

CONTENTS

S. No.	TITLE		Page No.
	Defence News		1-11
	Defence Strategic: National/International		1-11
1.	Major Boost to Atmanirbhar Bharat: Defence Production Witnesses 12 Per cent Hike in FY 22-23	<i>Financial Express</i>	1
2.	Indian Fighter Jets, Marching Contingent to Take Part in French National Day Parade with PM Modi as Main Guest	<i>The Print</i>	2
3.	BSF Intercepts Fifth Pakistani Drone in Last Four Days at International Border in Punjab	<i>The Economic Times</i>	2
4.	Kilo-class Submarine INS Sindhuratna Reaches India after Major Refit in Russia	<i>The Hindu</i>	3
5.	MiG-29's Additional Fuel Tank Dislodges During Training, Falls in Forest	<i>The Economic Times</i>	4
6.	India Soon to Jointly Manufacture Jet Engines for LCA-Mk2	<i>Financial Express</i>	5
7.	US, Papua New Guinea Sign Defence Agreement	<i>The Economic Times</i>	6
8.	British Army Seeks New Small Armed UAS Capability	<i>Army Technology</i>	7
9.	Israel Aims to be 'AI Superpower', Advance Autonomous Warfare	<i>India Today</i>	8
10.	China Expanding Central Asian Footprint	<i>The Tribune</i>	9
	Science & Technology News		11-13
11.	OpenAI is Exploring Collective Decisions on AI, like Wikipedia Entries	<i>The Indian Express</i>	11
12.	Enhancing 'Make in India' through the Power of Technology	<i>The Times of India</i>	12

Mon, 22 May 2023

Major Boost to Atmanirbhar Bharat: Defence Production Witnesses 12 Per cent Hike in FY 22-23

For the first time ever India's defence production has crossed Rs one lakh crore mark for in Financial Year (FY) 2022-23, marking a rise of more than 12 per cent over FY 2021-22, when it was Rs 95,000 crore.

The cherry on the cake is that the provisional figure of Rs 1,06,800 crore for the previous year is almost double the value of production (VoP) during the FY 2018-19, which stood at Rs 54,951 crore.

According to an official statement issued by the Ministry of Defence (MoD) last week, the number is expected to go up further once the data is received from the remaining private (sector) defence industries. However, neither the number or the identity of the remaining is disclosed.

“The feat is all the more gratifying considering that the VoP had declined from Rs 81,120 crore in 2018-19 to Rs 79,071 crore in 2019-20. Though this marginal decline was primarily due to the Covid-19 pandemic, it did raise concerns about the ability to stage a healthy recovery,” says Amit Cowshish, Former Financial Advisor (Acquisition), Ministry of Defence.

“The latest figures, which represent a growth of more than 12 per cent over the preceding financial years VoP of Rs 95,000 crore, belie those apprehensions. Maintaining the growth momentum is critical to MoD's stated objective of raising the VoP to Rs 1,75,000 crore by the FY 2024-25. In fact, the pace will have to be more than doubled to reach there,” he opines.

According to the former financial advisor, “The defence industry, especially the private sector, is being increasingly wooed by the government as a part of its Make in India project that aims at making the country a manufacturing hub.”

Initiatives announced by the government

Several policy initiatives and procedural reforms have been undertaken by the government in recent years to encourage the private sector entities, including the MSMEs and the start-ups, to take up design, development and manufacturing of defence equipment, which is crucial for achieving self-reliance in defence.

These measures include increasing proportion of the capital outlay being earmarked for procurement from the local companies, easing the industrial licensing process, facilitating exports, corporatisation of the ordnance factories board, and fine tuning of the procurement procedures.

These reforms have contributed to a nearly 200 per cent increase in the number of licenses issued in the last 7-8 years. However, “several stalled major acquisition programmes indicate many structural, financial and procedural issues remain to be addressed if India has to become truly self-reliant in defence production,” he adds.

<https://www.financialexpress.com/business/defence-major-boost-to-atmanirbhar-bharat-defence-production-witnesses-12-per-cent-hike-in-fy-22-23-3097768/>

ThePrint

Mon, 22 May 2023

Indian Fighter Jets, Marching Contingent to Take Part in French National Day Parade with PM Modi as Main Guest

India is preparing to send a military contingent including fighter aircraft to take part in the French National Day parade where Prime Minister Narendra Modi would be the guest of honour.

The French traditional military parade is held in Paris during the Bastille Day on July 14. The visit is also marking the 25th anniversary of the “strategic partnership” between France and India.

“The Indian military contingent would be including a marching contingent and the Indian Air Force would be deploying its fighter aircraft to take part in the flypast of the event,” defence officials told ANI.

The French Air Force is planning to field its Rafale combat aircraft in the parade which is also in the Indian inventory.

India may send aircraft from the Jaguar fleet which has been designed by the French and joined the Indian Air Force in the 1980s in significant numbers.

In 2016, when French President Francois Hollande had come to India for the Republic Day parade, the French side also sent its contingent.

At that time, the French contingent comprising 56 personnel of the 35th Infantry Regiment of the 7th Armoured Brigade had come.

The soldiers of their regiment were deployed in India between 1781 and 1784. The contingent was preceded by pipes and drums comprising 48 musicians.

India may also send a contingent from the units who have had a history of fighting in the French area during the world wars fought in the last century.

<https://theprint.in/world/indian-fighter-jets-marching-contingent-to-take-part-in-french-national-day-parade-with-pm-modi-as-main-guest/1588776/>

THE ECONOMIC TIMES

Tue, 23 May 2023

BSF Intercepts Fifth Pakistani Drone in Last Four Days at International Border in Punjab

The Border Security Force intercepted a fifth Pakistani drone in the last four days that intruded into India from along the International Border in Punjab to drop a drugs consignment, officials said on Monday. The latest drone was "downed" in the Amritsar sector. The Border Security Force (BSF)

has recovered the large black-coloured drone with a payload of suspected narcotics attached beneath it, they said.

The quantity and quality of the consignment is being ascertained, the officials added.

This is the fifth reported interception of a "rogue" unmanned aerial vehicle along the Punjab border since May 19.

A few more instances of troops picking up the buzzing sound of a drone were reported over the last four days but nothing more could be established, the officials said.

The BSF troops shot down two drones and intercepted a third along the front on Friday (May 19). A BSF spokesperson had said the third drone fell into Pakistani territory and could not be recovered.

A drone that "violated Indian airspace on Saturday night (May 20) was intercepted by firing in the jurisdiction of the Amritsar sector" and the force recovered 3.3 kilogrammes of suspected narcotics that was slung under it.

Punjab shares an over 500-kilometre-long front with Pakistan that is guarded by the BSF and drones and unmanned aerial vehicles taking flight from that country into India with drugs and arms and ammunition payloads have become a matter of concern for security agencies over the last three-four years.

<https://economictimes.indiatimes.com/news/defence/bsf-intercepts-fifth-pakistani-drone-in-last-four-days-at-international-border-in-punjab/articleshow/100429016.cms>



Tue, 23 May 2023

Kilo-class Submarine INS Sindhuratna Reaches India after Major Refit in Russia

The Navy's Kilo-class submarine INS Sindhuratna which underwent a major upgrade in Russia reached Mumbai after sailing for 97 days and almost 10,000 miles with two port calls in between.

The submarine underwent a Medium Refit Life Certification (MRLC) process in Russia which extended its life. However, it faced transportation issues in the backdrop of the war in Ukraine.

The initial plan was to move it by a transport dock ship directly from Russia which did not materialise following which the Navy tried to sea transport the submarine to Norway and then via a transport dock to India which also did not materialise. Following this, the Navy decided to sail it directly on its own.

“INS Sindhuratna, a Sindhughosh class submarine, returned to Mumbai after undergoing major refit at Naval dockyard in Russia. The submarine undertook a gruelling 97 days return passage through the Norwegian Sea, English Channel and the Mediterranean Sea, and arrived Mumbai on May 16,” the Western Naval Command said on Twitter.

#INSSindhuratna, a Sindhughosh class submarine, returned to Mumbai after undergoing major refit at Naval Dockyard in Russia. The submarine undertook a gruelling 97 days return passage through the Norwegian Sea, English Channel & the Mediterranean Sea, & arrived Mumbai on 16 May. pic.twitter.com/AAZJFWSaGS

— Western Naval Command (@IN_WNC) May 17, 2023

“The submarine with its modernised weapon and sensor suite will enhance the force level in the Western Seaboard, opening a new & exciting chapter in submarine operations in Indian Ocean Region,” it added.

The crew was received by Vice-Admiral Sanjay Bhalla, Chief of Staff, Western Naval Command.

On the way, the submarine made port calls in Le Havre, France and Cadiz, Spain.

The Navy has 16 conventional submarines in service. These are seven Russian Kilo-class submarines, four German-origin HDW submarines and five French Scorpene-class submarines.

With delays in induction of submarines, the ageing SSKs - 209s (German HDWs) and EKMs (Russian Kilos) are being put through the MRLC process which will extend their life by 10 to 15 years.

As reported by The Hindu earlier, officials acknowledged that transportation and finding cargo carriers outside the purview of sanctions and their insurance has been a major issue as also insurance and reinsurance.

Of the 10 Kilo-class submarines originally procured from Russia, Sindhurakshak was lost in an accident, Sindhuvir was transferred to Myanmar and Sindhudhvaj was decommissioned in July 2022 after 35 years. Another Kilo-class submarine INS Sindhukirtiis currently at Hindustan Shipyard Ltd., Visakhapatnam for normal refit of 22 months.

The Kilo-class submarines have a displacement of 2,300 tonnes, a maximum diving depth of 300 metres and a top speed of 18 knots. They are able to operate solo for 45 days with a crew of over 50.

<https://www.thehindu.com/news/national/kilo-class-submarine-ins-sindhuratna-reaches-india-after-major-refit-in-russia/article66881333.ece>

THE ECONOMIC TIMES

Mon, 22 May 2023

MiG-29's Additional Fuel Tank Dislodges During Training, Falls in Forest

An additional fuel tank of a MiG-29 aircraft of the Indian Air Force (IAF) got dislodged during a training session on Monday, and fell in a forest area near the Kalaikunda base in West Bengal's Paschim Medinipur district, a defence official said. There was no loss of life or damage to property as a result of the incident, he said.

The MiG-29 aircraft was on a routine training mission.

"While returning to Kalaikunda airbase, ventral drop tank which is used to carry additional fuel got dislodged and fell into an uninhabited forest," the defence official said.

The drop tank was being brought to the Kalaikunda airbase in coordination with the civil administration, he said.

An investigation was started to find out the cause of the incident, the official said.

<https://economictimes.indiatimes.com/news/defence/mig-29s-additional-fuel-tank-dislodges-during-training-falls-in-forest/articleshow/100427474.cms>

Mon, 22 May 2023

India Soon to Jointly Manufacture Jet Engines for LCA-Mk2

Possibilities of co-producing jet engines which will power India's indigenous fighter jets have intensified ahead of Prime Minister Narendra Modi's state visit to the US next month.

At the recently concluded meeting of the 17th meeting of India-U.S. Defence Policy Group (DPG) in Washington DC last week, chaired by Indian Defence Secretary Giridhar Aramane and Under Secretary of Defence for Policy Dr Colin Kahl last week co-producing the jet engines, infantry vehicles and long-range artillery were on the agenda.

Collaboration mechanisms within co-development and co-production are being considered by both countries under the initiative on Critical and Emerging Technologies (iCET) which was announced earlier this year. This was launched as both countries have elevated their strategic partnership and are now ready to work together in different aspects of deepening cooperation in important sectors like military, space and maritime domain.

Financial Express Online has reported earlier this year that both India and the US have joined hands on critical technology including Quantum, Semiconductors, space and more. The announcement was made during the inaugural meeting in the presence of National Security Advisor Ajit Doval, and the counterpart Jake Sullivan.

General Electric (GE) proposal

Officials have confirmed that the proposal made by the US engine manufacturer GE has sent an application to the US Congress to manufacture its GE-414 engine in India under license which has already been identified to power India's indigenous Light Combat Aircraft (LCA)-MK2. Also the US based engine manufacturer is ready to jointly produce jet engines for India's future

Due to the US domestic legislations, earlier efforts to jointly develop and build the jet engines under the Defence Technology and Trade Initiative (DTTI) failed following which the Joint Working Group working on that project had to be wound up.

Financial Express Online has reported earlier this year that the US based General Electric (GE) has sent an application to the US Congress seeking approval to jointly manufacture GE-414 engines in India. And to transfer total technology to HAL for licensed production of the engine to power India's Light Combat Aircraft (LCA)-MK2.

The American company is also keen to participate in another project of producing engines for India's Advanced Medium Combat Aircraft (AMCA). The American engine manufacturer is competing with the French Safran and Roll Royce of the UK.

Are engine companies interested in co-production of engines for LCA/AMCA?

Yes. According to sources, global engine manufacturers are keen to participate in the co-production and co-development of engines for the indigenous fighter jets which are going to be built by state-owned Hindustan Aeronautics Limited (HAL).

"The global engine manufacturers are in the process of competing for the AMCA engine and we are expecting a decision regarding the same soon," a source in the defence and security establishment confirmed to Financial Express Online.

The GE deal for co-production of the engines for the LCA-Mk2 is expected to be firmed up soon. And, then India will join the elite group of four countries in the world which make engines for the jet engines. The announcement is expected to be made when Prime Minister Narendra Modi is in Washington DC in June.

On getting approval from its government, GE will transfer technology for building engines for LCA Mk2 fighter jets which is an advanced version of the LCA-Mk1. The Indian Air Force is flying the LCA-Mk1 being manufactured by HAL at its facility in Bengaluru.

<https://www.financialexpress.com/business/defence-india-soon-to-jointly-manufacture-jet-engines-for-lca-mk2-nbsp-3097873/>

THE ECONOMIC TIMES

Mon, 22 May 2023

US, Papua New Guinea Sign Defence Agreement

U.S. Secretary of State Antony Blinken signed a defence cooperation agreement with Papua New Guinea on Monday, which he said would expand the Pacific island nation's capabilities and make it easier for the U.S. military to train with its forces.

Blinken was also set to meet 14 other Pacific island leaders. India's Prime Minister Narendra Modi had earlier pledged support for the Pacific Islands at a summit in the capital, Port Moresby.

The United States and its allies are seeking to deter Pacific island nations from forming security ties with China, a rising concern amid tension over Taiwan.

Leaders of the Pacific islands, whose territories span 40 million square km (15 million square miles) of ocean, have said rising sea levels caused by climate change are their most pressing security priority.

Meeting PNG Prime Minister James Marape, Blinken said the United States would deepen its partnership across the board with PNG. They discussed economic development, the climate crisis, and the importance of continuing U.S. engagement with the Pacific, the U.S. State Department said.

"The defence cooperation was drafted by the United States and Papua New Guinea as equals and sovereign partners," Blinken said at a signing ceremony.

It will expand PNG defence capabilities to enhance humanitarian assistance and disaster response, and make it easy for United States and PNG forces to train together, Blinken said.

"It will be fully transparent," he added.

China's foreign ministry said it had no objection to normal exchanges and equal and mutually beneficial cooperation between relevant parties and Pacific island countries such as PNG, but cautioned against "geopolitical games".

"What we need to be vigilant about is engaging in geopolitical games in the name of cooperation, and we also believe that no cooperation should target any third parties," ministry spokesperson Mao Ning told a news briefing.

'KNOW WHAT IS HAPPENING'

The United States and PNG struck a separate agreement on increasing maritime surveillance of PNG's exclusive economic zone through U.S. Coast Guard patrols, protecting its economy from illegal fishing.

Blinken said partnerships with businesses would bring tens of billions of dollars' worth of new investment to PNG.

U.S. President Joe Biden sent "his regret that he was not able to be here", he added. Biden was forced to cancel his travel to PNG amid debt ceiling negotiations in Washington.

Marape said the agreement would boost economic security by giving PNG's defence force "the ability to know what is happening in its waters - something we have never had since 1975".

Several universities held protests at campuses against the signing of the Defence Cooperation Agreement, with opposition politicians saying it would upset China. Marape has denied it would stop PNG from working with China, an important trade partner.

The U.S. defence agreement was an extension of an existing agreement, he said earlier.

Marape told media on Sunday the defence agreement would also see an increase in U.S. military presence over the next decade.

The United States will provide \$45 million in new funds as it worked with PNG to strengthen economic and security cooperation, including protective equipment for the PNG defence force, climate change mitigation and tackling transnational crime and HIV/AIDS, the State Department said.

Modi told the 14 leaders of the Forum for India-Pacific Islands Cooperation that India would be a reliable development partner and was committed to a "free, open and inclusive Indo Pacific".

"Without any doubt we are willing to share our capabilities and experiences in digital technology, space technology, health security, food security, climate change and environment protection," he said.

The Quad leaders of Australia, United States, Japan and India had agreed in Hiroshima to increase cooperation with the Pacific, he said.

In his opening remarks, Marape urged India to think of small island states that "suffer as a result of big nations at play".

Marape said Russia's war with Ukraine, for instance, had caused inflation and high fuel and power prices in the region's small economies.

Historians have said PNG and the Solomon Islands - which last year struck a security pact with China - were essential to the U.S. drive across the Pacific to liberate the Philippines in World War Two.

<https://economictimes.indiatimes.com/news/defence/us-papua-new-guinea-sign-defence-agreement/articleshow/100425570.cms>

ARMY TECHNOLOGY

Mon, 22 May 2023

British Army Seeks New Small Armed UAS Capability

The UK Ministry of Defence has issued a request for information on small armed unmanned aerial systems (UAS) to enhance the British Army's operational capabilities.

The UK Ministry of Defence (MoD) has released a request for information on small armed UAS, which the British Army could use to bolster its military capabilities. Seeking innovative solutions, the MoD aims to explore potential armed UAS capabilities with a maximum take-off weight, including payload, of 350g.

In the recently published documents, the British Army expressed keen interest in small armed UAS featuring modular payloads, enabling users to switch out equipment as tactical situations evolve.

The army wants explicitly expandable or reusable solutions tailored to the tactical scenario and payload requirements.

One of the critical requirements for the UAS is its ability to be launched in multiple ways, ensuring flexibility in various scenarios. Additionally, the UAS should have a minimum flight time of 20 minutes, regardless of the payload carried.

By seeking this information, the MoD aims to understand the armed UAS marketplace comprehensively and allow industry stakeholders to present potential solutions while highlighting development opportunities.

They are also expected to brief the ministry on any future developments in this field and disclose any contracts they may have for supplying solutions to other governments. Furthermore, respondents will have the opportunity to present or demonstrate their equipment to the MoD if invited.

The emergence of small armed UAS has become increasingly apparent during the Russian invasion of Ukraine. These UAS, from retrofitted to bespoke systems, are being employed to target personnel and vehicles using air-released munitions, including grenades.

According to GlobalData's "UK Defence Market 2022-2027" report, the UK is in the ongoing process of buying TUAV Nano-unmanned Aerial Vehicles (nUAS) from Elbit Systems and Atlas Dynamics and does also have an ongoing Maritime Heavy Lift UAS procurement for \$509m from Molloy Aeronautics and W Autonomous Systems.

Investment in the UAV domain in the region is primarily driven by forward-looking development programs such as the maritime heavy-lift UAS programs, among others.

The global military UAV market is valued at US\$11.1bn in 2023 and is projected to grow at a CAGR of 5.18% over the forecast period. It is expected to reach US\$18.4bn by 2033 and cumulatively value US\$172.9bn over the forecast period, according to "The Global Military UAV Market Forecast 2023-2033" report.

With its request for information, the British Army aims to enhance its small armed UAS capabilities, ensuring adaptability and flexibility in response to evolving operational requirements.

By embracing modular payloads and versatile solutions, the army seeks to effectively maintain an edge in modern warfare and address emerging threats.

<https://www.army-technology.com/news/british-army-seeks-new-small-armed-uas-capability/>



Tue, 23 May 2023

Israel Aims to be 'AI Superpower', Advance Autonomous Warfare

Israel aims to parlay its technological prowess to become an artificial intelligence "superpower", the Defence Ministry director-general said on Monday, predicting advances in autonomous warfare and streamlined combat decision-making.

Steps to harness rapid AI evolution include the formation of a dedicated organisation for military robotics in the ministry, and a record-high budget for related research and development this year, retired army general Eyal Zamir said.

"There are those who see AI as the next revolution in changing the face of warfare in the battlefield," Zamir told the Herzliya Conference, an annual international security forum.

He named GPT (Generative Pre-trained Transformer) and AGI (Artificial General Intelligence) as deep-learning realms being addressed by civilian AI industries which could eventually have military applications.

These, Zamir said, potentially include "the ability of platforms to strike in swarms, or of combat systems to operate independently, of data fusion and of assistance in fast decision-making, on a scale greater than we have ever seen".

The ministry declined to provide figures on AI funding.

The Israeli military has lifted the veil on some of autonomous systems already deployed. In 2021, it said robot surveillance jeeps would help patrol the Gaza Strip border.

This month, state-owned Israel Aerospace Industries unveiled an autonomous intelligence-gathering submarine which, it said, had already completed "thousands of hours" of operations.

Eyal credited Israel's achievements in cyber warfare - widely believed to have been used against Iranian nuclear facilities - to "a correct and timely discerning of the defence, economic, national and international dimensions".

Similarly, he said, "our mission is to turn the State of Israel into an AI superpower and to be at the head of a very limited number of world powers that are in this club".

<https://www.indiatoday.in/world/story/israel-aims-to-be-ai-superpower-advance-autonomous-warfare-2382899-2023-05-23>

The Tribune

Tue, 23 May 2023

China Expanding Central Asian Footprint

By Manoj Joshi

LAST week, even as the Group of Seven (G7) countries focused on ways to contain China, Beijing worked to consolidate its already substantial influence in Central Asia through a summit convened in the ancient capital of Xian. The show of support that the Central Asian leaders gave Xi Jinping served to contrast with the negative image of China's use of coercive diplomacy that was projected at the Hiroshima summit.

China has not wasted much time in taking advantage of Russia's self-imposed predicament in Ukraine.

China has not wasted much time in taking advantage of Russia's self-imposed predicament in Ukraine. This is precisely what President Vladimir Putin was worried about when he made his first foreign visit in June 2022, months after the start of the Ukraine war, to Tajikistan and Turkmenistan and participated in the sixth Caspian Summit along with the Presidents of Iran, Kazakhstan, Azerbaijan and Turkmenistan. At the time, though, Putin seemed concerned over the US efforts to move into the region. Earlier this year, US Secretary of State Antony Blinken visited Kazakhstan

and convened a meeting of Central Asian foreign ministers. Now, even as Russia is pouring all its resources into the war in Ukraine, China is making its moves.

Central Asia borders China's trouble province of Xinjiang. But it is also an important overland source of its energy supplies and has emerged as a gateway for overland trade with Europe. China's trade with five Central Asian countries is booming; it reached \$70 billion in 2022 and its investments there totalled some \$15 billion. Kazakhstan accounted for \$31 billion of the trade, while Kyrgyzstan came next with \$15.5 billion, followed by Turkmenistan (\$11.2 billion), Uzbekistan (\$9.8 billion) and Tajikistan (\$2 billion).

There is a special significance, too, of the fact that whereas earlier cooperation was bilateral or multilateral under the auspices of the Shanghai Cooperation Organisation (SCO), now it has been brought under a new minilateral involving China and the region.

Speaking at the end of the summit on Friday, Xi outlined a grand plan for the development of Central Asia, one that would involve building infrastructure and boosting trade. Towards that end, he announced \$3.8 billion for financial support and grants. While he spoke of deepening connectivity, he did not quite say that China would support the development of the trans-Caspian international transportation corridor which would effectively bypass Russia. China is also pressing for the construction of the 523-km Kyrgyzstan-Uzbekistan-China railway that would go onwards to Turkiye and avoid Russia.

Xi's four-point vision for a shared future of China and Central Asia included the notion of 'universal security', which called for the need to stand firm against external attempts to interfere in domestic affairs of regional countries. According to Xinhua, "Xi stressed that China is ready to help Central Asian countries improve their law enforcement, security and defence capacity building in an effort to safeguard regional peace."

China has been very careful in its footing in Central Asia so as not to arouse Russian suspicions. It has not challenged the Russia-led Eurasian Economic Union that integrates several of the Central Asian and Caspian republics to Russia in a single market.

So, when it comes to security, the Chinese speak more about internal security and surveillance. As of now, the countries of the region are covered by the Russian-led Collective Security Treaty Organisation (CSTO) and Moscow maintains large bases on the outskirts of Dushanbe, Tajikistan and Kyrgyzstan. Observers have noted that while Russia is the dominant power and responsible for the security under the CSTO, it failed to deal effectively with the Kyrgyz-Tajik border skirmishes last year. Waning Russian influence is evident from the fact that none of the Central Asian nations have backed the Russian invasion of Ukraine, though they did abstain from a UNGA vote to condemn the invasion earlier this year. Kazakhstan provided sanctuary to thousands of Russians fleeing military service in 2022 and its President has put himself forward as a mediator to resolve the conflict.

The Chinese have financed the construction of an outpost for a special forces unit of the Tajikistan police at the Tajik-Afghan border in the Pamir mountains. However, the Tajiks made it clear that no Chinese troops will be stationed at the facility. Concerns over Xinjiang would suggest that Beijing would be keen to enter into a formal security cooperation with the Central Asian nations and revive the drills involving their People's Armed Police.

It is not as though the Chinese moves are new or surprising. Central Asia neighbours China's restive Xinjiang province. Kazakhstan, Kyrgyzstan and Tajikistan have land borders with China. The region has been a significant focus of the Belt & Road Initiative (BRI) and is a major supplier of oil and gas to China through a network involving three pipelines (the fourth is under construction). Indeed, it was in Kazakhstan that Xi had announced the BRI in 2013.

Since 2011, the China-Europe Railway Express has been running freight trains through a network of railways across Eurasia to various European destinations. In 2021 alone, over 15,000 trains transported 1.46 million shipping containers to Europe.

But the Ukraine war has posed issues over the northern route since the EU/US sanctions list includes the Russian Railways. BMW and Audi have suspended shipments by train to China and international shippers such as Maersk and DHL have halted their railway business.

Between the fiasco of the US pullout from Afghanistan and Putin distracted by his disastrous Ukraine venture, China is allowing the gravitational flow to work in its favour and there is little doubt that its influence in Central Asia will continue to grow significantly.

<https://www.tribuneindia.com/news/comment/china-expanding-central-asian-footprint-510299>

Science & Technology News

The Indian EXPRESS

Tue, 23 May 2023

OpenAI is Exploring Collective Decisions on AI, like Wikipedia Entries

ChatGPT's creator OpenAI is testing how to gather broad input on decisions impacting its artificial intelligence, its president Greg Brockman said on Monday.

At AI Forward, an event in San Francisco hosted by Goldman Sachs Group Inc and SV Angel, Brockman discussed the broad contours of how the maker of the wildly popular chatbot is seeking regulation of AI globally.

One announcement he previewed is akin to the model of Wikipedia, which he said requires people with diverse views to coalesce and agree on the encyclopedia's entries.

"We're not just sitting in Silicon Valley thinking we can write these rules for everyone," he said of AI policy. "We're starting to think about democratic decision-making."

Another idea that Brockman discussed, on which OpenAI elaborated in a blog post Monday, is that governments around the world should coordinate to ensure AI is developed safely.

Since the Nov. 30 launch of ChatGPT, generative AI technology that can spin uncannily authoritative prose from text prompts has captivated the public, making the program the fastest growing app of all time. AI has also become a focus of concern over its ability to create deepfake pictures and other misinformation.

In assessing the path forward for AI, Brockman looked at Wikipedia as well as elsewhere. He and OpenAI said a body like the International Atomic Energy Agency (IAEA) could place restrictions on deployment, vet compliance with safety standards and track usage of computing power.

Another suggestion was a global agreement to limit the annual growth of frontier AI capabilities, or a joint global project that major governments could participate in.

OpenAI CEO Sam Altman proposed various ideas to U.S. lawmakers last week for setting guardrails for artificial intelligence, among them requiring licenses to develop the most

sophisticated AI models and establishing a related governance regime. He is visiting European policymakers this week.

<https://indianexpress.com/article/technology/artificial-intelligence/openai-is-exploring-collective-decisions-on-ai-like-wikipedia-entries-8623868/>

THE TIMES OF INDIA

Mon, 22 May 2023

Enhancing 'Make in India' through the Power of Technology

By Somdip Dey

Launched in 2014, the dynamic 'Make in India' initiative captured imaginations around the globe. The initiative, unveiled by the Indian Government, aimed to cement India's position as a leading manufacturing powerhouse. Over the years, the campaign has achieved a notable measure of success, enticing foreign investors and boosting India's manufacturing output. Yet, we believe there's always room for growth and improvement.

Let's delve into the realm of technology. As the saying goes, technology is the fuel that powers the engine of progress. In our current scenario, the fusion of technology and manufacturing could not only expedite processes but also enhance the quality of products, leading to lower costs. Furthermore, it might stimulate the creation of innovative products and services, tailored to meet the demands of an ever-evolving global market.

So, how can we use technology to bolster the 'Make in India' initiative? Let's explore a few intriguing possibilities:

Additive Manufacturing (AM): If you're wondering what this term means, it refers to the process of constructing three-dimensional objects from digital files. It's an exciting advancement that offers an array of benefits. With AM, we can create prototypes, custom components, and even finished goods in a far more efficient and economical manner compared to traditional manufacturing methods.

Robotics: Automation isn't a future fantasy anymore; it's here and it's transforming industries. With robotics, we can automate repetitive tasks, enabling our workforce to concentrate on complex, skill-oriented jobs. It simultaneously enhances workplace safety, creating a conducive environment for productivity.

Artificial Intelligence (AI): The magic of AI lies in its ability to sift through heaps of data and spot valuable patterns and trends. Harnessing AI, we could boost the quality of products and services by improving product design, refining manufacturing processes, and heightening customer service.

Internet of Things (IoT): IoT is the invisible thread that links machines and devices to the internet, providing us with precious insights. It enables manufacturers to collect data, monitor equipment performance and spot potential issues before they wreak havoc, thus promoting efficiency.

By harnessing the potential of technology, we can ensure the success of 'Make in India'. It could heighten the efficiency, quality, and cost-effectiveness of Indian manufacturing, making it an attractive proposition for foreign investors. This would lead to job creation and, in turn, bolster India's economy.

Beyond these examples, we can employ technology in a multitude of ways to augment 'Make in India'. It could be used to enhance worker education and training, develop infrastructure, and create a conducive business environment. With a strategic investment in technology, we can envisage an Indian manufacturing sector that competes globally with gusto.

Sustained by Statistics

A fascinating study by the Boston Consulting Group projected that India has the potential to add a staggering \$1 trillion to its GDP by 2025, given the successful implementation of the 'Make in India' initiative. The research underscored that technology would be crucial in realising this dream.

Another report, 'The Future of Jobs 2020' from the World Economic Forum (WEF), suggested that by investing in technology, India could potentially create a whopping 90 million jobs by 2025. It reiterated the fact that technology is an indispensable tool for job creation.

These studies reinforce the crucial role that technology plays in the success of 'Make in India'. With the right investments in technology, we can conceive of a globally competitive manufacturing sector while simultaneously creating millions of jobs.

Parting Thoughts

The 'Make in India' initiative was a bold and ambitious plan that sought to catapult India onto the world's manufacturing stage. It's our belief that technology can act as a pivotal catalyst in achieving this vision. With a strategic investment in technology, we can enhance the efficiency, quality, and cost-effectiveness of our manufacturing sector, making India an irresistible destination for foreign investors. This, in turn, would help fuel job creation and drive economic growth, leading to a prosperous India that we all envision.

<https://timesofindia.indiatimes.com/blogs/a-window-to-the-tech-world/enhancing-make-in-india-through-the-power-of-technology/>

