WORKING PRINCIPLE OF SAFETY JACKET

Women's safety jacket consists of an emergency button, when a woman who is in danger presses that panic button, the microcontroller gets turned on. Gps modem, gsm modem,

buzzer, shock circuit will get instructions from the micro controller and perform the respective operations.

- With the increasing number of crimes against women, two of my friends and I got together to make a jacket which will help in the safety of women from any kind of harassment by giving a shock of 3000-4000 volts to the perpetrator. The voltage is not dangerous, because the current that will flow will be approximately 0.14 milliampere. [24]

- If a woman wearing the jacket suspects something, she can switch on the emergency button inside the jacket, after which if somebody tries to touch her, not only will that person get an electric shock, but also his act will be recorded on the camera fixed in the jacket.

- The proposed system works on the ATmega328 module designing a portable device which resembles a jacket.

- It consists of GPS, GSM, Buzzer, camera and shock circuit. We have used a single emergency button in this system. After pressing that button the whole system gets activated.

- Buzzer indication makes the continuous siren to grab the attention of the nearby people; shock circuit will produce some voltage by that she can defend herself from the attacker while GPS will track the location of the victim and send the information to their parents, relatives by means of GSM module in the form of messages and calls.

- When the system starts, first the Arduino uno module gets activated then starts the GPS GSM through which it sends location and the message that the person is in danger to the predefined number. That predefined number may be of police station, friend and parents. Location is sent to that

number in the form of latitude and longitude and also a GSM alert message "HELP". At the same time a buzzer will be switched on which will alert the nearby people.

- After this, camera will start through that we can record the suspect. All activities will be recorded in the memory card through camera.

- And at the same time electric shock circuit will start, if anyone touches the victim, then he will 3k-4k volts of current. So that this jacket will help victim to defend herself.

- The National Marine Electronics Association (NMEA) [25] has developed a specification that defines the interface between various pieces of marine electronic equipment.

- The standard permits marine electronics to send information to computers and to other marine equipment.

- GPS receiver communication is defined within this specification.

4.1 How GSM message sent to the contact number

The messages are sent through the GSM module using the AT commands [26].

o AT+CMGF = 1;

On sending this command to the GSM module, the device sets the mode to text mode.

oAT+CMGS="<number>"<message><CTRL-Z>;

This command sends a text message to the destination number.

<number> —> destination number where text message is to be sent

<message> —> message content

On receiving the latitude and longitude values from the GPS device, the microcontroller then configures the SIM900 to text mode by sending the command "AT + CMGF", in a string format. Once the SIM900 has been configured to text mode, the microcontroller sends a second command "AT + CMGS", in a string format to the GSM device. This sends a message to the pre-defined number.

The message sent by the microcontroller is in the form of a link which gives the location of the victim in Google maps.

https://www.google.co.in/maps/search/<latvalue>N, <long value>E .... *position link*.

https://www.google.co.in/maps ? sadd r = My + Location & daddr=<latvalue>N<longvalue>E .... *navigation link.*

- latvalue —> latitude value as obtained from the GPS receiver.

- longvalue—>longitude value as obtained from the GPS receiver.

4.2 Working

The workflow of the women safety and security is explained in this section. The flow chart of the proposed system is illustrated in figure below:[27]

Step 1: Start.

Step 2: Switch ON the 7.4 Volt power supply.

Step 3: Emergency button is pressed.

Step 4: Buzzer is turned ON to alert the people in the surrounding area of the victim and simultaneously the shock circuit and the camera

Step 5: After GPS receives signal, GPS will start calculating the current latitude and longitude values of the victim and send it as SMS to the registered mobile number using GSM module.

Step 6: RELAY is turned ON, to apply the shock to the attacker.

Step 7: We track the last location of the victim and that location is sent to the particular person's mobile phone.

Step 8: Stop

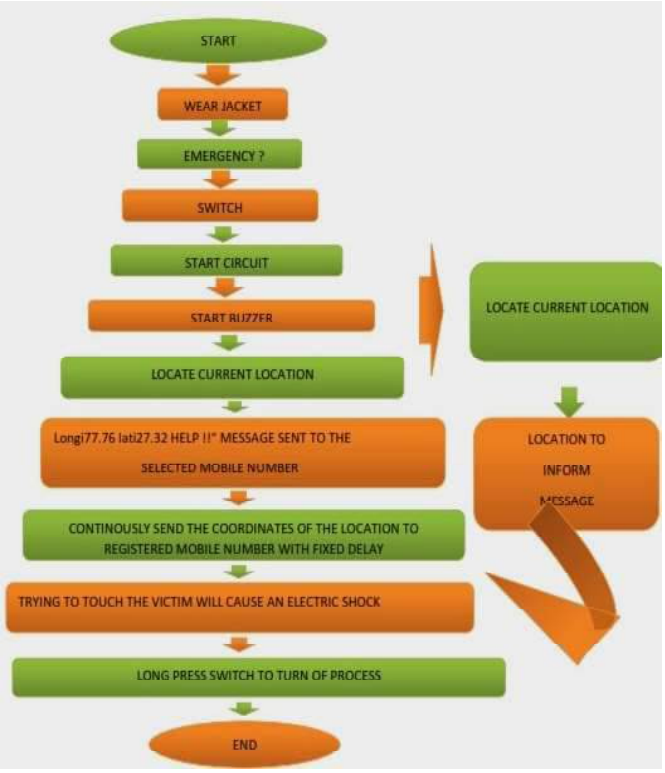

Fig. 4.1 Process system of safety jacket

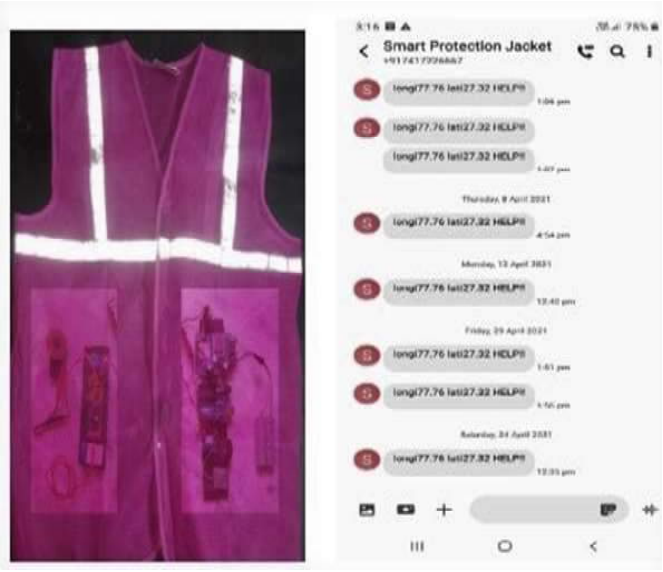

Fig. 4.2 Model prototype and Location of the victim

4.3 CONCLUSION

The proposed smart protection jacket is very helpful for the woman who is actually in need. Finally, GPS module tracks the location of the victim and forwards the messages to the respective contact numbers by using GSM module (SIM900), and where the location of the victim is obtained in the Google maps.

5. RESULTS AND DISCUSSIONS

A Model with GPS Module, GSM Module with SIM900, Camera, Buzzer Power Supply, Relay Unit, Battery, Electric Shock controlled by Atmega328P microcontroller acts as the prototype jacket.

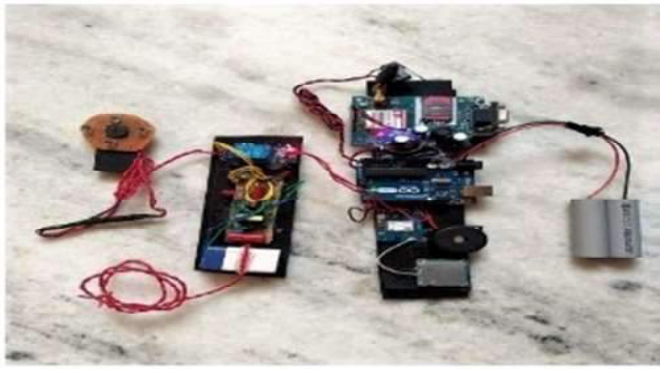

Fig. 5.1 Prototype Jacket (Circuit)

Latitude and Longitude data being received and is shown in the mobile display below is the image of the system when switch is pressed and the GSM message received by the emergency contacts.[29]

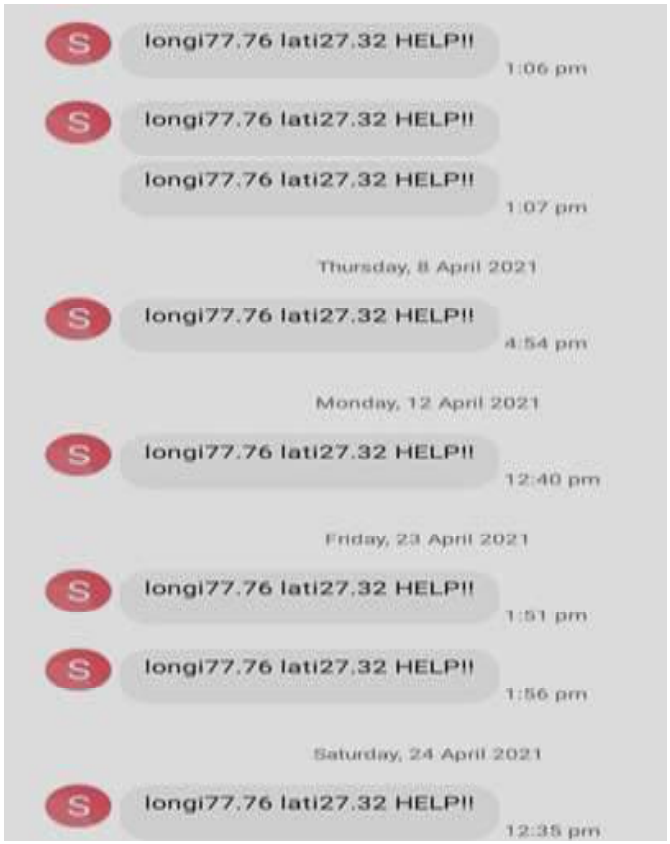

Fig. 5.2 Coordinates when Buzzer is on

Fig. 5.3 Message when switched is on

Fig. 5.4 Location on Google map

CONCLUSION

This report has mainly focused on safety of women in public places. The different modules used in the system are combined to develop a Women Security Jacket. This system makes use of GSM and GPS modules which are used to send emergency messages along with current longitude and latitude value to stored contacts.[30] On detecting violence situation, the system may be activated by simply pressing a switch. On pressing the switch, the system will activate GSM and GPS modules along with the Buzzer which will help to alert nearby public. The project has been developed with such a motivation that it will leave no stone unturned to provide women with a safe environment under all the circumstances. As the system is fabricated into a jacket, no one would be able to evaluate whether it is a safety jacket or just a regular jacket. The proposed design will help the girl when she is in danger zone. She can make rescue of herself in danger situation and this circuit will used to decrease the tension of girl when she walks alone in night hours also, so that she will never fill helpless at any situation and can protect her by herself sand the culprit face will be captured by camera so that police will be able to catch him easily end itemize. Being safe and secure is the demand of the day. Our effort behind this project is to design and fabricate a gadget which is so compact in itself that provide advantage of personal security system. This device will probably be very useful for the women. It is certainly a short term and preventive solution. This will be proved as a multi-pronged strategy with the participation of multi stake holders of society. The creation of a hardware and software prototype has achieved two objectives: validation of the proposed architecture and checking whether the utilized technology is Appropriate for the system. This system will help its users in difficult situation. This system would be highly sensitive and easy to handle. Its quick action response will provide safety and security to individual user.

FUTURE SCOPE

This report has mainly focused on one of the alarming issues in the society i.e., security and safety of women in India. In this report, we have shown a prototype using different modules. Testing of the system shows that the system worked efficiently. The system is of low cost and thus very effective and productive. However, there is always a scope of improvement.[33] As the technology changes or new requirements from the user to enhance the functionality of the product vary, it may require to introduce a new version with

additional modules without any major changes to the entire system. With further research and innovation, this system can be implemented in different forms. The system can be used in the form of different wearable devices. This system can be implemented as a safety locator wrist band using GSM.

and GPS modules, as a safety belt etc. We can also prepare an android application which directly shows the location on obtaining the longitude and latitude values.[34] We can also include a small camera which will capture the image of the attacker and help the victim. Furthermore, various safety emergency escape tools can be incorporated in the jacket in a disguised way which can consist of tools like:

- Cutter knife,
- Carbon steel blade,
- Pepper spray gun or any irritant spray gun,
- Torch or flashlight whenever needed,
- Some sharp objects for the worst cases if the victim gets kidnapped,
- Paracord keychain etc.

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INTERNATIONAL UNION OF LEATHER TECHNOLOGISTS AND CHEMISTS SOCIETIES

WELCOME TO ASIA INTERNATIONAL CONFERENCE OF LEATHER SCIENCE AND TECHNOLOGY

It is with great pleasure, that we invite you to participate in the 12th Asia International Conference of Leather Science and Technology (AICLST), hosted and organised by the New Zealand Leather & Shoe Research Association in the beautiful and picturesque city of Queenstown in New Zealand's South Island on 18-20 Oct. 2022.

Queenstown sits on the shores of the South Island's Lake Wakatipu, set against the dramatic Southern Alps. Renowned for adventure sports, it's also a base for exploring the region's vineyards and historic mining towns. There's bungee jumping off Kawarau Gorge Suspension Bridge and jet-boating on the Shotover and Dart rivers. There is also the possibility of skiing on the slopes of The Remarkables and Coronet Peak.

The three-day programme promises excellence in science, along with practical examples of science impact and the drive to sustainable leather production. We seek to foster strong and lasting bonds between leather scientists across the international community with companies engaged in leather production and chemical companies who deliver the products used to manufacture leather.

Main Topic Areas:

- Advances in Basic Science of leather
- Benign chemical developments
- Cleaner leather production and closed-loop processing
- High value uses for leather manufacturing by-products and wastes
- Technologies to advance protection of the environment in the leather industry
- Advances in detection technologies applied to leather manufacture and quantification
- Intelligent leather technologies – Industry 4.0
- Design innovation for fashion leathers

KOLKATA LEATHER COMPLEX: INDIA'S NEW LEATHER HUB

Cheap land and labour, an integrated hub, government sops and a hassle-free environment make Kolkata an attractive option for Kanpur's tanners to relocate

Over the past few years, India's leather capital has been shifting downstream the Ganga—from Kanpur to Kolkata. Once the hub of the country's leather industry, the Uttar Pradesh town has had to gradually cede that distinction as cow vigilantism in the state made the transportation and slaughter of cattle increasingly difficult, which, in turn, dealt a blow to the leather trade. So, when Iqbal Naaz, the regional chairman of the Council for Leather Exports and owner of the Kanpur-based Naaz Exports Private Limited, met West Bengal chief minister Mamata Banerjee during a stopover in Milan in September 2018 en route from a business trip to Italy and Germany, he wondered whether her government could provide him land in West Bengal to expand his unit. Shortly afterward, at the Bengal Global Business Summit in February 2019, Mamata issued a notification inviting applications for land in the sprawling 1,100-acre Kolkata Leather Complex (KLC), located in the eastern fringes of the city in Bantala, and touted to be "South Asia's biggest integrated leather hub".

Bengal, it seems, is ideal in terms of land availability and cost, as well as in the facilities offered by the government. "Land cost Rs 30,000-40,000 per square metres in Jajmau and Rs 10,000-15,000 in Unnao," says Naaz. "At KLC, it was only Rs 2,800 per square metres." Not just that, capacity in the leather clusters in Kanpur, Jajmau and Unnao are full. The CETPs (common effluent treatment plants)—essential for treating the immensely hazardous chemical effluents released from tanneries—there too are functioning over the optimal level.

More than anything, however, it was vigilante attacks by cow protection groups in UP and the closure of many slaughterhouses by the state government in 2017 that made the environment for the leather industry unconducive for business. The row over cow slaughter forced the closure of 150 out of 400 tanneries at the country's biggest leather hub at Jajmau, a suburb of Kanpur. Then, three months before the Kumbh Mela in January 2019, the Uttar Pradesh Pollution Control Board passed an order asking tanneries to shut down for three months to stop the discharge of effluents in the Ganga. Hundreds of tanneries closed down, and foreign contracts cancelled. As tannery owners turned to Pakistan and Bangladesh for raw material, manufacturers started looking to Kolkata to move or open new production units. The reasons? A metropolis with an airport and access to a port, cheap labour, but mostly government sops and attractive land rates at the KLC.

A GOOD PLACE TO HIDE

- **THE KOLKATA** Leather Complex has an annual turnover of Rs 15,000 crore and exports goods worth around Rs 7,500 crore
- **AT THE KLC,** 8 CETP modules can treat 40 MLD water a day
- **IT HAS** the potential to generate employment for lakhs
- **TWENTY TANNERY** owners from Uttar Pradesh are likely to expand operations here and bring in Rs 400 crore in investment
- **TOP NAMES** in UP's leather industry, like Super House, Pacific, Naaz etc., have plans to open units in Kolkata
- **KOLKATA'S** airport and port facilities are a big attraction for them

"There were several hundred tanners asking for land," says Naaz. "But Didi chose only those who were serious about the leather industry, not those who were looking to use it for other purposes," he says.

Indeed, the West Bengal government has been serious about giving the labour-intensive leather industry a big push by scaling up infrastructure, upgrading effluent treatment plants and promising a conducive environment. It was not a surprise, therefore, that many Kanpur tanners started contemplating setting up new units at KLC.

Their endeavours, however, were rudely interrupted by the Covid-19 pandemic, and the debilitating lockdowns that accompanied it, having a crippling effect on the industry and slowing down the entire process of the actual physical relocation from Kanpur. As matters stand, over 30 tanners from the city have been allocated space in KLC and are in the process of moving in, with their units in various stages of construction.

"We took possession of land only a few months back it was delayed mainly because of Covid and for upgradation of the CETP plant. The building plan is ready. I am hoping to start production within two years," says Mukhtarul Amin, a tanner from Kanpur who is setting up his fourth unit in the leather industry. Amin is planning to invest Rs 15-20 crore in this expansion. Like Amin, around 20 tannery owners with units in UP are keen on expanding operations with new units in the KLC. In all, the businessmen from Kanpur are likely to bring in over Rs 400 crore in investment.

Now home to some of the biggest names in leather export, KLC has an annual turnover of Rs 15,000 crore and exports products worth around Rs 7,500 crore. This, too, makes it an attractive destination for investors from Kanpur and Chennai.

KLC's success, though, has come the hard way, and after almost a quarter of a century. A brief rewind to its journey may perhaps help put things in better perspective.

A SHAKY START

The year was 1997. The country's apex court had ordered the shifting of 538 old, polluting tanneries from Kolkata to a self-contained zone with effluent treatment facilities. The complex was conceived at Bantala. M.L. Dalmiya & Co Ltd, owned by the late Jagmohan Dalmiya (the former BCCI president), won the bid and got 1,100 acres of land on lease. As a BOT (Build Operate Transfer) partner, he was to develop the land for the relocated units by 2002 as per the Supreme Court order. However, the developer kept on missing deadlines. Even for the installation of a basic CETP, mandatory for running tanneries, the government had to eventually step in. The CETP was commissioned in 2004 and the first tanneries began moving in from 2005.

The complex was a picture of desolation in those days. Imran Ahmad Khan, the general secretary of the Calcutta Leather Complex Tanners Association, who had invested Rs 7 crore in 2000, was shocked when he returned from Australia in 2013. Other than the four modules of CETP, which had the capacity to treat 20 MLD (million litres a day), there was practically nothing for tanners.

"We were just paying EMIs for our investment. Those days, the complex had no streetlights, no drinking water facility. Even HDPE (high-density polyethylene) pipelines for the transportation of toxic effluents from tanneries to the CETP had not been laid. Instead, brick sewers and inferior RCC (reinforced concrete) pipelines were hastily laid, which led to serious pollution," says a tannery owner who has had a unit in the KLC since its inception. The dumping of solid waste also led to nearby villages complaining of fish dying in ponds, vegetables rotting away in fields and sundry health hazards.

With sparse security inside a largely empty complex, tanners complained of harassment by extortionists—all valid reasons

for the close to 600,000 people directly or indirectly associated with tanneries to blame the government and the developer alike. Furthermore, there were no sewerage treatment plants (STPs) for around 50 leather goods manufacturing units that had clubbed together under the Indian Leather Products Association. There was scarcely any provision for drinking water, and reservoirs needed for washing leather were constructed without water pumping stations. The KLC was an embarrassment.

But the greatest handicap facing the KLC was the inadequate number of CETPs. For the highly polluting industry that is the leather business, they are an absolute must—actually considered as important as anything in a leather industry hub. Consequently, there were raps for allowing tanners to operate without adding to the capacity of CETPs to treat waste water. Instead of the proposed six CETP plants with a capacity to treat 30 MLD of effluents, the complex only had four CETP modules with the capacity to treat only 20 MLD.

In its first-ever environment audit in 2010-2011, the Comptroller and Auditor-General criticised the government in the strongest terms: "The project failed to achieve its stated objective of ensuring safe disposal of industrial effluents and solid waste from tanneries causing immense damage to the environment."

The gathering force of negativity around the KLC, combined with a need to generate employment and attract investment, forced the state government to act. The wheels started turning the other way around in 2015.

Bit by bit, infrastructure was improved, outstanding problems resolved. Three pumping stations with a capacity of 90,000 litres of water a day for washing leather were put in place. The matter of disposal of hazardous solid waste was also taken care of, with West Bengal Waste Management Ltd agreeing to transport 100 tonnes of waste every month to Haldia, a port city 120 kms south of Kolkata.

But the greatest difference came when four more modules of CETPs with the additional capacity to treat 20 MLD of effluent waste started operating in March 2022. While inaugurating them, Mamata said, "With eight CETPs, the only leather complex in the world to have such a capacity, KLC will attract investment worth Rs 80,000 crore and employ five lakh people."

Armed with this 40 MLD capacity, KLC is now ready to open its doors to the 187 new tanners who had already bought land in 2018 and were unable to shift because of inadequate effluent treatment capacities. Out of these tanners, around 30, among them Mukhtarul Amin, are from Kanpur and Chennai.

Now that KLC is up and running, other initiatives too are being taken up. The sludge, flesh and waste of the leather are being used for generation of electricity in a bio-gas plant as a pilot project. Along with SWITCH-Asia, a sustainable consumption and production programme, the KLC is extracting tallow oil for making tiles with 60 tonne weight-holding capacity. A secure land fill area spread over 51 acres is being prepared to store sludge and leather waste for manufacturing by products such as leather boards, paver tiles and sandals.

BIG NAMES IN KLC

Once their production units are up, Kanpur's tannery owners can readily benefit from the top manufacturing units that have set base in KLC. Vinit Gloves, with an annual turnover of Rs 100 crore, is a top exporter and is looking to set up a second unit. New Horizon, Trio Trends, Kompanero and ASG leather are all luxury brands with large footprints in the business and a presence in KLC.

The cost of labour—big units pay Rs 15,000-18,000 a month—too is favourable for UP's tanners. Wages of casual labourers are also cheap.

The promise of employment for 500,000-600,000 people also seems doable. According to Imran Ahmad Khan, for each crore invested in the industry, a minimum of 15 jobs are created. "This is central government statistics. So, if the new 187 tannery units are putting in an investment of Rs 4,000 crore, one can assume one lakh direct employment won't be too hard to generate," he points out.

That's a figure to be proud of. But giants from UP's leather belt—Super House, Pacific, Naaz and 15 others from Kanpur—have also taken a shine to Kolkata's leather hub. They have promised Mamata Banerjee investment worth Rs 5,000 crore.

(Source : India Today – 22/04/2022)

INDIA AND AUSTRALIA SIGN TRADE AGREEMENT

India and Australia have signed an economic cooperation and trade agreement providing duty-free access for over 6,000 Indian sectors including leather.

These sectors include leather, footwear, furniture and jewellery. The agreement is expected to come into force in around four months from now.

The India-Australia Economic Cooperation and Trade Agreement (IndAus ECTA) was signed in a virtual ceremony by Indian Commerce and Industry Minister Piyush Goyal and Australian Minister for Trade, Tourism and Investment Dan Tehan, attended by Indian Prime Minister Narendra Modi and Australian Prime Minister Scott Morrison.

Goyal asserted that the agreement would be a key driver for increasing bilateral trade from the current US$27.5 billion to US$45-50 billion in the next five years.

The IndAus ECTA includes safeguard mechanisms to prevent routing of products from third countries, unusual surges in imports, fast-track approvals and inspections for pharmaceutical products and more.

The agreement also includes post-study work visas for Indian students of two to four years. Goyal said: “post-study work visas will provide extended options for working in Australia to eligible Indian graduates, postgraduates and STEM specialists.” There are reportedly more than 100,000 India students enrolled on courses in Australia at present.

(Source : LeatherBiz.com - 22/04/2022)

KERING SEES REVENUE JUMP 27% IN Q1

The luxury fashion group has reported its first quarter results for the 2022 financial year, achieving €4.96 billion in revenue, up 27.4% on a reported basis.

Gucci brought in revenue of €2.59 billion during the period, up 19.5% year-on-year, while Yves Saint Laurent achieved revenue of €739 million, an increase of 43%. Bottega Veneta reported an increase of 20.8% to €396 million, and revenue from other houses came in at €973 million, growing by 35.5%.

Revenue for the quarter from directly operated stores was up 23% on a comparable basis, and grew by 32% over the same period in pre-pandemic 2019. Online sales continued growth during the first quarter, accounting for 15% of the total direct sales for the group.

At the beginning of the year, Kering announced an agreement to sell its entire stake in Sowind Group SA, which owns Swiss watch manufacturers Girard-Perregaux and Ulysse Nardin, to its current management.

François-Henri Pinault, Chairman and CEO of Kering, said: “We opened 2022 on a very solid first quarter in a more uncertain environment, notably impacted by tightening Covid restrictions in China since March. All our houses posted double-digit revenue growth in the quarter, with spectacular performances at Saint Laurent, our Other Houses, particularly Balenciaga, and Kering Eyewear.

“Bottega Veneta also delivered sharp higher sales on a more demanding base. Gucci’s strong showing in North America and Europe was overshadowed by its exposure to China, where we

are boosting its organisation to fully capture the vitality of the market. While we remain attentive to economic and geopolitical conditions, we invest in all our brands, whose attractivity will continue to fuel our growth and profitability."

(Source : ILM – 20/04/2022)

CUCINELLI REPORTS HIGHER FIRST QUARTER RESULTS

Leather goods brand, Brunello Cucinelli has reported its first quarter 2022 financial results, achieving net revenues of €196.9 million, up 19.6%.

Compared to pre-pandemic 2019, growth is 22.8%, with significant double-digit increases in all international markets, the company reports.

In Europe, revenues for the period were €58.3 million, up 14.5% compared with the first quarter of 2021. In Italy specifically, sales were €24.2 million, up 2.8%.

In the America's, reported revenues were €66.9 million, up 37.7% year-on-year. The company reports that the U.S. is continuing a healthy long-term growth process.

In Asia, turnover was €47.6 million, up 14.5% with a positive result in China despite the ongoing Covid-19 difficulties.

Following the first quarter results, Brunello Cucinelli expects revenue growth of around 12% in the full 2022 fiscal period, which the company describes as a very important year.

(Source : ILM – 22/04/2022)

TYSON FOODS ACHIEVES ZERO WASTE TO LANDFILL STATUS AT MULTIPLE PLANTS

Tyson Foods Inc. announced that six of its plants achieved Zero Waste to Landfill (ZWTL) gold level validation. UL validated these efforts to UL 2799 Environmental Claim Validation Procedure (ECVP) for ZWTL.

The company was recognized for reducing the production of all by-products like animal fats, hides and inedible proteins and reusing or recycling the remaining by-products to support conservation and efficiency.

Six plants have earned gold status, meaning that 95%-99% of their waste has been diverted from landfills. The facilities are located in Newbern, Tenn., Obion County, Tenn., Nashville, Ark., Hope, Ark., Albany, Ky. and Camilla, Ga.

"We're proud of our team members and the work they are doing to reduce waste to landfills," said Katherine Pickus, vice president of sustainability and global impact at Tyson Foods. "These validations reflect Tyson Foods' dedication to making a positive difference in the communities where we live and operate."

Tyson said it designed an integrated waste management system to ensure resources are reused and reduce greenhouse gas (GHG) emissions through the reduction of energy use needed to create new materials.

"Tyson Foods' participation in this voluntary third-party validation marks their leadership in the pursuit of waste reduction and recycling," said Doug Lockard, vice president and general manager of UL's retail and consumer products group. "We look forward to validating more Tyson Foods'

facilities and continuing to support their circular economy journey, which provides a clear way for the company to measure and track progress to meet sustainability goals."

To achieve ZWTL goals, each location identifies methods for handling waste in ways to avoid disposal at landfills. The ZWTL approach provides criteria for how to dispose of materials such as packaging, compost, liquids and food.

(Source : Meat + Poultry – 20/04/2022)

HERMÈS GENERATED $3.06 BILLION IN Q1 REVENUE, THANKS TO U.S., EUROPE DEMAND

Citing strong growth "despite a still uncertain context," Hermès reported revenue of €2.77 billion ($3.06 billion) for the first quarter of 2022, up 27 percent compared to the same quarter last year. The Birkin bag-maker saw double-digit sales increases in all divisions during the first three months of the year, with its Leather Goods and Saddlery division – which generates almost half of its total revenues – up 16 percent thanks to an "increase in production capacity and sustained demand." Ready-To-Wear and Accessories sales grew by 44 percent, Silk and Textiles was up by 27 percent, the brand's growing Perfume and Beauty group saw growth of 18 percent in Q1, and Watch sales were up (+62 percent), "reflecting the technical watch-making expertise and creativity of the collections."

Geographically speaking, Hermès' growth for the quarter was led by sales in the United States and Europe (excluding France), with sales in both markets up by 44 percent. In Europe, the United Kingdom, Germany, Italy and Spain led the growth, while France saw a 40 percent jump in sales.

Sales in Asia (excluding Japan) grew by 20 percent, per Hermès, which said that it benefitted from a very strong Chinese New Year before widespread COVID lockdowns, including "some store closures," took effect in mid-March. And finally, sales in Japan were up by 17 percent for Q1, with Hermès pointing to "the loyalty of local customers and the success of the collections."

Reflecting on Russia in a corresponding conference call on Thursday, Hermès' management revealed that its three stores remain closed and that it has cease all imports, including perfumes and beauty, to the country.

The status of a planned store opening in St. Petersburg in June in "uncertain." In terms of its 65 employees in Russia, Hermès' Executive Vice President for Finance Eric du Halgouet confirmed that the company has continued to pay them, while also "providing training and psychological support," per Reuters.

	1st quarter		Evolution /2021	
In millions of euros	2022	2021	Published	At constant exchange rates
Leather Goods and Saddlery (1)	1,197	988	21.1%	15.8%
Ready-to-wear and Accessories (2)	710	473	50.1%	44.1%
Silk and Textiles	198	148	33.3%	27.3%
Other Hermès sectors (3)	330	228	44.4%	37.4%
Perfume and Beauty	119	99	20.0%	18.4%
Watches	134	78	71.5%	62.0%
Other products (4)	77	69	12.8%	10.9%
TOTAL	**2,765**	**2,084**	**32.7%**	**27.1%**

With its growth driven largely by brick-and-mortar store sales in the U.S. and Europe, Hermès revealed that revenue from in-store was were up by 28 percent on a year-over-year basis, as it continues to develop its retail footprint by way of "store openings and extensions, and the strengthening of online sales worldwide."

As for output, the group is aiming to increase leather goods output volume by 6 to 7 percent in 2022, with a price increase of 3.5 percent across the geographical regions in play as of early this year, which comes as a result of an increase in cost of goods sold, and increases to come in 2023. The opening of two new leather goods production workshops in 2025 and 2026, which will eventually employ 500 craftsmen, in addition to the three sites under construction in Louviers (Eure) in 2022, La Sormonne (Ardennes) in 2023 and Riom (Puy-de-Dôme) by 2024, will support such increased output targets.

"The strong growth in sales at the beginning of this year reflects the desirability of our collections and the confidence of our customers in our artisanal and responsible approach," Hermès executive chairman Axel Dumas said on Thursday, "Despite a still uncertain context, the group is accelerating its strategic investments, recruitments and training to support the growth of all the métiers of the house."

(Source : TFL – 14/04/2022)

WORLD'S TANNERY

The Leather industry in India accounts for around 13% of the world's leather production of hides/skins and handles a robust annual production of about 3 bn sq. ft. of leather. The country accounts for 9% of the world's footwear production. The industry is known for its consistency in high export earnings and it is among the top ten foreign exchange earners for the country.

India has an abundance of raw materials with access to 20% of world's cattle and buffalo and 11% of the world's goat and sheep population.

The Leather industry is an employment intensive industry providing job to more than 4 mn people, mostly from the weaker sections of the society. Women employment is predominant in Leather products industry with about 30% share. The Leather industry in India has one of the youngest workforces with 55% of the workforce below 35 years of age.

The major markets for Indian Leather & Leather Products are USA with a share of 17.22%, Germany 11.98%, U.K 10.43%, Italy 6.33%, France 5.94%, Spain 5.01%, Netherlands 3.52%, U.A.E 3.35%, China 2.61%, Hong Kong 2.15%, Belgium 2.21% and Poland 2.11%.

India as Footwear hub

- For every 1,000 pairs produced and sold in India per day, the sector can create 425 jobs spanning manufacturing, allied industries, and retail./
- In terms of volume, India produced 1.8 billion units and is expected to product almost 3 billion units by 2024 growing at more than 10% annually
- As per Council for Footwear Leather & Accessories, the footwear sector has the potential to grow up to US$ 80 billion, or eight times its present size, by 2030
- Indian Footwear Market was valued at $ 9.70 Billion in the year 2019
- The per capita footwear consumption in India is estimated to have grown from 1.7 pairs in 2016 to 2 pairs in 2019
- Non leather footwear market in India contributed approximately 59 per cent of the total footwear market in 2019 with a market size of $ 4.3 Bn which is expected to increase to $ 6 Bn in 2024.

This article was originaly published in Vol. - 19 No. - 7 July 1971 issue of JILTA.

MONDOPOINT

The Sizing System of the Future

F. R. Manning, MA, ABSI

Introduction

The first announcement of the details of a new standardised shoe sizing system was made at the BBSI 1965 Conference, and subsequently in this journal*, under the name of "Europoint".

Since that time the system has been extended to include width markings, and further discussions have been going on at national and international levels which are slowly leading towards universal acceptance of the system. Indeed so much interest has been shown by countries outside Europe that the name "Europoint" has been abandoned in favour of "Mondopoint", a name which suggests a world standard.

SI and the millimetre

Most countries of the world (including the UK, but excluding USA) are changing their system of weights and measure to a form of the metric system known as SI (Systeme International). In SI the basic unit of length is the metre, and, where larger or smaller units are needed, multiples and submultiples of 1,000 are used. Thus the kilometre=(1,000 metres) is used for large distances, the millimetre (=one thousandth of a metre) for short distances, and the micrometre or micron (=one thousandth of a millimetre) for microscopic measurements. The centimetre is not a recommended SI unit and is likely to fall into disuse as SI gains ground.

Thus the millimetre is the appropriate unit to use for the expression of feet and shoes and lasts, and by a happy coincidence it is for other reasons a convenient unit for foot and last measurements.

Size sticks are sometimes graduated in eights of sizes—and an eighth of a size is a twenty-fourth of an inch, which is approximately a millimetre. The length and girth of a foot can be measured to the nearest millimetre, but

*Manning, F.R.: "Size standardisation—Europoint". J.B.B.S. Inst., 13 (6), 1965.

there is little virtue in attempting to measure to a closer degree of accuracy when the foot itself is liable to change according to the temperature. Similarly the girths of lasts can be measured with a tape graduated in millimetres and in practice this is close to the limit of accuracy.

Hence it is appropriate for a size system for shoes and feet to be based on the millimetre, and to ignore fractions of a millimetre.

Summary of Mondopoint

Mondopoint rests on the principle that the marking on a shoe should refer of the dimensions of the foot which will fit it more specifically the dimensions of the average foot when wearing hose and in the weight-on position.

A Mondopoint size marking will comprise two numbers, e.g. 240/95. The first number is the *size* ; it is an indication of the length of the foot fitted by the shoe, measured in millimetres ; the second number is the *width index* ; it is an indication of the joint girth of the foot fitted, expressed as a percentage of its length.

Example

Shoe marking	Foot measurement
240/95	Length : 240 mm Girth : 228 mm

Since 95 per cent of 240 is equal to 228, the shoe 240/95 fits a foot with a length of 240 mm and a girth of 228 mm.

Politics

After the Madrid Conference on Footwear Distribution in 1961, which recommended the international standardisation of sizes, the British Footwear Manufacturers Federation established a Committee on Size standardisation, which included representatives from shoe manufacturers, whole-salers, multiple retailers, the independent retailers, last makers, the Society of Shoe Fitters and Satra. In 1963 an international committee for size standardisation was established under the auspices of OECD, but this has since been superseded by a joint committee of EEC and EFTA footwear interest, on which the UK has two delegates, E. W. Howlett representing the manufacturers and J.R. Manning representing Satra, while B. E. Wallis attends in his capacity as Joint Secretary of the Technical Co-ordination Committee.

Progress has been steady but not swift, as is inevitable by the very nature of the democratic processes of achieving agreement. Mondopoint has evolved in a series of steps ; typically each step has begun with some technical work (mostly done at Lyon or Kettering) followed by a report and recommendations to the International Committee. Delegates have then referred the recommendations for consideration and ratification by their compatriots and have reported back to the next meeting of the International Committee.

The BFMF sub-committee, under the chairmanship of W. R. Cation, has played a leading role in all these deliberations ; the formal meeting have been supplemented and encouraged by informal discussions at other times, especially at BBSI annual conferences.

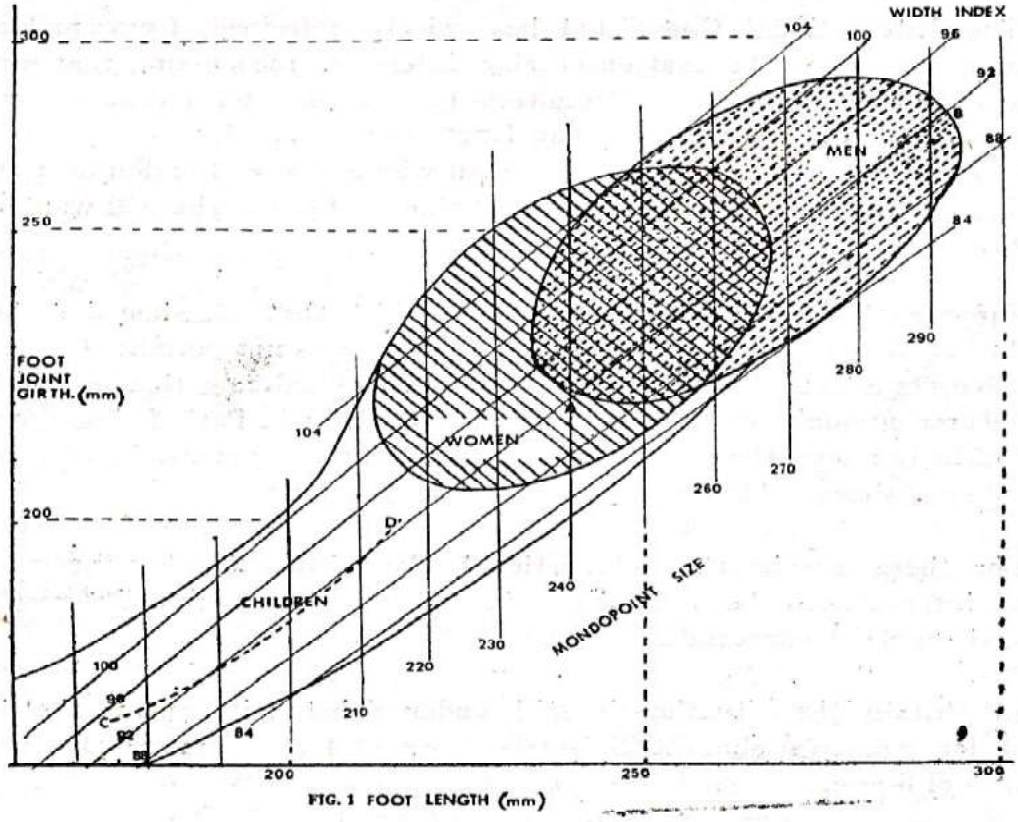

FIG. 1 FOOT LENGTH (mm)

Graphical representation of foot population

Figure I is an indication of the ranges of length and joint girth which are found amongst British feet. Any foot can be characterised by its length and joint girth, and represented by a point on the diagram. Ninety-five per cent of the points representing adult British male feet would fall inside the MEN'S

ellipse, and 95 per cent of the points representing adult British female feet would fall inside the WOMEN'S ellipse. Ninety-five per cent of growing feet would lie inside the curved band marked CHILDREN.

Size intervals

As was pointed out in the previous account (Manning, 1965) the optimum size interval, that which minimises stocks while providing an adequate fitting service, is 4 mm for women's court shoes, 6 mm for men's and children's lace shoes, and 8 mm for slippers. There is body of opinion, notably the Society of Shoe Fitters, who feel that the idea of three different size intervals is unduly complicated, and would prefer to standardize on 5 mm for all types of shoe.

The International Committee has wisely refrained from making any recommendations on the matter of size intervals, recognizing that conditions vary between countries. The Committee has recommended that the shoe size marking should correspond with the length of foot fitted, which is sufficient to ensure standardisation. The French woman who comes to London on a shopping spree knows that if she takes a size 240 shoe in France, she will want a 240 in London.

Suppose the Committee went on to insist that all shoe size should be multiples of 5 mm. This would mean that it was not permitted to market a shoe which fits a foot 248 mm long ! Moreover it is unlikely that a continental manufacturer of men's shoes, who happily makes shoes in Paris Points (6-2/4mm) would willingly reduce the size interval to 5 mm and so increase by 33 per cent the number of shoes in his range.

For these reasons the International Committee has left the question of size in intervals to be worked out in the form of Codes of Practice by the individual countries concerned.

In Britain the situation is still under debate ; it appears that the size interval for women's shoes will settle down at 4 or 5 mm and that for men's shoes at 5 of 6 mm.

Grading

Any system of standardisation for width markings influences, and is influnced by, the method of grading used. In the case of Mondopoint, the width index is the ratio of foot joint girth to foot length, expressed as a percentage. Figure 1 show lines of constant size (length) and constant width index in the area related to British feet. The oblique lines indicate all those feet wich have

the same width index, e.g. the line AB represents all men's feet whose girth is 92 percent of the length. According to Mondopoint principles all shoes for feet on the line AB will have a width index of 92. Evidently the situation will be simplified if the line AB also corresponds to the *grade line*, and this will be so if the lasts are proportionately graded.

Hence with the coming of Mondopoint we are likely to see a trend towards proportional grading for adult shoes, because then all the lasts in a graded series will bear the same width index. Arithmetic grading is not impossible, but the grade lines will then cut across the oblique lines of Figure 1, and the width index will drift as we go up the graded series.

For example a graded series of men's shoes in 8mm sizes might run thus 240 to 288

Proportionally graded : 240/92, 248/92, 256/92, 264/92, 272/92, 280/92, 288/92

Arithmetically graded : 240/94, 248/93, 256/93, 264/92, 272/92, 280/91, 288/91

The two sequences would not fit quite the same population of feet, but the differences in fit are slight and probably undetectable except a long series of careful tests.

Choice of Widths

One of the principles of Mondopoint is that it should not act as a straitjacket, constraining the designer or the shoe manufacturer. Just as the use of the millimetre scale for sizes enables any appropriate size interval to be used, so the use of the percentage scale for the width index enables any appropriate width interval to be used.

The range of foot joint girths is greater than many people realise. For example, a foot 240 mm long may have a joint girth as small as 190 mm or as large as 290 m. This is a range of nearly 4 inches, corresponding to a width index ranging from 80 (very narrow) to 120 (very wide). Customers with very wide or very narrow feet are rare, and ought not to expect the ordinary High Street shop to cater for their needs. Only a few specialist shops are likely to stock shoes narrower than 84 or wider than 108.

WOMEN'S SHOES. For example, those manufacturers who now make multifitting women's shoes with an interval of ¾ inch in joint girth will probably wish to open out the fitting interval to 3 percentage points (giving a joint girth interval of 6.9 mm at size 230, equivalent to 0.27 inch at size 4). A 3-fitting

range might have an interval of 5 points between consecutive widths (e.g.92, 97 and 102) and a 2-fitting range might have a 6-point interval (e.g. 94 and 100).

Nomogram for calculating Mondopoint size of last

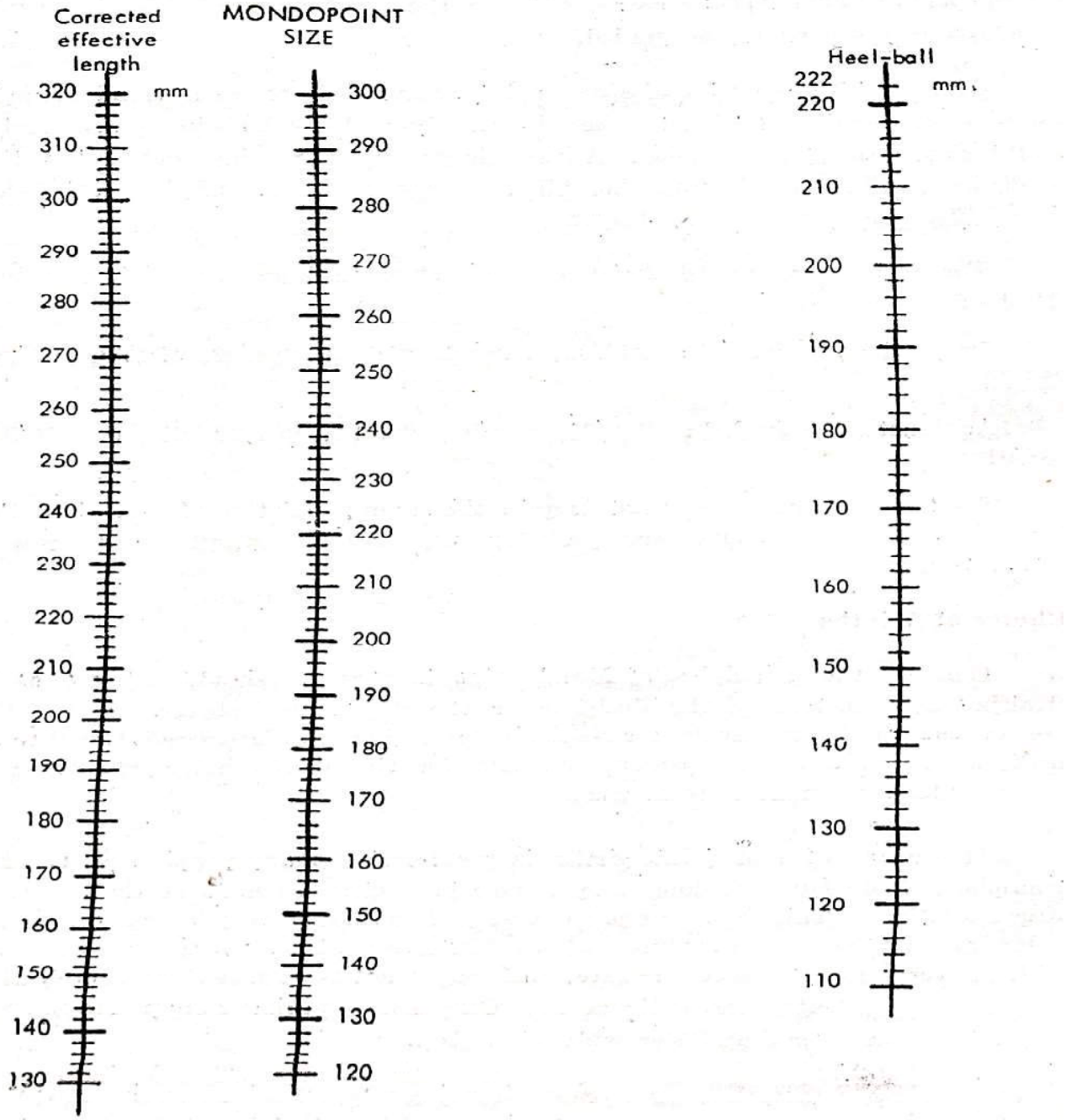

FIG. 2 If the transversal slopes upward to the right the heel ball is relatively far forward. If the transversal slopes downward to the right the heel ball is relatively far back.

The width index of the "average woman's" foot is 97, but it would be wrong to adopt 97 as a standard width index for every single-fitting shoe. As women grow older, their feet grow wider, and a girl who has a width index of 95 in her teens is likely to find that it has increased to 99 by the time she is a grandmother. Therefore a middle-fitting shoe intended for the teenage market would best be made with a 95 width index, whereas a middle-fitting matron's shoe should have a width index of 99.

Furthermore, many single-fitting shoes are recognised as being narrower or wider than average, and these ought to be marked accordingly with the appropriate width index.

For these reasons, it is recommended that all shoes, even single-fitting ones, should carry a width index ; the extra information will be helpful to the customer and the retailer.

MEN'S SHOES. A middle-fitting man's shoe will have a width index of 95.

K. W. Hall*, who pioneered this system of size marking for men's shoes, says that the most frequently occurring feet have a width index in the range 88 to 104, and suggests a 4-point interval in width index for a multi-fitting range of men's shoes.

CHILDREN'S SHOES

A 14 year-old foot is obviously not a proportional enlargement of a five year-old foot : fundamental changes in shape occur as the foot grows. There are even greater differences in shape between a last for a 14 year-old foot and a last for a five year-old foot, hence proportional grading is not feasible over the whole range. The situation is complicated by the fact that young children's shoes are fitted so that the shoe joint girth is greater than the foot joint girth, whereas older childern's shoes are fitted so that the two girths are about equal.

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*K. W. Hall, FBSI: "The Mandator Story". Privately printed, 1966.

The following table shows how the changing proportions of the growing foot are reflected in the dimensions of four Satra model lasts.

Last Number	English Size	Mondopoint Size	Last Joint Girth /Last Length
270	6 (infants)	141/104	0.96
271	9	166/97	0.90
272	13	197/94	0.86
273	4	231/93	0.84

Characteristics of Satra Model lasts

Children's last ought to be graded in accordance with the natural laws governing the average growth pattern of children's feet (e.g. the line CD in Fig. 1) and indeed most present-day ranges of children's shoes are so graded. When Mondopoint is introduced the shoes will carry a width index which will drift by case, the a few percentage points, for example:

168/97, 174/96, 180/96, 186/95, 192/94, 198/94, 204/93, 210/92, 216/92, 222/93, 228/94

Alternatively, above the infants' range, it would be possible to market a range of shoes with a width index of 94 which would command a sale at all sizes, although they would not be at middle fitting a all sizes. Even in this lasts could not be proportionally graded.

Foot measurement

Although the width index is defined by refernce to foot joint girth, it does not follow that a customer's joint girth will need to be measured before he can be fitted with a Mondopoint shoe. Joint width is generally easier to measure than joint girth, and the relationship between foot joint girth and foot joint girth and foot joint width is so uniform, that a measurement of width is in most cases an adequate substitute for a measurement of girth. A Mondopoint fitting board is being designed which will give a direct reading of Mondopoint size and width index. Millimetre size sticks are already available.

Alternatively Mondopoint shoes will be sold by trial and error, without any measuring, just as many shoes are to-day.

Because Mondopoint standardises the meaning of size markings, there will be less need for adults' feet to be measured—all an adult will need to do is to

have his foot measured when Mondopoint is introduced and thereafter remember his foot size.

But one cannot stress too much that a child with a growing foot ought *always* to have his feet measured before any shoe is fitted.

The measuring position for Mondopoint is weight-on, i.e. the subject is standing with the body weight equally divided between the two feet. Tests have shown that more precise measurements are obtained in the standing posture, although it may not always be possible to measure infants and elderly people in this way.

Three millimetres must be added to the measured length of a child's foot in order to arrive at the correct Mondopoint size. This is a growth allowance: it is logical that a growing foot which measures, say, 240 mm *at the time of purchase* ought to have a larger shoe than an adult foot which measures 240 mm.

Customer satisfaction

Mondopoint has been designed to make shoe-buying as easy as possible for the customer. An adult will be able to go into a shoe shop and quote his or her foot length in millimetres, together with his or her width index if necessary ; if the customer does not know the foot size, then it can be measured in the shop. Mondopint is really an expression of the view that it would be a needless complication to have a *special* measuring scale for footwear: ordinary millimetres are quite satisfactory.

The standardisation which Mondopoint offers does not abolish the need for trying on the shoes before purchase; the Smith-Evans effect* proves that *no* sizing system can avoid this necessity.

Trials have been carried out in which shoes, experimentally marked with Mondopoint sizes, have been on sale in shops. Records of customers' reactions showed the majority of customers were quite indifferent to the size marking, and were only concerned with buying a shoe that pleased the eye and fitted well enough. A minority of customers. however, perhaps 10 per cent, were interested in the millimetre size marking, and welcomed it as something which they could understand. No customers reacted against the new style of size marking.

The anomaly that Mrs. Smith takes a larger size of shoe than Mrs. Evans in one style of shoe, but a smaller size in another style.

Determination of size marking

Last and shoe size marking are nowadays often decided by the last manufacturer in consultation with his customer, and the accuracy of the size confirmed by a perfunctory fitting trial: "If Maggie can wear it then it's a size 4". Part of the present-day lack of size standardisation spring from the fact that each company has its own Maggie, and no two Maggies have identical feet. If size markings are going to be standardised, then Maggie is domed as a piece of inspection equipment.

Who is going to replace Maggie ? The definition of Mondopoint gives the answer—the Mondopoint size is the length of the *average* foot which fits the shoe. We have to carry out a proper fitting trial, using enough subject to provide a statistical sample, and to give a sound estimate of the average foot size. In practice this means at least 20 subjects. However, fitting trials are difficult, time-consuming and costly; and we need a simple alternative method of determining the correct Mondopoint size and width index. The simplified method is to measure the last and apply an appropriate formula. The previous paper (Manning, 1965) gave details of the determination of the Mondopoint size from measurements of "corrected effective length" and "heel-ball".

Fig. 2 is a nomogram which simplifies these calculations. It can also be used, (by taking a horizontal transversal) to arrive at "standard" measurements of the heel-ball and corrected effective length for any Mondopoint sizes.

A method of determining Mondopoint width index from last measurements will be put forward in due course.

The future of Mondopoint

In Britain, the switch to Mondopoint is expected to get under way in 1972. We hope that other Western European countries will make the change at about the same time. The NATO and Commonwealth military authorities are considering Mondopoint as a possible standard, and it may be that Mondopoint will become obligatory for all military footwear. Countries outside Europe are contributing to the development of Mondopoint, as witness a recent paper in this Journal by Mr. R. A. Harrison* of South Africa.

The movement for size standardisation will have failed if Mondopoint

*R. A. Harrison—"*A proposed last measuring system for Europoint incorporating a standard method of determining joint girth*", **J. B.B.S.Inst., 15** *(13), 1968.*

becomes just another method of expressing shoe sizes. We wish to reduce the variety of sizing systems, not increase them, and we hope that in the fullness of tfme, Mondopoint will be the only sizing system used by the footwear industries of the world. It is likely that this aim will succeed because it is in line with the trend towards international standardisation of all weights and measures.

Already 23 countries have passed or are preparing legislation to make SI the only legal system and Mondopoint is the only shoe sizing system compatible with SI. Strictly speaking, Paris Points are illegal in France because the Paris Point (=2/3cm) is not an SI unit!

For this reason we expect that the French and English sizing system will both become defunct during the 1970s. The USA is likely to be the last country in the world to cling to non-metric measures, but informed opinion seems to be that she, too, will eventually adopt SI and with it, presumably, Mondopoint.

Acknowledgments

Once again I should like to thank all those friends and colleagues, at home and abroad, who have contributed towards the development of Mondopoint, and who have agreed to sink their differences in order to progress towards a single acceptable sizing system.

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INFLATION REMAINS THE BIGGEST WORRY FOR RBI

Reserve Bank will have to constantly re-assess the "dynamic and fast changing situation" and tailor its actions accordingly, Governor Shaktikanta Das said during the recent meeting of the Monetary Policy Committee (MPC) which decided to maintain status quo on key interest rate.

According to the minutes of the six-member MPC meet released by Reserve Bank of India (RBI) on Friday, the five other members had also expressed a similar opinion amid the ongoing Russia-Ukraine conflict's impact on the global and domestic economies.

MPC, which held its meeting from April 6-8, unanimously decided to keep the borrowing costs unchanged at a record low for the 11th time in a row in a bid to continue supporting economic growth despite inflation edging higher in the aftermath of Russia-Ukraine conflict.

The central bank's MPC has six members, including the governor.

"The situation is dynamic and fast changing, and we should constantly re-assess the situation and tailor our actions accordingly," Das said.

MPC member and RBI Deputy Governor Michael Debabrata Patra had opined that in a world in which de-globalisation seems imminent, one thing has become globalised and that is the alarm about inflation, as per the minutes.

"With 60 per cent of developed countries facing inflation above 5 per cent — unheard of since the 1980s — and more than half of the developing countries experiencing inflation above 7 per cent, the climb in prices is testing societal tolerance levels," he had said during the meeting.

While RBI decided to maintain status quo, it raised inflation forecast to 5.7 per cent for the current fiscal, up from its 4.5 per cent estimate in February.

RBI also lowered the economic growth forecast to 7.2 per cent for 2022-23 from the previous outlook of 7.8 per cent.
This compares to real GDP growth of 8.9 per cent in 2021-22.

(Source : PTI – 22/04/2022)

WORKFORCE SHRANK BY 3.8 MILLION IN MARCH

The unemployment rate fell in March 2022 to 7.6 per cent, from 8.1 per cent in February. But the good news on the labour market front stops here.

All the other data points to worsening labour market conditions in March 2022. The labour participation rate (LPR) fell to 39.5 per cent in March.

This was lower than the 39.9 per cent participation rate recorded in February.

It was also lower than during the second wave of COVID-19 in April-June 2021. The lowest that the LPR fell to during the second wave was in June 2021 — at 39.6 per cent.

The average LPR during April-June 2021 was 40 per cent. March 2022, with no COVID-19 wave and with far fewer restrictions on mobility, has reported a worse LPR of 39.5 per cent.

The labour force shrank by 3.8 million during March 2022 to 428 million. This is the lowest labour force in eight months, since July 2021.

Employment shrank by 1.4 million to 396 million in March 2022, which was the lowest level since June 2021. The count of the unemployed fell by 2.4 million in March 2022.

This is what caused the fall in the unemployment rate. But, the fall in the absolute count of unemployed, or the unemployment rate, is not because more people got employed.

We have already noted that employment actually fell in March, by a substantial 1.4 million.

What the labour market statistics of March 2022 show is India's biggest sign of economic distress.

Millions left the labour market — they even stopped looking for employment, possibly too disappointed with their failure to get a job and in the belief that there were no jobs available.

This is not the first time that India has seen a fall in the labour force in a month wherein both its constituents — the employed and the unemployed — have fallen simultaneously.

Some of this phenomenon occurring during a month could be a reflection of short-term labour market variations, or even sampling variations.

What stands out this time is that the labour force and both its constituents shrank during a larger period — of the quarter of March 2022.

It is for the first time in over three years — since the quarter of June 2018 — that we have such a decline in the labour force. The decline in the LPR reflects the inadequacy of the growth in employment opportunities. This is because LPR compares the labour force with the working-age population.

The working-age population continues to grow and if job opportunities do not grow in tandem, then the LPR falls. But a decline in the labour force in absolute terms reflects a shrinkage in employment opportunities in absolute terms.

The matter gets worse when we dwell into the source of the fall in employment.

The composition of the 1.4 million fall in employment in March 2022 reveals a much bigger problem.

Non-agricultural jobs fell by a whopping 16.7 million.

This was offset by a 15.3 million increase in employment in agriculture.

Such a large increase in employment in agriculture is likely a seasonal demand for workers preparing for the rabi harvest. But, March is a tad early for the rabi harvest.

It is possible that a significant portion of the increase in employment in agriculture in March was disguised unemployment.

The fall in non-agricultural jobs in March is large and, therefore, worrisome.

Industrial jobs fell by 7.6 million in March 2022.

The manufacturing sector shed 4.1 million jobs; the construction sector shed 2.9 million; and mines shed 1.1 million jobs. Utilities saw a small increase.

Manufacturing industries that reported a fall in jobs were the large organised sectors — cement and metals.
The fall in manufacturing jobs is surprising.

After a disastrous 2020-2021, manufacturing jobs had been recovering through most of 2021-2022.

Except in July 2021, when employment in manufacturing was lower than it was in the year-ago month, and that was by a whisker, employment in all other months till February 2022 was higher than in the corresponding year-ago month.

March was expected to maintain the momentum. The fall in March 2022 is, therefore, surprising.

The March employment was a 12.5 per cent fall over February (which had fewer days) and it was a 4.3 per cent fall over March 2021, which was right before the second wave of Covid-19.

The fall in March is also surprising because traditionally, March was seasonally a far busier month than other months of the year.

The construction sector has recovered from the lockdown shocks. But, it has stagnated at employing about 64 million. It is unable to get back to its 68 million-72 million levels of employment in 2018.

In March 2022, employment in the construction industry was down to less than 62 million.

Employment in retail trade is comparable to construction.

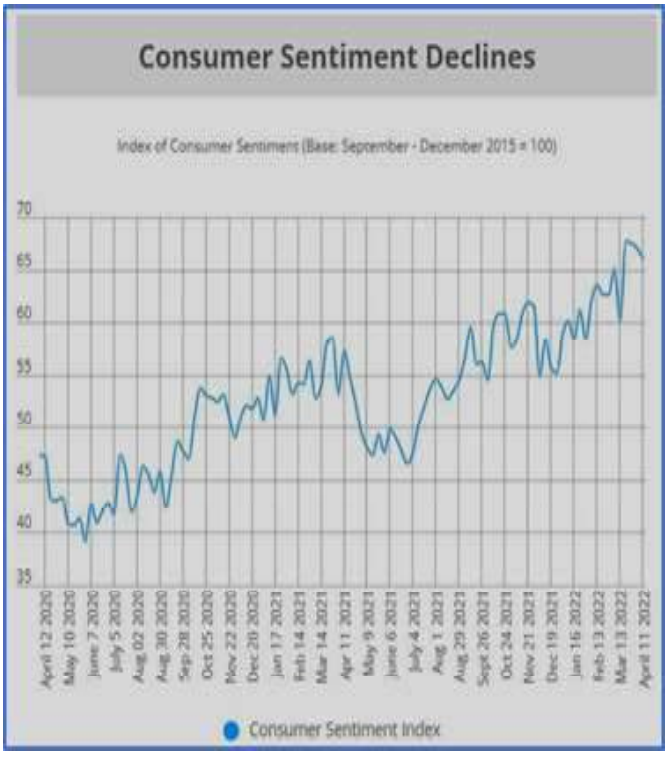
The trade employed a record 70 million in February 2022. This fell to 65.6 million in March.

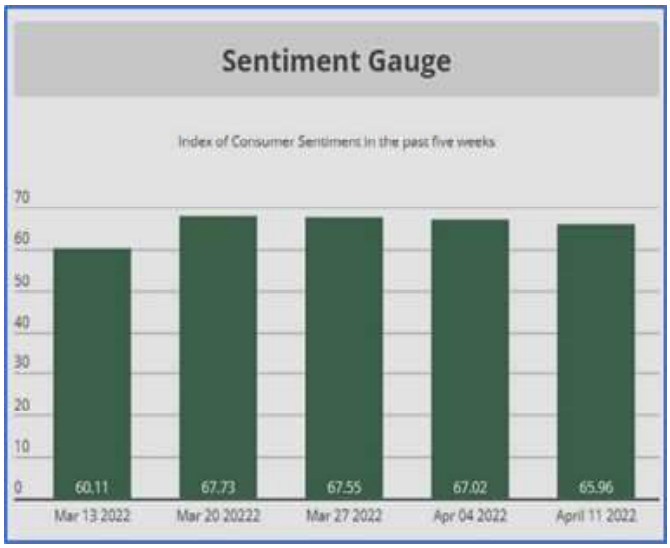
The 1.4 million fall in employment in March translates into a fall in the employment rate as well.

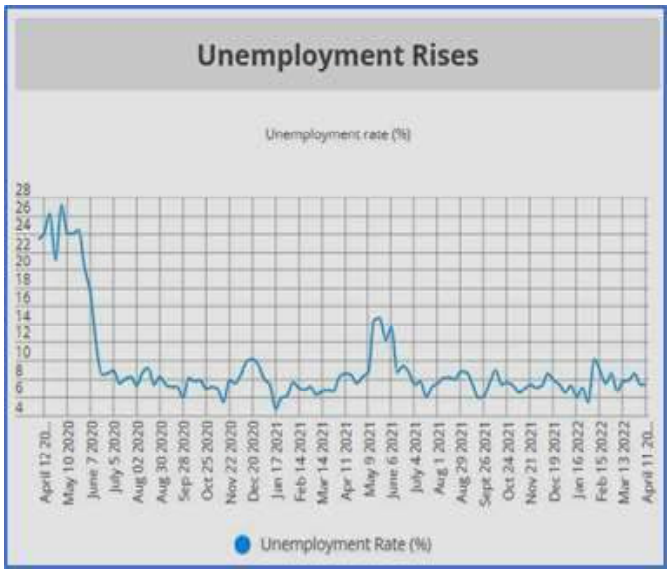
The employment rate, or the proportion of the working-age population that is employed, is the most important labour market indicator.

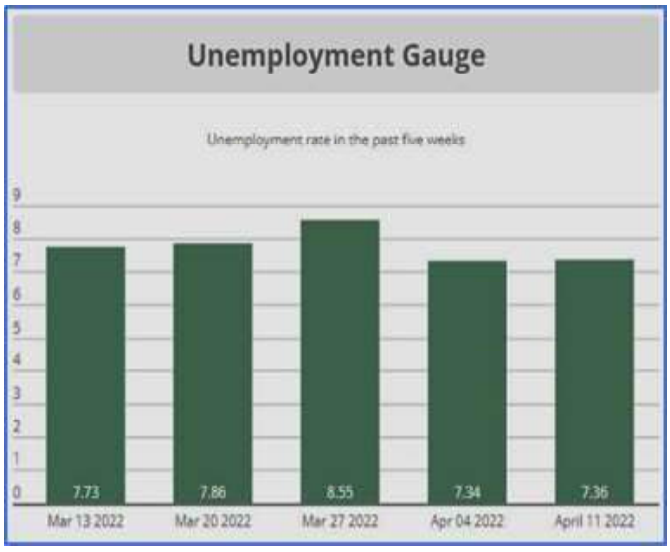
The employment rate fell from 36.7 per cent in February 2022 to 36.5 per cent in March.

Data for March 2022 has revealed once again that the unemployment rate is an unreliable indicator of economic conditions.









(Source : Business Standard – 22/04/2022)

NEED DEDICATED POLICY FRAMEWORK FOR MSMES' E-COMMERCE EXPORTS IN UPCOMING FOREIGN TRADE POLICY: FISME

Trade, import and export for MSMEs:

Industry body for MSMEs Federation of Indian Micro and Small & Medium Enterprises (FISME) on Thursday suggested a dedicated policy framework for promoting e-commerce exports in the upcoming Foreign Trade Policy (FTP). The suggestion was part of the inputs shared by FISME to the government to support MSMEs selling goods online. The current FTP 2015-20 had to lapse on March 31 this year but was extended further till September 30. The government had earlier extended the policy in March 2020 amid the Covid spread.

"A large number of e-commerce sellers are micro units. However, for such enterprises, many of which operate from homes and without proper office, GST registration is mandatory to sell goods online while those operating offline with up to Rs 40 lakh annual turnover are exempted from GST. So, the new FTP should exempt e-commerce sellers as well to promote more businesses to go online before they start selling abroad," Prashant Patel, President, FISME told Financial Express Online.

FISME also suggested several short to mid-term measures to address operational inefficiencies faced by MSMEs when exporting through the e-commerce channel. "This includes measures like simplifying returns in e-commerce exports, digitising the process of AD code registration (a 14-digit code provided by the bank and required at the port from where customs clear goods), automating the processes related to eBRC (electronic Bank Realisation Certificate for exporters by the bank as payment confirmation from the buyer for goods exported) and eFIRC (electronic Foreign Inward Remittance Certificate that acts as a proof of inward remittance to India) procurement and consolidation," the body said.

"GST refund for export items is applicable on invoices above Rs 25,000 but in e-commerce, the goods sold are largely around Rs 10,000 or less, MSMEs still have to pay 18 per cent GST. This 18 per cent is a very big amount for small businesses. Also, MSMEs have to pay import duty on e-commerce returns from foreign country. So, we have asked the government to make a separate policy for e-commerce exports in the upcoming FTP," added Patel.

Other suggestions made by FISME were creating a single window clearance for e-commerce exports by leveraging existing systems in place like Indian Customs Electronic Gateway (ICEGATE) etc., and also benefitting from existing schemes and bodies like 'Niryat Bandhu' and 'Export Promotion Councils' to create more awareness about e-commerce exports among MSMEs. ICEGATE is the portal of Indian Customs of Central Board of Indirect Taxes and Customs (CBIC) that offers e-filing services to trade, cargo carriers and other trading partners electronically.

(Source : Financial Express – 21/04/2022)

INDIA MUST BOOST CREDIT, LABOUR TO RAISE GROWTH POTENTIAL, SAYS IMF

India needs to generate more jobs and credit to power its economy back toward its growth potential, which has been hamstrung by a strained financial sector and the pandemic, according to the International Monetary Fund's mission chief for India.

The South Asian nation's gross domestic product growth potential over the next five years has slipped to 6.2%, from an earlier projection of up to 7%, following a crisis in India's shadow

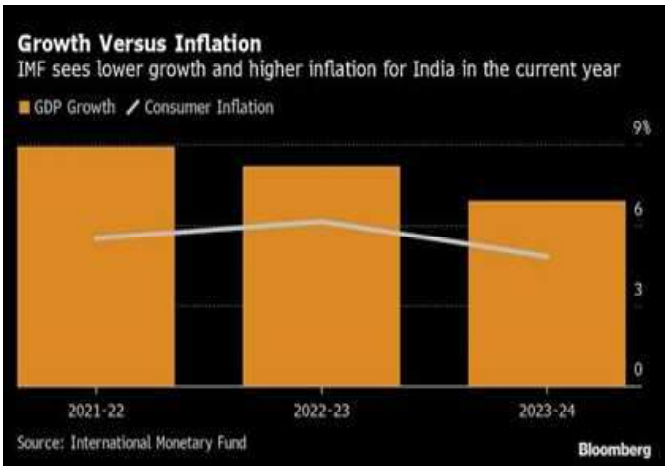
banking sector and the outbreak of Covid-19, the mission chief, Nada Choueiri, said in an interview Wednesday.

Faster expansion is possible "if there are reforms in the financial sector to get credit going strongly again, and labor market reforms to support greater labour force participation and employment," Choueiri said, referring to capital and labor as "important inputs."

The IMF this week lowered its projection to 8.2%, from 9% in January, for India's GDP growth in the fiscal year that started April 1, flagging risks to demand from a sharp rise in commodities prices and supply chain disruptions. It sees the pace slowing to 6.9% next year.

"We had lost two years of growth" because of the pandemic, Choueiri said in a separate interview Friday with Bloomberg Television's Kathleen Hays. "There is still catch-up growth happening in India."

While India continues to remain the world's fastest-expanding major economy even at that pace, surging inflation could begin to drag on activity. The IMF sees consumer price increases averaging 6.1% this year, higher than the central bank's projection of 5.7%. The Reserve Bank of India in its policy decision earlier this month signalled a pivot toward prioritizing rising costs, and away from supporting growth.



Price pressures driven by a global supply squeeze and a surge in energy costs are denting demand in India, hurting consumption that accounts for nearly 60% of India's gross domestic product.

Inflation coming from the supply shock driven by the war in Ukraine could last for a long time, which could trigger second round effects on prices, Nada said. However, the RBI has recognized the dangers of it by adopting a less accommodative stance in the April policy, she added. Now, "the RBI will have to be really data dependent and nimble to see the impact of its announcements and communications on the market and decide if it must shift the course earlier than it plans."

While monetary policy is the right tool to ensure the second-round effects don't take hold in the economy, the first round from supply shocks is better dealt with fiscal policies, according to Nada.

(Source : Business Standard – 22/04/2022)

IT MAY TAKE 12 YEARS FOR INDIAN ECONOMY TO OVERCOME COVID LOSSES, SAYS RBI REPORT

The RBI released the Report on Currency and Finance (RCF) for the year 2021-22 on Friday whose theme is 'Revive and Reconstruct' in the context of nurturing a durable recovery post-COVID and raising trend growth in the medium-term.

The Indian economy is likely to take over 12 years to overcome the COVID-19 losses, according to a report released by the Reserve Bank of India (RBI) on Friday. In its report on 'Currency and Finance for the Year 2021-22', the RBI said, the pandemic is a watershed moment and the ongoing structural changes catalysed by the pandemic can potentially alter the growth trajectory in the medium-term.

"Sustained thrust on capital expenditure by the government, push to digitalisation and growing opportunities for new investment in areas like e-commerce, start-ups, renewables and

supply chain logistics could in turn, contribute to step up the trend growth while closing the formal-informal gap in the economy," the report noted.

The RBI further noted in the report, the pre-COVID trend growth rate works out to 6.6 per cent (CAGR for 2012-13 to 2019-20) and excluding the slowdown years it works out to 7.1 per cent (CAGR for 2012-13 to 2016-17). "Taking the actual growth rate of (-) 6.6 per cent for 2020-21, 8.9 per cent for 2021-22 and assuming growth rate of 7.2 per cent for 2022-23, and 7.5 per cent beyond that, India is expected to overcome COVID-19 losses in 2034-35," the report said.

The output losses for individual years have been worked out to Rs 19.1 lakh crore, Rs 17.1 lakh crore and Rs 16.4 lakh crore for 2020-21, 2021-22 and 2022-23, respectively. The Reserve Bank of India released the Report on Currency and Finance (RCF) for the year 2021-22 on Friday. The theme of the report is "Revive and Reconstruct" in the context of nurturing a durable recovery post-COVID and raising trend growth in the medium-term.

The blueprint of reforms proposed in the report revolves around seven wheels of economic progress viz, aggregate demand; aggregate supply; institutions, intermediaries and markets; macroeconomic stability and policy coordination; productivity and technological progress; structural change; and sustainability.

The report noted, "the pandemic is not yet over. A fresh wave of COVID has hit China, South Korea and several parts of Europe. However, various economies are reacting divergently ranging from a no-COVID policy in some jurisdictions (eg, China, Hong Kong and Bhutan) on the one hand to those with relatively open borders and removal of internal restrictions (eg, Denmark and the UK).

In India, the restriction levels are being dynamically calibrated at local levels in response to the evolving situation."

(First Post – 29/04/2022)

GST REVENUES AT ALL-TIME HIGH OF RS 1.68 LAKH CR IN APRIL

The GST collection in April touched the highest ever level of about Rs 1.68 lakh crore, up 20 per cent from the year-ago period, on improved compliance and recovery in business activity, the Finance Ministry said on 1st May.

The GST collection in April touched the highest ever level of about Rs 1.68 lakh crore, up 20 per cent from the year-ago period, on improved compliance and recovery in business activity, the Finance Ministry said on 1st May.

During the month, 1.06 crore GST returns from GSTR-3B were filed, of which 97 lakh pertained to March 2022. The gross GST revenue collected in April is Rs 1,67,540 crore, of which CGST is Rs 33,159 crore, SGST Rs 41,793 crore, IGST Rs 81,939 crore (including Rs 36,705 crore collected on import of goods) and cess Rs 10,649 crore (including Rs 857 crore collected on import of goods), the ministry said.

The gross GST collection in April 2022 is an all-time high and Rs 25,000 crore more than the previous highest collection of Rs 1.42 lakh crore recorded in March.In April last year, the mop-up from Goods and Services Tax (GST) was about Rs 1.40 lakh crore.

Giving comparable data of April GST return filing, the ministry said there is a "clear improvement in the compliance behaviour, which has been a result of various measures taken by the tax administration to nudge taxpayers to file returns timely, to making compliance easier and strict enforcement action was taken against errant taxpayers identified based on data analytics and artificial intelligence".

During the month, revenues from import of goods were 30 per cent higher and the revenues from the domestic transaction (including import of services) are 17 per cent more than the revenues from these sources during the same month last year. The total number of e-way bills generated in March 2022 was 7.7 crore, which is 13 per cent higher than 6.8 crore in February 2022, which reflects the recovery of business activity at a faster pace, the ministry said.

In April 2022, 84.7 per cent of registered businesses paid taxes by filing GSTR-3B, compared to 78.3 per cent in the year-ago period. Also, 83.11 per cent of GST registered businesses have filed supply or sales return GSTR-1, compared to 73.9 per cent a year ago.

The highest ever tax collection in a single day also happened on April 20 and Rs 57,847 crore was paid as GST through 9.58 lakh transactions. Deloitte India Partner MS Mani said while the GST collections in respect of March have always been high, the record collections of Rs 1.68 lakh crore reported are on account of multiple favourable factors, including the recent changes on permitting input tax credits only upon timely compliance by the vendors.

"The impact of the continuing focus on ensuring timely compliance by all GST registrants by restricting the input tax credits of the buyers together with enhanced analytics to detect evasion has also contributed significantly to the all-time high collections reported," Mani said.

Tax Connect Advisory Partner Vivek Jalan said while the high collection depicts that the Indian Economy is coming out of the pandemic in full swing now, it is also a result of the tremendous price rise in input cost and implementation of GSTR 2B wherein the recipient can take only that much credit for input, input services and capital goods for which the supplier has filed his returns.

(PTI – 01/05/2022)

INDIA INC'S DEBT AT RISK OF DEFAULT MAY RISE BY RS 65000 CRORE

The ongoing headwinds like war-triggered inflation, rate tightening by RBI and weak rupee will lead to a Rs 60,000 crore increase in 'risky debt' in FY23.

Defining 'risky debt' as borrowings by companies having a net leverage or debt to operating profit ratio of more than five times, India Ratings said the ongoing troubles will take the stock of such loans to Rs 6.9 lakh crore by end of FY23, as against the Rs 6.3 lakh crore it would have been but for the Russian invasion of Ukraine.

An analysis of 1,385 corporate entities led the domestic ratings agency to trim revenue growth projection for entities in a post-war scenario and also forecast narrowing of the profit margins due to higher commodity prices, an increase in interest rates of up to 1 per cent and the rupee depreciating by a tenth.

Commodity price inflation

Commodity consumers are likely to experience a contraction in margin by up to 3 percentage points in FY23, given the difficulty in passing on the price increase to users without impacting volumes.

However, margins are likely to improve for commodity producers by up to 4 percentage points in FY23, on account of higher realisations amid higher commodity prices, although energy costs will impact producers more, given the energy intensive nature of their operations, it noted.

There will likely be an asymmetric impact across corporates and also among companies in sectors, the agency said, adding that large entities will show resilience on account of healthy balance sheets, easy access to financing and pricing power, while small and medium entities could face headwinds due to buoyant commodity prices and firming interest rates.

Rupee depreciation

A continued rupee depreciation is likely to exacerbate the challenges for both Indian importers and foreign currency borrowers in FY23, it said, pointing out that the modest improvement in demand can help entities in import-oriented sectors or net importers to pass on the impact of weak rupee to their customers.

Foreign currency borrowers with large unhedged positions are likely to be the worst affected by the weakening of rupee. As of 31 March 2021, approximately Rs 1 lakh crore of debt was denominated in foreign currency. However, entities in export-oriented sectors such as textiles, auto, capital goods, gems & jewelleries are likely to benefit from the rupee depreciation.

Favourable financing condition

From a financing point of view, the banking sector's improved appetite, owing to improving balance sheet and a rising demand from bond investors, will be conducive for financing in FY23. Higher commodity prices tend to increase the working capital requirements for corporates. The agency however believes that the cost of financing will be higher in FY23 than that in FY22, further affecting the debt-heavy entities.

A strong demand in in the telecom sector could enable players to raise tariffs and fully compensate the hike in operating costs. Entities in the power sector have well-defined coal supply agreements and pass-through mechanisms which would enable them to fully offset the impact of higher landed prices.

Power woes

The risk of receivable build-up could however impact short-term liquidity. Independent power producers with no pass-through mechanism may experience a contraction in their margins and a build-up of liquidity pressures. Furthermore, Ind-Ra believes that upcoming renewable power projects could face higher input costs on the back of rupee depreciation.

(ET-BFSI.com – 28/04/2022)

RUSSIA-UKRAINE WAR MAY EXPOSE 42% INDIA FIRMS TO SIGNIFICANT RISKS: MOODY'S

Global rating agency Moody's on Monday said the high commodity prices and supply chain disruptions due to further escalation in the Russia-Ukraine crisis could expose about 42 per cent of rated Indian companies to significant risks. They are mainly in the oil and gas and automotive sectors.

The impact may be seen under two scenarios: first, revised base line and second being downside economic scenarios incorporating a global recession and a more severe liquidity squeeze, it said. The military conflict between Russia and Ukraine is impacting companies in Asia Pacific, adding to existing challenges from supply chain disruption and the coronavirus pandemic. Moody's study considers the exposure of rated nonfinancial companies in the region to the Russia-Ukraine crisis. According to Moody's, the entities in China, Korea, Indonesia may face similar impact.

On the other hand, most rated companies in Australia, New Zealand, Japan, Hong Kong and Singapore have low risk exposure as high percentage of them are investment-grade companies and tend to be better equipped to withstand the spill over impact.The sensitivity of each sector reflects three channels of risk transmission.

First is a commodity price shock and supply disruptions. The second pertains to economic and financial disruption with the tightening of funding conditions and finally, security risks. The credit implications for companies depend on their direct exposure to each channel, and their capacity to mitigate shocks.

Under downside conditions, although major emerging market countries in Asia such as China (A1 stable), India (Baa3 stable) and Indonesia (Baa2 stable) will avoid entering recessions, their growth rates will slow materially in 2022-23. As global economic output deteriorates, high-yield spreads widen sharply and refinancing risk rises.

This combination of adverse trends will lead to contagion across several industries and a large number of speculative-grade companies — especially those with maturities coming due in or before 2023, it added.

(Business Standard – 26/04/2022)

-: JILTA :-

***Owner**: Indian Leather Technologists' Association, **Publisher & Printer**: Mr. S. D. Set, **Published From**: 'Sanjoy Bhavan', (3rd floor), 44, Shanti Pally, Kasba, Kolkata - 700107, West Bengal, INDIA and **Printed From**: M/s TAS Associate, 11, Priya Nath Dey Lane, Kolkata- 700036, West Bengal, INDIA*

ILTA PUBLICATION

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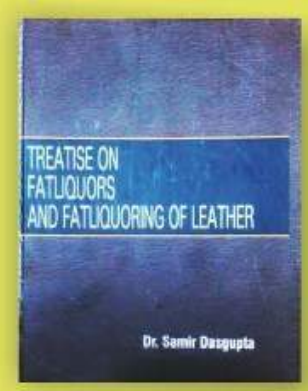

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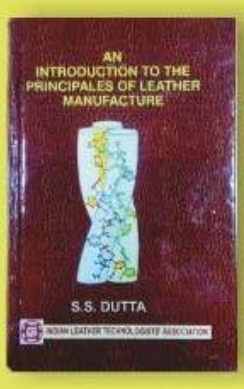

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Registration No. KOL RMS/074/2019-21

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-Stiasny theory and father of Indian Leather Science on 14th 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 seminar, symposium, 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 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 16th 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.
- 5th 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 14th August every year.
- Sanjoy Sen Memorial Lecture on 14th January every year, the birthday of our late President for several decades.
- Prof. Moni Banerjee Memorial Lecture on 15th 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. Y. Nayudamma Memorial Lecture.
- Series of Lectures during "Programme on implementing Emerging & Sustainable Technologies (PrEST)".
- Seminars in occasion of India International Leather Fair, 2014 and 2015 at Chennai etc. Many reputed scientists, industrialists and educationists 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 Fatliquors and Fatliquoring 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 Moni Banerjee Memorial Medals to the top rankers at the University / Technical Institute graduate and post graduate levels to encourage the brilliants 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 (JILTA).

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 800 from all over India and abroad. Primarily the members are leather technologists passed out from Govt. College of Engineering & Leather Technology, Anna University, Chennai, Harcourt 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

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