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# Most US Small Businesses Say They're Looking To Leave China

SA ranks 6th in World Bank's Ease of Doing **Business** ranking, while China ranks 31st. And even so, China has become the epicenter of the world's supply chain, for almost every product. If there is one thing the pandemic taught the world, it was that we are over-reliant on China for everything from the key ingredients used to make cleaning agents to pharmaceuticals, surgical masks to personal protection equipment. That's not diversification of risks. And small business owners get it.

Even if they're not in the business of making Lysol wipes, 56% of 635 North American small business owners surveyed by OFX, a global money transfer operator, said they are considering switching supply out of China, or have already done so.

Some 61% of those sourcing products from China, and elsewhere, said they were looking for domestic partners. Slightly more than half of small businesses said the outbreak that started in China in December hurt their supply chains, OFX reported.

"We were having problems with China supply chains back in November," says Aaron Sokol, CEO of Q4 Sports, a sneaker brand manufacturing in China. They have seven employees, all based in southern California. Sokol's firm is currently living off three things: savings, an SBA disaster loan, and the payroll protection "We didn't know what was going on until January when they told us there was a problem with a virus outbreak in Wuhan," Sokol says. "We would love to manufacture in the US but the cost of the shoes would be prohibitively expensive," he says, adding that they are looking at alternatives within Asia now.

Brazil is also a potential solution due to their domestic, high end shoe manufacturing industry.

### Mexico is the biggest standout

"You have a couple of big names already moving to Mexico, all auto parts," says Alfred Nader, president of OFX North American in San Francisco. "Some of them are leaving China and going to Mexico because of the new NAFTA. Mexico has a nice supply chain in auto and they are decent sized players in textiles and in other industries that require light manufacturing. Most people don't really think of this, but Mexico is cheap and on a labour perspective it is as cheap or cheaper than China," says Nader.

Even the Chinese are looking to Mexico now. It is closer to China's largest market - the US. Plus it is easier to develop a relationship with Mexico than it is to develop a new one in China, which is on the other side of the world. Small and midsized businesses trying to go global with sales can easily make a day trip out to Mexico if they are from the US southwest.

OFX is an Australian company. Some 50% of their revenue comes from there, and that is where the first signs of a change in the patterns of payment flow were the most visible.

Average transactions size is around US\$ 20,000 at OFX. They started to see payments shrinking in China in number, and going to Indonesia, Taiwan and Vietnam. The US is heading in the same direction.

"Using China as a hub...that model died this year, I think," says Vladimir Signorelli, head of Bretton Woods Research, a macro investment research firm.

According to 160 executives who participated in Foley & Lardner LLP's 2020 International Trade and Trends in Mexico survey, released in February, respondents from the manufacturing, automotive and technology sectors said they intended to move business to Mexico from other countries - and they plan on doing so within the next one to five years. "Our survey shows that a large majority of executives are moving or have moved portions of their operations from another country to Mexico," says Christopher Swift, Foley partner and litigator in the firm's Government Defense Enforcement ጼ Investigations Practice.

For those considering moving operations, 80% said they will do so within the next two years. They are "doubling down on Mexico", according to Foley's report.

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### **2** IN THE PUBLIC EYE

# CustomFab USA's Success Mantra -Customer Service, HRM, Technology

#### Reena Mital

s it viable to manufacture textiles and apparel in the US? Shouldn't textile companies in the US survive? relocate to CustomFab believes that is not true. Over the last 25 years, the company has grown to become one of the leading sewing contractors in the US, offering a variety of high end medical textiles, military textiles, sporting goods, luggage textiles.

Founded in 1990 by Don Alhanati in his garage with an ultrasonic welder and sewing machine, CustomFab USA began as a family owned business that worked tirelessly over the years to earn the trust of customers, growing the company into the industrial powerhouse that it is today - employing a dedicated workforce of over 300 people.

As one of the nation's lead sewing contractors, CustomFab USA now occupies a 77,000 square foot, lean manufacturing facility in southern California, which has a dedicated R&D team, a Quality Assurance programme, and abundant manufacturing capabilities, producing over 2000 unique products every year. company, "The mentality of catering to each customer's individual needs is sewn into our roots and drives our success. We rose to the top of our industry by providing personal customer service that is unparalleled by larger companies while being able to reliably manufacture items for customers that need to meet strict industry standards and have next to zero defects. It's no exaggeration when we say that people literally trust our products with their lives."

### Accessibility, reliability, technology

So why did CustomFab plan to start manufacturing in the US? According to Danny Brown of CustomFab USA, "When we opened our doors in 1990, we decided to keep our production here in the USA, even though similar companies were moving operations overseas.

"We did this because we saw a business opportunity to provide American companies the luxury of quickly accessing the manufacturing facility and interacting with the people producing their goods. By building a product from start to finish in one location, we could better and more reliably control its quality and protect our customers' intellectual property. Finally, with our access to the rapid emergence of new industrial manufacturing technologies, we saw a competitive fiscal edge emerging that we knew would eventually pay off in our favour if we continued to invest in our domestic workforce."

New automated technology, manufacturing equipment, and ERP software have helped CustomFab USA streamline operations while improving quality and consistency of output. "We manufacture goods at a medium to large scale. Although we might have fewer employees than an overseas company with our production output, we manage to keep up with the competition by ensuring our team is trained to use the latest technology and are efficient at their craft," he adds.

#### Higher education, skills, productivity command higher wages

Maintaining a labour force in the USA is more expensive than in Asian markets. "However, one of the benefits of paying higher wages is that we can demand more of our

employees in terms of their education and skill. We have a symbiotic relationship with the dedicated workers and craftspeople that keep our company running. The more we invest in them and their future, the more technology they can master, increasing manufacturing output. On average, a worker in our CustomFab USA facility today produces more than two to three times the amount a worker in the same position would have been able to a decade ago. We continue to expect the numbers to increase as skills become more specialised," states Brown.

The company anticipates domestic textile demand will continue to rise, given the uncertainty of tariffs on finished goods and the disruption of overseas supply chains affecting the lead time of orders.

Meanwhile, US exports of textile and apparel have been picking up. US exports stood at US\$ 22.67 billion in 2017, 2.47% higher than in 2016. In 2018, exports had gone up to US\$ 23.46 billion, a growth of 3.51%. In 2019 however, exports fell by 2.40% to US\$ 22.90 billion.

This can be attributed to the US-China trade-off, which disrupted the supply of inputs to the US textile and clothing industry, and exports to China, which is the fourth largest market for US textiles and apparel.

According to

the

# Most US Small Businesses Say They're Looking...

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"Our estimates of possible FDI to be redirected to Mexico from the US, China and Europe range from US\$ 12 billion to US\$ 19 billion a year," says Sebastian Miralles, managing partner at Tempest Capital in Mexico City.

"After a ramp-up period, the multiplier effect of manufacturing FDI on GDP could lead Mexico to grow at a rate of 4.7% per year," he says. According to OFX, American small businesses

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# A Lot Of Groundwork Needed For FDIs To Come To India

n a bid to attract foreign investors looking to shift their operations out of China, India is developing a land pool nearly double the size of Luxembourg. As reported, a total area of 461,589 hectares has been identified across India. including 115,131 hectares of existing industrial land in few prominent states, such as Gujarat, Maharashtra, Tamil Nadu, and Andhra Pradesh

Unlike China, acquiring land is complicated in India with multiple stakeholders involved, such as farmers and individual plot holders, administrators, politicians, governments and local besides social and environmental activist groups in case the land ownership is contested or the area is part of a green belt. Foreign companies must also comply with stringent land acquisition and labour laws, which delay projects from moving forward or at all.

This is the negative trackrecord that India is looking to leave behind, with media reports indicating that the government will ensure the land being made available for foreign firms is either unused or located in special economic zones (SEZs) with key infrastructure already in place. Sources say that a detailed scheme to attract potential foreign investors may be ready by the end of this month.

The move comes right after news broke out that nearly 1,000 foreign firms have been in talks with Indian authorities to shift their manufacturing to India; at least 300 of these firms are actively pursuing production plans in various sectors.

The Indian government has hand-picked 10 sectors textiles, electrical products, pharmaceuticals, medical devices, electronics, heavy engineering, solar equipment, food processing and chemicals-as focus areas for promoting manufacturing in India.

So far, firms from the US, Japan, South Korea, and China have expressed interest in moving their operations to India from China.

Along with making land available for foreign companies, India is also building local supply chain capacity and providing incentives to boost domestic manufacturing in order to emerge as a viable alternative manufacturing hub for global firms.

India will need to assert itself with clear incentives, particularly in the land, tax, & labour domains. Changing the perception that India is a competitive place to do business requires that multiple factors are simultaneously addressed-not mere promises of land availability.

#### Is India ready for foreign firms relocating their setups

Land availability is a testissue for foreign ed investors. By allocating land outright, India will solve a major concern for foreign firms looking to invest in the country. In the past, companies such as Saudi Aramco, the Saudi Arabian Oil Company, and Posco, the South Korean steel-making company, have faced immense frustrations around land acquisition in India.

In case of Saudi Aramco, India is yet to find land for the US\$60 billion-dollar oil refinery project, which is jointly constructed by the oil giant & the UAE's Abu Dhabi Oil National Company (ADNOC). The project has several hurdlesfaced initially, it was proposed to be built at Nanar in the Ratnagiri district of Maharashtra.

However, the project was later shifted to another district in the state due to protests from local farmers. Even after the project was shifted to Raigad, land acquisition continued to be difficult.

Since November 2019 there has been no update regarding the project. Likewise, in the case of Posco Steel, the company faced similar hindrances when it tried to set up a US\$12 billion steel plant in the state of Odisha. The South Korean company faced resistance in acquiring land, primarily from betel leaf farmers. The MoU expired in 2012, and the project failed to take off.

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# Most US Small Businesses Say They're Looking...

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were forced during the pandemic to find new markets beyond their own neighbourhoods. All they need to do is set up a foreign currency account at a bank, or firms like OFX, and then they can start taking sales orders from whichever currency they are set up to take orders in. Got an Etsy account showcasing your wares? Sell to Brazil. Sell to China, even. That's exactly what China has been doing for years, throughout Asia and into the US. Alibaba was built for that.

A total of 83% of the OFX respondents said international markets could offer a good opportunity for them to grow their business as they try recovering from the pandemic. Most Americans have pointed fingers at China. Others at their own failed national leadership.

"Everyone has a vested interest in the trade relationship with China, including the Chinese," says Sokol. His company is wholly dependent on China. No China factories are operational because of a crisis, no shoes to sell and showcase to buyers even if you're not in a crisis.

"We are looking for alternatives. We need to. Preferably someone that doesn't come with this kind of political tension," Sokol says. "But I'll tell you this much...if China didn't induce this much stress, we would stay there."

### **4** IN THE PUBLIC EYE

# A Lot Of Groundwork Needed For FDIs...

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Currently, foreign firms have to acquire land on their own if they are interested in setting up a factory in India. By providing land with power, water, and road access, the Indian government is looking to solve major hurdles for potential foreign investors.

However, to develop this land pool, the Indian government will need to work closely with state governments to ensure that foreign investors are not faced with the same challenges again.

In fact, the state governments have been asked to build their own programmes in order to attract foreign investments. This will be key and what investors need to assess is: do the pitches from central government officials align with state government ministers and bureaucrats, who are the key stakeholders on the ground, what are the important timelines, and how is the particular industry or sector regulated, to name a few considerations.

Firms are advised to seek on-the-ground intelligence about proposed investment sites, local players, reliability of administrative officials and implementation of rules and regulations, clarity on tax incentives and liabilities, the industrial established ecosystem-feeder industries, backward, and forward linkages, real estate market, labour market, and utilities, among other factors.

#### Incentives offered by Indian states

Several states in India have relaxed labour laws for new projects in their states to restart industrial activity, and in a clear bid to attract foreign investment. The move has been met with some criticism but it is unlikely that states will roll back these changes.

For instance, in the state of Gujarat, all new projects that operate for at least 1,200 days or are operational for 1,200 days will be exempted from all labour laws, except three. Only labour laws pertaining to paying minimum wages, following safety norms, and compensation for workers in case of industrial accidents will be applicable. Gujarat will also allow laborers to work a 12-hour shift, instead of 8-hour shifts, with extra pay for the additional work hours.

The Gujarat government says that it has identified nearly 33,000 hectares of land for foreign companies looking to shift their operations from China. Further, the state government is offering incentives for manufacturing units in more than 30 sectors.

It is banking on its air connectivity and 48 large ports as a major advantage for investors.

Meanwhile, the south western state of Karnataka is playing to its strengths - providing skilled manpower and showcasing an already established industrial and technology ecosystem.

The state capital, Bengaluru, is the top spot for foreign investors in India's IT sector. The state government has built a 500-acre Japan Industrial Township for Japanese firms who want to set up in Karnataka. The government has identified

land near Bengalury, and "will also activate work on clusters, includina the 'Compete with China' clusters, which have been created anticipating largescale manufacturing," said a state government official. The northern state of Uttar Pradesh, which is said to be in talks with foreign companies in sectors, such as defense and aerospace, is developing an online system for land allotment for all industrial and commercial purposes.

On the other hand, the south eastern state of Andhra Pradesh is looking to provide subsidies to reduce burden on companies who move their production to the state.

Meanwhile, Telangana, which is an existing IT/ITeS hub in India, has also carved out a few industrial parks in the state, including the Kakatiya Integrated Mega Textiles Park, Sircilla Apparel Park, four mega food parks, and Pharma City near capital, Hyderabad. With these setups in place, Telangana is ready to pitch itself across diverse industries to foreign investors.

#### India must compete with other Asian countries to attract FDI

Major manufacturing and export-oriented economies like Vietnam, Indonesia, and Thailand in Southeast Asia as well as Bangladesh in South Asia, will offer competitive incentives to attract foreign investment into their respective countries.

In a study by Nomura, a Japanese financial group, only three out of the 56 companies that relocated their production out of China between April 2018 and August 2019-chose India. Two relocated to Indonesia, eight to Thailand, 11 to Taiwan, and 26 to Vietnam. While India's bold announcement makes land available for foreign companies, it fails to address details-acquisition criteria and role of stakeholders, for example. In the past, clashes with farmers and landowners have led to delays, and even closures of projects. Therefore, the government should ideally acquire the land and ensure that local interests are balanced with the interests of foreign investors.

### India has to develop its supply chain capacity

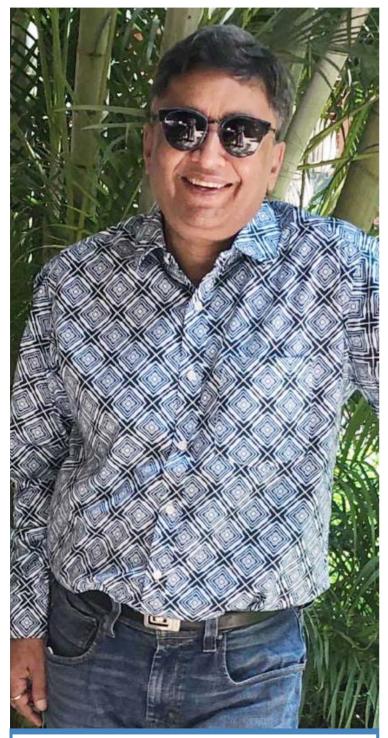
To emerge as a viable option for foreign firms, India needs to become a part of the global supply chain. Currently, the Indian supply chain only caters to a few industries in a handful of sectors.

India needs to continue building and strengthening its supply chain capacity if it wants to emerge as an alternate manufacturing destination. While the country slashed its corporate tax rate last year to compete with the ASEAN emerging economies, New Delhi will need to do more in the form of additional tax incentives, import subsidies, clarity on retrospective tax liabilities, and area-wise support measures.

All of these are a given in the Southeast Asians markets who are vying for their share of the foreign investment moving out of China.

### RENDEZVOUS 5

# 'Our Focus On Sustainability Is Paying Rich Dividends'



For Sanjeev Bhartia, nature is all that matters. Here, he is seen wearing DWPL's in-house creation-a digitally printed, bamboo/hemp shirt (with nature in the backdrop).

Dhanesh Weaving is the go-to company for sourcing fabrics made from sustainable, high value, natural and manmade fibres. It is among the few textile companies in the country that has identified sustainability as its long term objective and vision. In an exclusive interview with **Reena Mital, Sanjeev Bhartia, Marketing Director, Dhanesh Weaving Pvt. Ltd.**, talks about how the pandemic has brought in over US\$ 100 million export business for the company, and DWPL's interesting plans for a sustainable, circular textile economy in India.

#### hanesh Weaving is into some very innovative textiles. What made you opt for these products?

Dhanesh Weaving has been a family-run business for three generations, it's a very innovative and progressive company in India. We produce the finest quality fabrics in various compositions and constructions. We have the facility to produce fabrics from sustainable fibres like organic cotton, bamboo, Modal, hemp and hemp blends.

Our in-house production facility has a slew of rapiers and projectile weaving machines that deliver impressive volumes as well as impeccable quality of fabric In addition, our machines are equipped with 22 shafts Staubli dobby and come with electronic double beam attachment.

When I joined the company few years back as a marketing director, we took a conscious decision to have a new Sustainable Division. It is like a shop-in-shop.

We source most of our fibre and yarn requirements

from India. Some special yarns and fibres are imported from France, Belgium and UK.

#### Tell us about Dhanesh Weaving's collaboration with UK's Le Metier?

Le Metier management team has been leading the field in textile innovation since 1971 and they produce contemporary and high fashion, quality textiles for major high street brands in the UK, Europe and for USA. We have a strong manufacturing base, hence collaboration with Le Metier was a natural progression.

Up until a few months ago, most of our exports were through Le Metier, UK. We started working on hemp and hemp based products few years ago. With our innovative products, we have penetrated into all the six continents and also in 21 US states.

#### How has the current pandemic impacted your business?

Keeping in mind the

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### 6 SPECIAL REPORT

# The Industry Needs A Change Of Mindset To Succeed Post-Lockdown

.V. Aras, Director, A.T.E. Enterprises, in a recent TAI webinar, adeptly brought out some interesting facts and strategies about Unlock India. "The industry, as we know, is struggling to restart. We are faced with shortage of labour, a near

absence of demand, and a lot of uncertainty," said Mr Aras, listing out the main challenges in front of the industry today.

According to Mr R.D. Udeshi, President, Polyester Chain, Reliance Industries Ltd, "The challenges are as you list out. What is a challenge and a solution is how the way of doing business has changed. People are working efficiently from their homes, having virtual business meetings, and webinars."

According to Mr S. K. Khandelia, President & CEO, Sutlej Textile, digitalisation of work processes is of paramount importance. "We are in fact moving towards paperless working in our company." He also believes that automation will be the key to facing the current challenges.

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## 'Our Focus On Sustainability Is Paying Rich Dividends'

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extraordinary situation due to the pandemic, we have forayed into anti-viral and anti-microbial products using Swiss technology; viz medical gowns, medical coats, face masks. All these are made of hemp fabric. Our customers just loved these, we are inundated with orders. We are negotiating orders of US\$ 100 million for these medical apparel made from hemp fibre. This will certainly catapult us amongst the top textile companies of India.

Otherwise, it's the same story for us too - our factory was completely closed for a few months; there are cancelled orders and various other issues. We are working at 20% of our capacity now. Everything is still uncertain. Fortunately our export business is looking up.

#### Dhanesh Weaving has made remarkable progress in the last two years. Can you elaborate on your journey?

We started the Sustainable Division a few years back. It was kind of a challenge for me to make this division successful. We started with our Iron Zero (wrinkle-free) cotton from the UK. All leading stores in India lapped it up because of its high quality and soft and silky finish.

After that we introduced this wonderful fibre called hemp. Let me elaborate some of the amazing properties of hemp.

- Hemp is naturally antimicrobial and UV rays resistant.
- Hemp retains colour better than any other fabric.
- It saves water! Hemp uses only 1/20th the amount of water as regular cotton to grow and process.
- Hemp uses almost no water to grow and can usually be rain-fed.
- Unlike other natural fibres like cotton, which deplete the soil of nutrients, hemp can be grown consecutively for over twenty years without the soil being affected.
- Hemp is deliciously soft on the skin, more and more with each wear.

As I mentioned earlier, we have now decided to offer all

our hemp-based products with anti-viral and antimicrobial finish, with Swiss Technology (FDA approved). Hence, introducing hemp has completely changed the business scenario.

#### According to you, what prevents more textile companies from opting for these high value fibres?

My answer is very simple. Firstly, high cost of inputs. Secondly, most of the companies do not have the expertise and infrastructure to manufacture products as per international demand.

# Tell us about your work in textile recycling and textile circular economy.

We are still in a very nascent stage. Due to the pandemic, there is a cash flow problem. So we plan to start a full-fledged recycle industry by July 2021. We have already made a project report.

We are looking for an investor. Our plan is to start a unit for manufacturing all kinds of recycled fibres, yarns and fabrics in linen, wool, silk. hemp, etc. Textile circular economy is the need of the hour.

# What are the challenges towards establishing a textile circular economy?

There are a few companies in India working on it but in an unorganised manner. This is because of lack of awareness and a sizeable market to ensure viable production. I find that developed countries are far ahead than India in textile circularity, but overall, we still have a long way to go.

# What is the vision of Dhanesh Weaving in the coming years?

We are strong advocates of sustainable and environment-friendly textile manufacturing and products. We have big plans for establishing a circular textile economy.

Our focus on sustainability has already started paying rich dividends. We hope to achieve bigger export turnover compared to domestic turnover in the year 2021-2022, with much better top line and bottom line.

### SPECIAL REPORT 7

# The Industry Needs A Change Of Mindset To Succeed Post-Lockdown

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For Rahul Mehta, Mentor, CMAI, it is important to change the mindset of the industry to successfully tide over the changes in the way of doing business. "There is a saying that it's difficult to change a man and it's almost impossible to change a successful man. We need to bring in new blood into the industry, create an entirely new set of leadership," he stresses.

For Mr Narendra Dalmia, Director, Strata Geosystems, the lockdown posed challenges in that it became a little difficult to fulfill the export orders that the company was inundated with, given that it operates in the road construction sector. And road and infrastructure are a priority in every country, and one of the businesses that had not stopped. "However, we had to deal with some labour leaving for their home towns, and production capacity had to be cut. However, we had managed to retain most of our workers, and as orders started pouring in, it was relatively easy to restart our factory. Besides, the pandemic helped us to improve our systems, our work processes, to become more efficient."

Agreed Mr Rajeev Jain, Chief Executive, Yarn Business, RSWM, "This situation has forced us to align our working despite the many restrictions. It has made us relook at cost factors, that were earlier not taken too seriously. These



changes will become a habit, and will help businesses get leaner and agile."

### Moving from cotton to polyester

According to R. D. Udeshi, the government has taken a lot of policy measures to bring cotton and polyester at par in terms of taxes and duties; the industry has excellent upstream facilities; the industry realises that the future is synthetics. "It's now necessary for mindsets to change. We have to think of setting up large capacities, like 1 billion metres of fabric per day kind of capacity that is needed in the industry today. Then, we need to match this with the requisite, processing world-class capacity too. The geopolitical issues in the world today will support India becoming a textile and apparel supplier to the world. So, we have to act quickly."

### How to increase India's apparel exports

Rahul Mehta reiterated what we've been hearing for over 20 years - India needs to diversify its product base, and move into formalwear, synthetic-based apparel, perform ancewear, winter wear, sportswear.

"As an industry, we have never paid attention to productivity, even though this is the only thing that we have control over in our factories. Today the buyer nominates the fabrics which we have to buy, the price at which we have to buy, the number of toilets in the factory, the distance between the head of one worker and the nose of the second worker, the salaries that we have to pay to our workers - virtually everything is dictated by the buyer.

The only thing we have in our hands is the number of shirts that we produce per day per machine. And unfortunately, we have never focussed on that."

He further advised the industry to stop being scared of large scale production at one place, and of labour unrest, etc. "This had kept our industry technologically backward, even though immense opportunities exist in the world."

Giving the example of the home textiles sector, Mr Khandelia reiterated Mr Mehta's point that worldclass manufacturing facilities with scale, quality design capabilities, product and process innovation, marketoriented approach, organic and inorganic growth by acquiring international brands - are some of the different strategies that helped this sector's remarkable performance.

#### 4.0 Smart Factory

As automation and digitisation become the answers to running business with restrictions and shortage of labour, RSWM has been way ahead of the competition in adopting these changes.

Says Rajeev Jain, "Way back in 2011, we had decided to invest in the fullest level of automation, installing the latest technologies in our factory. The kind of productivity and level of consistency quality we achieved was just awesome. And even after 8-9 years, our factory is among the most automated in the country. So definitely, to move up the textile chain in the global market, to achieve the ranking that India deserves, automation, Industry 4.0 is the answer."

### Medical textiles, PPEs, and India's capabilities

The current trend in manufacturing of PPEs, where India within a few months set up capacities to manufacture 400,000-500,000 PPE suits a day, shows the capabilities and resilience of the Indian textile industry. Moreover, these suits are sold at Rs 500-600 per suit, against Rs 2000-2500 per suit when imported. Similarly, with other medical textiles, the pandemic just gave the necessary boost to this sector.



# How Many Jobs Do Robots Really Replace?

MIT economist Daron Acemoglu's new research puts a number on the job costs of automation.

n many parts of the US, robots have been replacing workers over the last few decades. But to what extent, really? Some technologists have forecast that automation will lead to a future without work, while other observers have been more skeptical about such scenarios.

Now a study co-authored by an MIT professor puts firm numbers on the trend, finding a very real impact although one that falls well short of a robot takeover. The study also finds that in the US, the impact of robots varies widely by industry and region, and may play a notable role in exacerbating income inequality. "We find negative fairly major employment effects," MIT economist Daron Acemoglu says, although he notes that the impact of the trend can be overstated. From 1990 to 2007, the study shows, adding one additional robot per 1,000 workers reduced the national employment-topopulation ratio by about 0.2%, with some areas of the US affected far more than others.

This means each additional robot added in manufacturing replaced about 3.3 workers nationally, on average. That increased use of robots in the workplace also lowered wages by roughly 0.4% during the same time period.

"We find negative wage effects, that workers are losing in terms of real wages in more affected areas, because robots are pretty good at competing against them," Acemoglu says.

#### Displaced in Detroit

To conduct the study, the economists used data on 19 industries, compiled by the International Federation of Robotics (IFR), a Frankfurtbased industry group that keeps detailed statistics on robot deployments worldwide. The researchers also compared robot deployment in the US to that of other countries, finding it lags behind that of Europe. From 1993 to 2007. US firms actually did introduce almost exactly one new robot per 1,000 workers; in Europe, firms introduced 1.6 new robots per 1,000 workers.

"Even though the US is a technologically verv advanced economy, in terms of industrial robots' production & usage & innovation, it's behind many other economies," advanced Acemoglu says. In the US, four manufacturing industries account for 70% of robots: automakers (38% of robots in use), electronics (15%), the plastics and chemical industry (10%), & metals manufacturers (7%).

Michigan has the highest concentration of robots in the workplace, with employment in Detroit, Lansing, and Saginaw affected more than anywhere else in the country. However, in a subtle twist, adding robots in manufacturing benefits people in other industries & other areas of the country-by lowering the cost of goods, among other things. These national economic benefits the are the reason researchers calculated that adding one robot replaces 3.3 jobs for the country as a whole.

#### The inequality issue

The study suggests that robots have a direct influence on income inequality. The manufacturing jobs they replace come from parts of the workforce without many other good employment options; as a result, there is a direct connection between automation in robot-using industries & sagging incomes among blue-collar workers.

"There are major distributional implications," Acemoglu says. When robots are added to manufacturing plants, "The burden falls on the low-skill and especially middle-skill workers. That's really an important part of our overall research on robots, that automation actually is a much bigger part of the technological factors that have contributed to rising inequality over the last 30 years." So while claims about machines wiping out human work entirely may be overstated, the research by Acemoglu and Restrepo shows that the robot effect is a very real one in manufacturing, with significant social implications.

#### Robots help some firms, even while workers across industries struggle

The study further reveals that firms that move quickly to use robots tend to add workers to their payroll, while industry job losses are more concentrated in firms that make this change more slowly. The study, by MIT economist Daron Acemoglu, examines the introduction of robots to French manufacturing in recent decades, illuminating the business dynamics and labour implications in granular detail.

"When you look at use of robots at the firm level, it is really interesting because there is an additional dimension," says Acemoglu. "We know firms are adopting robots in order to reduce their costs, so it is quite plausible that firms adopting robots early are going to expand at the expense of their competitors whose costs are not going down. And that's exactly what we find." Indeed, as the study shows, a 20 percentage point increase in robot use in manufacturing from 2010 to 2015 led to a 3.2% decline in industry-wide employment. And yet, for firms adopting robots during that timespan, employee hours worked rose by 10.9%, and wages rose modestly as well.

#### A French robot census

To conduct the study, the scholars examined 55,390 French manufacturing firms, of which 598 purchased robots during the period from 2010 to 2015. The 598 firms that did purchase robots, while comprising just 1% of manufacturing firms, accounted for about 20% of manufacturing production during that five-year period.

The manufacturing industries most heavily adding robots to their production lines in France were pharmaceutical companies, chemicals & plastic manufacturers, food & beverage producers, metal and machinery manufacturers, and automakers.

The industries investing least in robots from 2010 to

#### July 1-15-2020 Textile Excellence



2015 included paper and printing, textiles and apparel manufacturing, appliance manufacturers, furniture makers, and minerals companies.

The firms that did add robots to their manufacturing processes became more productive and profitable, and the use of automation lowered their labour share the part of their income going to workers - between roughly 4 and 6 percentage points. However, because their investments in technology fueled more growth and more market share, they added more workers overall.

By contrast, the firms that did not add robots saw no change in the labour share, and for every 10 percentage point increase in robot adoption by their competitors, these firms saw their own employment drop 2.5%. Essentially, the firms not investing in technology were losing ground to their competitors.

### Stronger links between automation & inequality

The study further suggests that automation has a bigger impact on the labour market and income inequality than previous research would indicate - and identifies the year 1987 as a key inflection point in this process, the moment when jobs lost to automation stopped being replaced by an equal number of similar workplace opportunities.

Within industries adopting automation, the study shows, the average "displacement" (or job loss) from 1947-1987 was 17% of jobs, while the average "reinstatement" (new opportunities) was 19%. But from 1987-2016, displacement was 16%, while reinstatement was just 10%. In short, those factory positions or phone-answering jobs are not coming back.

"A lot of the new job opportunities that technology brought from the 1960s to the 1980s benefitted lowskill workers," Acemoglu adds. "But from the 1980s, and especially in the 1990s and 2000s, there's a double whammy for low-skill workers: They're hurt by displacement, and the new tasks that are coming, are coming slower and benefitting high-skill workers."

#### Low-skill workers: Moving backward

Acemoglu and Restrepo constructed a model of technology's effects on the labour market, while testing the model's strength by using empirical data from 44 relevant industries.

The result is an alternative to the standard economic modeling in the field, which has emphasised the idea of "skill-biased" technological change - meaning that technology tends to benefit select high-skilled workers more than low-skill workers, helping the wages of high-skilled workers more, while the value of other workers stagnates.

However, Acemoglu and Restrepo think even this scenario, with the prosperity gap it implies, is still too benign. Where automation occurs, lower-skill workers are not just failing to make gains; they are actively pushed backward financially. Moreover, Acemoglu and Restrepo note, the standard model of skill-biased change does not fully account for this dynamic; it estimates that productivity gains & real (inflation-adjusted) wages of workers should be higher

than they actually are.

More specifically, the standard model implies an estimate of about 2% annual growth in productivity since 1963, whereas annual productivity gains have been about 1.2%; it also estimates wage growth for low-skill workers of about 1% per year, whereas real wages for low-skill workers have actually dropped since the 1970s.

"Productivity growth has been lackluster, and real wages have fallen," Acemoglu says. "Automation accounts for both of those." Moreover, he adds, "Demand for skills has gone down almost exclusively in industries that have seen a lot of automation."

### Why "so-so technologies" are so, so bad

Indeed, Acemoglu says, automation is a special case within the larger set of technological changes in the workplace. As he puts it, automation "is different than garden-variety skill-biased technological change," because it can replace jobs without adding much productivity to the economy.

Think of a self-checkout system in your supermarket or pharmacy: It reduces labour costs without making the task more efficient. The difference is the work is done by you, not paid employees. These kinds of systems are what Acemoglu and Restrepo have termed "so-so technologies," because of the minimal value they offer.

"So-so technologies are not really doing a fantastic job, nobody's enthusiastic about going one-by-one through their items at checkout, and nobody likes it when the airline they're calling puts them through automated menus," Acemoglu says. "So-so technologies are cost-saving devices for firms that just reduce their costs a little bit but don't increase productivity by much. They create the usual displacement effect but don't benefit other workers that much, and firms have no reason to hire more workers or pay other workers more."

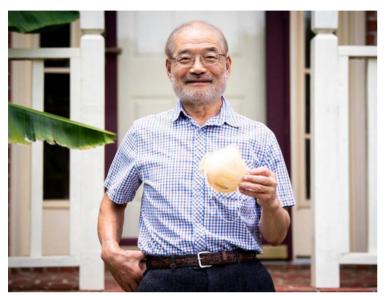
To be sure, not all automation resembles selfcheckout systems, which were not around in 1987. Automation at that time consisted more of printed office records being converted into databases, or machinery being added to sectors like textiles and furniture-making. Robots became more commonly added to heavy industrial manufacturing in the 1990s. Automation is a suite of technologies, continuing today with software and AI, which are inherently worker-displacing.

"Displacement is really the centre of our theory," Acemoglu says. "And it has grimmer implications, because wage inequality is associated with disruptive changes for workers.

It's a much more Luddite explanation." After all, the Luddites - British textile mill workers who destroyed machinery in the 1810s may be synonymous with technophobia, but their actions were motivated by economic concerns; they knew machines were replacing their jobs. That same displacement continues today, although, Acemoglu contends, the net negative consequences of technology on jobs is not inevitable. We could, perhaps, find more ways to produce job-enhancing technologies, rather than job-replacing innovations.

### 10 | FIGHTING COVID-19

# Tennessee Scientist Makes It Possible To Reuse N95 Respirators



Before the coronavirus pandemic, Dr. Peter Tsai was far from a household name. Even though he was well-respected as a materials scientist and inventor, very few people had heard of him.

Until now.

Covid-19 dragged one of Tsai's inventions into the spotlight. He is the creator of the filter material inside most disposable N95 respirators. As the pandemic worsened, health care workers nationwide needed the masks to stay safe, which means there were shortages and massive price markups.

The shortage was so dire that it brought Tsai out of retirement to dive headfirst into solving the crisis.

Since mid-March, Tsai has been a worldwide force on two fronts: finding new ways to sterilize disposable respirators for reuse and rapidly scaling up their production. "My invention is just an ordinary invention," the 68-year-old says humbly. "But because of the need for the respirators, people think it is very important."

Tsai's invention is not new. He filed the first patent for the filtration technology back in 1995. His invention gives the masks' filter fabric a permanent electrostatic charge by exposing it to a halo of electricity. Scientists call this an electrical "corona." Tsai named his process "coronal charging." The irony of the name is not lost on Tsai. "I use coronal charging to fight coronavirus," he joked. Tsai has had a long career in textile manufacturing and engineering. He graduated from what is now National Taipei University of Technology in 1975. He worked for several years in manufacturing before moving to the US in the 1980s to earn a doctorate in materials science at the University of Kansas.

During his research career at the University of Tennessee-Knoxville, Tsai developed his filtration technology further while pursuing other projects. He holds 12 US patents in filtration technology and other areas.

While his material and production processes made a huge difference in the world, it wasn't front page news. He retired in late 2019. Then you know what happened this year.

"I felt very stressed in the very beginning," he said. "I got a lot of pressure and a lot of questions." He knew the kinds of stress the respirators could tolerate, and he published these thoughts in the Journal of Emergency Medicine in a special emergency article. He turned his home into a lab and published more results.

One group donated an ozone machine commonly used in hospital sterilization to see if that would work. Tsai boiled and steamed masks. He borrowed a neighbour's oven to see if masks could be safely heated using common kitchen appliances. He exposed respirators to sunlight. The masks were then tested again to see if they lost filtration power.

Ozone was a no-go because it ruined elastic or rubber ear loops. Wet heat had to be applied carefully to avoid deforming the masks. Home ovens heated too unevenly and inaccurately. Alcohol ruined the filters. Other techniques, like dry heat and hydrogen peroxide, seemed more promising.

But Tsai couldn't fully test every technique, nor could he validate that it killed viruses. This worried him. "I started wondering whether people were using my methods without validation," Tsai said. "If it does not really sterilize the mask and people reuse them, then we would have a lot of trouble."

He reached out to other scientists and got in touch with a team at the University of Tennessee Medical Center to validate his approaches. N95DECON, an interdisciplinary research group, also got in touch. It ran its own tests to validate some of his suggestions in addition to others. N95DECON recommends versions of some of Tsai's initial approaches for sterilization. Its validation studies cite communications with Tsai and the experiments of over a hundred N95DECON members. Their results echo some Centers for Disease Control and Prevention suggestions for mask sterilization.

But reusing masks is only half the battle.

The world faces a crucial supply shortage. Few domestic suppliers make N95 filtration material. Half the world's N95 masks are manufactured in China. The Food & Drug Administration recently deauthorised many models of N95 masks from being reused.

Unbeknownst to Tsai, Oak Ridge National Lab was gearing up to try to address the problem. "We have a labwide initiative effort on Covid-19," said Dr. Merlin Theodore, director of the Carbon Fiber Technology Facility at ORNL. She explained that the facility was struggling to come up with a way to convert its machines to make the filter fabric and was looking to enlist local experts.

Dr. Lonnie Love, a lead scientist in ORNL's Covid

Contd. On Page 13...

# KG Denim Develops Reusable PPE Coveralls

The Coimbatore-based textile manufacturing company claims that they have developed personal protective equipment (PPE) coveralls which are reusable for up to 80 washes.

G Denim has developed personal protective equipment (PPE) coveralls which are reusable for up to 80 washes. Speaking to news agencies, company officials said, "These PPE coveralls have been designed such that they have the ability to recharge chlorine in fabric for nearly 80 washes. It has anti-microbial certification from SITRA."

"Disinfecting properties of chlorine is built in our fabric and is active on its surface



for two weeks. On washing, chlorine is absorbed again by

the fabric giving it antimicrobial facility. Property available in the fabric in first wash is available even after 80 washes," they said.

FIGHTING COVID-19

The PPE kits which are presently being used are not reusable, and can be used only for one day. The used PPE have to be incinerated, but many times have been simply disposed in the garbage, which can create serious problems.

"Our technology binds chlorine with the fabric and kills 99.5% of many common bacteria and virus. We have the capacity of producing 15,000 metres of these antiviral fabrics," the company said.

# Tennessee Scientist Makes It Possible To Reuse N95 Respirators

#### ....Contd. From Page 12

manufacturing task force, remembered Tsai but couldn't put his finger on why.

"He remembered the name and couldn't remember why so he asked his wife," Theodore said. As it turns out, Tsai was neighbours with Love's mother-inlaw. After that, they quickly made contact.

"He came that very same week, fully suited up. He brought his own equipment," Theodore said. "He reminded me of someone going to war."

With Tsai's expertise, the team at ORNL was able to quickly convert its carbon fibre processing facility into a filtration cloth facility.



Within a week it was able to produce filter cloth. Theodore says it's impossible to say how much time Tsai's involvement saved.

"Just imagine the amount of experiments you'd have to run to determine a process that works," Theodore said. "That can average from months to years. But we didn't have to because he had already done all the experiments."

The ORNL facility can produce enough material for roughly 9,000 masks per hour. It's shipping the material to academic and national labs for research purposes. Theodore explained that for the market, ORNL worked with industry partners to get the fibre technology into domestic manufacturers' hands quickly.

A spokesperson for ORNL confirmed that it had assist-

ed a filtration material manufacturer based out of Cookeville, Cummins, with the installation of equipment to produce Tsai's filter technology.

Tsai said this was far from the only consulting work he had been doing. He said he'd been doing pro-bono consulting work and research around the clock.

Theodore said Tsai vigorously tried to turn down payment for his work with ORNL but had to be paid per ORNL policy. Tsai said that being helpful during this time was all that mattered to him. "This is an opportunity for me to contribute to the community," he said. "If I can do this, it will be a good memory for the rest of my life."

The work has not been without its toll. Tsai said that since the start of the pandemic, he had lost 10 pounds, but he was optimistic.

"Someone said I should get a Nobel Prize," Tsai joked. "But what I deserve is a 'No Belly' prize."

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# Liva Launches Anti-Microbial Fibres

Making Care Fashionable



iva, the fashion ingredient brand from Birla Cellulose, has launched anti-microbial fibres, a breakthrough innovation that not only kills viruses and bacteria, but also inhibits their growth, keeping the fabric fresh and hygienic in the long run.

The latest innovation -Liva with added protection of anti-microbial fibres - is a leap forward in fashion. The anti-microbial agent is injected into the viscose staple fibre, which when woven or knitted into a fabric, offers protection to the wearer from bacteria and viruses, lasting over multiple washes while retaining comfort, fluidity and softness of the fabric. Liva's special fabric inherently possesses antimicrobial properties which kills 99% of bacteria and viruses and also inhibits their growth on apparels and home-textiles, thereby making it safe for the user.

Introduced in a first ever virtual launch through a webcast, Rajeev Gopal, Group Executive President and Global Chief Sales and Marketing Officer, Pulp and Fibre Business, Aditya Birla Group said, "Anti-microbial products are currently the need of the hour and will continue to be the point of focus in the near future.

Liva with added protection of anti-microbial fibres by Birla Cellulose, offers long lasting protection, while keeping the fashion quotient high. At Liva, our aim is to make apparels and hometextiles safe without compromising on performance and fashion."

#### Benefits

Developed using in-house technology by Birla Cellulose's Research & Development team, antimicrobial agents are injected during the fibre manufacturing stage, making it an integral part of the fibre and providing durable antimicrobial properties. The science behind the technology involves the active agent being strongly bonded with the substrate, resulting in excellent durability to wash and wear. The interactions between cell membrane of the microbe and the active agent causes the interruption of all essential functions of the cell membrane and, consequently, the cell membrane gets ruptured and destroys the microbe.

These agents inherently bond with fibres, resulting in excellent durability to wash and wear and helps retain anti-microbial effectiveness through multiple washes. This effectiveness is tested under stringent ISO standards and authenticated by international labs. Moreover, due to its nature-based ori-

gin, the fabric is skin-friendly. Killing of microbes inhibits odour development, keeps the fabric fresh and increases hygiene. Liva with added protection of anti-microbial fibres by Birla Cellulose, can he used in producing menswear. womenswear, kidswear, athleisure, intimate wear, accessories and in home textile applications.

#### Traceability & transparency for the value chain

Liva with added protection of antimicrobial fibres by Birla Cellulose has a unique tracer in its fibre which helps in source verification at all stages of the textile value chain and removes any possibility of counterfeit or dilution. Blockchain Technology based tool - Green Track<sup>™</sup> is used to trace upward and downward value chain, to maintain authenticity of data.

# Grim Outlook Continues For Cotton Farmers

ast week's release from the US Department of Agriculture showing cotton supply/demand numbers and projections paints a grim picture for cotton farmers across the globe.

Prices remain dismal for cotton farmers. New crop December futures have fallen back to 59 to 60 cents per pound. Price direction will depend largely on demand and exports and US crop size and condition.

Some of the report's highlights include:

- The 2020 crop is still projected at 19.5 million bales.
- US exports for the 2019

crop year remain at 15 million bales.

- US mill use for the 2019 crop year was lowered 200,000 bales.
- US mill use for the 2020 crop year was also revised downward by 100,000 bales.
- World demand for the 2019 crop year was revised down by 2.35 million bales to only 102.65 million bales, which is 17% less than 2018 and the lowest since 2003.
- World use is expected to rebound for the 2020 crop year but the USDA report lowered that increase by 2 million



bales.

Ending stocks for the 2020 crop year are projected to top 104 million bales, almost 5 million bales higher than for 2019 and the largest stocks since 2014 and second highest on record. "The report suggests that

rebound in demand/use from the coronavirus pandemic may be slower than earlier projected," analysts say.

"We need to think of ways to invigorate the US textile mill industry so we are not as dependent on exports. Large stocks in China used to be the problem.

Stocks in the ROW (Rest of the World) are now the problem."

# Maharashtra Govt Offers Guarantee To Mahafed's Rs 1,000 Cr Loan

n a major decision that will help clear the cotton procurement dues of farmers, the Maharashtra State Cabinet gave a nod to offering government guarantee to additional loan of Rs 1,000 crore, obtained by Maharashtra State Co-operative Cotton Growers Marketing Federation.

According to Anantrao Deshmukh, Chairman of the Cotton Federation, the federation had taken a loan of Rs 2,300 crore previously to make payment to farmers for cotton procured from them.

At that time, the state government had given a guarantee for Rs 1,800 crore of the loan amount. "Recently, we have obtained additional loan of Rs 1,000 crore.

Thus, the total loan obtained by the Cotton Federation for clearing dues of farmers is Rs 3,300 crore. We had sought government guarantee for a total of Rs 1,500 crore.

However, the state cabinet has cleared government guarantee for Rs 1,000 crore only," he said.

Besides, the State Cabinet also decided to waive guarantee charges applicable for the new guarantee.

Interestingly, as per the official press release, already, the state has given government guarantee to a loan of Rs 1,800 crore obtained by the Cotton Federation for payment to farmers.

According to Deshmukh, the Cotton Federation had exhausted its funds and hence had obtained additional loan. The loan was raised as the Cotton Federation had to pay the farmers within seven days of procurement.

#### Graders warn of stir

Anantrao Deshmukh, Chairman of the Cotton Federation, attracted the attention to another issue as well. Graders' Association had resorted to a day's 'no work' agitation last week, and had warned to go on indefinite strike from June 30 if the government did not meet their demand, he said. According to Deshmukh, despite start of monsoon season the Cotton Federation was forced to procure cotton from farmers. The graders were complaining of pressure on them to procure even the wet and sub-standard quality of cotton, he said.

"Such forced procurement of wet and sub-standard quality of cotton would cause loss to the government.

The graders and officials involved are afraid that they would be held responsible for this loss at a later stage. Hence, they want assurance from the government that they would not be held responsible for loss arising out of forced procurement of wet cotton," he said.

If their demands are not met, the graders and officials have threatened to go on indefinite strike from June 30, he added.

# Maharashtra Govt Procures 50% Of Cotton In State

Maharashtra clock a fiveyear high in terms of government procurement of cotton. With over 92% payment cleared for farmers, the government is confident of finishing the process within the next few days.

Maharashtra reported an all-time high 44 lakh hectares of cotton acreage and production of 407 lakh quintals (80 lakh bales each of 170 kg) of cotton. Since the start of the season, the fibre crop has been trading well below its government declared minimum support price (MSP) of Rs 5,500 per quintal. Both the Cotton Corporation of India (CCI) and the Maharashtra State Cooperative Cotton Marketing Federation had waded into procurement of cotton to help farmers. Till March 2020 - that is before the lockdown was announced - both the CCI and the Federation had effected payment of 145.06 lakh quintals of cotton.

Anoop Kumar, principal secretary of animal husbandry, dairy development fisheries and marketing, said the impasse created by the lockdown was resolved by talking to individual district collectors to restart

the process of government procurement. Thus, the number of both procurement centres as well as ginning and pressing units were increased substantially. The federation, which had 74 procurement centres and 127 pressing and ginning units prior to the lockdown, increased it to 89 and 170 respectively. Similarly CCI, which was operating 84 procurement centres and 181 processing units, increased it to 85 and 231 respectively.

Data shared by the state marketing department shows that till date both the government agencies have effected procurement of 200 lakh quintals of kapas (unginned seed cotton) while private traders have procured 198 lakh quintals. Thus, only a small fraction of 407 lakh quintals still remain with the farmers which the Federation and CCI say will be procured in the next few days. "In areas where the procurement centres did not have water-proof structures to protect the cotton, the APMCs had erected sheds," he said. Till date, of the Rs 10,463.25 crore to be paid to farmers in way of MSP, Rs 9946.46 crore has been paid. "The remaining amount will be cleared soon," he said. ■

# Forced Labour Persists In Uzbekistan's Cotton Fields

U zbekistan has made important strides in reducing the use of forced labour in its cotton sector, but has yet to eliminate it completely, according to new research released last week.

Uzbek Forum, an international non-governmental organisation, investigated six regions of Uzbekistan to assess the prevalence of forced labour in the 2019 cotton harvest.

Two independent human rights activists also conducted interviews and fact-finding missions in two other regions. They found the central government continues to be involved in mobilising employees of public institutions and enterprises to work on cotton farms, with the fear of job or benefit loss or other reprisals if they refuse.

Those mobilised to work were largely mid-level civil servants, but also included emergency workers, firefighters, hospital, & school employees.

Uzbek Forum also obtained official documents showing labour mobilisation continued to be directed by authorities or was the result of government policy.

Uzbekistan has sought to transform its cotton sector through privatisation and has eliminated a production quota system that drove the need for forced labour.

However, the new research found that farmers enter private contracts under the supervision of local officials to produce a specified amount of cotton, a system which closely resembles the government quotas abolished in March. Some farmers faced penalties and threats for not producing enough cotton, spurring the use of forced labour even on private farms.

The investigation identified the failure of the government to establish a fair recruitment system, independent of government or employer interference, as a major roadblock in eliminating forced labour.

Farmers facing labour shortages do not always have the ability to recruit voluntary workers, so they rely on local government authorities to mobilise labour.

When this occurs, the accountability system is not effective in prosecuting perpetrators or providing remedy to those forced to work, both critical in ending the practice of forced labour.

Uzbekistan wants international brands and investors to return and create much-needed employment opportunities, but the government needs to assure them that forced labour has been eliminated.

An important element to achieving this goal is ensuring space for independent civil society and unions, particularly those who monitor forced labour and support worker organising.

By protecting these fundamental rights, the government can both improve conditions for workers and create opportunities for international business engagement.

# Australia's Cotton Area Lowest Since The 1970s



A ustralia's cotton crop area has plunged to the smallest in four decades as years of drought slashed growers' access to water and prevented planting.

As picking in the country finishes for another season, 2019-20 production is estimated to have decreased 72% on the year to 134,000 tons of lint because of low irrigation water supplies, Australian government forecaster Abares said in its June report. The area planted for cotton is estimated to have declined by 83% to 60,000 hectares, the lowest since 1978-79, according to the report.

Australia's low supplies contrast with the US and much of the world, which is experiencing a cotton glut.

"We're expecting 550,000-600,000 bales once

it's processed," said Adam Kay, chief executive of Cotton Australia.

A bale is 227 kilograms of fibre. "The previous year was 2.2 million bales and the year before that was 4.1 million bales, so you can see the impact of the drought."

Rains in February and March had seen rivers start flowing and had put water in dams, so estimates for next year's crop are more positive at as high as 1.7 million bales, he said. "It's starting to inch in the right direction."

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Much of this year's, and some of next year's output has already been forward sold to China, Kay said, offering some relief to farmers amid the coronavirusrelated demand slump.

Prices have come down due to a lower appetite for the fibre, though the smaller crop size has offered some support compared with prices in competing countries, said Michael O'Rielley, chairman of the Australian Cotton Shippers Association.

"As demand continues to fall away, prices will come under pressure a little more than what they already have," he said.

The world cotton indicator price is forecast to fall by 12% on the year to an average of 63 cents per pound in 2020-21, according to Abares, amid mill closures this year and expected price competition from synthetic fibres.

# Field To Market, US Cotton Trust Protocol Formalise Cotton Sustainability Partnership

ield to Market: The Alliance for Sustainable Agriculture and the US Cotton Trust Protocol have formalised a partnership between the two organisations to document and accelerate sustainable outcomes for US cotton production.

The new partnership combines two of the industry's leading sustainability assessment frameworks, strengthening the ability of cotton growers and the value chain to drive continuous

#### improvement.

Field to Market and the US Cotton Trust Protocol have committed to:

■ Scale grower access to sustainability measurement by enabling farmers enrolled in the US Cotton Trust Protocol to utilise metrics from Field to Market's FieldprintPlatform, allowing growers to analyse the connection between agronomic practices and sustainability outcomes. ■ Track US cotton's sustainability journey through continued publication of Field to Market's National Indicators Report, which will communicate progress against the industry's established environmental targets.

• Foster an increased level of collaboration by participating in each other's meetings and work sessions.

Together, Field to Market and the U.S. Cotton Trust Protocol will assess progress against the US cotton industry's established environmental targets.

By 2025, the industry aims to achieve targeted reductions in soil loss, water use, greenhouse gas emissions and energy use, alongside increased land use efficiency and soil carbon.

The Trust Protocol completed a successful project pilot in 2019, and has begun fully implementing its programs in 2020, with a goal to enroll at least 500 producers by December 2020. 16 | MARKET REPORT

# Market Intelligence Reports

Products	12-May 2020	28-May 2020	12-Jun 2020	28-Jun 2020	% Change		
Brent	32.5	38.0	39.4	39.1	0.6↓		
PFY							
POY 130/34	87	87	81	81	0.0		
POY 250/34	80	80	71	71	0.0		
FDY 70/34	92	92	84	85	1.3↑		
FDY 70/72	96	96	87	88	1.3↑		
FDY 100/48	88	88	81	82	1.4↑		
80 roto	100	100	90	91	1.3↑		
80 Tex	97	97	86	87	1.3↑		
80/108	104	104	93	94	1.2↑		
150 roto	88	88	80	81	1.4↑		
150 tex	85	85	77	78	1.4↑		
150/108	91	91	84	85	1.3↑		
50 flat	101	101	95	96	1.2↑		
75 flat	93	93	83	84	1.4↑		
150/48 Flat	85	85	80	81	1.4↑		
Nylon							
20/1 den	325	325	320	320	0.0		
44 den	260	260	255	255	0.0		
70 den	250	250	245	245	0.0		
PSF							
1.4 den	66	66	66	66	0.0		
1.2/1.0 den	67	67	67	67	0.0		
Cotton price/candy*=355.62 kgs           Beng Desi (RG)         34600         35600         36600         36400         0.5↓							
	34600	35600	36600 37300	36400	0.5↓		
Beng Desi (SG) V797	35000 18600	36000 20000	20500	37100 20500	0.5↓ 0.0		
Jaydhar	27100	27700	27000	26100	3.3↓		
J-34	33500	33400	34800	33700	3.2↓		
H4/ Mech 1	35800	35100	35600	35700	0.31		
Shankar 6	37100	36600	36800	36400	1.1↓		
Bunny/ Brah	38100	37500	37800	37200	1.6↓		
DCH-32	53400	53400	53800	53600	0.4↓		
Spun yarn	1/2	1/2	146	146	0.0		
30s p/c (65/35)	143	143 155	146 158	146 158	0.0 0.0		
40s p/c (65/35)	155						
40s p/v (65/35)	165 168	165 168	168	168 170	0.0 0.0		
45s p/v (65/35) 20s carded	108	108	170		0.0		
30s carded			120	120	0.0		
40s carded	144 195	144 195	142 193	142 193	0.0		
40s carded 40s combed	214	214	212	212	0.0		
					0.0		
60s combed	253	253	253	253	0.0		

## **COTTON MARKET INSIGHTS** CCI's Selling Plan Puts Further Pressure On Indian Cotton Prices



Vimal Verma

No other major fundamental is working now, only CCI is leading and influencing Indian cotton prices.

Indian cotton prices have been in a downward spiral since February 2020, prices are continuing to fall, and it seems prices have yet to touch the bottom. This season, only CCI's activities can decide if prices will fall or rise.

Cotton fundamentals continue to remain very bearish. India is keeping historically high cotton stock with poor consumption numbers. In this scenario, world's cotton traders are closely following CCI's activities, to understand price trends of Indian cotton, which will influence world prices and consumption.

### CCI support v/s bearish market

As of now, Indian cotton is the cheapest cotton in the world, and there is some more space for prices to go down further, as CCI is carrying record stocks and willing to reduce these stocks before entering into new season 2020-21 with higher MSP and good crop projections. After introducing lucrative bulk discounts recently, CCI has brought down base prices as well. Recently CCI reduced base price by Rs 300-500 per candy which brought CCI prices further close to open market price. However, buying remained limited. So in order to sell its cotton, CCI may need to keep reducing prices, which is putting further pressure on open market prices.

CCI was able to sell some quantity in northern India recently. However, ginners and stockists are bleeding in this bearish market. There are reports of panic selling in the market, with stockists and ginners earning a decent Rs 32500-33000 per candy, depending on quality (S-6/29mm & 75RD).

Arrivals continue at around 45000-50000 bales per day on all India basis, out of which majority is coming from Gujarat and Maharashtra. Daily arrivals are almost equivalent to daily consumption by spinners or slighlty lower, as mills are not running at full capacity even now.

Maharashtra government has procured 50% of cotton in Maharashtra, which has reported all-time high 44 lakh hectares of cotton acreage and production of

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407 lakh quintals (80 lakh bales each of 170 kg) of cotton.

#### Strengthen Indian rupee

The Indian rupee, one of the worst-performing currencies in Asia, may finally be ready to start recovery. The rupee may strengthen to 75 per dollar by the end of December, an advance of about 1% from Friday's close of 75.65. The currency has dropped approximately 5.6% so far in 2020. The rupee is set to recover in the coming months.

#### **Kickstart of monsoons**

Upto June 26, cumulative rainfall was 22% above normal as against a shortfall of 36% in the same period last year. Regionally, on a cumulative basis, rainfall has been abundant in Central India, recording a surplus of 44% as against a shortfall of 44% in the same period last year. Out of the 37 sub-divisions India. 14 have across received excess rainfall, 15 have received normal rainfall, and 8 have received deficient rainfall.

### Indian cotton sowing progress

Ministry data showed total sowing area this year at 31.56 million ha (around 31% of normal area for the entire year) by June 26 compared with 15.45 million ha covered by the same time last year. Cotton sowing reported till 26th of June was 71.692 lakh hectares against 27.082 lakh hectares last year same period. Agro climatic condition was different last year with the seasonal rainfalls delayed by over three weeks and ended normal with the long period average (LPA). The increase in kharif acreage points to yet another season of bumper agri harvest this year.

#### **Rural economy**

As the economy begins to normalise from the lockdown restrictions, various seqments are witnessing differential pace of recovery. In an otherwise gloomy environment, rural economy (particularly agriculture) seems to be emerging as a bright spot, clearly outperforming the urban economy, helped by government's policy thrust along with prediction of normal monsoons. We can continue to expect the outperformance of the rural economy over the urban economy through the rest of the year given adequate focus by the government & limited spread Covid-19, along with of robust agricultural output.

#### India-China trade

Cotton is one of the major commodities trading from

India to China, Initially China was the biggest buyer for Indian cotton but now Bangladesh has the highest share of Indian cotton export. After Covid-19, the ongoing India-China stress at LAC can lead to disruptions in trade, even as no major disturbance has been reported till now.

India depends on China for a wide range of important items, from antibiotics and raw materials for its pharmaceutical industry to solar panels for its renewable energy programmes to key components for low-cost smartphones. Increased import duties have helped reduce India's imports from China to approximately US\$ 65 billion, and pared the bilateral trade deficit to US\$ 48.7 billion.

In April, the Prime Minister's new vision of a `self-reliant India', could further bring down imports, while pushing up production within the country. But we are still far away from India-China trade balance

All India Cotton Sowing							
As on 26-06-2020							
State	(Area in Lakh Hectare)						
	2020-2021	2019-2020	Change				
Punjab	5.010	4.020	0.990	24.63%			
Haryana	7.370	6.760	0.610	9.02%			
Rajasthan	5.880	3.450	2.430	70.43%			
North India	18.260	14.230	4.030	28.32%			
Gujarat	11.670	5.060	6.610	130.63%			
Maharashtra	23.772	0.194	23.578	12153.61%			
Madhya Pradesh	5.200	3.010	2.190	72.76%			
Central India	40.642	8.264	32.378	391.80%			
Telangana	10.689	3.441	7.248	210.64%			
Andra Pradesh	0.451	0.180	0.271	150.56%			
Karnataka	1.420	0.543	0.877	161.51%			
Tamil Nadu	0.048	0.031	0.017	54.84%			
South Zone	12.608	4.195	8.413	200.55%			
Orissa	0.182	0.122	0.060	49.18%			
Ohters	0.000	0.271	-0.271	-100.00%			
All India	71.692	27.082	44.610	164.72%			

Source: Department Of Agriculture Cooperation & Farmer Welfare-Government of India

### Texas-US cotton crop progress

Soon USDA will release its planted acres report. The average industry estimate stands at 13.15 million acres, compared to the previous March planting intentions of 13.70 million acres. Planting is now complete, and Texas continues to be a concern due to drought conditions on the High Plains. According to the crop progress report, 36% of Texas crop is rated poor. West Texas has only a slight chance of rainfall over the next 10 days. The region was hit with triple digit temperatures along with high winds in the first part of this week.

### Weekly US cotton export sales as on 6/18/2020

Net sales of 102,700 RB for 2019/2020 were up 5% from the previous week, but down 23% from the prior 4week average. Increases were reported primarily for China (94,500 RB, including decreases of 1,300 RB), Turkey (4,100 RB), Vietnam (3,600 RB, including 1,500 **RB** switched from Hong Kong and decreases of 1,000 MT), Bangladesh (2,800)RB. including decreases of 400 RB), and Pakistan (1,500 RB, including decreases of 700 RB).

For 2020/2021, net sales of 67,900 RB reported for China (36,500 RB), Vietnam (33,400 RB), Peru (2,200 RB), and Bangladesh (400 RB), were offset by reductions for Turkey (4,100 RB) and Indonesia (600 RB).

Overall sentiment continues to remain bearish, and Indian cotton market has more space to come down further.

(Vimal Verma is a cotton trader)

## YARN MARKET ROUNDUP China, Covid-19, Consumption, Collection: The 4C Problem For Indian Yarns



Deepak Periwal

#### China

China is obviously of paramount importance to India's foreign policy. China's every move is carefully watched by Indians, and every issue with China glorified. China is the first benchmark for India's aspiration to be a global power.

The clash at the borders has made headlines in India but barely got a mention in China. Our entire nation is calling for boycotting Chinese goods and cancelling import contracts with Chinese businesses. China, on the other hand, is fully focussed on the United States in its foreign policy and discussions.

India's main imports from China are bulk medicines, APIs, electronic products, electrical equipment, organic chemicals, plastics and fertilizers. India mainly imports raw material, auxiliary materials and intermediate goods to make our manufactured products competitive in the world. In 2018/19, China was India's largest trade deficit country. The trade volume between the two countries was US\$ 88 billion, out of which India's exports to China were only US\$ 16.7 billion, while imports were US\$ 70.3 billion. Trade deficit between India and China was US\$ 53.5 billion.

Looking at the numbers and considering the dependence of core Indian industries on Chinese products, the likelihood of the government taking any strong step against trade with China is extremely slim.

But the step to ban 59 Chinese apps has definitely, albeit temporarily, soured the sentiments regarding shipping yarns to China at this juncture. Suppliers are thinking twice about risking their shipment. The last thing anyone wants is a new policy/duty announcement while the cargo is sailing.

The next few days are crucial and everyone involved in trade is vocally hoping that the situation at the border diffuses asap so that trade is conducted smoothly. Can India go the next step and ban critical raw material imports too? I doubt it.

#### **Covid-19 & Consumption**

Consumption is the cornerstone of any economy. The official number of infected cases in India is indeed spiralling and so is the fear of the disease. The fear psychosis is preventing any lift off in consumption. Until people freely go for haircuts, and buy a pizza, and try some clothes out and buy a couple of them, the economy will not roll like it did before. People ask me regularly about my take on when demand for yarns will pick up. I quite simply tell them that demand for yarn will pick up when they venture out to a store and buy some apparel.

No marriages, parties, dinners, social events, schools as well as workfrom-home have drastically hit consumption of apparels. Why would a brand order more apparel if the existing stocks don't clear out. They will either not order more or order far lower volumes which would pale in comparison of what they are used to. We as consumers need to buy, buy, buy and buy some more.

#### Collection

Payment collection has been a perennial problem for suppliers in the textile industry but never has it been as exacerbated as now. There are still huge outstanding lists across the textile value chain. Money is moving slowly but keeping the chain moving.

There's only a certain distance that banks' money can help you travel. Eventually, a company needs money from their clients before banks' money runs out. The slow pace of Unlock in India has delayed the payment cycle.

#### **Price trends**

Yarn prices haven't changed much over the last fortnight. In some verticals, they have in fact eased a bit, however, we've seen a slight uptick in certain verticals. Higher prices are just not able to find any support. Low production capacity utilisation at spinning mills is helping prices stay afloat.

- 30s combed knitting yarn is exactly where it was 15 days back, i.e. Rs 172. However its trending lower due to factors discussed above.
- 60s compact is still at Rs 250 ex-factory and trending further downwards.
- Open ends are oscillating. There was a spurt in prices when export sales picked up but since China is the primary buyer of open end yarn from India, the current anti-China sentiment have pulled the prices back to lower levels. 10s and 20s with 1700 CSP are back at Rs 96 and Rs 116 exfactory respectively.
- 30s PC combed with a 48:52 blend has eased to Rs 145 ex-factory. Demand is still weak.
- 30s viscose yarn fell to Rs 145 ex-factory but is now back up to Rs 148-150 due to two factors. The current anti-import sentiment coupled with a surge in demand from Gujarat-based fabric markets.

#### **Overseas price trends**

Some spinning mills have stopped quoting for China, understandably. Bangladesh is reeling under Covid-19. Certain major factories are not running a full tilt and LCs are delayed too. European buyers have booked decent quantities and so has Egypt.

- 16s carded is selling at \$1.92 whereas 21s carded is at \$2.02 FOB.
- 30 compact knitting is at

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### MARKET REPORT | 19

## **PETROCHEMICALS OUTLOOK** Asia's Petrochemical Demand Recovery Slows Down

petrochemical sia's demand recovery is likely to be in limbo despite countries easing restrictions on their lockdowns, amid a resurgence of the coronavirus in Beijing. New cases in Beijing and a global record single-day increase of nearly 190,000 coronavirus cases signaled a world economy sullen with gloomy data. Hit by weak downstream derivatives, Asian monoethylene glycol (MEG) faced tepid sales.

The downstream polyester sales slowed down and the polyester inventories have built up amid the lull seasonal demand, which prompted polyester producers to cut operations and subsequently hurt the procurement for feedstock MEG. Buyers and end-users

were not rushing to replenish cargoes amid ample availability as the MEG port inventories rose again with rising arrival of import cargoes and slowing off-take rates.

MEG producers are plagued by the eroded margins due to the rising crude futures and naphtha prices, and some producers in the region have cut or plan to cut operations. The Indian and southeast Asian markets are just restarting their economies and demand from the downstream sectors including textile, paint and coating, adhesive sectors remained slow.

Asia's purified terephthalic acid (PTA) margins are under a downward pressure, and are expected to stay weak in the near term. Inventories of PTA in China were building up since the start of the year, as demand was adversely impacted due to the coronavirus outbreak.

Outside of China, downstream polyester demand stayed weak, as export orders of textile and clothing to the West were curbed by prevailing weak global macroeconomic environment.

#### The week ahead

The Asian market is expected to be more active this week, as demand makes the transition to August arrivals. The acrylonitrile market is likely to gain more support due to the resilience in replenishments.

The ABS plants in China were running at full operating rates, while the acrylic fibre run rate had also hit 60% last week.



Some buyers think the price for acrylonitrile could hit a ceiling once Zhejiang Petrochemical, which had started its new 260,000 mt/year plant on June 23 and poised to produce on specification material this week, starts producing at its full rate.

Asian PX is likely to continue taking directional cues from related markets, while market activity is expected to pick up following the end of the Dragon Boat holiday in China and Taiwan. However, a mix of bullish and bearish views persist among market participants.

Bullish views were mostly fueled by expectations of improved demand from the start up of Hengli's 2.5 million mt/year No. 5 purified terephthalic acid line in Dalian on June 28, which is running at 50% capacity, and the restart of Hanbang Petrochemical's 2.2 million mt/year PTA unit.

Weak PX and PTA margins, pressured by poor fundamentals amid slow demand and high inventory in China as well as concerns of a second wave of Covid-19 infections have dampened the long term outlook, market sources said.

Asian PTA fundamentals are expected to remain bearish in the week starting June 29 due to rising supply and uncertain demand along the whole polyester chain amid the global coronavirus pandemic.

#### ....Contd. From Page 18

- \$2.30 whereas 40s compact knitting yarn is selling at \$2.70 FOB.
- 10s open end is at \$1.32, 16s at \$1.50 and 20s at \$1.64 FOB.

A lot of expectations are

## China, Covid-19, Consumption, Collection: The 4C Problem For Indian Yarns

attached to July 1st as premier markets like Surat and Ahmedabad might come alive in a big way. Even if demand indicators are weak, pent-up demand can be the booster shot the industry needs to feel like doing business again. Let's hope for a jubilant July. ■ (Deepak Periwal is Founder & CEO, YarnLIVE)

### **20** FIBRE INNOVATION

# CSIRO Scientists Are Producing Sustainable Coloured Cotton

SIRO scientists in Canberra have developed a new kind of coloured cotton. The scientists have figured out cotton's molecular colour code. This means they simply add genes to make the plants produce a colour.

"Having the cotton produce its own colour is a game-changer," said Dr. Colleen MacMillan, who leads the team. "We've seen some really beautiful bright yellows, sort of golden-orangey colours, through to some really deep purple," fellow scientist Filomena Pettolino added. For now, the new coloured cotton is just a series of petri dishes with plant tissues. It will take a few months to see if the tissue grows into actual coloured plants. However, it looks very promising, the researches say. When the coloured cotton genes were inserted into green tobacco plants, they showed up as coloured splotches on the leaves. If the leaves are coloured, it means that the fibre will be too. This was when the scientists knew they were on the right path. Now, they are focusing particularly on the black dye,

the most harmful and damaging dye of them all. "This research can really have the potential to transform the textile industry global because we're making fibres that are still biodegradable, still renewable, but still have properties that they don't currently have," said MacMillan. The team doesn't limit their work to coloured cotton. They are also working on producing fibre that can make wrinkle-free textiles. This might seem like an impossible task but the researchers are well on their way to creating fabric that does not require ironing.

# Environmentally - Friendly Polyester Yarns With CiCLO<sup>®</sup> Additive Technology

Market Constant of the second second

MSYG is currently introducing yarns with CiCLO® technology to hosiery markets, initially for performance and hiking socks. Yarns with CiCLO® technology are also available to manufacturers of medical PPE for use making medical gowns, lab coats, medical setting curtains and other medical textiles typically made from polyester.

Meridian's new yarns with CiCLO® technology can be treated with anti-microbials proven effective at reducing exposure to viral infections and have the same beauty, wearability, durability, functionality, and performance characteristics consumers expect from polyester. At the same time, when thrown away, CiCLO® yarns reduce the persistence of synthetic textile accumulation in land-fills and synthetic fibre fragments in the ocean.

The yarn is being processed in the United States in MSYG's new manufacturing plant in Valdese, North Carolina. The facility, which opened in July 2019, is the most modern and up-todate dyehouse in the US and equal to, or better than, any other yarn dyeing operation worldwide.

The plant has been engineered to use dramatically less water and power than comparable textile operations and generates much less effluent as a byproduct of the dyeing and drying process.

The result is a high quality polyester yarn with all of the performance and PPE characteristics brands, consumers and frontline medical professionals rely on - but with a verifiable sustainability story and reduced environmental impact.

"This represents a breakthrough for the performance apparel and hosiery industries, which have been looking for sustainable alternatives to traditional synthetic fabrics," said Tim Manson, president of MSYG. "Fabrics made from yarns with CiCLO® technology can be treated to have the same performance characteristics as the synthetic fibres and yarns now widely used in performance apparel, including outdoor hiking and running socks."

CiCLO® technology is a product of Intrinsic Advanced Materials, which was formed to develop and commercialise innovative and sustainable solutions for the textile industry. Their team is made up of scientists, engineers and textile industry veterans who are outdoor



enthusiasts and feel passionately about protecting the planet.

The chemistry used to create CiCLO® fibres is ECO PASSPORT by OEKO-TEX certified, and Intrinsic Advanced Materials is a member of both the Textile Exchange and the Outdoor Industry Association. Extensive testing by reliable third party laboratories over several years has proven that CiCLO® technology fibres and yarns are effective at reducing synthetic fibre accumulation in landfills and microfibre pollution in the oceans.

July 1-15-2020 
Textile Excellence

### INTERNATIONAL TRADE 21

### **NEWS IN BRIEF**

### VIETNAM CUTS CORPORATE INCOME TAX BY 30%

All locally incorporated businesses with an annual income of less than VND 200 billion (US\$ 8.6 million) are to have their corporate income tax (CIT) liability cut by 30% for the 2020 financial year. The measure, recently approved by the National Assembly, is expected to benefit the majority of the country's small and medium sized enterprises, many of which have been negatively impacted by the coronavirus outbreak. According to the Standing Committee of the National Assembly, this reduction in CIT liability may be extended should the current trading difficulties persist into 2021.

#### CAMBODIA CUTS ONLINE BUSINESS REGISTRATION APPROVAL TIME TO EIGHT DAYS

In Cambodia, the lead time to register an enterprise is to be cut from three months to just eight days, following the recent launch of an online singlewindow service. The facility will integrate a number of services currently offered separately by the Ministry of Commerce, the General Department of Taxation, the Ministry of Labour & Vocational Training, the Ministry of Interior, the Ministry of Economy and Finance & the Council for the Development of Cambodia. The service will allow applicants to electronically submit documentation and obtain the necessary authorisations from the government agencies by accessing just one dedicated website. In addition, new businesses will be able to make one time payments of all the requisite fees as well as obtain all approved licences and certificates in digital formats.

### CHINA OFFERS ZERO TARIFF TO 97% OF TAXABLE GOODS FROM BANGLADESH

China announced it will offer zero tariff treatment to 97% of taxable goods originating from the People's Republic of Bangladesh, saying that this is in line with its commitment to the least developed countries with whom it has established diplomatic ties. Based on the exchange of notes between the two countries, 97% of taxable goods originating from Bangladesh will be entitled to the preferential zero tariff rate starting from 1 July 2020. The 97% of taxable goods include 5,161 tariff items marked "Beneficiary LD", 2,911 tariff items marked "Beneficiary Country1LD1 " and 184 tariff items marked "Beneficiary Country2 LD2 " in the preferential tariff section of the Tariff Schedule of the People's Republic of China for Imports and Exports (2020) (Customs Tariff Commission Announcement No. 9 [2019]), totalling 8,256 tariff items.

# Philippines, ASEAN Push RCEP Deal In November

The Philippines has joined members of the Association of Southeast Asian Nations (ASEAN) and other trade partners in pushing for the signing of the Regional Comprehensive Economic Partnership (RCEP) deal by November this year.

Trade Secretary Ramon Lopez and trade ministers of ASEAN states, as well as Australia, China, Japan, South Korea and New Zealand, reaffirmed the signing of the agreement this November during the 10th RCEP Intersessional Ministerial Meeting conducted through video conference on June 23. "Together, let us send a strong signal that we continue to deepen our economic partnership despite the challenges and uncertainties in the global trade environment. RCEP remains crucial in restoring business confidence and maintaining a positive outlook in the region," Lopez said. The conclusion of the RCEP has become more important to strengthen cooperation among countries to minimise disruptions and promote recovery.

advancing the region's economic integration, the trade ministers also said they would welcome the country back to RCEP. In November last year, Indian Prime Minister Narendra Modi announced the country's withdrawal from RCEP due to unresolved issues and concerns including entry of goods from other countries which may hurt its local industries.

Lopez said the Philippines stands ready to engage with all RCEP participating countries in resolving remaining issues in order to finalise the agreement.

RCEP participating countries launched negotiations for the deal in 2012. Once entered into force, RCEP would be the world's largest trade deal by population and gross domestic product. Apart from enhanced market access for goods and services, RCEP would also provide stability and predictability on trade rules and regulations.

In addition to enabling an increase in Philippine exports to RCEP members, the trade pact is also expected to encourage investments in manufacturing, energy, and technology-based industries.

Recognizing India's role in

### China To Reduce Logistics Costs

The National Development and Reform Commission and the Ministry of Transportation recently issued policies to reduce logistics costs, improve logistics efficiency and restore order in epidemic?hit areas of production and day?to?day life. The following recommendations for reducing costs have been put forward to government departments:

Promote paperless operations at ports & checkpoints;

- Provide guarantees on construction land quotas for major logistics infrastructure projects;
- Reduce toll costs;
- Reduce rail & air freight charges;
- Standardise port charges;
- Improve the system of logistics standards and specifications;
- Accelerate the development of smart logistics and actively develop green logistics.

### **22** INTERNATIONAL TRADE

# **Review Of EU Trade Policy Announced**

The Commission's trade policy in the Covid-19 world will focus on: (i) Building more resilience in internal and external dimensions; (ii) Supporting socio economic recovery and growth; (iii) Supporting SMEs; (iv) Supporting the green transition and making trade more sustainable and responsible; (v) Supporting the digital transition and technological development; and (vi) Ensuring fairness and a level playing field.



n 16 June 2020, the European Commission announced the launch of a major review of the European Union's trade policy, including a public consultation seeking input from the European Parliament, member states, stakeholders and civil society.

The Commission seeks to build a consensus around a fresh direction for EU trade policy, responding to a variety of new global challenges and considering the lessons learned from the Covid?19 outbreak.

Two key objectives drive this process. The first is an assessment of how trade policy can contribute to a swift and sustainable socio?economic recovery.

Important aspects of this objective are reinforcing competitiveness in the post Covid 19 environment, addressing the challenges the EU will face, and helping to promote its values and standards.

The second is an analysis of how trade policy can help build a stronger EU. This in turn is based on a model of "Open Strategic Autonomy" reaping the benefits of a perceived openness for its businesses, workers and consumers, while aiming to protect them from unfair practices and building up the EU's resilience to be better equipped for future challenges.

The EU has been a major beneficiary of the interconnected, global economy with external trade accounting for almost 35% of its gross domestic product (GDP), while the value of foreign direct investment stocks in the EU, relative to GDP, represents 40%.

The EU's openness before the Covid?19 crisis reportedly ranked amongst the highest in the world, with 35 million EU jobs depending on exports and 16 million European jobs depending on foreign investment. In other words, one out of seven jobs in the EU today depends on exports.

According to the Commission, trade has also been particularly important for SMEs. These represent 87% of all EU exporting companies and are a driving force for EU export performance.

Moreover, the EU is also said to be the largest investor in the world, with a stock of over Euro 8.7 trillion held by EU investors abroad, contributing to the competitiveness of EU companies. Global private investment needs will only increase in the years to come in order to help the EU reach the UN's sustainable development goals.

Beyond the economic benefits, the Commission highlights that trade policy plays an important role in promoting and protecting the EU's values and standards, both domestically and abroad.

Promoting values - in relation to human rights, environment/climate, social and labour rights, sustainable development, and gender equality, amongst others - is said to have become an integral part of the EU's commitment to a more sustainable and responsible trade policy.

The Covid?19 crisis has further exacerbated the challenges faced today by the EU. The Commission's 2020 Spring Economic Forecast projects that the pandemic will cause the EU economy to contract by 7.4% in 2020, while global GDP will fall by 3.5% and global trade between 10?16%.

At the same time, the pandemic has exposed some of the challenges associated with a high degree of inter connectedness.

The crisis has also increased development challenges in developing countries. The EU's recovery plan provides a roadmap for a more sustainable, resilient and fairer Europe for the next generation - and trade policy, it is felt, needs to adapt to support these objectives.

In essence, the trade policy review will set the political direction for EU trade and investment policy in the years to come.

# Cambodia Seeks FTAs To Counter Loss Of Duty-Free Access To EU

FTA negotiations with China expected to be completed by end of the year, while negotiations to commence soon with South Korea.

ollowing the conclusion of the third round of free trade agreement (FTA) negotiations between Cambodia and China, it is expected that such a treaty will be ratified before the end of the year.

According to Cambodia's Ministry of Commerce (MOC), the latest talks focussed on market access with regards to goods and services, investment protocols and greater economic/ technical/regulatory alignment.

The next stage requires the Agreement Text and the Market Access Proposal to be officially approved by both governments. Once this has been secured, the negotiations phase will be declared officially over, and pave way for the actual signing of the agreement.

The signing of the FTA would be particularly timely for Cambodia as it looks to up its exports to China in a bid to mitigate the impact of its partial loss of duty-free export access to the European Union (EU), the country's largest export market, which is scheduled to take effect from 12 August. In 2019, trade between Cambodia and China was valued at US\$ 9.42 billion, a figure the two are now committed to raise beyond US\$ 10 billion by 2023.

In terms of benefits to China, it is expected to ease the way for mainland companies looking to relocate production resources to Cambodia as a means of ameliorating the impact of the punitive US import tariffs on goods of Chinese origin.

#### Cambodia to soon start FTA negotiations with South Korea

Negotiations for a FTA between Cambodia and South Korea are set to commence next month, according to Cambodia's Ministry of Economy & Finance. The announcement follows the conclusion of a Cambodia South Korea joint FTA feasibility study initiated last November. Earlier this month, South Korea also completed the public consultative period that is a mandatory domestic requirement prior to entering into any such agreement.

On South Korea's part, the deal would help the country secure alternative export destinations as part of its bid to diversify its trade dependence on its two largest export marketsChina & the US-both of which have been compromised by their ongoing trade dispute. Inevitably, the negative impact of this year's coronavirus outbreak has acted as an added incentive for the country to diversify its available supply chains. Last year, South Korea concluded its FTA negotiations with Indonesia and is currently in talks with both the Philippines and Malaysia with regard to putting similar arrangements in place.

Last year, Cambodia's exports to South Korea totalled US\$ 335 million, a massive increase on the US\$ 18 million recorded back in 2009.

Over the same period, the country's imports from South Korea also increased, growing from US\$ 294 million 10 years ago to US\$ 696 million last year. Cambodia's primary exports to South Korea include clothing, footwear, electronics, rubber and travel accessories, while its primary imports include knitted textiles, preowned freight trucks, electronics, cosmetics and beverages. 

# Morocco's New Free Trade Zone To Combat Illegal Imports

More trade economic zone in the northern town of Fnideq, near the Spanish?administered enclave city of Ceuta, in a bid to reduce illegal imports.

Smuggling through Ceuta has been significant. In February 2019, the Director General of the Moroccan Administration of Customs and Indirect Taxation, Nabyl Lakhdar, estimated the value of smuggled goods entering Morocco through the Ceuta border at between MAD 6 billion (US\$ 620 million) and MAD 8 billion per year, resulting in substantial losses in unpaid duties. In contrast, Ceuta's legal exports to Morocco were estimated at only about US\$ 53 million.

The new free trade zone will host several customs warehouses dedicated to high demand goods, such as textiles and food products, that will be imported through Morocco's Tanger Med mega port. Textiles and food products have been among the most commonly smuggled commodities through Ceuta.

The facility will also have an area for the conditioning and labelling of incoming merchandise. Dining, leisure and entertainment facilities, as well as landscaped green spaces, will also be created in the zone. According to the report, the current stage of construction is focusing on land levelling and road infrastructure planning, at a cost of MAD 91 million. Moroccan authorities aim to have completed construction within 12 months.

Since October of last year, Morocco has cracked down hard on the illegal import of goods through the Ceuta border.

Aside from being another nail in the coffin for illegal imports, the free zone also seeks to improve import procedures & goods transit between Ceuta and Morocco; raise revenue by boosting export operations; and create jobs for the local workforce.

### **24** INTERNATIONAL TRADE

# More Tariff Increases Possible As US Considers Revising WTO Commitments

Recent comments by US Trade Representative Robert Lighthizer that the United States will "seek a broader reset at the WTO" with respect to member countries' tariff commitments suggest that more US tariff increases, along with retaliatory measures by US trading partners, could be on the horizon.

Current WTO tariff commitments "no longer reflect members' policy choices and economic conditions," Lighthizer said during recent congressional hearings, and as a result "many countries with large and developed economies maintain very high bound tariff rates, far above those levied by the United States."

In response, the United States "must ensure that tariffs reflect current economic realities to protect our exporters and workers." This comment suggests that the United States may seek to revoke the special and differential treatment that allows some countries to maintain higher tariffs and/or increase its own bound tariff commitments.

Mark Linscott, a former assistant USTR for WTO affairs, said in an article published by the Atlantic Council that Lighthizer could be preparing to submit to the WTO an Article XXVIII notification, "which provides unilateral authority to permanently increase tariffs following consultations with affected suppliers."

If the United States does not reach agreement with those countries on compensation for such a move, they "can retaliate by raising their tariffs in response." While this provision "has been used sparingly in limited circumstances in the past," Linscott said, current speculation "suggests that the Trump administration could use Article XXVIII on a massive scale with the general goal of raising US tariffs to levels the United States views as reciprocal to high tariffs of major trading partners."

On the other hand, Lighthizer's remarks during the hearings suggests that, despite occasional assertions from President Trump that the United States should withdraw from the WTO altogether, the United States plans to remain a member of the organisation.

That apparent position sat well with the senior Republicans on the Senate Finance and House Ways and Means committees, who voiced support for continued US involvement, while agreeing that reform of the WTO is necessary.

Lighthizer indicated that mainland China should be a major focus of WTO reform efforts, noting that "an extremely large state?run economy cannot be disciplined under the current WTO rules." Observers believe new and more modern rules to tackle distortions created by state?owned enterprises, technology theft, and subsidies, problems the United States has largely raised with respect to mainland China. They also said WTO members should work to ensure that dispute settlement and Appellate Body panels focus on enforcing existing rules instead of creating new ones. 

# Israle Cuts Consumer Product Tax Indefinitely

Relief on customs duties and purchase taxes in Israel on a wide range of consumer products will now remain in force for the foreseeable future.

Consumer products covered by tariff reductions include mobile phones with a 15% cut; electronic entertainment items, such as loud speakers and television screens, have cuts ranging from 15% to 30%; shoes have 12%; garments have 6%; home appliances' cuts range from 6% to 12%; and lighting, ranges from 8% to 12%. Cosmetics, toys, eyeglasses and baby products, also benefit with a 12% tariff cut. The move is intended to ease the financial burden on citizens and restart the economy. The cuts were originally introduced in 2017 by Moshe Kahlon, the previous finance minister under the government's 'Net Family Plan', and were due to expire on 16 June 2020.

According to government estimates, the cuts are expected to amount to ILS 1.45 billion (US\$ 420 million) and have already been included in the budget.

A government spokesman said, "As stated in the presentation to the government in the revision of the three year budget plan, the working assumption of the Ministry of Finance, on the basis of which the tax revenues forecast was built, was that tax reductions approved in April and December 2017 would be extended."

The tax cuts are intended to help boost consumer

spending which has experienced a significant drop following the spread of Covid?19 throughout the country.

Data released in May by the Israel Central Bureau of Statistics (CBS) revealed that private consumption has been severely hit by the pandemic, with clothing, household goods, cars, furniture, jewellery and small electrical products seeing major declines.

The Israeli economy shrank by 7.1% in the first quarter of this year due to the impact of the coronavirus, its sharpest fall in 20 years and more severe than after the 9/11 attacks and the 2008 global financial crisis.

# Pakistan's Textile Exports Unlikely To Pick Up Soon

Pakistan's textile exports were down 37% in May, cotton yarn sees the steepest decline, readymade garments and linens the least

Akistan's textile exports stood at US\$ 751 million in May 2020, a 37% decline when compared to the exports worth US\$ 1.19 billion in May of last year. This was the second successive month of massive reduction in textile exports amid the global pandemic.

In fact, all categories of textile exports witnessed double-digit declines. Exports of cotton yarn saw the steepest decline, from US\$ 107 million in May last year to US\$ 52 million in May this year, or a 51% decline. Highest value areas like garments (which stood at US\$ 252 million last May) and knitwear (which stood at US\$ 274 million last May), declined by 46% to US\$ 136 million, and 34% to US\$ 181 million this May respectively. The category of bedwear experienced the least amount of shock, but even that segment declined by

22% year-on-year from US\$ 188 million to US\$ 146 million.

The solace for the industry is that May was not as bad as April. That particular month, which saw exports decline by 65% year-on-year to US\$ 404 million, represented a historic, multidecade low.

Lockdowns across the world, and delayed shipments to major markets are the obvious factors that resulted in this steep fall in exports.

According to analysts, the base level of April was so low, that May figures look like a solid rebound: exports in May shot up 86% when compared to April. Every single export segment showed a double-digit month-onmonth increase, with segments like towels and garments increasing 127% MoM and 121% MoM respectively.

It is important to note

that the actual share of the composition of segments has remained unchanged. So in May, knitwear remained at 24%, bedwear at 19%, readymade garments at 18%, cotton cloth at 13% and others at 25%, respectively.

On a monthly basis, the share of textiles in total exports in Pakistan declined to 42% in April, and 53.8% in May.

If one looks at the period of the first eleven months of the fiscal year 2020, the share of textiles in total exports of Pakistan remained unchanged at around 59.5%, compared to 59% for the same period last year.

However, during that same eleven month period, textile exports were down by 6% year-on-year to US\$ 11.6 billion, with double digit declines in yarn and cotton cloth (13% and 12% respectively), while categories like knitwear and garments also stayed firmly negative.

According to Lakhani, textile exports are expected to recover gradually from the lows of April and May, but remain lower on a yearly basis over the next few months.

Analysts suggest developing new channels and products for exports, such as masks and PPEs, while simultaneously ensuring adherence to safety SOPs on the domestic front to ensure the situation does not worsen.

However, while the Pakistani textile industry has somewhat reoriented itself towards exporting masks and creating PPEs, the orders are simply not enough to make up for the loss in other segments. In reality, exporters find these orders to be nonrepetitive, with low margins.

Textile industry associations in the country have asked the government to competitively price energy, lower sales tax, and have the turnover tax reduced from 1.5% to 0.5%.



### **26** RETAIL UPDATE

# RIL Nears Deal To Acquire Retail Biz Of Future Group

The deal will involve at least three companies promoted by Biyani-Future Retail, Future Lifestyle Fashions and Future Supply Chain Solutions-going for a merger. The combined business will then be acquired by the Mukesh Ambanicontrolled petrochemicals-to-telecom conglomerate.

Reliance Industries (RIL) has moved close to clinching a deal to buy the retail businesses of Kishore Biyani's Future Group. The move will further cement RIL's position as the top brick-and-mortar player across categories like groceries, fashion and general merchandise.

The deal will involve at least three companies pro-**Biyani-Future** moted by Retail, Future Lifestyle Fashions and Future Supply Chain Solutions -going for a merger. The combined business will then be acquired by the Mukesh Ambani-controlled petrochemicals-totelecom conglomerate.

The discussions are now at an advanced stage, and RIL is keen on closing it before the upcoming AGM on July 15. But details are still being ironed out on both sides, and a final deal is still to be signed, according to sources. Discussions for the deal started earlier this year as one of Biyani's holding units defaulted on a loan repayment.

Several other players like US-based retail giant Amazon had evinced interest in Future Group. But a deal with Reliance offers a much more comprehensive solution to Biyani's debt problems, said a source. "It is likely to be a complex transaction as, first,



Future Group will announce a scheme of arrangement to merge into one company.

RIL is most likely to completely buy out this combined entity in exchange for its shares," said one of the sources. Existing investors in various Future Group businesses-Amazon, Blackstone and PremjiInvest-may get shares in RIL.

The deal with Reliance is interesting as Jeff Bezosowned Amazon has had a business partnership with Future Group since 2014. Last year, Amazon also acquired an indirect stake in Future Retail by investing in one of the promoter entities of Biyani.

"It's fair to assume it's going in Reliance's direction now. Even though others are still in talks with Future, the strategic direction is clear now, compared to last week when it could have gone either way," a person aware of the matter said. He added that while Reliance will take over all of the retail businesses, some brands and manufacturing businesses under companies like Future Consumer and Future Market Networks might remain with Biyani.

These people said the implication of this deal with Reliance would have a "significant impact" on the retail sector - both online and offline. Future Retail has over 1,500 retail stores in various formats through brands like Big Bazaar, Nilgiris and while Easyday, Future Lifestyle has 300 stores through brands like Central and Brand Factory.



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Editor: Dibya Jyoti Gohain

# **UK Blocks Merger Of JD Sports** And Footasylum

he UK's competition regulator, the Competition and Markets Authority (CMA) has blocked the sports fashion retailer JD Sports' already completed purchase of retailer sportswear Footasylum. The CMA concluded that the parties were close competitors and the transaction would lead to a substantial lessening of competition nationally in the sports inspired casual footwear and clothing market, which would leave shoppers with fewer discounts or receiving a lower level of customer service. The CMA has now ordered JD Sports to sell Foot asylum.

Following the completion of the deal in April 2019 for a purchase price of £86 million (US\$ 111 million), the CMA referred the merger for an in depth investigation after JD Sports declined to offer remedies to address the CMA's initial competition concerns.

Having reviewed the transaction, the CMA concluded that a number of key pieces of evidence pointed to close competition between the parties and therefore the merger would reduce competition in the market. From an analysis of the companies' internal strategies and decision making documents, it discovered that the two parties monitor each other's activity closely. The CMA also surveyed over 10,000 of the parties' customers, finding that more than two thirds of customers surveyed would switch to JD Sports if Foot asylum left the market. The CMA also found that Foot asylum store openings negatively impacted footwear and clothing sales at nearby JD Sports stores. With regard to the relevant product market, the parties are active in selling products such as trainers, tshirts sweatshirts and tracksuits, both in store and online. The CMA considered these two sales channels to be one product market, given the evidence which the CMA found indicating that consumers in the sports inspired casual footwear and clothing market shop both in store and online interchangeably.

In assessing whether rival retailers posed a competitive constraint on the parties, the CMA determined that rivals, such as Foot Locker and Sports Direct, which sell multiple brands, as well as Nike and Adidas, which sell only one brand, impose a lower competitive constraint than the parties do on each other. As a result, the CMA found that the level of competition which these rivals exert on the parties was not sufficient to stop consumers being worse off after the merger.

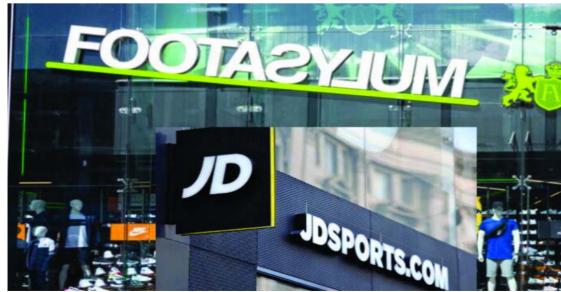
While the CMA acknowledged that the Covid 19 crisis has led retailers to face uncertain and challenging trading conditions, the CMA said that it had not found evidence that the impact of coronavirus would remove its competition concerns. In April, the CMA released guidance indicating that it would consider the impact of Covid 19 during merger reviews under its existing "failing firm" framework.

The "failing firm" framework allows a firm acquiring another firm that is about to go out of business, to argue that the acquisition of such a firm would not result in a substantial lessening of competition since it is likely to exit the market anyway. However, the CMA noted that neither party had claimed that it would exit the market absent the merger and so the merger could not he assessed under the CMA's "failing firm" framework.

Nonetheless, JD Sports argued that the CMA should have given the impact of the Covid 19 crisis much more attention and has indicated that it intends to appeal the UK's decision to the **Competition Appeals** 

Tribunal. Specifically, JD Sports contends that the CMA's decision fails to take account of the dynamic and rapidly evolving competitive landscape and the long lasting impact that Covid 19 has had on the industry, to the particular detriment of smaller retailers like Footasylum, which it says is in a weak financial position.

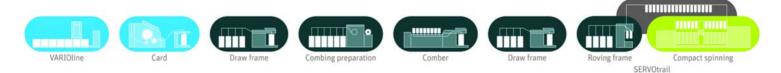
Finally, because the acquisition was completed before the CMA started its in depth review, JD Sports will now have to sell Foot asylum. Although the CMA has indicated that, in light of the Covid 19 outbreak, it will give JD Sports "sufficient" time to sell Foot asylum, this case shows the danger of completing an acquisition in the UK without previously notifying the CMA of the proposed acquisition.





### **28** | TECHSPEAK

# Rieter's Compact Spinning System Ensures Better Cash Flow



blowroom line VARIOline

thanks to the combination of

VARIOset and progressive

process is dependent on the

raw material being well

opened from the outset. The

automatic bale opener A 12

is capable of breaking down

An efficient blowroom

the function

microtufts,

cleaning.

The process sequence for the Rieter compact-spinning system used.

Priorities in the spinning industry have shifted. It is essential to get the best out of existing systems. But there will also come a time after Covid-19, in which investments will be made in new systems; such as in the Rieter compact spinning system, which enables a significantly higher cash flow.

The Rieter compact spinning system with the highperformance card C 80, comber E 90, ring spinning machine G 38 and the compacting device COMPACTdrum is known for very good yarn quality, the highest possible level of flexibility and low production costs. A complete Rieter system draws on Rieter's expertise throughout the entire spinning process: from raw material to yarn.

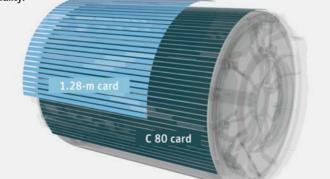
What factors influence production costs? In this example, a compact spinning system is used to produce combed cotton yarn with a count of Ne 60 for shirting fabrics.

A Rieter system is compared with a "mixed spinning mill" equipped with machines from different manufacturers. Rieter systems are most impressive when it comes to raw material utilisation, energy requirements as well as personnel and space requirements. The cash flow generated demonstrates the outstanding economy of the complete system, which is perfectly synchronised and is supplied from one source.

#### Good raw material utilisation

Optimal raw material utilisation is achieved in the

The high-performance card C 80 with the largest active carding area allows low loss of good fibers while retaining the same sliver or yarn quality.





the bales into microtufts. The removal of trash and dust from small tufts in the downstream blowroom process is considerably more efficient and gentle.

On the high performance cards C 80, the maximum technological carding area with 40 active flats and a working width of 1.5 meters as well as the pre- and postcarding zones that can be equipped individually ensure reduced loss of good fibres while retaining the same sliver and yarn quality.

High quality technology components and optimally coordinated combing movements on the comber E 90 allow reduced noil extraction while retaining the same yarn quality.

Over the entire spinning process, this results in a raw material saving of 1%.

#### The Energy Saver

Rieter compact spinning machines save energy. This also applies to Rieter ring spinning machines combined with compacting device COMPACTdrum. The sieve drum of the compacting device that compresses (i.e. compacts) the fibres has been optimised and the compacting zone reduced to the necessary minimum.

The energy required for compression is therefore

#### July 1-15-2020 ■ Textile Excellence



The compacting device COMPACTdrum requires five to eight watts less energy per spindle for compressing the fibers compared to compacting solutions from other suppliers.



very low, at around five to eight watts lower per spindle than that of compacting solutions from other suppliers.

With energy-efficient drive concepts and innovative machine components throughout the process, the Rieter system is capable of offering 10% energy savings - all the while maintaining the highest possible levels of productivity.

### Reduced personnel and space requirements

The high productivity of

Rieter machines allows a reduction in the number of machines, thus saving a lot of space compared to a process using a "mixed system." In the case study mentioned above, the Rieter spinning mill requires one compact spinning machine, one autoleveler draw frame, one comber and two cards fewer than the "mixed system." Space-saving machine concepts, such as for draw frames, also lead to a more compact spinning mill layout. This allows space savings of

approximately 7% (750 m2) - and therefore lower building investment and maintenance costs.

Thanks to the reduced number of machines and therefore a reduced operator workload, the automatic roving bobbin transport system SERVOtrail and user-friendly machines with a uniform design, 6% fewer personnel are required and can therefore be used for more efficient tasks.

### Higher cash flow thanks to lower production costs

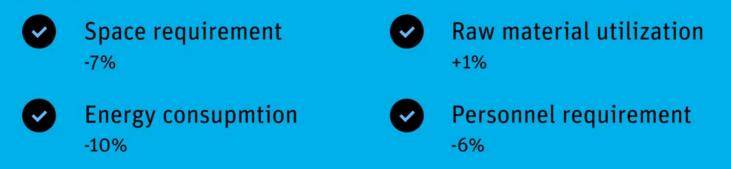
Taking raw material utilisation, energy and labour costs, interest rates, yarn and noil sales and ongoing operating costs into consideration, the total production costs calculated for the Rieter system for the combed compact spinning process are lower than for a solution from different suppliers. This means that customers who invest in the Rieter compact spinning system as per the example shown generate a cash flow that is around US\$ 250 000 per year higher than that of customers who opt for a "mixed spinning mill".

### Maximum flexibility as an additional advantage

The combination of the ring spinning machine G 38 with the compacting device COMPACTdrum is ideal for customers who appreciate flexibility in yarn production. COMPACTdrum makes it easy to change between ring and compact yarn, because the compacting device can be easily attached and removed from the ring spinning machine. COMPACTdrum can be supplied with a new ring spinning machine, and existing Rieter ring spinning machines can be retrofitted. In addition, the G 38 is capable of producing high-quality special yarns. Thanks to the integrated VARIOspin system for slub yarns, which is integrated in every G 38, the customer can change between standard and slub yarns simply at the touch of a button. The G 38 with COMPACTdrum is suitable for all raw materials and yarn counts.

Customers who choose the Rieter compact-spinning system generate a cash flow that is USD 250 000 higher per year.

### ADDITIONAL CASH FLOW WITH THE RIETER SYSTEM: AROUND USD 250 000 PER YEAR



Calculation basis: yarn production 413 kg/h; raw material costs: 1.80 USD/kg; energy costs: 0.074 USD/kWh



# A.T.E. Helps Industry Move Towards Textile 4.0

### A.T.E. offers automation upgrade for legacy textile machines

The year 2020 will be remembered as the year of the Covid-19 pandemic, with its lockdowns and social distancing. The fallout from the pandemic such as low density on the shop floor, as well as reverse migration of labourers - has affected industries such as textiles that are labour intensive. Constrained supply chains will increase margin pressure.

Another effect of the pandemic is the increased interest of US and European businesses to diversify their supply chains. This opens up opportunities for the Indian textile industry, for exporting high quality textiles that meet stringent quality standards. In this background, to stay relevant, textile manufacturers need to change manufacturing processes and become leaner by operating manpower. with less Manufacturers have no choice but to adopt automation through accurate control systems equipped with data collection and analytics.

Thus, to become more sustainable in the new normal, textile manufacturers need to:

- 1. Move towards automated machines rather than machines that require manual operation
- 2. Follow rigorous export quality norms
- Improve production efficiency as well as energy efficiency
- 4. Build quality during manufacturing.

For Indian textile manufacturers, the way ahead is clear - Textile 4.0 involving automation & real-time monitoring of machines and utilities is the solution to meet tomorrow's textile needs.

#### Plant monitoring

Plant monitoring (a Textile 4.0 technology) involves the collection and analysis of data from machines and utilities. The analysed data can be used to improve processes and generate reports, based on which a user can take decisions that ensure the efficient utilisation of machines to enhance production and product quality.

Many companies now use ERP systems for managing their businesses. However, inputs to these enterprise resource systems are done manually which is prone to error.

Ideally, data must be input into the ERP system directly from machines. To accomplish this, machines must first be capable of transmitting data to the system. It is here that automation plays an important role to effectively use any plant monitoring system, manufacturing machines and utilities must transmit the data online to a central system. Only automatic/PLC based machines can provide data in real time, thus enabling machines to talk with each other and/or with the ERP Automation system. of machines is therefore the first step in implementing Textile 4.0 in a textile manufacturing facility. Automation has many other advantages addition to making in machines ready for Textile 40

It reduces labour requirement, makes for safer working conditions, improves productivity and product quality, reduces variability, eliminates human error, & reduces breakdowns.

Once machine automation is implemented, the next steps are:

- 1. Collecting correct and precise data online
- 2. Deciding KPIs and their measurement methods
- 3. Analysis of the data
- 4. Generation of reports/ data analytics and using them to make process corrections.

Typical machine connectivity for Textile 4.0

#### Automation and upgradation of old machines

Old machines can have several issues, such as:

- 1. Lower energy efficiency
- 2. Product quality depends on operator skill
- A requirement of obsolete spare parts, which are hard to come by, but the lack of which can lead to machine stoppage at any time, for any period. This can hamper production
- 4. Data cannot be collected from the machines online
- 5. No interactive alarm/fault indication system.

New machines are equipped with energy efficient motors, latest PLCs, interactive HMIs, SCADA software etc., and can also be connected to online data collection systems. Machines used in manufacturing cannot be changed every 10 years, due to the high initial investment. In fact, most legacy machines are mechanically healthy. The root cause of their problems lie with the outdated control system, control panels,

1. Collect 2. Analyse 3. Utilise Machines without Bar code PLC control PLC Production plan Bar code scanner Machine with from ERP PLC control Terminal PLC Collective data from factory Report generation Report management and analytics of important data Utility meters Flow meter Interface



Old automation process





motors, etc. Upgrading and automating such legacy machines with the latest control systems enable them to work like new and provides a host of advantages such as:

- 1. Changing older inefficient motors with latest motors increases energy efficiency
- 2. Old and sluggish electronic controls can be replaced with the latest high speed and more capable PLCs that not only make the machine more responsive while improving productivity, but also add fea-

Old PLCs Embedded cards Controllers

Contactor logic Relay logic

DC motors

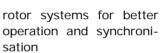
Slip ring motors

Old HMIs Mimic Analog meters

tures to machines

- 3. Prevent down time due to non-availability of services and spare parts of old control systems by changing embedded systems with the latest generic PLCs and HMIs
- 4. Extend the life of the machine by 10-15 years by replacing obsolete parts
- 5. Upgrading sluggish, less energy efficient systems like PIVs with modern motor drive systems
- 6. Single motor machines can be converted to multi-

Maintenance cost Breakdown Spares availability **Dependence on OEMs** More brakedowns More down time Less production time No online monitoring No utility monitoring



No alarm diagnostics

- 7. User-friendly PC-based SCADA gives the operator all the information about the machine at one glance on a single screen. For example, quality parameters can be monitored online and quick preventive measures taken by the operator if there are any deviations. Also helps reduce breakdown time
- 8. Alarms/warning/events can be logged
- 9. Machines are ready for

# DEPENDENCY

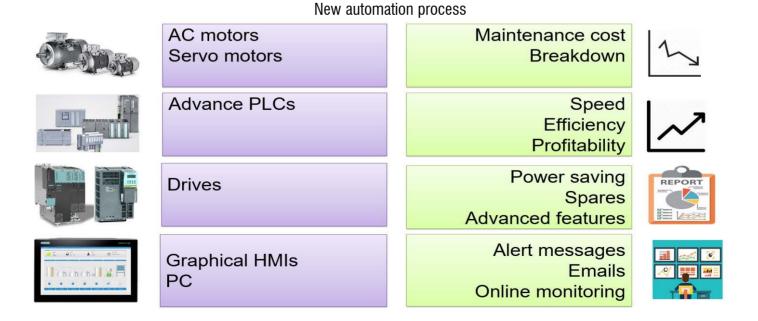






Textile 4.0.

Over 80 years' experience in the textile industry and deep domain knowledge of textile processes has made A.T.E. a reliable partner for all Indian textile manufacturers. An A.T.E. automation upgrade for legacy textile machines is a complete, ground-up revamp of the machine that involves the replacement of all existing hardware with new PLCs and OEM drives that are easily available in the market; easily adding 10 years of life to older textile machines.



### **32** INDUSTRY NEWS

# ITAMMA Chalks Out A Web Of Virtual Events

Show must go on, says Chandresh Shah, newly elected President of ITAMMA



rrespective of the lockdown, ITAMMA has continued its activities by organising about 11 webinars on a host of topics including boosting will power, business response in the present situation, energy conservation cost-cutting after Covid-19, Lean & Six Sigma, Indonesian market for Indian textile machines and accessories, among others.

These webinars addressed the present uncertain situation in the country and the industry, the opportunities that exist, the tools to achieve growth and sustainability in these difficult times.

According to ITAMMA President, Chandresh Shah, "ITAMMA believes that Covid-19 is an opportunity for the Indian TEI, and has prepared a roadmap which will provide end-to-end solutions to every category of entrepreneur right from provision of important data to technological and technocommercial developments. Considering 80% TEI are in the MSME sector, ITAMMA has drawn up technology programmes driven for developing in-house technologies and adaptation of new/latest technologies through JVs/Transfer of Technology. The aim is to strengthen their technological base and adopt a stateof-the-art set-up of their factories in order to deliver quality & competitive products to the Indian and international textile industry."

He concluded, "Lastly, I am proud to mention here that India has always proved to be in the front when it calls for low cost innovations, whereby ITAMMA members have developed mask-making and automatic sanitizer disposal machines and disinfection chambers, which were developed during the two months of the lockdown period."

# New President Of Cematex



Maurer rnesto has been appointed as the new President of Cematex, the European Committee of Textile Machinery Manufacturers. His four-year term of office will cover three major events in the pivotal ITMA series of textile technology exhibitions scheduled for Europe and Asia.

Maurer was elected at the Cematex General Assembly, on June 12. He is President of the Swiss Textile Machinery Association since 2015, serving during the same period as a member of the Cematex Board of Directors and its 1st Vice-President for the past four years.

Also elected at the General Assembly were 1st Vice-President Mikael Äremann (TMAS, Sweden) and 2nd Vice-President Charles Bauduin (Symatex, Belgium).

Cematex is the official representative body for Europe's national textile machinery associations and has been in charge of organising the ITMA exhibitions, since inaugural show in 1951, and subsequent editions in both Europe, Asia and China.

Over the next four years, Ernesto Maurer will lead Cematex through a challenging period globally, taking in three major events. ITMA Asia + CITME will be held in Shanghai from June 12-16, 2021 - postponed from October 2020 because of Covid-19. This will be followed in 2022 by the next ITMA Asia + CITME in the same city, and then by ITMA 2023 in Milan (June 8-14).

Says Maurer: "The post-Covid-19 period will have a tremendous impact on the textile industry of today and tomorrow.

Cematex is determined to maintain its leadership role for exhibitions, carrying the ITMA brand to partners worldwide today and in the future, including a focus on increasingly digital opportunities."

INDUSTRY NEWS 33

# Untreated Textile Effluents Pollute Rivers In Mumbai Metropolitan Region



lip service by authorities that action will be taken but nothing happens on the ground. Amid all this, MPCB has tripled the consented capacity of perennial violators."

During inspection, it was also found that common effluent treatment plant (CETP) at Dombivli and Ambernath were dysfunctional in curbing industrial waste. "Discharge of effluents is going on in broad daylight. The CETP is being bypassed and untreated effluents are being discharged into the stormwater drains," said Stalin adding, "After seven years of fighting to save the Ulhas river, we have now realised that the MPCB has taken an adversarial stand to support the violating industries."

#### Ulhas river was much cleaner during lockdown: MPCB

As repeated complaints of water pollution from Ulhas and Waldhuni rivers pile up, the state pollution control board's water quality assessment of Ulhas river showed that the water quality had improved during the lockdown. The water quality index reflected non-polluted status based on samples collected from six regions along the river. "Apart from a drop in industrial effluents, other activities such as the washing of vehicles, jeans washing units, service centres, etc. all had stopped, thus improving Ulhas water quality," said YB Sontakke, joint director, MPCB.

espite the Supreme (SC) Court being apprised of high pollution levels in Ulhas and Waldhuni rivers near Mumbai, untreated effluents continue to be discharged by industries in the Mumbai Metropolitan Region (MMR). An inspection report submitted in SC by the environment group Vanashakti, last week, showed pollutant discharge at the Maharashtra Industrial Development Corporation (MIDC) area at Sonarpada, Dombivli, had turned the river water turquoise and foamy.

"Effluents are being discharged by industries at unauthorised locations entering stormwater drains and polluting a 1.5 km stretch of Ulhas river. The violations are going unnoticed as there is preferential treatment meted out to Dombivli MIDC textile and chemical industries," said Stalin D. director. Vanashakti.

Following this, a complaint has been filed with the state environment department and Maharashtra Pollution Control Board (MPCB). A stream passing through Dombivli was identified carrying effluents to the main channel, the complaint said.

The inspection also revealed that untreated industrial effluent discharge into the Waldhuni river by Ambernath MIDC and Anand Nagar Additional MIDC has caused a section of the river to turn black. This is the same area where MPCB had issued closure notices to seven firms earlier this year for violating water pollution norms. "The brazenness of the polluters, backed by active support from state agencies, has killed the Ulhas and Waldhuni rivers," added Stalin.

MPCB said they initiated an investigation into the source of pollution. "On taking cognisance of the SC petitioner's complaint, a team has been directed to undertake a site visit and submit a report on alleged violations. Necessary action will be taken based on the report," said SL Waghmare, regional officer (Kalyan), MPCB. In May, a section of Waldhuni river had turned red due to water pollution forcing MPCB to issue a Rs 5 lakh penalty on the Badlapur wastewater treatment plant.

Ulhas and Waldhuni are among 53 of the most polluted rivers in Maharashtra, highest for any state among 351 most polluted rivers in India, according to the Central Pollution Control Board (CPCB). Ulhas supplies drinking water to over 30 lakh residents of the Badlapur-Thane belt.

MIDC officers said they identified a textile industry in the belt using finishing dyes, which had released its effluents in the river. "The frequency of violations have risen. Only essential industries are being allowed to function, and this industry is not one of them. We will ask MPCB to take action against this industry for violating norms," said Kalidas Bandekar, MIDC superintendent engineer for MMR.

Another Vanashakti member Nandkumar Pawar countered, "Despite repeated violations, there is mere

### **34** THE LAST WORD

# WRAP Funds £1.5 Million For Projects Fighting Textile Waste

he Waste and Resources Action Programme (WRAP) has relaunched its grant fund of £1.5 million for "imaginative projects" intending to tackle barriers to textile recycling and reuse.

The Textiles Project Grant Fund is drawn from the £18million Resource Action Fund, provided by the Department for Environment, Food and Rural Affairs (Defra) to support resource efficiency projects, such as the Covid-19 Emergency Surplus Food Grant, which sets out to fight food waste by facilitating its redistribution.

It intends to support projects that prevent textiles going to landfill or incineration and utilise them as a valuable resource.

Grants are between £20,000 and £170,000 awarded as capital expenditure to organisations of any size, both commercial and not-for-profit.

Various changes have been made as the scheme relaunches. Notably, 100% of capital costs are now funded (no match funding required) and capital costs can be put towards helping a business reconfigure itself to comply with Covid-19 safety measures.

Commenting on the relaunch of the fund Peter Maddox, Director of WRAP UK, said: "We have responded swiftly to feedback from the textile sector that businesses are struggling due to the negative impact of







Covid-19. There has been an excellent response since this fund was launched in March. Now that there is no absolute deadline and no match funding required, I am confident that many more organisations will come forward with imaginative projects to combat barriers to textile recycling and reuse - and I urge them to apply soon, to make sure they get their share of the funds available."

Environment Minister Rebecca Pow added: "I know coronavirus has placed extra pressures on the textiles sector, so I'm very pleased that this fund is helping more organisations to explore innovative solutions for the industry.

"Fast fashion is having a real impact on our environment. With more than 300,000 tonnes of clothing being sent to landfill or incineration every year, it's important that we find ways to make the clothing sector more sustainable and environmentally-friendly."

As current markets for recycled textiles tend to be small-scale and traditional, and export markets are set to diminish over time as other countries increase their exports of used textiles, finding the scope for innovation within the sector is essential to avoid textiles becoming waste. WRAP believes the fund can address the need for increased capacity, sorting, handling and reprocessing of textiles.