

Business Alliances are Critical for the Textile Sector

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, December 15, 2022)---Establishing robust business partnerships is important to boost the demand of textile and technical textile products.

Inflation still has the upper hand on the economy at 7.1% in the United States. The Federal Reserve of the United States has hiked the interest rate by 0.5% effective December 15, signaling the need to cool down the economy. With economic slow down still a possibility in 2023, textile and other manufacturing sectors are looking for ways to be sustainable.

“Business-to-business (B2B) and business-to-consumer (B2C) partnerships need to be strengthened and have to be established in sectors where such efforts are weak,” stated Dr. Babu John-Mariadoss, Associate Professor of Marketing at Texas Tech University.

United States’ cotton industry has been the leader in B2B and B2C initiatives, which are proving successful in improving the market share of cotton. Cotton producers contribute to research and marketing programs. Particularly, through Cotton Incorporated, positive attributes of cotton are widely broadcast to domestic and international consumers. In addition to such B2C efforts, programs are aimed at yarn spinners, fabric manufacturers and finishers highlighting the advantages of cotton. Efforts are ongoing to reach out to nonwovens and technical textile sectors to boost the consumption of natural fibers in these sectors.

Global market size of B2B is larger than that of B2C and will reach US \$1.8 trillion in the United States according to Forrester. In these stressful economic conditions, consumers want products at an affordable rate and squeezing price points across the supply chain is of importance. Having robust B2B relationships and a reliable supply chain can translate into cost-competitive products. Cost cutting at manufacturing and distribution channels will be helpful in the current circumstance. “In the United States, distribution channel members such as distributors, wholesalers and retailers collectively earn margins ranging between 30 and 50% of selling price,” stated Babu John-Mariadoss.

Effective marketing has been a bottleneck in the growth of the technical textiles sector in developing economies. Dual-prong approaches involving B2B and B2C tactics are needed to boost this sector. Consumer goods manufacturers like Kimberly-Clark and Proctor & Gamble, which manufacture branded single-use hygiene products, have established robust B2B and B2C initiatives.

Policy schemes in countries that are aiming to boost technical and advanced textile sectors should focus on technical and marketing support. Until the time, the technical textiles industry reaches a critical level, government support should also focus on marketing, such as promotional initiatives modeled after the United States’ cotton sector. There can be public-private partnerships for promotional efforts to create awareness on the use of sustainable fiber-based advanced textiles in hygiene, healthcare, and industrial sectors.

India has been investing in the National Mission on Technical Textiles, which has created awareness among businesses on different sectors of the technical textiles industry. There is an urgent need to reach the consumers and hence B2C efforts should go into high gear.

As the industry starts growing, such efforts will be picked-up by the private sector as is the case in developed economies. In single-use hygiene products, while manufacturers involve in B2C campaigns such as mass advertisement, wholesalers, distributors, and retailers also participate in such efforts. Many different marketing efforts happen through B2B dealings, and supply chain channels also agree to cost sharing arrangements regarding marketing.

“Trustworthy business relationships and marketing campaigns are very crucial for business development and growth,” added Babu John-Mariadoss.

Business alliances involve a variety of negotiations, deal-making, and marketing tactics. Business and consumer partnerships are especially important to deliver cost-competitive products during tight economic situations.

Cotton Proves as a Sustainable Advanced Textiles Product

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, December 09, 2022)---Advanced textiles sector needs to go on high gear in utilizing natural and biodegradable raw materials.

Recent research on “Comparison of Oil Sorption Capacity of Nonwoven Sorbents,” published in the peer-reviewed AATCC Journal of Research has shown that all-cotton absorbent pads with nonwoven cotton core performs relatively better in absorbing oils compared to a few commercially available synthetic based nonwovens. In addition, cotton is naturally biodegradable material, which can reduce the burden on the environment.

Cotton’s functionality in different applications must be explored stated Mr. Suresh Kotak, Chairman of Textile Advisory Group, Government of India in the recent 80th Plenary Meeting of the International Cotton Advisory Committee.

World nations have made a clarion call to reduce Greenhouse Gas Emissions by 43% by 2030, which necessitates the use of earth friendly materials in many different applications. Natural fibers such as cotton, kenaf, banana, hemp are getting due attention by the textiles and advanced textiles sector.

Cotton has a composite economy and provides jobs to many in rural areas in developing and poor nations, highlighted Mr. Kotak. It adds economic value to cotton by finding industrial and non-commodity applications.

United States-based Cotton Incorporated has been supporting research in the Nonwovens & Advanced Materials Laboratory at Texas Tech University in enhancing cotton’s role in industrial textiles landscape. For nearly two decades, I have been advocating the capability of cotton in some industrial applications such as toxic oil absorbent in the oil and gas sector. Raw cotton is penetrating the industrial wipe sector as well.

There are opportunities for the cotton textiles and other natural fibers sector to utilize new developments in physics and chemistry disciplines such as low-pressure plasma, as an alternate functional finishing process, to name a few.

Research organizations such as Coimbatore-based The South India Textile Research Association are looking into environmentally friendly cotton finishing methods to reduce environmental pollution.

Recent COVID-19 has duly highlighted the value of cotton in the medical sector. There is a need to undertake more outreach and engagement activities with stakeholders and the end-user community to promote the values of natural fibers as high-performance fibers, wherever applicable.

Source: Comparison of Oil Sorption Capacity of Nonwoven Sorbents, AATCC Journal of Research (Sage Publications), Published Online, December 04, 2022

Nonwoven Wipe Innovation for Global Security

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, November 21, 2022) --- Recent work by the U. S. Army has shown that FiberTect wipe can decontaminate biological toxin spores as well.

With heightened political tensions in some regions of the world, high-tech sectors like defense, personnel protection and semiconductor are gaining due attention.

Advanced textiles find applications such as decontamination wipes, body armor, medical textiles, wearables, etc.

Investment in science and technology to boost innovation and grow the economy is recognized as a high priority in the United States and United Kingdom amidst dire economic situations. The Chips Act in the United States and the recent Autumn Statement by the United Kingdom's Chancellor of Exchequer are testimonies to the necessity.

Chantilly, USA-based First Line Technology (FLT) has been working to develop multiple applications for the nonwoven wipe, "FiberTect" that can contribute to global security. FiberTect technology evolved out my invention at Texas Tech University. FiberTect is a platform technology based on its universality to wipe away different CBRN agents, as well as with the use of different fibers such as cotton, polyester, and blends as absorbent layers, depending on the application and need.

"FiberTect was one of the first patented technologies out of Texas Tech University, and through industry partnership with First Line Technology and Hobbs Bonded Fibers, it has proven to be one of the most widely commercialized from TTU over the past two decades," stated Cameron Smith, Director of Commercialization at TTU System.

FLT's continued efforts are taking FiberTect to the next level making it a universal wipe for chemical, biological and radiological protection. Recent effort by the U. S. Army has shown that FiberTect is able to efficiently wipe away toxic microbes such as bacterial spores just using the dry FiberTect wipe. This method is advocated for cold weather regions of the world where liquid freezes making wet decontamination methods inefficient, such as Siachen glacier, and other high-altitude regions. This study showed FiberTect dry wipe can decontaminate *Bacillus atrophaeus* var. *globigii* (BG) spores up to 94.93 percent. This research proves the applicability of FiberTect nonwoven wipe against biological toxins in addition to its efficacy against chemical agents like mustard gas and fentanyl particles.

"FiberTect was originally developed for toxic liquid chemicals such as chemical warfare agents, but it has proven equally effective at the physical removal of fine powders like fentanyl and weaponized bio-agents," stated Corey Collings, Director of Research and Development at FLT.

"There is a need to develop functional products that can sense and wipe away opioids and fentanyl products. These products although used in pain treatments are regulated items that need good control and hence there is a need to develop effective decontamination products such as wipes," stated Dr. Vaclav Trojan of the International Clinical Research Center at Brno-based Masaryk University, Czech Republic. Adsorbent and absorbent wipes like FiberTect can pay vital role in wiping away fine particles that contain fentanyl compounds, added Trojan.

The need for such high-tech wipes has been expressed by Dr. Jan Halamek, Director of the Institute for Forensic Science at Texas Tech University. “United States is going through unparalleled opioid crisis, where fentanyl and its analogs represent the deadliest drug threat we have ever encountered. Highly porous and absorbent wipes like FiberTect can be used as a decontamination countermeasure for fentanyl, which gives forensic scientists a tool to detect and decontaminate illicit drugs” stated Halamek.

FLT is advocating “Blot-Apply-Remove,” method that uses dry FiberTect wipe to wipe away bulk toxic agents. Small amount of reactive agent is applied followed by again wiping with FiberTect. “The highly absorptive nature of FiberTect makes it far superior to paper towels or other absorbents in this procedure,” stated Corey Collings.



FLT demonstrating the use of FiberTect to wipe away toxins from the skin of an animal

Translating research from laboratory to marketplace is critical these days for national security, economic growth, and job creation. FiberTect is a good model for such an activity, that showcases public-private partnerships. Initial applied research was supported by the United States’ government and the private sector picked-up the technology after robust evaluation by a United States’ National Laboratory. “Universities are critical to the technology commercialization process, providing not only foundational research but also translational research, directly impacting the commercial market and economy with new technologies,” stated Cameron Smith.

Sources

Jana Kesavan et al., Evaluation of Cold Weather Decontamination Methods, American Journal of Disaster Medicine, Vol. 17 (1), 2022, pp. 13-21.

S. S. Ramkumar, “Process for Making Chemical Protective Wipes and Such Wipes,” U. S. Patent 7,516,525, April 2009.

A Better Method for Self-Decontamination, Lawrence Livermore National laboratory, S & TR, March 2009, pp. 20-22.

Ramkumar, S

Subject: FW: TexSnips: Nonwoven Wipe Innovation for Global Security

From: Dr. PR Roy <>
Sent: Tuesday, November 22, 2022 1:01 AM
To: Ramkumar, S <S.Ramkumar@ttu.edu>
Subject: Re: TexSnips: Nonwoven Wipe Innovation for Global Security

This email originated outside TTU. Please [exercise caution!](#)

Great achievements ! Thanks .

Dr. P. R. Roy
Former Chief Executive
Arvind Group, India

On Mon, Nov 21, 2022 at 9:18 PM <TexSnips@ttu.edu> wrote:

Nonwoven Wipe Innovation for Global Security

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, November 21, 2022) --- *Recent work by the U. S. Army has shown that FiberTect wipe can decontaminate biological toxin spores as well.*

<Ellen.Horn@>

Sent: Tuesday, November 22, 2022 2:08 AM

To: Ramkumar, S <S.Ramkumar@ttu.edu>

Subject: RE: TexSnips: Nonwoven Wipe Innovation for Global Security

Congratulations on getting your invention into development!

My husband served in the Chemical, Nuclear & Biological branch of the US Army reserve for 14 years, and decontamination was something he trained soldiers on for many years. It's exciting to hear of this progress.

All the best to you and your family as we head into the Thanksgiving holiday!

Ellen Horn

Edward Jones | Financial Advisor

Demand Enhancement Critical for the Cotton and Textile Sectors

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, November 15, 2022)---Demand for discretionary products like textiles is low, which needs enhancement.

New cotton harvests are arriving in India and the High Plains of Texas. However, demand is weak compared to last year.

On November 14, 2022, Mumbai-based Cotton Association of India (CAI), released the 2022-23 cotton supply and demand in India. Cotton production in India during 2022-23 (October 2022 to September 2023) is estimated to be 34.4 million bales (170 Kgs/bale), while the total supply will be 38.78 million bales (170 Kgs/bale). The consumption is estimated to be about 30 million bales, which is lower than the previous year's consumption.

This year (Oct. 2022-Sep. 2023), Indian domestic consumption by spinners is expected to be lower by 1.8 million bales compared to the previous cotton year, indicating the squeeze in the demand side. With the beginning of new cotton season in India, cotton stock situation is good stated Velmurugan Shanmugam, General Manager of Jayalakshmi Textiles, India. "Yarn demand is less than what it was during this period last year," added Velmurugan Shanmugam. For five months from June to October 2022, daily cotton yarn production at Jayalakshmi Textiles was only about 60% of normal production indicating weak demand.

Geopolitical and economic scenarios are playing their part in influencing the demand of textile and other non-essential products, stated Mark Brown, Field Services Director of Lubbock-based Plains Cotton Growers, Inc. Similar sentiments have been expressed by industry leaders in India.

"Product demand is pathetic," stated Gnanasekar Thiagarajan, Director of Mumbai-based commodity research firm, Commtrendz Research. "It is interesting that Chinese yarns are available in India at discounted prices, adding pressure to the Indian spinning sector," added Gnanasekar Thiagarajan.

I have been emphasizing the need for enhancing the demand for cotton by exploring new markets and developing value-added products. Cotton being a natural fiber has a good story to tell regarding product sustainability.

Industry is hoping that United States' interest rate hike which is expected to moderate in the coming months will improve the demand for items like textiles. Enquires must be materialized as orders, which depend on lot of factors like energy situation, inflation, political tensions in Europe, U.S.-China relations, etc. Bangladesh textile sector is affected by high energy price as well as availability issues.

All eyes are on India, which is expected to surpass China as the world's most populated country in the next year. It is a dominant player in cotton production and textile manufacturing. Government of India is encouraging its synthetic sector to grow to enhance India's textile offerings and capacity.

Three countries will play dominant role in geopolitics as well as the textile space.

Trifecta to watch is the United States, China, and India.

Ramkumar, S

Subject: Comment from Prof. Michael Galyean

From: Galyean, Michael <@ttu.edu>
Sent: Tuesday, November 22, 2022 10:01 AM
To: Ramkumar, S <S.Ramkumar@ttu.edu>
Subject: RE: Happy Thanksgiving

Ram:

Thank you for the note. I always appreciate your thoughtfulness. Please accept my best wishes to you and your family for a happy and relaxing Thanksgiving holiday.

You had a really nice piece in the paper last week – keep up the good work.

Mike Galyean

Former Provost
Horn Distinguished Professor
Texas Tech University

Indo-United States Collaboration Shows the Usefulness of Face Masks in Curbing the Spread of COVID-19 Wave

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, November 9, 2022)---Face masks play a valuable supportive role in the fight against COVID-19 and air pollution.

Recent collaboration between our team from the Nonwovens & Advanced Materials Laboratory, Texas Tech University and an undergraduate student from Bengaluru, India has shown that mask mandate in India helped with reducing the number of daily COVID-19 cases.

Cotton face coverings, surgical masks and N95 types are being used by public in India.

The work did not isolate the influence of different type of face masks as there were no specific data available on this aspect. Public uses different face masks depending on the availability and choice.

Building on over two-decades of outreach effort to promote the technical textiles sector in India, during this past summer, I enticed, Shreyas Ganesh, a computer science major from PES University, Bengaluru to work on the project to analyze the effect of mask mandates on COVID-19 during January to May 2022.

During the mask mandate period (January 1 to March 31, 2022), usefulness of masks in reducing the spread was visible after some period as expected due to the nature of the virus. During this 3-month period, there was an average decline of about 2920 daily cases. As the mandate was lifted during April 1 to April 23, 2022, cases per day spiked from a period of decline in the previous months. Again, as the mandate was reinstated, data indicated a decline in daily cases, showing the positive effect of masks as a supportive countermeasure.

Vaccination is a proven preventive measure against viral communicable diseases as is the case with COVID-19. As viruses like SARS-CoV-2 can mutate into different variants, additional measures prove useful such as the use of face coverings.

The work has recently appeared as Cover Page article in the peer-reviewed Technical Association of Pulp and Paper Industry's Open Access TAPPI Journal.

<https://imisrise.tappi.org/TAPPI/Products/22/OCT/22OCT521.aspx>



The journal has recognized the collaborative study with Indian flag's tricolor background on the cover of the October 2022 issue.

The work highlights the value of advanced textiles such as filters in enhancing human health as well as the need for multidisciplinary research efforts to grow the global textiles industry.

United States' Department of Defense and Cotton Incorporated, supported by the U.S. cotton growers are funding multiple research projects looking at functional and sustainable advanced textiles. Recently, India's Ministry of Textiles through its National Mission on Technical Textiles is supporting multiple research projects to boost the advanced textiles sector.

China in the Global Economic and Textiles Space

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, October 24, 2022)---Ongoing geopolitical and economic scenarios highlight the growing prominence of China in the world order.

On October 20, as part of celebrating the harvest in the High Plains of Texas, Lubbock Chamber of Commerce hosted Luke Lindberg, Founder and Principal, E. Pluribus Unum, LLC. Mr. Lindberg in his services at EXIM Bank of the United States has had firsthand experience in dealing with China and provided an overview on China's status in the world.

"China is an important market and a competitor for the United States," stated Lindberg. The transition of China from a nation of famine to a feasting one within one to two generations is remarkable and hence it is important to be cognizant of China's aspirations.

President Xi Jinping in his speech at the recent Communist Party of China's National congress has highlighted the importance of development focusing on domestic economy, strengthening education and innovation. The congress highlighted the aspirations of China to strengthen its security, grow domestic economy to gain an upper hand on its growth. The recent GDP numbers show that China has witnessed a growth of about 3.9% in the 3rd Quarter relative to last year, while domestic demand has been weak.

The zero Covid-19 policy has played a role in the slowing of Chinese economy, and this is a setback for China's ambition to be a dominant superpower. A growth of about 3-4% is not sufficient to achieve such a status commented Professor Rashid Al-Hmoud, Department of Economics, Texas Tech University. Lindberg viewed that China aspires to be sole superpower to overtake the United States. To counter competition from China, it is important that countries focus on innovation, build trade alliances, and invest in foreign diplomacy, added Lindberg.

China hopes to be less import dependent, which necessitates exporting nations to explore alternate markets, explore new technologies and develop value-added products. This is clear now with the dire situation of cotton spinning mills in States like Andhra Pradesh in India which are dependent on exports to China.

To my question on the ongoing political crisis in the United Kingdom and its impact on economy, Lindberg opined that it is important for United States to have robust trade deals with countries to enhance trade. "Going on trade missions is important," added Lindberg. Countries like China need agricultural imports from the United States, particularly cotton from the High Plains of Texas. 40% of soybeans from South Dakota end up in China stated Lindberg.

"China continues to be an important market for U.S. cotton and is number 1 or number 2 in terms of cotton imports from the United States," stated Shawn Wade, Director of Policy Analysis and Research at Lubbock-based Plains Cotton Growers, Inc. Texas is expected to produce 3.4 million bales (480 lbs. per bale) this year, and almost all of it will be exported. While China's cotton imports are high, in recent years its yarn imports are slowing down indicating a shift towards growing domestic manufacturing, which is a priority highlighted this past week in the 20th National Congress of the Communist Party of China.

Countries like Brazil and Australia are trying hard to capture the Chinese cotton market, while Chinese favor quality and reliability of the U.S. cotton highlighted Lindberg.

The ongoing global economic crisis, political instability in some regions of the world, aspirations of China and Russia, weakening consumer confidence all necessitate the need for new pathways for the global textiles sector. “It’s critical and important for the United States to invest in research and continue export expansion, which is important for trade advancement and national security,” opined, Murvat Musa, Executive Director of Reese Technology Center, a business and research park in Lubbock, Texas.

Investing in R and D, focusing on innovation, exploring new markets are a few feasible options available for the global textile industry.

Politico-economic Crisis and the Global Cotton-Textiles Sector

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, October 20, 2022)---Politico-economic crisis, war in Europe, dampening demand seem to have an upper hand on the economy.

Crisis gets deeper with today's resignation of Liz Truss, Prime Minister of the United Kingdom making her the shortest serving Prime Minister ever in the United Kingdom.

The political and economic crisis in the U.K will have ripple effects on the global economic situation. The 44-days of high drama in the United Kingdom is highlighting fragile economic and political order in certain parts of the world. With the recession expected around the corner, these unstable situations add pain to the global geo-political and economic situations.

Where is Britain heading now and hence the global order? This loaded question needs serious thinking.

In a discussion last week at Texas Tech University, Dr. Glenn Hubbard, who served as the Chair of the Economic Council of Advisers under President George W. Bush stated, "economy is going to witness substantial pain." In my question on the end game for inflation, Dr. Hubbard stated, with the target to bring down the inflation to 2%, we must expect economic slowdown. Recently, Bloomberg predicted the probability of recession to be 100 percent in the next 12 months.

Consumers have less to spend on non-essentials, with mortgage rate as high as 7% in the United States. The borrowing rate has increased sharply from 3% to 7% within a year, displaying the pains of inflation.

In June 2022, at the Textile Association (India) event in Coimbatore, I articulated the need for the global cotton-textile industry to consider both the supply and demand sides of the equation. This is what has come true, with the demand sliding, while we have tight supply of commodities like cotton.

"Advance booking for yarn is down in this festive season," stated Velmurugan Shanmugam, General Manager of Aruppukkottai, India-based Jayalakshmi Textiles. While domestic demand is there, export market has slowed down added Velmurugan Shanmugam. India's yarn manufacturing is at a saturation level and needs about 40% of its cotton yarn production to be exported to avoid job losses in the sector.

Global politics is currently under the grip of economic woes and the war in Europe, as is evident from the high drama in the United Kingdom.

Textile sector needs good introspection and look forward to opportunities beyond the commodity sector such as health care, make the production and products with competitive advantage and enhance its product basket.

Cotton Sector Needs 3 Vs

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, October 18, 2022)---Recent months have seen high cotton drama regarding price volatility and demand. As cotton is a natural fiber; its availability depends on weather and other uncontrollable situations. However, these aspects have also given room to high volatility and uncertainties that are influencing the entire cotton and textile supply chain. Adding to these expected pains, the ongoing war in Europe has added more volatility to the sector.

While the entire cotton segment is under the grip of uncertainties, the current scenario calls for self-introspection and solid plan ahead.

Need for 3Vs

Prior to inflation reaching 9% in some parts of the world, which is 40-year high, the textile sector focused predominantly on the supply side of the equation, such as the availability of raw materials, labor force and energy issues, etc. Given the finite amount of arable on the amount of arable land, due to the growing need of food grains, with the global population ever rising, land for other cash crops is always stressed. China is a good example for this situation, which necessitates the import of cotton and food grains such soy to satisfy its domestic demand. Textile sector will be under tight supply of cotton, which provides necessary price value for cotton in addition to its inherent technical advantages. Cotton is natural, biodegradable, and comfortable. Cotton is pre-sold on its breathability value, which makes it a preferred fiber despite its relative cost issue with some synthetics.

Availability of arable land, some limitations in the product range, market volatility, competition from synthetics all influence the cotton sector. Given this scenario, our industry should focus on three Vs. 3 Vs are: 1) Value utilization; 2) Value creation and 3) Value addition.

Value Utilization

The cotton sector from farm to fashion should utilize its fullest value. At the farm level, countries like India need to increase the yield/acre, increase the efficiency with the use of fertilizer, pesticides, and water to maximize return of investment. India has largest land area dedicated to cotton crop compared to other major cotton producing countries, but with least yield. Yield enhancement should be a public-private partnership initiative in India, which can deliver cost effective next generation value-added seed to farmers. Knowledge creation and dissemination about best farm practices such as fact-based agronomic approaches, selection of seeds, farming and irrigation techniques must be widely transmitted to the practitioners such as farmers, researchers, and policy makers. Active involvement at grassroot levels during the growing season is vital for the growth of agriculture. Lubbock, USA-based Plains Cotton Growers, Inc. is highly active in such efforts.

Value Creation

While value utilization focuses on using the existing resources to improve the sector, value creation is aimed at creating new opportunities. Cotton is predominantly used as apparel textiles, a way to increase its demand is to find new opportunities in the farm to fashion sectors and beyond such as industrial textiles.

As is evident from the ongoing inflationary cycle, demand for goods, particularly nonpriority items have come down. Cotton is subjected to such stressful situations and is also sensitive to price pressures from competing synthetic and regenerative fibers. In the mid to long term, it is important to enhance the demand for cotton in non-traditional areas. Recently, cotton industry is focused on finding applications in industrial, medical, automotive and defense sectors. Cary, United States-based Cotton Incorporated is conducting projects in nonwovens to enhance demand for cotton. INDO-United States collaboration between Texas Tech ...Continued

From: Dr. PR Roy <~~prroy1974@gmail.com~~>
Sent: Wednesday, October 19, 2022 7:05 AM
To: Ramkumar, S
Subject: Re: TexSnips: Cotton Sector Needs 3 Vs

This email originated outside TTU. Please [exercise caution!](#)

Well noted . Thanks.

On Wed, Oct 19, 2022 at 12:32 AM <TexSnips@ttu.edu> wrote:



Dr. P. R. Roy
Former Group Chief Executive
Arvind Group
Ahmedabad, India.

Cotton Sector Needs 3 Vs

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, October 18, 2022)---Recent months have seen high cotton drama regarding price volatility and demand. As cotton is a natural fiber; its availability depends on weather and other uncontrollable situations. However, these aspects have also given room to high volatility and uncertainties that are influencing the entire cotton and textile supply chain. Adding to these expected pains, the ongoing war in Europe has added more volatility to the sector.

While the entire cotton segment is under the grip of uncertainties, the current scenario calls for self-introspection and solid plan ahead.

Need for 3Vs

Prior to inflation reaching 9% in some parts of the world, which is 40-year high, the textile sector focused predominantly on the supply side of the equation, such as the availability of raw materials, labor force and energy issues, etc. Given the finite amount of arable on the amount of arable land, due to the growing need of food grains, with the global population ever rising, land for other cash crops is always stressed. China is a good example for this situation, which necessitates the import of cotton and food grains such soy to satisfy its domestic demand. Textile sector will be under tight supply of cotton, which provides necessary price value for cotton in addition to its inherent technical advantages. Cotton is natural, biodegradable, and comfortable. Cotton is pre-sold on its breathability value, which makes it a preferred fiber despite its relative cost issue with some synthetics.

From: Rakesh Rao / ASAPP Info Global Group <~~rakesh.rao~~@asappinfoglobal.com>
Sent: Tuesday, October 18, 2022 10:23 PM
To: Ramkumar, S
Subject: Re: Article Filing: Cotton Sector Needs 3 Vs

This email originated outside TTU. Please [exercise caution!](#)

Nice article Prof Ram. Will host it on ITJ website today
Regards,
Rakesh

Mr. Rakesh Rao
Executive Editor, The Indian Textile J
Mumbai, India

On Wed, 19 Oct, 2022, 12:33 AM Ramkumar, S, <S.Ramkumar@ttu.edu> wrote:

Cotton Sector Needs 3 Vs

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, October 18, 2022)---Recent months have seen high cotton drama regarding price volatility and demand. As cotton is a natural fiber; its availability depends on weather and other uncontrollable situations. However, these aspects have also given room to high volatility and uncertainties that are influencing the entire cotton and textile supply chain. Adding to these expected pains, the ongoing war in Europe has added more volatility to the sector.

While the entire cotton segment is under the grip of uncertainties, the current scenario calls for self-introspection and solid plan ahead.

Need for 3Vs

Prior to inflation reaching 9% in some parts of the world, which is 40-year high, the textile sector focused predominantly on the supply side of the equation, such as the availability of raw materials, labor force and energy issues, etc. Given the finite amount of arable on the amount of arable land, due to the growing need of food grains, with the global population ever rising, land for other cash crops is always stressed. China is a good example for this situation, which necessitates the import of cotton and food grains such soy to satisfy its domestic demand. Textile sector will be under tight supply of cotton, which provides necessary price value for cotton in addition to its inherent technical advantages. Cotton is natural, biodegradable, and comfortable. Cotton is pre-sold on its breathability value, which makes it a preferred fiber despite its relative cost issue with some synthetics.

University and Aruppukkottai-based Jayalakshmi Textiles has resulted in a sustainable cotton-based oil absorbent material. This product has been evaluated at ONGC facilities in Thiruvarur and Rajahmundry areas in India.

Value Addition

The downstream processes in the textile sector can help with value addition to find new markets and opportunities. Salt less dyeing and waterless finishing technologies can be utilized to generate sustainable and high-end products. Leading brands are looking for opportunities to come-up with products that have consumer appeal and can be marketed as “green,” products. New finishing technologies like atmospheric plasma can help with selective surface characteristics with less or no water usage. Cotton being biodegradable provides opportunities for brands to develop value-added products.

While the present economic situation put enormous stress on the textile sector, it provides a valuable lesson that we should focus both on the supply and demand sides of the textile equation.

(Note: A longer version of this article appeared in the Souvenir of Cotton Association of India’s Centenary Celebrations, Inaugural Event, October 18, 2022).

Economic Tsunami and the Global Cotton-Textiles Sector
By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, October 12, 2022)—Textiles and other manufacturing sectors are looking for strategies to ride out the economic storm.

Financial support provided by many governments during COVID-19 created aggregate demand for many commodities such as textiles, electronic items, which led to price hikes and hence volatility in the market. Following this runaway demand scenario, due to inflation, monetary interventions are being imposed by national banks, which may lead to recession in 2023. IMF predicts slow growth in 2023, with negative growth in developed economies like Germany and Italy.

The economic tailspin and monetary interventions are dampening the demand, which is affecting many sectors particularly, textile sector. Cotton price has come down steeply since this Summer and spinning mills are operating at a loss in India and other countries. Mills in the State of Andhra Pradesh, India have announced temporary closures, while mills in Tamil Nadu are running at about 70% capacity. “Our normal production capacity is 13 tons/day of cotton yarn, but due to weak demand, we are running at 7 tons/day,” stated Velmurugan Shanmugam, General Manager of Aruppukkottai, India-based Jayalakshmi Textiles.

With adversity comes opportunity. Textile sector should analyze the current situation and explore new strategies that can shield them from such future scenarios. I have articulated “4S principle,” proposed by the United States’ Department of Defense say: Sense; Shape, Shield and Sustain. How apt this strategy is for the textile industry now! The industry needs to sense the situation, plan (shape), and put forward growth plan (shield and sustain).

Companies must have “Disaster Management Plans” stated Dallas-based Mr. Ranga Rajan Sampath, an accounting professional with experience in manufacturing, trading, and IT sector in many countries such as Maldives, India, The Netherlands, and the United States. The plan should involve: 1) Disaster Recovery and 2) Business Continuity (when the business runs smoothly). According to Mr. Sampath, companies should identify risks (some may not be known such as the COVID-19 pandemic), identify resources, strengths, and weaknesses, such as financial and personnel to handle demanding situations. Such a planning will come handy to manage unforeseen situations as there is a structure in place. More importantly, effective, candid, and timely communication is essential, added Sampath. This has become clear during the ongoing pandemic and the current economic crisis. The way United Kingdom handled the mini-budget proposal recently without effective communication shows how good intentions can lead to negative results due to lack of reasoning and clear communication.

Learning and skill enhancement need to be an ongoing education process in the industry. Relying on his own experience in the IT sector, Mr. Sampath emphasized that every day is a learning process. Management should support personnel development by providing opportunities for skill enhancement that can cater to short- and long-term needs. Management should enable interaction among production, finance, personnel, and marketing units, which will help with holistic personnel development and tackling crisis.

“When we are in crisis, efforts are needed to plan and act differently,” stated Velmurugan Shanmugam. In India, where the spinning industry is at its maximum capacity, we should plan for modernization to cut the cost, enhance quality, and develop new products, added Velmurugan Shanmugam.

As a case in point, in India more interaction with the government is needed to diversify the sector and look for vertical integration. This needs resource planning and allocation, effective communication with stakeholders, particularly with the public, and investments in R & D. As these growth plans involve infrastructure development such as new industrial zones, pollution control, etc., public must be engaged to garner broad-based support.

Textile industry needs rethinking, retooling and skill enhancement. The past two years have been a challenge, but the lessons learnt will be valuable.

We have all undergone harsh dry runs of handling demanding situations socially and economically. “Dry runs should come in handy to manage future stressful scenarios,” stated Ranga Sampath.

Strategizing for the Global Textile and Materials Sector

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, October 4, 2022)—Strategies to move the global textile and materials forward to guard against volatilities are needed.

The world's largest professional body of the textile industry, The Textile Association (India) [TAI], which has about 25,000 members is doing its part to provide a global platform for deliberating the needs and future of the industry.

TAI will be organizing a global event in Ahmedabad, India during February 25-26, 2023, which will attract leaders and practitioners in the field of fiber to fashion, advanced textiles to nonwovens to discuss and chart out the plans for the sector. The event is aimed at realigning the sector with the future needs and supply and demand scenario. Speaking about the event, Dr. P. R. Roy, former group Chief Executive of Arvind Group, India stated, "An event of major significance for the textile industry that will deliberate key challenges and opportunities and endeavor to chart out a growth plan."

How should the industry handle price volatility, develop new products which are in need, invest in R & D, and focus on sustainability are some of the themes, which will receive due attention.

Tony Fragnito, President of USA-based Association of the Nonwoven Fabrics Industry (INDA) will travel to India to interact with industry professionals and discuss about the status of the nonwovens sector. Views on the status of the textile sector will be highlighted by representatives from The Southern India Mills' Association and key companies such as Indorama Ventures. The importance of research as a way forward will be highlighted by Bryan Haynes, Chairperson of the Board of Directors of INDA, who is traveling all the way from the United States to India for strengthening much needed global collaboration.

"India's textile industry provides both direct and indirect jobs to millions and is looking towards next phase. The Textile Association (India) will be providing a platform for international players to discuss technical and market aspects of the industry such as R and D to enhance its strength. We are excited to put forward a major international congress to address timely issues and very pleased that key people from all over the world are attending," stated Mahendrabhai Patel, Honorary Secretary of the world's largest professional association in the field of textiles.

The congress is making efforts to attract young entrepreneurs and business leaders to share their experience in dealing with the ongoing COVID-19 and economic crisis. Arunkrishna Srinivasan, Director of India-based Jayalakshmi Textiles will highlight the challenges for the cotton textiles industry and actions needed to go on a high gear.

Timing is critical, as the world is witnessing a slump in the demand of commodity products. The conference will endeavor to brainstorm feasible options for growth such as the development of cost-effective advanced textile products for non-commodity markets, recycle and reuse and sustainability.

Given that India is a major player in the field of textiles, an event of such a magnitude with global participation will enable growth opportunities by way of global collaborations and interactions.

Inflation Import Vs. Textile Imports

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, September 28, 2022)— Textile importing, and manufacturing countries are importing inflation.

As the inflation reached near double digits recently reaching a 40-year high, national banks like the United States' Federal Reserve and the Bank of England are implementing restrictive monetary policies. While tight monetary policies are being practiced now to bring down the inflation, fiscal policies like tax cuts and infrastructure investments are unleashed to enhance the economic growth. Fruits of growth-related policies would be enjoyed in the months to come; hope is that tight monetary policies should pay off within short duration.

United Kingdom's Chancellor of Exchequer announced on September 23, 2002, a set of tax cuts, which is aimed at boosting the demand, which did not get favorable response from financial markets. As the tax cuts are supported by debt financing, borrowing will be from international markets. This financial scenario has brought the British Pound to its record low, trading at 1.03 US dollar on Monday, September 26, 2022.

Inflation and other financial policies are lowering the value of currencies like Pound sterling and Turkish Lira, which are important for the global textile sector. Importing of textiles and cotton by these countries may cost more as these commodities are traded in US dollar. Weakening of other currencies against US dollar will impact the buying of commodity products by consumers in Europe, United Kingdom, and other nations, which are importing textiles.

Ongoing stressful economic situation is affecting the demand of commodity products, which is reflected in the decline of price of cotton. Indian cotton was priced at about Rupees 1,05,000 per candy (356 Kgs) in June 2022. Recently, the cotton price has sharply declined, and it is traded at Rupees 64,000 per candy for November delivery. This fall is primarily due to the softening of global demand and ongoing stressful economic scenario.

"In June 2020, one load of cotton (100 Indian bales) would cost us about Rupees 20 lakhs, but during the Summer 2022, we have to pay Rupees 60 lakhs for one load," stated a cotton purchaser from a cotton spinning mill in South India. "With the arrivals picking up during the peak season of November to January timeframe, we are hoping to see a further decline in price," added the cotton purchaser. Of course, demand will have its role to play.

Price stability is in the minds of national bankers, which will support additional rounds of monetary tightening that may lead to increase in unemployment. Although the effect will be lagging, all these factors point towards recession, which will influence the demand.

Countries which normally import textiles are currently importing inflation with the weakening of their currencies, thereby making import of textiles relatively expensive.

Inflation control and debt financing are interesting mix in the economic equation. There is going to be an interesting tug-of-war between inflation control and growth.

Textile industry should be in a watchful mode and analyze the arrival of new cotton in India, and the demand pickup in the festive season ahead.

Global macro-economic situation should be in the radar for the textile industry, as currency fluctuations, price stability and demand enhancement, all have their respective roles to play.

Cotton and Textile Sectors Under Economic Uncertainty

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, September 22, 2022)—Economic uncertainty has direct influence on the demand of cotton and textiles.

Inflation which has reached a 40-year high level is getting due attention by national banks in many countries. On September 21, United States' Federal Reserve increased the interest rate for the third straight time in recent months signaling the need for restrictive monetary policy to gain an upper hand on inflation.

Among other factors, the ongoing war in Europe is enabling the inflation. The war is dragging the world into recession and global food crisis stated the representative of European Union in today's U.N. Security Council meeting.

How bad is the inflation? Consumers experience the increase in price for common items in their daily lives in multiple ways. I used to pay US\$1.25 for 5-gallons of Glacier water in a retail outlet in Lubbock. Just recently, the price has shot up to US\$2.5. Prices of commodity items and groceries have climbed up affecting consumers' purchasing power.

Swiss National Bank has raised the interest rate ending its years of negative rate regime and the Bank of England has also raised the interest rate signaling the need to moderate demand.

Price stability is needed to control inflation according to Jerome Powell, Chair of the United States' Federal Reserve, who stated on September 21 after the Federal Reserve raised the interest rate that restrictive policy is needed to bring down inflation to 2% level.

The raise in interest rate will increase the rate of borrowing by companies, which will affect employment and subsequently may lead to recession. This situation will have direct effect on the global textile sector and the results will be witnessed in months to come.

As textiles fall under the category of non-high priority items, high price for goods will lead consumers to prioritize on essentials such as food, energy, mortgage payments, etc. In general, high interest rate will lead to demand softening.

“Yarn enquiry is dull even though we are entering into Diwali festive season in India and Christmas times in the West,” stated Velmurugan Shanmugam, General Manager of Aruppukkottai, India-based cotton spinning mill, Jayalakshmi Textiles. Mills in India are selling yarns at a loss of about 30-40 Rupees/Kg. “Our mill has cut down the capacity utilization from 98% to 85% and is exploring other options like weekly closures for a day or two,” stated Velmurugan Shanmugam.

While national banks are focused on bringing down the inflation by raising the borrowing cost, uncontrolled inflation and restrictive policies have their effect on increasing unemployment, which may lead to economic slowdown. United States is expected to have increased unemployment in 2023 at about 4.4 percent.

Demand will be a great influencer in the coming months for the global textile sector. Mills must anticipate for lesser demand and plan accordingly.

Mills in India such as Jayalakshmi Textiles have reduced consumption of cotton by about 30% signaling demand weakening.

Anticipation is that United States' Federal Reserve may raise the interest rate again in November as controlling prices is its priority. Actions by the United States' Federal reserve will have ripple effects around the world, which will affect all sections of the society.

While we hope for a soft landing without recession, raising interest rates will lead to slowdown affecting the demand of products.

Demand side of the economy needs careful watch. The textile industry will be better served if they plan for careful stocking and manage production without excessive inventory. Careful planning of stocks with help with price gains, when the economy rebounds, provided there is no recession in 2023.

Prediction is a game, but careful planning is the best way forward.

Demand Will Drive the Cotton and Textiles Sector

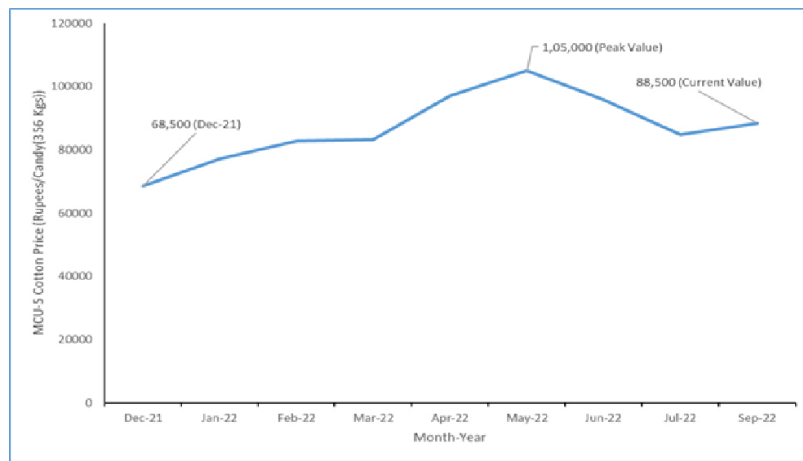
By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, September 14, 2022)---Given the ongoing inflation around the world, consumer is the king, and the demand will drive the cotton and textile sectors.

Cotton will be in tight supply due to drought in West Texas, unexpected floods in Pakistan and other factors. Textile sector has focused heavily on the supply side of the equation. However, it is the demand of end products by consumers, which will drive the textiles industry.

The ongoing inflation with high consumer price index values in textile importing countries like USA, EU, and the United Kingdom indicate the importance of demand as a determinant.

This year has seen high volatility in cotton price predominantly due to tight supply situation.



The above graph shows the volatility in the price of MCU-5 cotton per candy (356 Kgs) from December 2021 to September 2022. While the price peaked in May-22, it has started moderating, which is due to inflation fueled by Russian invasion of Ukraine, higher fuel price and slowing in consumption of non-essentials.

I have used the price situation of MCU-5 cotton, which is spun into fine counts used in home textiles, as these textiles were in demand during the COVID-19 timeframe when the demand aggregate was peaking. Cotton price situation since May 2022 shows that the demand for textiles is moderating, due to high prices for essential products like groceries.

Yesterday's Consumer Price Index number released by the United States' Bureau of Labor Statistics showed an increase of 8.3% over last year, indicating that inflation is still high. This fact will in a way force the Federal Reserve Bank in the United States to raise the interest rate to bring inflation under control. Higher interest rates will strengthen US dollar, which will in turn affect the cost of imported goods traded in dollar. Inflation is high at 9.9% in the United Kingdom, which will determine the buying choices of consumers.

Macroeconomic situation and the ongoing war between Russia and Ukraine will dampen global consumer confidence and hence will influence the purchase of non-essential items.

“Normally during the present times with the arrival of festive season in India, we see high demand for yarns. But the demand is not there,” stated Velmurugan Shanmugam, General Manager of Aruppukkottai-based Jayalakshmi Textiles.

On June 25th in a meeting hosted by the Textile Association-South India Unit in Coimbatore, attended by about 720 people of the textile sector, I articulated the importance of analyzing the holistic picture of supply and demand, macroeconomic and geo-political scenarios in planning ahead for the textile sector.

“If we see demand moderation, there is a potential for cotton market to move down despite tight supply,” stated Shawn Wade, Director of Policy Analysis and Research of Lubbock-based Plains Cotton Growers, Inc.

Given the high inflationary situation we are facing now, stressful situations in EU and the United Kingdom due to high energy price, ongoing war between Ukraine and Russia, it will be in the best interest of the textile sector to plan for moderated demand in the next few months.

Demand of textiles will determine the price situation of raw materials, while we have tight supply of cotton. Planning by the industry should take into consideration the demand as well as the availability of resources. Caveat Emptor et Venditor!

Global Textile Sector Under the Grip of Geopolitical and Economic Situations

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, September 6, 2022)---Inflation induced economic stress and energy crisis are affecting the global textile sector.

There has been a change of guard in the United Kingdom with The Rt. Hon. Ms. Liz Truss, becoming the Prime Minister; direct impact of economic woes there, which resulted in the change in the party leadership.

Soaring energy and consumer products' costs coupled with reduction in the disposable incomes in the United Kingdom and EU will impact the global textile industry. Additionally, strengthening of U.S. dollar will increase the price of gasoline paid by importing nations, and will put pressure on the debt repayment by developing countries like Sri Lanka and Pakistan, which are major textile manufacturing countries.

Rising cost of living, energy crisis, inflationary pressures, ongoing Russia-Ukraine war, mounting tensions between China and Taiwan are all contributing towards the slowing of the textile sector.

“Yarn enquiry is not there,” stated Mr. Velmurugan Shanmugam, General Manager of Aruppukkottai, India-based Jayalakshmi Textiles, a cotton spinning mill which has 72,000 ring spindles. Mills are forcing additional weekly holidays or reducing production in states like Gujarat, Andhra Pradesh and even in Tamil Nadu. “Our production has come down from 12 tons/day to 8 tons per day,” added Velmurugan Shanmugam.

While the issue surrounding high cotton and raw materials' costs has occupied the textile industry for few months now, it is important to focus on the demand aspects. Demand of textile products has slowed down due to global geopolitical and economic situations. This is evident from the ongoing crisis conditions in the United Kingdom and Sri Lanka.

As stated today by Ms. Liz Truss, the Prime Minister of the United Kingdom, priority is to tackle energy crisis so that cost of living raises can be controlled. Policies in near short term must tackle energy costs and allied issues to have control on the economy. If uncontrolled, analysts predict that inflation may spiral up to 13.3% by Spring in the United Kingdom. Such dire economic situation may affect the sales of textile and other commodity items.

“Economic scenarios in Europe and elsewhere are affecting the textile industry in India. Even at Rupees 430/Kg for 60s Ne compact cotton yarns, there are not many takers. Mills incur a loss of Rupees 30-40/Kg at such prices,” agonized Velmurugan Shanmugam.

Textile and manufacturing sectors must adopt a new management paradigm, “Caveat Emptor et Venditor.” This indicates that both buyers and sellers must pay attention to global scenarios to have the situation under control. Industry should be cautious in their planning in terms of modernization and non-essential capital expenditure. In my opinion, it is worthwhile to postpone such activities for a period of at least 18-months.

Burden rests in the hands of policy makers and central bankers of nations to have a good grip on their economy to avoid recession. Recessionary pressures along with higher input costs will have dire consequences for the industry.

Care needs to be exercised by the stakeholders of the textile industry. Fall-2022 will be an interesting one to watch, which will set the course for the global textile and manufacturing industry for next few years to come.

Ramkumar, S

From: Jim Steadman <~~JSteadman~~@meistermedia.com>
Sent: Wednesday, September 7, 2022 10:16 AM
To: Ramkumar, S
Subject: Re: Time Sensitive Article Filing: Global Textile Sector Under the Grip of Geopolitical Situation

This email originated outside TTU. Please [exercise caution!](#)

Good article. Here's the link:

<https://www.cottongrower.com/opinion/global-textile-sector-struggling-with-geopolitical-and-economic-situations/>

By Jim Steadman, Editor
Cotton Grower Magazine

Global Textile Sector Struggling with Geopolitical and Economic Situations

Inflation-induced economic stress and an energy crisis are impacting the global textile sector.

www.cottongrower.com



From: Ramkumar, S <S.Ramkumar@ttu.edu>
Sent: Tuesday, September 6, 2022 7:51 PM
To: Jim Steadman <~~JSteadman~~@meistermedia.com>
Subject: Time Sensitive Article Filing: Global Textile Sector Under the Grip of Geopolitical Situation

Global Textile Sector Under the Grip of Geopolitical and Economic Situations

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, September 6, 2022)---Inflation induced economic stress and energy crisis are affecting the global textile sector.

There has been a change of guard in the United Kingdom with The Rt. Hon. Ms. Liz Truss, becoming the Prime Minister; direct impact of economic woes there, which resulted in the change in the party leadership.

From: Rakesh Rao / ASAPP Info Global Group <rakesh.rao@asappinfo.com>
Sent: Tuesday, September 6, 2022 9:59 PM
To: Ramkumar, S
Subject: Re: Time Sensitive Article Filing: Global Textile Sector Under the Grip of Geopolitical Situations

This email originated outside TTU. Please [exercise caution!](#)

Dear Prof Ram,
Really a thought provoking article. Will put it up on ITJ website today.
Regards,
Rakesh

*Mr. Rakesh Rao, Editor
The Indian Textile Journal
a over 150 year old publication.*

On Wed, 7 Sep, 2022, 6:24 AM Ramkumar, S, <S.Ramkumar@ttu.edu> wrote:

Global Textile Sector Under the Grip of Geopolitical and Economic Situations

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, September 6, 2022)---Inflation induced economic stress and energy crisis are affecting the global textile sector.

There has been a change of guard in the United Kingdom with The Rt. Hon. Ms. Liz Truss, becoming the Prime Minister; direct impact of economic woes there, which resulted in the change in the party leadership.

Soaring energy and consumer products' costs coupled with reduction in the disposable incomes in the United Kingdom and EU will impact the global textile industry. Additionally, strengthening of U.S. dollar will increase the price of gasoline paid by importing nations, and will put pressure on the debt repayment by developing countries like Sri Lanka and Pakistan, which are major textile manufacturing countries.

Rising cost of living, energy crisis, inflationary pressures, ongoing Russia-Ukraine war, mounting tensions between China and Taiwan are all contributing towards the slowing of the textile sector.

"Yarn enquiry is not there," stated Mr. Velmurugan Shanmugam, General Manager of Aruppukkottai, India-based Jayalakshmi Textiles, a cotton spinning mill which has 72,000 ring spindles. Mills are forcing additional weekly holidays or reducing production in states like Gujarat, Andhra Pradesh and even in Tamil Nadu. "Our production has come down from 12 tons/day to 8 tons per day," added Velmurugan Shanmugam.

While the issue surrounding high cotton and raw materials' costs has occupied the textile industry for few months now, it is important to focus on the demand aspects. Demand of textile products has slowed down due to global geopolitical and economic situations. This is evident from the ongoing crisis conditions in the United Kingdom and Sri Lanka.

As stated today by Ms. Liz Truss, the Prime Minister of the United Kingdom, priority is to tackle energy crisis so that cost of living raises can be controlled. Policies in near short term must tackle energy costs and allied issues to have control on the economy. If uncontrolled, analysts predict that inflation may spiral up to 13.3%

TexSnips: Outreach to Cotton and Textile Sectors

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, September 3, 2022)---Outreach to the entire spectrum of the fiber to fashion supply chain and advanced textiles sector is essential.

This month marks a milestone in the annals of the publication of the outreach newsletter, “TexSnips,” from the Nonwovens & Advanced Materials Laboratory at Texas Tech University. I started writing the TexSnips column just as a hobby to put thoughts to pen in the research areas I work. “Why not I provide visibility on what others in the field are doing and write snippets on interesting happenings in the field, so that global readers would benefit?” Answer to this thought resulted in the arrival of TexSnips.

In September 2010, TexSnips newsletter came into being and today it has about 3500 subscribers. TexSnips articles are archived at:

<https://www.entx.ttu.edu/sramkumar/textsnips.html>

The need to connect students, researchers, and industry people in the field of fiber to fashion, advanced materials and even broader fields arose after the International Cotton Advisory Committee’s Plenary meeting in Lubbock in September 2010. Industry veterans from India in the likes of Mr. Suresh Kotak, Mr. Dhiren Sheth, and others while visiting Lubbock visited my laboratory which is 10 miles away from the main campus. A thought to inform readers in India and elsewhere on timely information on cotton and textile matters from the epicenter of cotton production, Lubbock sparked the initiation of TexSnips.

Over the 12-year period, cotton scenario, views of Nobel laureate and colleagues such as Dr. Srinivasan Narasimhan of Asthagiri Herbal Foundation on concepts such as functional finishes, importance of fiber quality, timely developments and advancements in textiles have been reported.

United States’ cotton industry leaders such as Dr. Kater Hake of Cotton Incorporated, leaders of Lubbock-based Plains Cotton Growers have presented their views on different cotton situations. Indian textile industry people representing the ginning sector, spinning such as Jayalakshmi Textiles, and machinery such as Lakshmi Card Clothing have opined on matters of importance.

The outreach newsletter over the years has grown attracting students from India, Bangladesh, etc. and leaders of multinational corporations representing cotton fiber, nonwovens, and advanced textiles.

This September the subscription is about 3500 people and still growing. Subscription ranges from Australia to Canada, Bangladesh to South Africa, spanning the entire world.

The aim of this newsletter is to connect the global audience in fiber to advanced textile sectors as a way of advancing the industry and knowledge base.

Interested people can contact the publisher Seshadri Ramkumar (s.ramkumar@ttu.edu) to join the TexSnips distribution list, which is free of cost and is undertaken as a service to the textiles and materials fraternity.

Ramkumar, S

From: Presley, Steve
Sent: Friday, September 9, 2022 6:45 AM
To: Ramkumar, S
Subject: RE: Nonwovens and Advanced Materials Laboratory's Outreach Activities Gets Recognition

Congratulations Ram. Your dedication and professionalism have brought great credit to TTU.

Sincerely,
Steve

By: Dr. Steve Presley
Immediate Past Chair, ENTOX Dept
Div., TIEHH, TTU

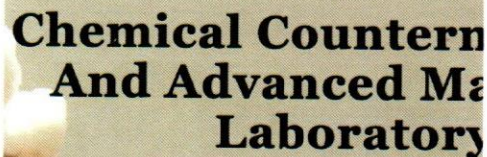
From: Ramkumar, S <~~S.Ramkumar@ttu.edu~~>
Sent: Friday, September 9, 2022 6:22 AM
Subject: Nonwovens and Advanced Materials Laboratory's Outreach Activities Gets Recognition

Greenville, SC-based eTextileCommunications came out of the established Southern Textile News.

Industry leaders in the United States like Milliken, Parkdale Mills, etc., read this weekly publication.

In its September 9th edition, the note about TexSnips' outreach and information exchange has appeared.

https://www.etextilecommunications.com/news/texas-tech-professor-s-texsnips-reaches-10-year-milestone/article_e8f9ea6a-2fa4-11ed-bdc6-a70eb9680f9e.html



**Chemical Countermeasures
And Advanced Materials
Laboratory**

Texas Tech professor's TexSnips reaches 10-year milestone

This month marks a milestone in the annals of the publication of the outreach newsletter, "TexSnips," from the Nonwovens & Advanced Materials Laboratory at Texas Tech University.

www.etextilecommunications.com

eTextileCommunications has several thousand subscribers and faculty/staff from leading Universities like NC State, Clemson, Fashion Institute of Technology read eagerly this publication on Friday weekly.

As the editor/publisher, I thank the Editor of eTextileCommunications to carry information on our TexSnips Newsletter.

Dr. Seshadri Ramkumar, PhD, CText, FTI (UK), FTA [*Honorary*] (India), TAPPI Fellow (USA)

Professor, Nonwovens & Advanced Materials Laboratory

Ramkumar, S

From: Wilkinson, Andy
Sent: Tuesday, September 6, 2022 7:41 AM
To: Melinda Harvey
Subject: Weaving knowledge and its application

Fellow Commoners!

I'm forwarding a note from our Commoner Colleague Seshadri Ramkumar that's a nice summary of an important and interesting newsletter he created a dozen years ago to connect people across various disciplines and endeavors but with the common thread — sorry, but I couldn't stop myself — of fiber. The missives — and the work itself — make a fine testament to both the theoretical and practical sides of transdisciplinarity.

As another connection and a celebration of fiber work, give this beautiful film a look!

https://aeon.co/videos/sublime-colours-brought-back-from-oblivion-the-exquisite-effects-of-natural-dyes?utm_source=Aeon+Newsletter&utm_campaign=9f4d53697e-EMAIL_CAMPAIGN_2021_09_27_04_36&utm_medium=email&utm_term=0_411a82e59d-9f4d53697e-68741001

The Omicron variant vaccines are available now, so my kindly suggestion is that you get yours. We need all you Commoners in order to make an exceptional world!

Andy

Andy Wilkinson
Director, Special Projects
Texas Tech University
~~806-777-7801 cell~~
~~andy.wilkinson@ttu.edu~~

TTU Commoner Newsletter

----- Forwarded message -----

From: Ramkumar, S <S.Ramkumar@ttu.edu>
Date: Sep 3, 2022, 10:48 AM -0500
To: Galyean, Michael <Michael.Galyean@ttu.edu>
Cc: Wilkinson, Andy <Andy.Wilkinson@ttu.edu>
Subject: TexSnips: Outreach to Cotton and Textile Sectors

Outreach to Cotton and Textile Sectors

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, September 3, 2022)---Outreach to the entire spectrum of the fiber to fashion supply chain and advanced textiles sector is essential.

This month marks a milestone in the annals of the publication of the outreach newsletter, "*TexSnips*," from the Nonwovens & Advanced Materials Laboratory at Texas Tech University. I started writing the TexSnips column just as a hobby to put thoughts to pen in the research areas I work. "*Why not I provide visibility on*

From: Schovanec, Lawrence
Sent: Sunday, September 4, 2022 2:29 PM
To: Ramkumar, S
Subject: Re: TexSnips: Outreach to Cotton and Textile Sectors

Ram

I appreciate your sharing this information regarding the history and reach of the newsletter. As you state this does advance the textile industry, but also the work done at TTU.

Thank you and best wishes
Lawrence

Sent from my iPhone

Lawrence Schovanec, Ph.D
President
Texas Tech University, USA

On Sep 3, 2022, at 10:16 AM, Ramkumar, S <S.Ramkumar@ttu.edu> wrote:

Outreach to Cotton and Textile Sectors

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, September 3, 2022)---Outreach to the entire spectrum of the fiber to fashion supply chain and advanced textiles sector is essential.

This month marks a milestone in the annals of the publication of the outreach newsletter, "TexSnips," from the Nonwovens & Advanced Materials Laboratory at Texas Tech University. I started writing the TexSnips column just as a hobby to put thoughts to pen in the research areas I work. "Why not I provide visibility on what others in the field are doing and write snippets on interesting happenings in the field, so that global readers would benefit?" Answer to this thought resulted in the arrival of TexSnips.

In September 2010, TexSnips newsletter came into being and today it has about 3500 subscribers. TexSnips articles are archived at:

<https://www.entx.ttu.edu/sramkumar/texsnips.html>

The need to connect students, researchers, and industry people in the field of fiber to fashion, advanced materials and even broader fields arose after the International Cotton Advisory Plenary meeting in Lubbock in September 2010. Industry veterans from India in the likes of Mr. Suresh Kotak, Mr. Dhiren Sheth, and others while visiting Lubbock visited my laboratory which is 10 miles away from the main campus. A thought to inform readers in India and elsewhere on timely information on cotton and textile matters from the epicenter of cotton production, Lubbock sparked the initiation of TexSnips.

Ramkumar, S

From: Kanti Jasani <kantijas1@yahoo.com>
Sent: Saturday, September 3, 2022 11:04 AM
To: Ramkumar, S
Subject: Thank you for a very informative newsletter!

This email originated outside TTU. Please exercise caution<<https://askit.ttu.edu/phishing>>!

Hello Ram,

I want you to know how I view the "TexSnip":

Ram, this is one of the finest and most informative newsletter I enjoy reading as it gives me perspective on not only cotton, the total textile industry progress. Thank you for starting and keeping it going. And, the fruits of it are quite obvious as the growth of subscribers and the far reaches of the world that enjoy it. Congratulations! Keep it going!

Best regards,
Kanti A Jasani, President
Performance & Technical Textile Consulting Harrisburg, PA
717-503-1394

Sent from my iPhone

Life Skills Education to Benefit the Cotton Textile Sector

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, August 31, 2022)---Ongoing global situations like inflation, price volatilities and the pandemic is putting stress across many sectors affecting the price and demand of textiles.

Managing difficult situations demand important life skills like confidence, diplomacy, planning, long term analysis of situations, and utilizing interdisciplinary talents.

It has become clear that industries like textiles, cotton production and manufacturing need to interact with academia, policy makers and brands for its mid to long term planning. While it has become a widespread practice to seek management expertise, COVID-19 has emphasized the need to get support for enhancing life skills that focus on human centric attributes like empathy, counseling, managing difficult scenarios, etc.

Recently, I had an opportunity to present the importance of life skills as part of creating innovative ideas in an event jointly organized by the Indian Association of Life Skills Education (IALSE) and Kalinga Institute of Social Sciences, India. The event attracted students, faculty, and members of IALSE.

How can one innovate was the question posed as the theme of the meeting. I placed the argument that everyone is an innovator in their own way and by watching the society around us we become innovators. Listening and paying attention to what happens in the society are important life skills that are needed for development.

“Life skills promote the enhancement of key psycho-social skills such as communication, interpersonal relationship, managing our emotions, stress, and cognitive skills such as critical thinking, problem solving and decision making,” stated Ms. Sunitha Ranjan, President of Indian Association of Life Skills Education.

How can life skill education support cotton, textile, and manufacturing sector, was the question posed by Dr. Ram Asrey Lal, Chairperson of the North India Section of The Textile Institute, who participated in the event. In answering this question, I emphasized the need for better communication among stakeholders in the cotton sector about weather, agronomic and marketing practices. By adopting scientific approaches in sourcing cotton, analyzing data on the supply and demand from reliable sources like USDA, observing global economic patterns and being better informed using reliable data are some ways one can manage risks in the textile sector.

Lubbock-based Plains Cotton Growers, Inc. meets regularly during the cotton growing season, where crop situation, insect and weed pressures, marketing details are discussed. Interesting aspect of these meetings is the participation of stakeholders that involve cotton farmers, bankers, seed companies, academics, researchers, and representatives of elected politicians. The platform involves active participation of different groups of the sector, where topical matters are discussed—this is indeed practicing of life skills for advancing the cause.

“Life skills help in developing relationship and resiliency. It helps to connect well with people of different work and cultural backgrounds,” stated Dr. Radhakrishnan Nair, Founder President of Indian Association of Life Skills Education.

Global cotton sector can benefit a lot from life skill education. Given the current global textile situation, the industry should involve life skill educators to impart timely skills to people in the textile sector.

Cotton Fiber Sector Development is Urgently Needed

By: Seshadri Ramkumar Professor Texas Tech University, USA

(July 26, 2022, Aruppukottai, India)-Cotton fiber is gaining attention globally and in the mainstream media in India in recent times due to high volatility in the market.

Spinning sector in India and globally are witnessing severe price squeeze due to high price and less demand. Within a year since July 2021, cotton price has shot up by 50 percent. For example, last year about this time, MCU-5 cotton was selling at Rupees 59,000/Candy, while the price is about Rupees 89,000/Candy. One candy is about 355.62 Kgs.

Today, I had the opportunity to visit Jayalakshmi Textiles in Aruppukottai to witness firsthand the situation in a spinning industry.

In a candid discussion with Mr. Shanmugam Velmurugan, General Manager of the 70,000-spindle mill, it became evident that the cotton sector from the farm level must gear up to meet the challenges faced by the spinning industry.

Firstly, yield improvement must be immediately enhanced stated Velmurugan. India although having largest acreage dedicated to cotton, it has the lowest productivity/hectare, about 462 Kgs/hectare as against the United States at 1000 Kgs/hectare. This necessitates seed improvements with latest biotechnology traits to counter issues from drought and pests.

Second aspect is focusing on the variability within the region in terms of fiber quality. Seed companies, state and national level agricultural agencies, and industry must collaborate with farmers in planting uniform variety to have better control on fiber variabilities. Velmurugan states that when doing bulk purchase of cotton by mills, variation in varieties from field to field causes issues regarding quality. Farmers have to be better engaged so that some control on regional variations can be achieved.

Third aspect is focusing on contamination at farm and gin levels. In addition to machine clearing at blowrooms in spinning mills, the industry has to have manual inspection and cleaning to have better contamination control. Normally 4 to 5 people are employed per shift for this operation. Contamination arises due to packaging materials made using plastic and jute, food packings and other materials due to manual handling of fiber. Awareness creation is needed to counter these issues in addition to machine level interventions.

Another aspect for the development is to focus on enhancing fiber quality. Indian industry has so far focused on length, micronaire, strength and color. Jayalakshmi Textiles has recently started focusing on other properties such as elongation. This necessitates the importance of HVI testing of fiber at mills. Mills in India normally do 20% testing of bales using HVI. Jayalakshmi Textiles consumes 40,000 bales and so, only about 8,000 bales are evaluated using high volume instruments using HVI and AFIS.

Cont. Next page...

“Since we started purchasing cotton from the United States, we pay attention to fiber elongation,” stated Velmurugan. Fiber elongation is important for fiber performance in spinning and weaving with reduced breaks. Even a 2% increase in fiber elongation matters, adds Velmurugan. Cotton breeding should focus on fiber quality and not only on yield.

During my recent trip to India, I have been promoting the use of quality testing and the availability of reliable and timely data. Stakeholders must first create the awareness on the importance of timely and reliable data involving production and quality. State and national agencies should interact regularly with farmers and the end-users during the planting season to have better handle on the data, weather, and agronomical aspects.

Cotton revolution in India should begin at farm level with input from stakeholders such as end-users, say apparel makers and brands. The current high volatility situation opens-up opportunity to focus on long-term planning for the cotton sector from fiber to fashion supply chain.



Executives of Jayalakshmi Textiles and Dr. Seshadri Ramkumar with Imported Cotton Bale from the United States

Cotton Innovation Shines in Southern India

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(July 23, 2022, Dindigul, India)- Innovation is needed in developing sustainable advanced products from cotton.

In a function to inaugurate “Innovation & Entrepreneurship Development Cell,” at Dindigul, India-based RVS College of Engineering, the importance of translating ideas to reality was emphasized.

Dindigul region is an important cotton spinning region in the State of Tamil Nadu with about 800 cotton spinning mills.

I had the opportunity to lecture to about 100 people in the audience, the need to work on ideas that will help the society, such as using sustainable materials.

Speaking at the event, Dr. Binod Badhri Advisor, RVS Group of Institutions emphasized the importance of innovation pipeline in higher education institutions. Researchers from the institution exhibited products that came out of their research such as cotton-bamboo sanitary napkins, cotton oil seed crusher, method to automatically inflate tires, etc.

“Entrepreneurship education should be part of curriculum in higher education institutes, which will help many to be job creators,” stated Dr. Vaidyanathan Krishnakumar, Director, RVS Group of Institutions.

My lecture promoted the value-added applications of cotton such as cotton-layered face masks and oil absorbents using mini demonstrations. Natural fibers like cotton, bamboo, and their blends can be used to develop advanced products like conveyor belts, medical pads, toxic chemical absorbents, etc., which was evident from many products displayed at the exhibition at the institute.

Engineering institutes are focusing on entrepreneurship development, which is a welcoming sign.



Cotton-bamboo Sanitary Napkin Displayed

Cotton Sector Needs to Enhance its Competitiveness

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Coimbatore, India, July 10, 2022)-Price volatility, tight supply, and moderation of demand for textiles pushes the cotton textile chain to be competitive.

During my recent trip to India, amidst stormy cotton situation, I have been fortunate to discuss with stakeholders in the entire cotton value chain to enhance the competitiveness of the sector.

Apart from market dynamics, factors such as farm productivity and getting a handle on cotton contamination needs priority attention. Plastic bale wrap is a major issue facing the global cotton sector.

Indian textile spinners are having good control of plastic, vegetable matter and metal contaminants at the spinning level due to cotton contamination detection systems.

Coimbatore-based Nestling Technologies has been a market leader in delivering cotton cleaning technologies at spinning mill level.

Normally, this technology is employed in the blowroom stage in spinning, where white and colored plastic contaminants can be traced and ejected. I have been discussing with textile industry people to focus attention on plastic contamination at gin and farm levels.

Chandrasekaran Somasundaram, Managing Director of Nestling Technologies agrees with the need for contamination cleaning at gin level and insists that stakeholders like farmers, ginners, mills, and machinery makers must come on a single platform to manage this critical issue. Machinery makers have technology that can be quickly adapted at gin level to have control on plastic and other contaminants, added Chandrasekaran Somasundaram.

Today, a discussion with Velmurugan Shanmugam, General Manager of Aruppukkottai-based Jayalakshmi Textiles, which is a fine count spinning mill underscores the importance of having cotton devoid of plastic contaminants at the entry level. “Mills will be interested in paying a premium of Rupees 1500 to 2000 per candy (356 Kgs) for contamination free cotton. Leaving a small porting of plastic in cotton in the early processing stages in a mill can be corrected only at autoconer stage, which is a costly affair for the industry. By having plastic free cotton can enhance the productivity of autoconer by 5%, which will be a blessing for the industry,” added Velmurugan.

With cotton prices riding high, industry must look for cost savings and quality enhancements. Plastic free cotton and better methods to catch plastics at gin level should receive due attention.



Pictured: Nestling Technologies Executives Showing Plastic Contaminants in Cotton

Lab to Land Should be the Way Forward

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Chennai, India, July 7, 2022)-Research results need to be translated into reality.

Lab to land and land to lab should be the way forward for research stated, Honorable Narendra Modi, Prime Minister of India in a major education summit today at Varanasi, India.

Experience gained in life and field need to be brought back to students and academia expressed Honorable Modi. In addition to publication of results in international magazines, they must be used in the field, added Honorable Prime Minister. Students can gain a lot by interacting with actual practitioners in the field.

Many universities are hiring Professors of Practice who have vast experience in production and managing industries, to teach students and engage in research in universities. Particularly, fields of engineering, business and journalism have streamlined this practice.

Textile sector, which depends on many different fields such as science, engineering and business economics can benefit a lot by proactive interactions with industry and experienced people in multiple fields.

Prime Minister Modi highlighted the importance of data to back results and encouraged to work on circularity.

Textile industry must focus on circularity and sustainable processes to advance to next level.

Academia in India involved in textile materials research are collaborating increasingly these days with international universities and interact with international experts.

Virtual interaction platforms have become a boom after COVID-19, to advance teaching and research in textile and other disciplines.

Cotton Plantings Seeing a Rise

by: Professor Seshadri Ramkumar, Texas Tech University, USA

(July 5, 2022, Chennai, India): Two regions in the world need to be watched carefully to have better grip on cotton production, this new season starting October 1, 2022.

According to the latest USDA estimates, United States' cotton producers planted 12.3 million acres of upland cotton, a 11% increase from last year. Interesting figure is the steep increase in planting in Texas. Texas acreage has increased by 750,000 acres. While drought is on going, how much yield will come depends on the weather.

Similarly, State of Gujarat in India will see an increase in acreage by 15 to 20%, as farmers are excited by high price for cotton, they received this year. Maharashtra may see a rise of about 12% increase in plantings. If weather progresses well, Gujarat may get about 90 lakh bales. If all things go well, Indian crop may range between 350 to 360 lakh bales (170 kgs/bale).

All eyes on the drought in Texas and monsoon and insect pressures in India.

Sustainability in Textiles Sector is the Need of the Hour

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Chennai, India, July 3, 2022)- Economic and material sustainability is the way forward for the textile industry.

Inflationary and raw material price pressures are forcing the textile sector to investigate the use of recycled fibers, cotton blends and cost cutting measures.

In this setting, Coimbatore-based Kumaraguru College of Technology recently organized a two-day hybrid international conference on “Sustainable Materials, Management, and Innovative Technologies.”

Paris accord on climate change made recommendation to limit global warming to 1.5 degree C, which necessitates textiles and manufacturing sectors to contribute to reduction in green house gas emissions.

Professor Seeram Ramakrishna of the National University of Singapore in his inaugural address highlighted the social cost associated with excessive material usage, pollution effects and finite nature of materials. These are key drivers to look towards green economy and manufacturing.

Academia should focus on research on various aspects of sustainability stated Professor Govindan Ramakrishnan of Kumaraguru College of Technology. Interesting projects can develop advanced textiles using blends of cotton, bamboo, banana fibers, etc, added Professor Ramakrishnan.

“Today’s students are going to be future leaders, policy makers, researchers, and scientists, who need to be environmentally literate in addition to having domain expertise. This calls for holistic multidisciplinary approach in higher education, better engagement of students with societal needs,” stated Professor D. Saravanan, Principal of Kumaraguru College of Technology.

Paris accord’s global warming target can be achieved only by exploring circularity approaches, opined Professor Ramakrishna.

Next phase of the textile industry is to exploit sustainable fibers, green manufacturing technologies, curbing pollution and adopting to cost effecting manufacturing processes.

In my opinion, sustainability is built on 3Es: 1) Economic sustainability; 2) Energy sustainability and 3) Environmental sustainability.

Seventy Years of Fiber Research Experience Speaks

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Chennai, India, July 1, 2022)-Industry and academia needs to collaborate to deliver useful products.

Last week, I had the distinct pleasure of visiting with two senior professors with collective teaching and research experience of over 70 years in the field of textiles and materials science, spending much of their career at Coimbatore-based PSG College of Technology.

As the textile sector is going through a tailspin, it was an opportune time to have tête-à-tête in Coimbatore with such experienced people to seek inputs to grow research in the field of textile materials.

Professor Thangavelu Ramachandran advised to have better handle on raw material situation. Stating that Tamil Nadu state has the largest number of spinning mills in India, it has to depend on other states for cotton and hence the industry has to work with farm level agencies to increase yield and quality. Government can look at supporting infrastructure facilities such as energy enabling cost savings and explore alternate energy usage.

Meaningful research that can help the industry with process improvements and product developments should be the next phase of academic research stated Professor Arunachalam Venkatachalam. Reminiscing how research was not given high priority in academia in 1976, when he joined the profession, he was pleased that research has become important part of academia these days. Now, research should be undertaken to ignite minds to develop ideas that will be of service to the society added Venkatachalam.

Emerging areas such as sustainability should get top attention by the industry according to the professors. Higher education institutions in the STEM field should have entrepreneurial development cells to cultivate “start-up,” mindset among students.

Growth will depend on next generation scholars who can generate jobs rather than depending on jobs. Textile sector needs to focus on innovations that can lend itself to high-tech start-ups.

In addition to focusing on research, students should be equipped with soft skills such as communication and have mindsets to face challenges opined Drs. Ramachandran and Venkatachalam.

Given the current situation in the textile industry, mission-linked research such as alternate fibers, value-added textiles, etc, to take the textile industry to the next phase is the need of the hour.



(Left to Right) Professors Venkatachalam, Seshadri Ramkumar and Thangavelu Ramachandran

India Needs to Explore Cotton Reserves Stockpiling

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Chennai, India, June 29, 2022)-COVID-19 era consumption fueled by available discretionary wealth helped with demand for products and commodities.

Housing market and home textiles market heated up enabling enhanced need for household products, cotton, and other fibers. Hoping to have the growth trajectory in spending, without expecting inflation, mills were hungry for cotton; not looking to get a handle on the price. While textile mills were caught in the demand driven market, inflationary pressures started creeping-up since January 2022, with United States hitting the four-decade high mark of about 8.6 percent.

Cotton price shot up above US\$1.30/lbs. this season and is witnessing fall in recent days rising expectations for steep decline in the new season. Such a sharp rise and fall is not good for the market and will result in high volatility in case of any supply alterations due to climate, production issues and of course slowing demand influenced by economic situations such as inflation.

Is there any viable solution to control such a volatility? India should explore the possibility of stockpiling cotton as reserve, which is routinely undertaken by China. India's state-owned Cotton Corporation of India [CCI] can lead this charge, stated, well respected commodity analyst Gnanasekar Thiagarajan, Director, Commtrendz Research, Mumbai.

CCI manages the MSP procurement process and when market prices are above MSP, it ceases major purchases as is the case this year. However, if the mandate of CCI could be altered to help with India's cotton reserves, steep volatilities can be better controlled. Such an initiative will create confidence in the textile pipeline with farmers and end-users having some safety net. Farmers will have confidence regarding predictable buyer all through, and mills will be assured of minimum stock in case of adverse weather scenarios and market fluctuations due to multiple factors. This necessitates improved farm infrastructure such as efficient warehousing and quality evaluation.

How much reserve needs to be held and how to disburse cotton are all the issues that must be discussed with stakeholders. India has recently started having petroleum reserves and such a model can be looked at, added Gnanasekar Thiagarajan.

Cotton production and demand data needs to be more dependable, and all stakeholders must come together in this initiative to have good handle on the data at the farm, gin, and end-user levels. Instead of having good guesses relying on multiple sources, more robust and scientific estimation methods must be implemented. Government can again lead this initiative as is undertaken by United States' Department of Agriculture at a global level. The data must be relayed to end-users in a timely manner at fixed intervals during the cotton season. This will also alleviate unnecessary anxiety in the market and increase confidence in the sector.

Better control of supply, reliable cotton data collection and dissemination are priority tasks for the cotton supply chain.

Cotton Expected to Moderate in the New Season

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Coimbatore, India, June 26, 2022)- Cotton price will soften in the new season beginning October 1, 2022.

Yesterday (June 25, 2022) in an event organized by Textile Association India, South India Unit in Jenny's Residency, Coimbatore about 700 technical experts in the textile industry from all parts of India gathered to analyze the cotton situation.

I had the privilege to address the standing room only audience of technical people for 90 minutes on cotton situation providing detailed analysis.

The analysis centered on the drivers of the sector: 1) demand and supply; 2) climate; 3) economy and inflation; 4) geopolitical scenario; 5) market influences.

By interacting with international stakeholders in the cotton sector in the United States and India and based on the planted acres, economic situation, inflation, etc., my prediction is that there will be tight supply situation, but the price will moderate in the new season.

Cotton is expected to range between Rupees 60,000 to mid-50,000 range per candy (356 Kgs). As the season progresses, based on satisfactory climate with no delayed rains in Gujarat and weather situation in Texas, the price may further soften to lower Rupees 50,000 level. As the cotton pipeline is basically empty now, price may begin at slightly elevated level in the new season and as the arrival picks up, with steady pipeline, price will soften and hence the above range is expected.

This situation may be comfortable to farmers, textile sector and consumers.

We must be cognizant that consumer will be the key player. Interest rates, income levels all influenced by inflation will drive the demand for nonessential commodities.

Cotton is here to stay and its inherent attribute, "comfort," is a much-preferred attribute.

Cotton Sector Needs Value Addition

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Bengaluru, India, June 17, 2022)- Cotton price has more than doubled since 2020 creating an unsettling situation in the global textiles sector.

On June 16, 2022, I had an opportunity to visit with a 30-year industry veteran, Mr. Ganesh Srinivasan, CEO of Bengaluru-based Resil Chemicals Pvt. Ltd., which specializes in silicone finishes for cotton and textile industries. The discussion centered around the cotton situation and on ways functional finishes can enable new opportunities for cotton textiles.



Photo Caption: Ganesh Srinivasan (Left) with Professor Seshadri Ramkumar (Right)

Greater penetration of cotton into active and sportswear markets is the need of the hour. Improvements in silicone chemistry may give a boost to cotton textiles in finding value-added applications. Traditional silicone finishes are hydrophobic in nature, hence inhibiting sweat absorption. Hydrophilic silicone finishes on cotton can provide better handle, superior wicking and enhanced water holding, which can create new opportunities in sportswear segments.

Sustainability in cotton processing should be the focus. Process improvements such as spray finishing with reduced water consumption should be explored stated Ganesh Srinivasan. “These days process developments are driving product innovations,” added Ganesh Srinivasan. Functional finish developments should focus on reduced water usage to make the industry green.

Resil Chemicals has released new generation silicone finishes such as Aquasil and Silkoist to provide new properties to cotton and blends. Aquasil on cotton provides instant absorption, enhanced water retaining capability and improved horizontal and vertical wicking. This keeps the skin dry and finds new opportunities for cotton in activewear segments. Fifth generation Silkoist treatment helps with good re-dyeability of woven and knitted fabrics. Leading companies such as Welspun, Maral Overseas Ltd. and Erode-based India Dyeing Mills are using the new generation of silicones for imparting added value to their products.

While agreeing that it is not possible to offset the price increases of cotton by solely other means, as raw material cost is the principal component of product costs, Ganesh Srinivasan stated, finding value-added applications will provide improved margins for the industry.

Cotton is here to stay, and the industry should focus of new process and product developments. Functional finishing is an important part of the growth equation. Measures such as enhancing farm productivity, quality improvements, cost-effective green processing, reduction in energy consumption and creating more awareness on cotton products must be carefully investigated to move forward the cotton industry.

Priority Issues for the Cotton Sector

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, April 26, 2022)- Supply-demand situation, soaring prices, quality, contamination aspects, penetration into value-added sectors are priorities that need the attention of stakeholders of the cotton sector.

Yesterday (April 25, 2022), a team of key people from Bajaj Coneagle, LLC and its parent company, Nagpur, India-based Bajaj Steel Industries, Ltd., which is a leading manufacturer of cotton ginning machinery visited Lubbock to explore the current cotton sector's situation and interact with industry people. As part of the visit, I had the opportunity to interact with them to gain information about current cotton situation.

With cotton prices at higher levels, discussions focused on what's next for the industry. With the current drought conditions in the High Plains of Texas, if this situation persists, it is expected that cotton yields may suffer in the world's leading cotton producing region, affecting the supply and demand situation, noted Lav Bajaj, Business Director of Bajaj Steel Industries, Ltd., with a sales turnover of about US\$60 million related to gin machinery business.

Given such a tight supply situation, competition from synthetics will be high, which necessitates concerted efforts from all stakeholders in the industry. Recently, clarion calls made by the Indian textile industry has made the Government of India suspend import duty on cotton for a specified period.

United States' cotton sector has established a global name as a producer of consistent quality, which is due to several factors such as machine harvesting, mass scale production, educated producers and the use of technology. This may not be feasible in other regions say India and Africa as farmlands owned by single family farmers range from half an acre to ten acres, which influences the quality. The visiting team from Bajaj Steel Industries, Ltd., agreed and suggested that Indian cotton sector should utilize existing resources such as grassroot level education, effective utilization of farm Apps to follow good agronomy practices and marketing.

Efforts must focus on quality grades and seed variety selection stated Shankar Venkatachalam, President of Bajaj Coneagle, LLC. It is time for India to look into saw gin revolution, added Shankar Venkatachalam. This will enhance quality and hence yarn realization in spinning mills.

-Continued On Next Page



Lav Bajaj (Left), Seshadri Ramkumar (Center)
and Shankar Venkatachalam (Right)

Agreeing with the current tight supply situation, mills will expect high quality cotton at reasonable price, stated Velmurugan Shanmugam, General Manager of Aruppukkottai, India-based Jayalakshmi Textiles, which annually consumes about 7000 tons of cotton and produces 4800 tons of fine count cotton yarns. In countries like India, it is important that government, textile, and cotton industry aim towards individual bale classification to achieve quality consistency and reliability, added Velmurugan Shanmugam.

In India, cotton is traded at the farm level based on length and mills while purchasing conduct thorough quality evaluation using HVI instrumentation depending on the size and requirement of individual mills. Quality evaluation at single bale level is needed which was expressed by the Bajaj team as well as textile mill representatives like Velmurugan Shanmugam.

Contamination at gin level such as plastics, quality consistency and effective utilization of technology and creating more awareness at farm level should receive priority attention. More importantly, effective management decisions by the stakeholders, given the tight supply of cotton will be the need of the hour, say cotton purchasing and stocking decisions.

Ramkumar, S

From: skumar@q-lab.com
Sent: Tuesday, April 26, 2022 10:37 AM
To: Ramkumar, S
Subject: RE: TexSnips: Priority Issues for the Cotton Sector

This email originated outside TTU. Please [exercise caution!](#)

Nice write up.

Thanks for sending me.

Regards, Smrithi



Smrithi Kumar
Global Customer Education Specialist
Q-Lab Corporation

800 Canterbury Road | Westlake, Ohio 44145-1419 USA
t: +1-440-835-8700 x205 | m: [redacted] | f: 1-440-835-8738 | e: [redacted]@q-lab.com | w: Q-Lab.com



Join us for a **Five-Part Webinar Series**
on Special **Weathering Testing Topics**
APR Part Three: Light Stability Testing

From: Ramkumar, S [mailto:S.Ramkumar@ttu.edu]
Sent: Tuesday, April 26, 2022 11:26 AM
Subject: TexSnips: Priority Issues for the Cotton Sector

Priority Issues for the Cotton Sector

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, April 26, 2022)- Supply-demand situation, soaring prices, quality, contamination aspects, penetration into value-added sectors are priorities that need the attention of stakeholders of the cotton sector.

Yesterday (April 25, 2022), a team of key people from Bajaj Coneagle, LLC and its parent company, Nagpur, India-based Bajaj Steel Industries, Ltd., which is a leading manufacturer of cotton ginning machinery visited

India Slashes Import Duty on Cotton

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, April 13, 2022)-Government of India has slashed the import duty of cotton for a specific period effective tomorrow, April 14, 2022.

Indian textile industry has been making clarion calls to the Government to allow duty free import of cotton to stay competitive against other low-cost textile manufacturing countries.

Today, Ministry of Finance of India has announced that there will be no import duty on cotton for the period April 14, 2022, till September 30, 2022.

This news is welcomed by the Indian industry. In speaking with this scribe, Mr. Gandhiraj Krishnasamy, general manager of Coimbatore-based Lakshmi Card Clothing stated that this news is a welcoming one. He added that, this support from the government will exert influence on domestic cotton market to offer cotton at competitive price.

Already mills have been paying attention to cotton from High Plains of Texas and Australia and this concession from the Government will help the textile industry to stay competitive.

Adding to this sentiment, Mr. Velmurugan Shanmugam, General Manager of Aruppukkottai-based Jayalakshmi Textiles cotton spinning mill with 72,000 spindles stated that 11% import duty has been making the industry less competitive and mills would benefit with a waiver. Jayalakshmi Textiles will be receiving a consignment of three hundred tons of United States' cotton this May. This exemption shall benefit the entire textile chain and will provide relief to consumers stated Gandhiraj Krishnasamy.

This news will serve as a timely gift by the Indian Government for the Tamil New Year celebration tomorrow in the State of Tamilnadu, which has the highest number of spinning mills in India.

Geopolitical Situation, Cotton, and Textiles Sector

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, April 11, 2022)-Ongoing political crisis in Europe, Sri Lanka and Pakistan are influencing the global cotton and textiles sector, manufacturing, and global economy.

Rise in prices, inflation, and political crisis in some parts of the world are having direct effect on the recent Presidential election in France. Worries on the increase in energy cost due to probable embargo on Russian gas and oil by EU countries is genuine among consumers, while making buying decisions on non-essential items.

Ripple effects from COVID-19 are seen in different sections of the society, which is more evident in Sri Lanka. With the decrease in foreign tourism, the economy of Sri Lanka has taken a severe hit, which has been in decline due to mismanagement for over a decade and due to heavy foreign debts. In addition to economic fallouts, political crisis in Pakistan and Europe due to Russian invasion of Ukraine is adding to the pain as well.

All these instabilities are showing its impacts on the global cotton and textile sectors. This is immediately felt in a major textile producing country, say India. The economic and political crisis in some parts of the world should result in favorable conditions for textile manufacturing in India, but this is not the case. Steady increase in cotton price is creating a havoc in the Indian textiles sector resulting in decreased production and reducing work week by a day in textile mills in India.

Sri Lanka is a leading garment producer supplying to global brands. Lack of power and the ongoing political crisis is affecting many sectors of the country. “While orders from Sri Lanka are getting diverted to Tiruppur in India, steep cotton price in India is not helping the situation,” stated Mr. Velmurugan Shanmugam, a 30-year industry veteran and the general manager of Aruppukkottai-based Jayalakshmi Textiles.

In many mills, production has been slashed by 20 percent resulting in losses. Higher cotton prices are not absorbed by upstream products like yarns. “Weavers are not willing to pay higher prices,” added Velmurugan Shanmugam.

Cotton prices have doubled in a year and the present situation is worse than 2011 when cotton price was steep. Textile mills in India are demanding Indian government to slash 11% import duty on cotton, which will create a level playing field with competing countries like Bangladesh, Vietnam, and Indonesia.

Cautious stock maintenance, negotiating with the government for adequate support, efficient workflow management and watching the global situations carefully are a few near term solutions for the global textiles sector.

Ramkumar, S

Subject: FW: TexSnips: Geopolitical Situation, Cotton, and Textiles Sector

-----Original Message-----

From: tapan sengupta <sengupta_tk@ >

Sent: Tuesday, April 12, 2022 1:45 AM

To: Ramkumar, S <S.Ramkumar@ttu.edu>

Subject: Re: TexSnips: Geopolitical Situation, Cotton, and Textiles Sector

Excellent presentation and very informative. Please keep it up. God bless you.

Thanks.

T. K. Sengupta

Ex National President, The Textile Association (India)

Consultant

Mumbai

Research Collaborations in Advanced Textiles and Global Harmony

By: Seshadri Ramkumar, Professor, Texas Tech University

(March 7, 2022, Lubbock, USA)--Unity and harmony are in much need as we witness distress in some parts of the world.

Research and graduate education are international, and it celebrates global unity and understanding. On March 5, the Nonwovens and Advanced Materials Laboratory at Texas Tech University, USA, to show solidarity among many nationals, and as a mark of celebrating James Ayodeji's successful defense of Ph.D. on "Face Coverings as a Countermeasure to COVID-19," hosted a dinner involving students of a few nations. James is from Nigeria. Such small acts of showcasing unity and understanding of different culture is valuable in times of stress.

Since the initiation of research in advanced cotton products, nonwovens and technical textiles in the Advanced Materials Laboratory at Texas Tech, students, and visitors from many parts of the world like Germany, China, Japan, Nigeria, United States, Bangladesh, and India have visited and collaborated in many efforts. Ongoing collaborations with many Institutes in India for over 20-years have strengthened India's technical textiles sector. This effort has enabled India to be self-sufficient in the manufacture of PPE during COVID-19 times. A high point has been the collaboration between USA-based Association of the Nonwoven Fabrics Industry (INDA) and Texas Tech University in hosting a major nonwovens training workshop and "Link with India," business conclave in the mid-2000s in Mumbai, India.



Notable visitors to the laboratory's events include United States' Congressmen, U.S. Department of Defense scientists, Ministry of Textiles-Government of India's senior officials, delegation of officers from the Cotton Corporation of India, business leaders, scientists, to name a few. In the early 2000, a member of the trade delegation representing the textile sector under the leadership of former Prime Minister of India, Honorable Atal Bihari Vajpayee ji visited the laboratory and Lubbock to know firsthand about the High Plains' cotton sector and the technical textiles research at Texas Tech University. Leading cotton industry leaders from India say, Mr. Suresh Kotak of Kotak group of companies and the former R & D head of the leading textile machinery manufacturer, Coimbatore-based Lakshmi Machine Works, Ltd., have extended their visits to the laboratory.

Ongoing collaboration with Amit Kapoor, President of Chantilly-based First Line Technology, LLC is leading to new applications for the nonwoven decontamination wipe, "FiberTect." FiberTect's commercial success showcases the importance of industry-academia collaboration. In a similar vein, collaboration with South India-based Jayalakshmi Textiles, a leading cotton spinning industry has resulted in cotton-based sustainable oil absorbent to contain oil spill issues.

Research in the laboratory focuses on advanced textiles to protect the environment and save human lives, finding new and industrial applications for cotton, nanofibers, and sustainable textile-finishing technologies to name a few. Let peace prevail in the world.

Ramkumar, S

From: Prof. Dr. Engr. Ayub Nabi Khan <~~provc@buft.edu.bd~~>
Sent: Monday, March 7, 2022 11:37 AM
To: Ramkumar, S
Cc: MS Kamrun; afroza akther; Sajibul Haque
Subject: Re: TexSnips: Research Collaborations in Advanced Textiles and Global Harmony

This email originated outside TTU. Please [exercise caution!](#)

Congratulations.

Regards.

Prof. Dr. Engr. Ayub Nabi Khan
Pro VC BUFT

Pro-Vice Charellor, Bangladesh University BUFT



Virus-free. www.avast.com

On Mon, Mar 7, 2022 at 9:21 PM Ramkumar, S <S.Ramkumar@ttu.edu> wrote:

Research Collaborations in Advanced Textiles and Global Harmony

By: Seshadri Ramkumar, Professor, Texas Tech University

(March 7, 2022, Lubbock, USA)--Unity and harmony are in much need as we witness distress in some parts of the world.

Research and graduate education are international, and it celebrates global unity and understanding. On March 5, the Nonwovens and Advanced Materials Laboratory at Texas Tech University, USA, to show solidarity among many nationals, and as a mark of celebrating James Ayodeji's successful defense of Ph.D. on "Face Coverings as a Countermeasure to COVID-19," hosted a dinner involving students of a few nations. James is from Nigeria. Such small acts of showcasing unity and understanding of different culture is valuable in times of stress.

Elementary School Student Demonstrates Cotton's Sustainable Industrial Application

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, February 28, 2022)- Sustainability requirements, and the need for sustainable advanced products for enhancing human health and protecting environment is an encouragement for the fiber to fashion supply chain to work towards sustainability goals.

The Nonwovens & Advanced Materials Laboratory at Texas Tech University for the past two decades has been focusing on research, education and outreach related to cotton-based technical textile products.

As part of outreach effort, demonstration of cotton's sustainable industrial application was carried out this past Friday evening (February 25, 2022) in the STEM Night event organized by Ramirez Elementary School's PTA, which was attended by many elementary school children and their parents in Lubbock, Texas.

Aditya Ritvik, a 5th grade student at Roscoe Wilson Elementary School in Lubbock, USA enthusiastically carried out the demonstration and witnessed the unique capability of raw cotton absorbing oil.

Demonstration by 5th grade student can be viewed at:

<https://www.youtube.com/watch?v=jECKHsXcjsI>

Mirza Khyum and Faizur Rahman, graduate students in the Nonwovens & Advanced Materials Laboratory, Texas Tech University showcased the industrial applications of cotton such as oil soaking abilities to the audience.

Research has so far resulted in commercial products such as FiberTect, a nonwoven decontamination wipe, which could absorb toxic chemicals such as sulfur mustard, cotton-based oil absorbent and novel face mask concept, "FISOR." FISOR concept advocates the use of cotton face cover and nonwoven surgical mask as a combo mask with good fit to provide improved filtration and comfort.

It was enthralling to see many different groups such as wind energy, robotics, geosciences, forensics, museum studies, etc., showcasing science and technology in the STEM Night event.

Certainly, there was enthusiasm among youngsters to see science in action.

Ramkumar, S

Subject: FW: TexSnips: Elementary School Student Demonstrates Cotton's Sustainable Industrial Application

From: techtex**Sent:** Tuesday, March 1, 2022 1:05 AM

To: Ramkumar, S <S.Ramkumar@ttu.edu>

Subject: RE: TexSnips: Elementary School Student Demonstrates Cotton's Sustainable Industrial Application

This email originated outside TTU. Please [exercise caution!](#)

Congrats on this good work on promoting cotton-based products. MY best wishes to you and your team.

Regards

Ravishankar

Technical Textiles Consultant

Baroda, India

From: Ramkumar, S <S.Ramkumar@ttu.edu>

Sent: Monday, February 28, 2022 11:02 PM

Subject: TexSnips: Elementary School Student Demonstrates Cotton's Sustainable Industrial Application

Elementary School Student Demonstrates Cotton's Sustainable Industrial Application

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, February 28, 2022)- Sustainability requirements, and the need for sustainable advanced products for enhancing human health and protecting environment is an encouragement for the fiber to fashion supply chain to work towards sustainability goals.

The Nonwovens & Advanced Materials Laboratory at Texas Tech University for the past two decades has been focusing on research, education and outreach related to cotton-based technical textile products.

As part of outreach effort, demonstration of cotton's sustainable industrial application was carried out this past Friday evening (February 25, 2022) in the STEM Night event organized by Ramirez Elementary School's PTA, which was attended by many elementary school children and their parents in Lubbock, Texas.

Aditya Ritvik, a 5th grade student at Roscoe Wilson Elementary School in Lubbock, USA enthusiastically carried out the demonstration and witnessed the unique capability of raw cotton absorbing oil.

Demonstration by 5th grade student can be viewed at:

<https://www.youtube.com/watch?v=jECKHsXcjsI>

Ukraine Crisis, Cotton and Textiles Sector

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, February 24, 2022)-Today's invasion of Ukraine by Russia is creating a tailspin in the global markets, particularly in the energy sector.

Crude oil price is trading about US\$104 per barrel, which will certainly affect stock markets, commodity, and metal prices. Gas prices are as high as \$3.15 a gallon for regular gas at some gas stations in Lubbock, Texas. More importantly, it will have impact on consumer psychology and their buying power, which is important for the global textiles sector.

Immediate reactions by the United State, EU, and UK have been by imposing economic sanctions against Russia, which is only going to harden. This will impact crude oil and natural gas prices as Russia is a major exporter of these commodities to EU nations like Germany. One may also swiftly see the strengthening of dollar, which will at least for the immediate future see higher prices for imports from the United States.

Cotton market which is experiencing a tight supply will see uncertainty and added volatility due to uncertain demand and ripple effects from higher energy prices. More importantly, as many EU countries depend on wheat and energy products from Russia, and Ukraine being the breadbasket for Europe, increase in prices of these commodities will influence the overall markets and consumer confidence.

"The market will be more volatile," stated Velmurugan Shanmugam, General Manager of Aruppukottai, India-based Jayalakshmi Textiles. Jayalakshmi Textiles is a 100% cotton spinning mill with 72,000 spindles spinning fine count cotton yarns catering to home textiles market. India exports cotton home textiles to EU countries like Germany and crisis in that part of world will have impact on textile exports and consumption.

Cotton prices have been seeing an upward trend in recent months. In recent weeks, the expected invasion by Russia has been playing its part on commodity markets. In the past 20 days, mill delivered price for MCU-5 cotton has climbed from Rupees 78,000 per candy (356 Kgs) to its current level at 83,000 per candy (356 Kgs). With the current global situation, uncertainty will increase, added Velmurugan Shanmugam. As gas prices are expected to go up, consumers will take a hard look at the prices of textiles and may postpone buying non-essential items, which may have an impact on textile trade, added Velmurugan Shanmugam.

Textiles' demand and prices not only depend on cotton and raw materials' prices. Other factors such as regional peace and security influence consumers' interest in buying items such as textiles which are heavily dependent on discretionary spending.

Textile industry people while expecting high volatility in markets must carefully plan in stocking raw materials and work out transportation and operational costs.

With tighter economic sanctions on Russia expected soon, it is important to watch how the commodity and financial sectors will react and their impact on manufacturing and textile sectors.

Face Masks Enabled Returning to Normalcy

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, February 16, 2022)- With the COVID-19 wave waning and many States in the United States easing their face mask recommendations, it is important to understand the role played by face coverings offering varied levels of protection during the pandemic.

For nearly two years, face masks have been a much-debated product, while they have played important role in curtailing the spread of variants of SARS-CoV-2.

Since March 2020, when the pandemic was recognized and vaccinations were just beginning to happen, face masks have played critical role in saving lives. Face masks are one of the critical tools in the toolbox to fight infections caused by airborne microbes.

The use of different versions of face coverings has genuinely spotlighted the use of cotton and its blends. While in public domain, technical details may not have been much discussed, certainly, among stakeholders, from producers to fashion designers, technical advantages of cellulose-based materials for medical and personnel protection has gained support and interest.

HariPriya Ramesh, doctoral student in the Department of Environmental Toxicology, Texas Tech University, who wears face coverings in indoor public settings such as classrooms stated that cotton-based face coverings are comfortable and makes her safe and comfortable in wearing.

As the Omicron wave was peaking in late Fall 2021, medical community emphasized the need for high quality face masks such as N95s. N95s and other filtering facepiece respirators offer highest level of protection, which are needed where higher level of transmissions is experienced.

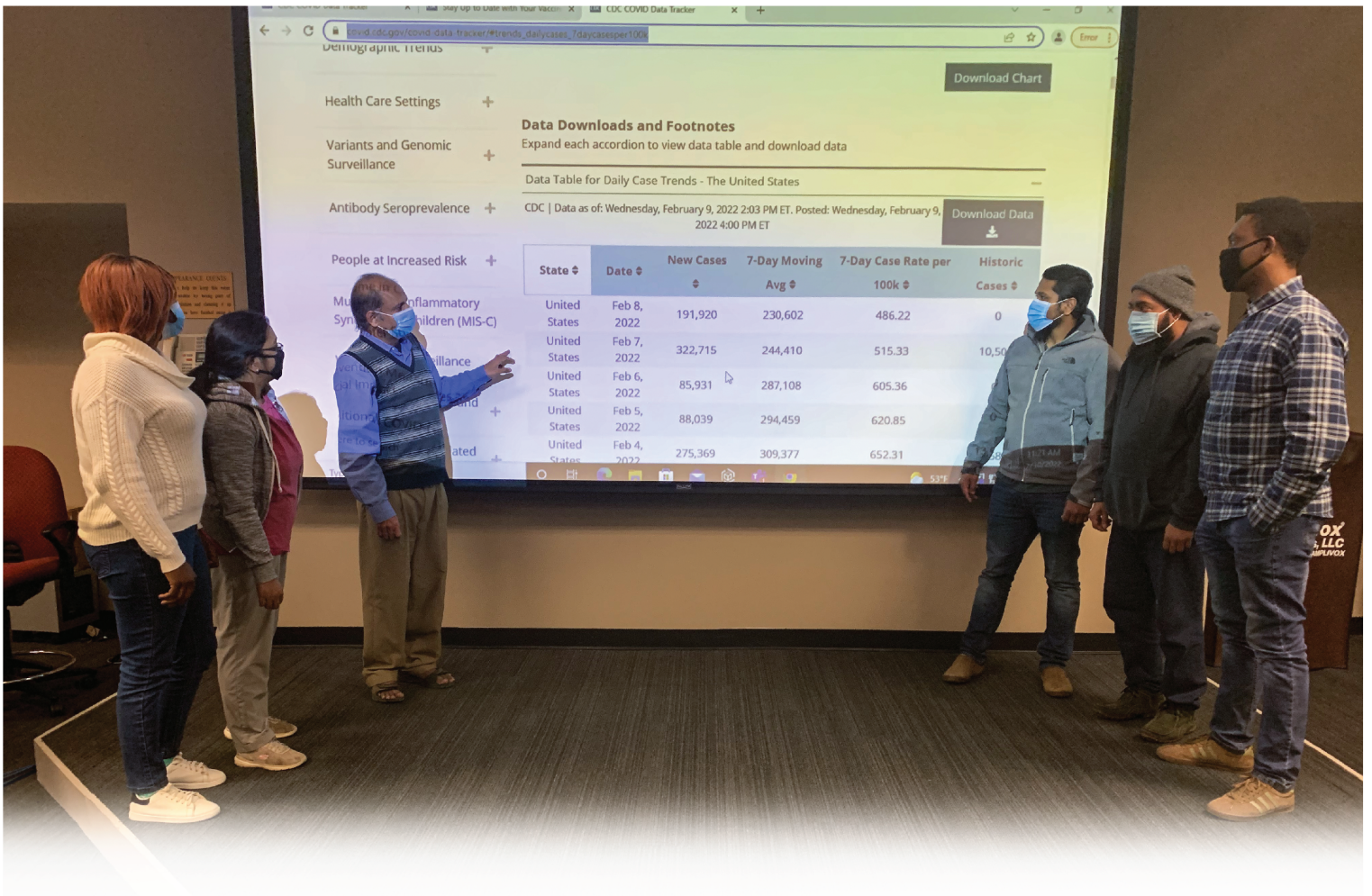
In communities other than highly vulnerable settings such as hospitals, health care facilities, etc., other making strategies that involve nonwoven face masks in combination with multilayered cotton-based face coverings may be helpful. In all these scenarios, fit is important. The use of cotton-based face coverings as a combo may provide next-to skin comfort, provided the combo structure provides good fit.

This alternate masking strategy considers, filtration, fit and comfort into consideration and has evolved out of two years of class discussions and research in the Nonwovens & Advanced Materials Laboratory at Texas Tech University. Cotton-based multilayered face coverings with more than two layers are needed when used in combination with 3-ply nonwoven surgical masks to offer good protection.

Graduate students involve both in research on PPE and analyzing the infection and vaccination rates as part of “Countermeasures to Toxins,” graduate level course at Texas Tech University. It has become evident that courses that deal with ongoing crisis result in timely and valuable deliverables. Such activities also strengthen the course information based on relevance and ongoing research, adding value to courses.

COVID-19 has strengthened our understanding that textile materials, which have functional capabilities play vital roles in medical, hygiene and personnel protection applications.

Stakeholders in the textile and material sectors must focus on non-commodity applications and provide support for much needed R & D in the advanced materials sector.



L-R: Racheal Afolabi, Haripriya Ramesh, Dr. Seshadri Ramkumar, Mirza Khyum, Md Faizur Rahman, & Kenneth Kikanme

(Figure Caption: Graduate students at Texas Tech University analyzing COVID-19 data as part of class and research on countermeasures to infections and toxins)

American Cotton Gets a Favorable Look by South Indian Textile Spinners

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, January 17, 2022)—High Plains of Texas cotton is getting attention in South India.

Cotton price situation is creating a lot of anxiety in the global textile sector. Particularly in India, which is a largest textile producing country, high cotton prices are being carefully watched, as it is having ripple effects across economy and employment.

In an interesting twist to the cotton story, cotton from the High Plains of Texas is getting a favorable consideration by South Indian textile spinners.

Spinning industry is heavily concentrated in the southern state of Tamil Nadu and the textile industry is situated in Coimbatore, Erode and Thiruppur regions. Additionally, mills are situated in cotton growing areas in Virudhunagar districts.

High prices coupled with lack of consistent quality have made spinning industries to look for alternatives to Indian cotton. Indian spinning associations have been pleading the government to waiver the import duty of 10% on cotton.

A telephone call this morning with Mr. Velmurugan Shanmugam, General Manager of Jayalakshmi Textiles, based in Aruppukkottai in South India revealed that they are seriously looking at cotton from High Plains of Texas in their raw material mix. It is my understanding that another large mill has also booked an order of about 1000 tons of U.S. cotton, again showing interest in imported cotton.

According to Velmurugan, Jayalakshmi Textiles have booked 300 tons of High Plains cotton and the consignment is expected to arrive in Tuticorin port, which is near to their mills in 3-4 months. He hopes that by that time, government will make a favorable decision on the import duty on cotton.

Many textile spinners are also exploring imported cotton. Indian spinners like Jayalakshmi Textiles have been using small quantity of Giza cotton for high quality yarns of 100-120s Ne. Jayalakshmi Textiles spins fine count yarns catering to sheeting and saree materials.

While landed price including tax of imported may be slightly higher than the price of domestic cotton, mills in India are also paying attention to quality and its consistency.

Indian cotton sector should pay attention to quality and delivery consistency and enable farmers to achieve high quality standards.

From: Prof. Dr. Engr. Ayub Nabi Khan <provc@buft.edu.bd>
Sent: Monday, January 17, 2022 9:42 PM
To: Ramkumar, S
Cc: MS Kamrun; Sajibul Haque; afroza akther
Subject: Re: TexSnips: American Cotton Gets a Favorable Look by South Indian Textile Spinners

This email originated outside TTU. Please [exercise caution!](#)

Very interesting and important information for Bangladeshi Spinners also.

One proposal to you, i.e I would like to organise a online seminar on Nonwoven Textile and its prospects in the world in the context of Asia.

Appreciate if you can give your kind consent.

Looking forward to hearing from you.

Best Regards

Prof. Dr. Engr. Ayub Nabi Khan
Pro VC, BUFT, *Bangladesh*

On Mon, Jan 17, 2022, 22:20 Ramkumar, S <S.Ramkumar@ttu.edu> wrote:

TexSnips: American Cotton Gets a Favorable Look by South Indian Textile Spinners

By: Seshadri Ramkumar, Professor, Texas Tech University, USA

(Lubbock, USA, January 17, 2022)—High Plains of Texas cotton is getting attention in South India.

Cotton price situation is creating a lot of anxiety in the global textile sector. Particularly in India, which is a largest textile producing country, high cotton prices are being carefully watched, as it is having ripple effects across economy and employment.

In an interesting twist to the cotton story, cotton from the High Plains of Texas is getting a favorable consideration by South Indian textile spinners.

Spinning industry is heavily concentrated in the southern state of Tamil Nadu and the textile industry is situated in Coimbatore, Erode and Thiruppur regions. Additionally, mills are situated in cotton growing areas in Virudhunagar districts.

High prices coupled with lack of consistent quality have made spinning industries to look for alternatives to Indian cotton. Indian spinning associations have been pleading the government to waiver the import duty of 10% on cotton.

A telephone call this morning with Mr. Velmurugan Shanmugam, General Manager of Jayalakshmi Textiles, based in Aruppukkottai in South India revealed that they are seriously looking at cotton from High Plains of Texas in their raw material mix. It is my understanding that another large mill has also booked an order of about 1000 tons of U.S. cotton, again showing interest in imported cotton.