

NATIONAL NEWS**Jammu Drone Attacks**

Recently, Drones were used for the first time to drop explosive devices, triggering blasts inside the Air Force Station's technical area in Jammu.

Drone

- Drone is a layman terminology for Unmanned Aircraft (UA). There are three subsets of Unmanned Aircraft- Remotely Piloted Aircraft, Autonomous Aircraft and Model Aircraft. Remotely Piloted Aircraft consists of remote pilot station(s), the required command and control links and any other components, as specified in the type design.
- Besides combat use, drones are used for a range of purposes like package delivery, in agriculture (spraying pesticides etc), monitoring environmental changes, aerial photography, and during search and relief operations, among others.

Key Points**Drone Attacks and Concerns:**

- Over the past two years, drones have been deployed regularly by Pakistan-based outfits to smuggle arms, ammunition and drugs into Indian territory. Drones fly low and therefore cannot be detected by any radar system.
- According to government figures, 167 drone sightings were recorded along the border with Pakistan in 2019, and in 2020, there were 77 such sightings.
- With the rapid proliferation of drone technology and exponential growth of its global market in recent years, the possibility of a drone attack cannot be ruled out even in the safest cities in the world.
- Drones are becoming security threats particularly in conflict zones where non-state actors are active and have easy access to the technology. For example: 2019 twin drone attacks on Aramco crude oil production in Saudi Arabia.
- What makes combat drones in the hands of non-state actors most dangerous is the threat of them being used to deliver weapons of mass destruction. Weapons of mass destruction are weapons with the capacity to inflict death and destruction on such a massive scale and so indiscriminately that its very presence in the hands of a hostile power can be considered a grievous threat.
- In the military domain, small drones have been proliferating at a rate that has alarmed battlefield commanders and planners alike. In certain incidents, the small drones were also armed with explosive ordnance, to convert them into potentially lethal guided missiles, thus demonstrating the growing sophistication with which these potent warriors have found relevance in combat zones.

Reason for Increasing Drone Attacks:

- **Cheap:** The primary reason for this proliferation is that drones are relatively cheaper in comparison to conventional weapons and yet can achieve far more destructive results.
- **Remotely Controlled:** The biggest advantage that comes with using a drone for combat purposes is that it can be controlled from a remote distance and does not endanger any member of the attacking side.
- **Easy to Operate:** It is this easy-to-procure, easy-to-operate, and proven damage potential that makes it important for any country to equip its forces with anti-drone combat technology.

Rules for Drone Regulations in India:

- **Unmanned Aircraft System (UAS) Rules, 2020:**
 1. It is a set of rules notified by the government that aims to regulate the production, import, trade, ownership, establishment of the drone ports (airports for drones) and operation of UAS.
 2. It also seeks to create a framework for drones use by businesses.
- **National Counter Rogue Drones Guidelines 2019:**
 1. The guidelines had suggested a number of measures to counter rogue drones depending on the vitality of assets being protected.
 2. For places of critical national importance, the rules called for deployment of a model that consists of primary and passive detection means like radar, Radio Frequency (RF) detectors, electro-optical and infrared cameras.
 3. In addition to this, soft kill and hard kill measures like RF jammers, Global Positioning System (GPS) spoofers, lasers, and drone catching nets were also suggested to be installed.

Other Initiatives:

- **Directed-Energy Weapon:** Defence Research and Development Organisation (DRDO) has developed two anti-drone Directed-Energy Weapon (DEW) systems, with a 10-kilowatt laser to engage aerial targets at 2-km range and a compact tripod-mounted one with a 2-kilowatt laser for a 1-km range. But they are yet to be productionized in large numbers.

- **Smash-2000 Plus:**The armed forces are now also importing a limited number of other systems like Israeli 'Smash-2000 Plus' computerized fire control and electro-optic sights, which can be mounted on guns and rifles to tackle the threat from small hostile drones in both day and night conditions.

Way Forward

In the backdrop of the drone attack, the Ministry of Civil Aviation could potentially look at making the existing regulations for unmanned aircraft systems more stringent. Current drone rules are sufficient to get information into the system about drones from the manufacturer or importer to end users. However, rogue drones will always be non-compliant. But yes, tightened regulations are required to create deterrence.

INTERNATIONAL RELATION

New Chinese Militia Units for High Altitudes

Recently, Chinese Military has raised new militia units comprising local Tibetan youth for high-altitude warfare.

Key Points

About:

- The new units named Mimang Cheton are presently undergoing training, and are to be deployed mostly in upper Himalayan ranges, both in the eastern and western sectors of the India-China border. They are being trained for a variety of tasks, including using high-tech equipment such as drones on the one hand, as well as mules and horses to reach regions in the Himalayan range that can't be accessed by modern means.
- They have been raised near Eastern Ladakh, the site of the recent border tensions along the Line of Actual Control (LAC), as well as near its borders with Sikkim and Bhutan. The LAC is the demarcation that separates Indian-controlled territory from Chinese-controlled territory.
- Trained units have already been deployed along various locations in the Chumbi valley and at Rutog in Tibet, near the Pangong Tso (lake) in eastern Ladakh.
- The deployment of the new Mimang Cheton units mirrors India's elite and decades-old Special Frontier Force (SFF). Just like the SFF which relies on the knowledge of Tibetans, the Mimang Cheton also relies on the local knowledge of Tibetans as well as locals' resistance to High Altitude Sickness, a problem in alpine warfare.

Objectives:

- **High Altitude Warfare:**The new units will be used for high-altitude warfare as well for surveillance.
- **Socio Cultural Aspect:**A new feature of the units is that upon completion of training, they are being blessed by Buddhist monks in Tibet, which is being interpreted as a sign of greater socio-cultural outreach from the PLA to ethnic Tibetans. This is possibly a new strategy of the PLA to get some mileage in the Tibet region.

Recent Chinese Developments along the Border:

- **Railway Line:**
 1. China has started the first bullet train line in Tibet, linking Lhasa to Nyingchi near the border with Arunachal Pradesh.
 2. It is the second major rail link to Tibet after the Qinghai-Tibet railway that opened in 2006.
- **Highway:**In 2021, China completed construction of a strategically significant highway enabling greater access to remote areas along the disputed border with Arunachal Pradesh in India.
- **New Villages:**
 1. In January 2021, there were reports of Chinese construction of three villages in Arunachal Pradesh 5 kilometres from the Bum La pass.
 2. In 2020, satellite images emerged showing a new village called Pangda built 2-3 km into what Bhutan sees as its land.
 3. In 2017, the Tibet Autonomous Region (TAR) government launched a plan to build moderately well-off villages in border areas. Under this plan 628 first line and second line villages—referring to those right on the border and others in remote areas slightly further within—would be developed along China's borders with India, Bhutan and Nepal.

Concerns for India:

- **Strategic Location:**
 1. Such development in view of the strategic location of Chumbi Valley creates a concern for India. Chumbi Valley is a 100-km protrusion of Chinese territory located between Bhutan in the east and Sikkim in the west.
 2. The valley's location has long resulted in concerns that it could be used to launch operations to snap strategic communications links in the Siliguri Corridor. Siliguri Corridor is a narrow stretch of land located around the city of Siliguri in West Bengal. It connects northeastern states with the rest of the country, and is also known as chicken's neck.

- **China's Strengthening Position:** These developments have come against the backdrop of the border standoff that began in May 2020 and a rapid build-up of infrastructure on the Chinese side along the LAC, including airports, helipads, missile facilities and air sites.

Steps Taken by India to Strengthen its Border:

- India has its own High Altitude Warfare School (HAWS) in Gulmarg, Jammu and Kashmir.
- India will spend 10% funds of the Border Area Development Programme (BADP) only to improve the infrastructure along the China border.
- The Border Roads Organisation (BRO) constructed the Daporijo bridge over Subansiri river in Arunachal Pradesh. It links roads leading upto the LAC between India and China.
- A tunnel at Nechiphu in West Kameng district of Arunachal Pradesh will shorten travel time for troops till the LAC through Tawang, which China claims to be its territory.
- A tunnel is being constructed under the Se La pass in Arunachal Pradesh which connects Tawang to the rest of Arunachal and Guwahati.
- The state government of Arunachal Pradesh has advocated selection of 10 census towns along the India-China border as pilot projects for infrastructure development in order to stop people living along its international borders, specifically with China, from migrating to faraway urban centres in the State.
- Sisseri River Bridge, located at lower Dibang Valley in Arunachal Pradesh, connects Dibang Valley and Siang.
- In 2019, the Indian Air Force inaugurated resurfaced runway at India's easternmost Village-Vijaynagar (Changlang district) in Arunachal Pradesh.
- In 2019, the Indian Army conducted exercise 'HimVijay' in Arunachal Pradesh and Assam with its newly created Integrated Battle Groups (IBG).
- Bogibeel bridge, which is India's longest road-rail bridge connecting Dibrugarh in Assam to Pasighat in Arunachal Pradesh was inaugurated in 2018.

Special Frontier Force

About:

- It was established in November 1962 in the immediate aftermath of the 1962 Sino-India war.
- It falls under the purview of the Cabinet Secretariat where it is headed by an Inspector General who is an Army officer of the rank of Major General. The units that comprise the SFF are known as Vikas battalions.
- They are highly trained special forces personnel who can undertake a variety of tasks which would normally be performed by any special forces unit.
- The recruits initially consisted of Tibetan refugees hailing from the Khampa community (now it has a mixture of Tibetans and Gorkhas). Women soldiers, too, form a part of SFF units and perform specialised tasks.
- SFF units are not part of the Army but they function under operational control of the Army

Major Operations: Operation Eagle (1971 war with Pakistan), Operation Bluestar (clearing Amritsar's Golden Temple in 1984), Operation Meghdoot (securing the Siachen glacier in 1984) and Operation Vijay (war with Pakistan at Kargil in 1999) and many counter-insurgency operations in the country.

Way Forward

India needs to be vigilant enough for any new development in China near its border to protect its interests efficiently. Further, it needs to build robust Infrastructure in difficult border areas in its territory to ensure movement of personnel and other logistical supplies in an efficient manner.

ECONOMY

US' Digital Millennium Copyright Act

Recently, the Union Minister for Electronics and Information Technology was locked out of his Twitter account for an hour allegedly over a notice received for violation of the US' Digital Millennium Copyright Act (DMCA) 1998.

Key Points

Digital Millennium Copyright Act:

- It is a law passed in the US and is among the world's first laws recognising Intellectual Property (IP) on the internet.
- The DMCA oversees the implementation of two 1996 treaties signed by World Intellectual Property Organisation (WIPO) member nations.

Complaint and Compliance:

- Any content creator of any form, who believes that their original content has been copied by a user or a website without authorisation can file an application citing their intellectual property has been stolen or violated.

- In the case of social media intermediaries like Facebook, Instagram or Twitter, content creators can directly approach the platform with a proof of them being original creators. Since these companies operate in nations which are signatories to the WIPO treaty, they are obligated to remove the said content if they receive a valid and legal DMCA takedown notice.

WIPO Treaties:

- WIPO members had agreed upon two treaties, namely the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty. India is a member of both the treaties.
- Both the treaties require member nations and signatories to provide in their respective jurisdictions, protection to IP that may have been created by citizens of different nations who are also co-signatories to the treaty.
 1. Protection must not be any less in any way than the one being given to a domestic copyright holder.
 2. It also obligates that signatories to the treaty ensure ways to prevent circumvention of the technical measures used to protect copyrighted work. It also provides the necessary international legal protection to digital content.

Intellectual Property

- It is a category of property that includes intangible creations of the human intellect, and primarily encompasses copyrights, patents and trademarks.
- It also includes other types of rights, such as trade secrets, publicity rights, moral rights, and rights against unfair competition.
- Every year World Intellectual Property Day is celebrated on 26th April.
- Other than WIPO treaties, it is also covered under the World Trade Organisation's (WTO) Agreement on Trade Related Aspects of Intellectual Property (TRIPS Agreement). India is a member of WTO and hence committed to TRIPS.

World Intellectual Property Organisation

About:

- It is one of the oldest specialised agencies of the United Nations.
- It was created in 1967 to encourage creative activity, to promote the protection of IP throughout the world.
- It currently administers 26 international treaties. Some of the major treaties are:
 1. Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure.
 2. Paris Convention for the Protection of Industrial Property.
 3. Berne Convention for the Protection of Literary and Artistic Works.
 4. Protocol Relating to the Madrid Agreement Concerning the International Registration of Marks-Madrid Protocol.
 5. Washington Treaty on IP in respect of Integrated Circuits.
 6. Nairobi Treaty on the Protection of the Olympic Symbol.
 7. Marrakesh Treaty to facilitate Access to Published Works by Visually Impaired Persons and Persons with Print Disabilities.
- **Headquarter:** Geneva, Switzerland.
- **Members:** As of date, 193 nations across the world, including India, are members of WIPO.
- **Major Functions:**
 1. Policy forum to shape balanced international IP rules for a changing world.
 2. Global services to protect IP across borders and to resolve disputes.
 3. Technical infrastructure to connect IP systems and share knowledge.
 4. Cooperation and capacity-building programs to enable all countries to use IP for economic, social and cultural development.
 5. A world reference source for IP information.

Indian Laws which Cover Intellectual Property

1. Trade Marks Act, 1999.
2. Patents Act, 1970 (as amended in 2005).
3. Copyright Act, 1957.
4. Designs Act, 2000.
5. Geographical Indications of Goods (Registration and Protection) Act, 1999.
6. Semiconductor Integrated Circuits Layout Design Act, 2000.
7. Protection of Plant Varieties and Farmers' Right Act, 2001.
8. Information Technology Act, 2000.

2. Indian Initiatives Shaping Energy Transition

Recently, the Minister of State for New & Renewable Energy launched 'The India Story' booklet, a compilation of Indian initiatives that are shaping India's energy transition. The booklet was launched at the

event on Accelerating Citizen Centric Energy Transition organized by the Ministry of New and Renewable Energy (MNRE).

Key Points**Growth of Renewable Sector:**

- In the last 6 years, India's installed Renewable Energy (RE) capacity has increased by over two and a half times and stands at more than 141 Giga Watts (including large Hydro). It is about 37% of the country's total capacity.
- The installed solar energy capacity has increased by over 15 times, and stands at 41.09 GW.
- India's RE capacity is the 4th largest in the world. Its annual RE addition has been exceeding that of coal based thermal power since 2017.

Ease of Investment in Renewables:

- During the last 7 years, over USD 70 billion investment has been made in RE in India.
- India has a very liberal foreign investment policy for renewables allowing 100% Foreign Direct Investment (FDI) through the automatic route in the sector. Ease of doing business is India's utmost priority.
- Established dedicated Project Development Cells (PDC) and FDI cells in all Ministries for handholding and facilitating domestic and foreign investors. PDCs have been established for the development of investible projects in coordination between the Central Government and State Governments and thereby grow the pipeline of investible projects in India and in turn increase FDI inflows.
- **Renewable Energy Investment Promotion and Facilitation Board (REIPFB) Portal:** It has been developed to provide one-stop assistance and facilitation to the Industry and Investors for development of projects and bringing new investment to the RE sector in India.

Industry's Commitment:

- Several members from the Industry have voluntarily declared RE goals and committed to the Carbon Disclosure Project (CDP), Renewable 100% (RE100) and Science based targets (SBTs).
1. CDP is a global disclosure system that enables companies, cities, states and regions to measure and manage their environmental impacts.
 2. SBTs are greenhouse gas reduction goals set by businesses.

Green Tariff: Rules are being framed for a 'green tariff' policy that will help electricity Distribution Companies (Discoms) supply electricity generated from clean energy projects at a cheaper rate as compared to power from conventional fuel sources. Government is also promoting Green Hydrogen with obligations for Fertilizers and Refining industries (Green Hydrogen Purchase obligations).

Initiatives to Increase Investment in Renewables:

1. Viability Gap Funding options for Offshore Wind Energy.
2. Green Term Ahead Market and Green Day Ahead Market.
3. Rules for facilitating RE through Open Access.
4. RE procurement through exchanges will also be notified to promote non - conventional resources of energy.

INITIATIVES SHAPING INDIA'S ENERGY TRANSITION**➤ Electrification:**

- Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA): Empowering rural and urban households through access to reliable and affordable electricity
- Green Energy Corridor (GEC): Synchronising grid-connected renewable energy with India's national transmission network
- National Smart Grid Mission (NSGM) and Smart Meter National Programme (SMNP): Modernising India's power sector into a secure, adaptive, sustainable, and digitally enabled ecosystem

➤ Renewable Energy:

- National Solar Mission (NSM): The 100 GW solar ambition at the heart of the world's largest renewable energy expansion programme
- The Wind Energy Revolution: Leveraging India's robust wind energy sector to boost clean energy manufacturing and the rural economy
- National Biofuels Policy and SATAT: Building value chains to reduce fuel imports, increase clean energy, manage waste, and create jobs
- Small Hydro Power (SHP): Harnessing the power of water to integrate remote communities into the economic mainstream.
- National Hydrogen Energy Mission (NHEM): Exploring the commercial viability of a versatile clean fuel
- Production-Linked Incentive (PLI) Scheme: Integrating India into the global clean energy value chains

- National Biofuels Policy and SAYAY: Building value chains to reduce fuel imports, increase clean energy, manage waste and create jobs
- **Energy Efficiency:** Unnat Jyoti by Affordable LEDs for All (UJALA): Bringing affordable, energy-efficient lighting and appliances to citizens
- **Clean Cooking:** Pradhan Mantri Ujjwala Yojana (PMUY): Delivering LPG gas to households for Swachh Indhan, Behtar Jeevan – Clean Fuel, Better Life
- **Industrial Decarbonisation:** Perform, Achieve and Trade (PAT): Enhancing energy efficiency and curtailing emissions of hard-to-abate industrial sectors
- **Sustainable Transport:**
 1. Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles (FAME): Driving India's vision for reliable, affordable, and efficient electric mobility
 2. Indian Railways: Going Green: Fuelled by environmental conservation, racing towards net zero carbon emissions by 2030
 3. Sustainable Aviation: Integrating cleaner fuels, energy efficiency and ecosystem preservation with aircraft and airport operations
- **Climate Smart Cities**
 1. Smart City Mission (SCM): Developing sustainable and resilient urban habitats via 'smart solutions'
 2. The Green Buildings Market: Constructing resource efficient, sustainable and resilient buildings
- **City Gas Distribution:** India's CNG and PNG Network: Increasing the adoption of the 'green' fossil fuel for vehicles, households and industries
- **Cooling Action:** India Cooling Action Plan (ICAP): Incentivising the air conditioner industry to build a sustainable cooling value chain
- **Skilling:** Skill Council for Green Jobs (SCGJ): Building a skilled and specialised workforce to deliver India's sustainable development goals
- **Global Initiatives:**
 1. International Solar Alliance (ISA): Harnessing the infinite power for the Sun for sustainable human development
 2. Clean Energy Ministerial (CEM): Fostering international cooperation for a technology-driven transition to a global clean energy economy
 3. Mission Innovation (MI): Investing in innovation in breakthrough clean energy technologies to deliver impact at scale

GOVERNANCE

Cyber Capabilities and National Power Report: IISS

According to a report by International Institute for Strategic Studies (IISS), an influential think tank, India's offensive cyber capability is "Pakistan-focused" and "regionally effective", and not tuned towards China.

Key Points

Countries Under Observation:

- The report has done a qualitative assessment of cyber power in 15 countries.
- Four members of the Five Eyes intelligence alliance – the United States, the United Kingdom, Canada and Australia.
- Three cyber-capable allies of the Five Eyes states – France, Israel and Japan.
- Four countries viewed by the Five Eyes and their allies as cyber threats – China, Russia, Iran and North Korea.
- Four states at earlier stages in their cyber power development – India, Indonesia, Malaysia and Vietnam.

Assessment Criteria:

- The methodology analyses the cyber ecosystem of each state and how it intersects with international security, economic competition and military affairs. The countries are assessed in seven categories:
 1. Strategy and doctrine
 2. Governance, command and control
 3. Core cyber-intelligence capability
 4. Cyber empowerment and dependence
 5. Cyber security and resilience
 6. Global leadership in cyberspace affairs
 7. Offensive cyber capability

Key Observations:

- **The report has divided the 15 states into three tiers of cyber power:**

1. First Tier: States with world-leading strengths across all the categories in the methodology. The United States of America is the only country in this tier.
 2. Second Tier: States that have world-leading strengths in some of the categories. Australia, Canada, China, France, Israel, Russia and the United Kingdom are in this tier.
 3. Third Tier: States that have strengths or potential strengths in some of the categories but significant weaknesses in others. India, Indonesia, Iran, Japan, Malaysia, North Korea and Vietnam are in this tier.
- This report provides confirmation of the likely durability of US digital-industrial superiority for at least the next ten years. There can be two reasons for this.
1. In advanced cyber technologies and their exploitation for economic and military power, the US is still ahead of China.
 2. Since 2018, the US and several of its leading allies have agreed to restrict China's access to some Western technologies. By doing so, these countries have endorsed a partial decoupling of the West and China that could potentially impede the latter's ability to develop its own advanced technology.

India Specific Observations:

- Despite the geo-strategic instability of its region and a keen awareness of the cyber threat it faces, India has made only "modest progress" in developing its policy and doctrine for cyberspace security.
- India has some cyber-intelligence and offensive cyber capabilities but they are regionally focused, principally on Pakistan. However, the military confrontation with China in the disputed Ladakh border area in June 2020, followed by a sharp increase in Chinese activity against Indian networks, has heightened Indian concerns about cyber security, not least in systems supplied by China.
- India is currently aiming to compensate for its weaknesses by building new capability with the help of key international partners – including the US, the UK and France – and by looking to concerted international action to develop norms of restraint.
- India's approach towards institutional reform of cyber governance has been "slow and incremental", with key coordinating authorities for cyber security in the civil and military domains established only as late as 2018 and 2019 respectively. The key authorities work closely with the main cyber-intelligence agency, the National Technical Research Organisation.
- The strengths of the Indian digital economy include a vibrant start-up culture and a very large talent pool. The private sector has moved more quickly than the government in promoting national cyber security.
- The country is active and visible in cyber diplomacy but has not been among the leaders on global norms, preferring instead to make productive practical arrangements with key states.

National Technical Research Organisation

- National Technical Research Organisation (NTRO), established in 2004, is under the National Security Advisor in the Prime Minister's Office and focuses on intelligence gathering.
- The agency specializes in multiple disciplines, which include remote sensing, data gathering and processing, cyber security, geospatial information gathering, cryptology, strategic hardware and software development and strategic monitoring.
- The National Critical Information Infrastructure Protection Centre (NCIIPC), an agency under the control of National Technical Research Organisation, aims to monitor, intercept and assess threats to critical infrastructure and other vital installations from intelligence gathered using sensors and platforms which include satellites, underwater buoys, drones, VSAT-terminal locators and fiber-optic cable nodal tap points.
- NTRO has the same "norms of conduct" as the Intelligence Bureau (IB) and the Research and Analysis Wing (R&AW).

Way Forward

According to the report, India is a third-tier cyber power whose best chance of progressing to the second tier is by harnessing its great digital-industrial potential and adopting a whole-of-society approach to improving its cyber security.

Also, the key is "political will" and "how India organises its intelligence agencies." One of the "leapfrog opportunities" for governments to be more effective in cyberpower is "how they align themselves with other governments".

IMPORTANT FACTS FOR PRELIM**International MSMEs Day**

Every year, Micro, Small and Medium-sized Enterprises (MSMEs) Day is celebrated on 27th June to recognise the contribution of these industries in the implementation of the Sustainable Development Goals (SDGs).

Key Points

History:

- The United Nations (UN) designated 27th June as Micro, Small and Medium-sized Enterprises Day through a resolution passed in the UN General Assembly in April 2017.
- In May 2017, a program titled 'Enhancing National Capacities for Unleashing Full Potentials of MSMEs in Achieving the SDGs in Developing Countries' was launched.
- It has been funded by the 2030 Agenda for Sustainable Development Sub-Fund of the United Nations Peace and Development Fund.

Significance:

- The UN wants countries to recognise sustainable development goals and create awareness about them. An International Trade Centre survey on Covid-19 impact among businesses in 136 countries has shown that nearly 62% of women-led small businesses have been strongly affected by the crisis, compared to just over half of firms led by men, and women-owned are 27% more likely not to survive the pandemic.
- Formal and informal MSMEs make up over 90% of all firms and account, on average, for 70% of total employment and 50% of GDP. As such, they are key actors in achieving a green recovery.

2021 Theme: MSME 2021: Key to an inclusive and sustainable recovery.

Role of MSMEs in Indian Economy:

- They are the growth accelerators of the Indian economy, contributing about 30% of the country's gross domestic product (GDP).
- In terms of exports, they are an integral part of the supply chain and contribute about 48% of the overall exports.
- MSMEs also play an important role in employment generation, as they employ about 110 million people across the country. Interestingly, MSMEs are intertwined with the rural economy as well, as more than half of the MSMEs operate in rural India.

Initiatives to Promote MSME Sector

- The Ministry of Micro, Small & Medium Enterprises (M/o MSME) envisions a vibrant MSME sector by promoting growth and development of the MSME Sector, including Khadi, Village and Coir Industries.
- **The Micro; Small and Medium Enterprises Development (MSMED) Act** was notified in 2006 to address policy issues affecting MSMEs as well as the coverage and investment ceiling of the sector.
- **Prime Minister's Employment Generation programme (PMEGP):** It is a credit linked subsidy scheme, for setting up of new micro-enterprises and to generate employment opportunities in rural as well as urban areas of the country.
- **Scheme of Fund for Regeneration of Traditional Industries (SFURTI):** It aims to properly organize the artisans and the traditional industries into clusters and thus provide financial assistance to make them competitive in today's market scenario.
- **A Scheme for Promoting Innovation, Rural Industry & Entrepreneurship (ASPIRE):** The scheme promotes innovation & rural entrepreneurship through rural Livelihood Business Incubator (LBI), Technology Business Incubator (TBI) and Fund of Funds for start-up creation in the agro-based industry.
- **Interest Subvention Scheme for Incremental Credit to MSMEs:** It was introduced by the Reserve Bank of India wherein relief is provided upto 2% of interest to all the legal MSMEs on their outstanding fresh/incremental term loan/working capital during the period of its validity.
- **Credit Guarantee Scheme for Micro and Small Enterprises:** Launched to facilitate easy flow of credit, guarantee cover is provided for collateral free credit extended to MSMEs.
- **Micro and Small Enterprises Cluster Development Programme (MSE-CDP):** It aims to enhance the productivity and competitiveness as well as capacity building of MSEs.
- **Credit Linked Capital Subsidy and Technology Upgradation Scheme (CLCS-TUS):** CLCS aims at facilitating technology upgradation of Micro and Small Enterprises (MSEs) by providing 15% capital subsidy for purchase of plant & machinery.
- **CHAMPIONS portal:** It aims to assist Indian MSMEs march into the big league as National and Global CHAMPIONS by solving their grievances and encouraging, supporting, helping and hand holding them.
- **MSME Samadhan:** It enables them to directly register their cases about delayed payments by Central Ministries/Departments/CPSEs/State Governments.
- **Udyam Registrations Portal:** This new portal assists the government in aggregating the data on the number of MSMEs in the country.

- **MSME SAMBANDH:** It is a Public Procurement Portal. It was launched to monitor the implementation of the Public Procurement from MSEs by Central Public Sector Enterprises.

2. Project Seabird: INS Kadamba

Recently, the Defence Minister visited the Karwar Naval Base in Karnataka to review the ongoing infrastructure development under Phase-II of 'Project Seabird'.

Key Points

Project Seabird-Phase II:

- Project Seabird involves construction of a naval base over an area of 11,169 acres.
- Phase I comprised construction of a deep-sea harbour, breakwaters dredging, a township, a naval hospital, a dockyard uplift centre and a ship lift. It was completed in 2005.
- Phase-II of Project Seabird was cleared by the Cabinet Committee on Security in 2012. It envisages expanding facilities to house additional warships and set up a new Naval Air Station, among other plans.
- INS Kadamba is currently the third-largest Indian naval base, and is expected to become the largest naval base in the eastern hemisphere after completion of expansion Phase II.
- The Navy's lone aircraft carrier INS Vikramaditya is based at Karwar. The base also has the country's first sealift facility, a unique "shiplift" and transfer system for docking and undocking ships and submarines.
- The project involves several technical and environmental challenges.

Efforts to Boost Self Reliance in Indian Navy:

- More than two-thirds of the Navy's modernisation budget has been spent on indigenous procurement in the last five financial years.
 - Out of the 48 ships and submarines, 46 are being inducted through indigenous construction.
 - Project 75 (I) envisages indigenous construction of submarines equipped with the state-of-the-art Air Independent Propulsion system at an estimated cost of Rs. 43,000 crore.
 - Aircraft Carrier Vikrant, likely to be commissioned in 2022, is a shining example of the Navy's self-reliance efforts.
 - The Navy is continuously strengthening India's relations with its maritime neighbours with its focus on 'SAGAR' (Security & Growth for All in Region).
1. From rescuing stranded Indian nationals from affected countries to ferrying-in critical equipment, including oxygen cylinders, from abroad, Indian Navy has worked tirelessly in the fight against Covid-19 (Operation Samudra Setu - I and II).
 2. SAGAR was launched in 2015. It is India's strategic vision for the Indian Ocean Region (IOR).

DAILY ANSWER WRITING PRACTICE

Qns. The real challenge to India's food security is poor grain management rather than a shortage of grain production. Comment. (250 words)

Ans:

Introduction

As per FAO, India's present food grain production is over 275 million tonnes while annual per capita consumption is nearly 160 kg. Despite sufficient grain production, what India lacks currently is efficient grain management, which includes proper storage and distribution.

With an increasing population (touching 1.8 billion by mid-21st century), limited net sown areas, rising fiscal deficit, inflation and objectives to be fulfilled under National Food Security Act the supply-demand congruency has to be achieved from efficient grain management.

Body

Current Challenges in Grain Management

- Procurement being open-ended while distribution limited through PDS.
- Inadequate storage with FCI, leading to wastages.
- Not efficiently monetizing excessive stocks apart from Buffer Stocks through Open Market Operations.
- Centralised role of FCI in procurement and distribution: less involvement of private entities.
- MSP regime focusing on certain crops like wheat and rice leaving less market space for other cereals like coarse grains.
- NFSA coverage over 67%, despite India's growing purchasing power at an individual level. This increases the subsidy burden on the state exchequer.
- Poor targeting: Some states provide the bulk of grain in FCI's basket-like Haryana and Punjab; beneficiaries.
- Leakages and inefficient working of institutions like FCI. Shanta Kumar committee observed 47% leakage in whole procurement to the beneficiary supply chain.

Steps for efficient grain management

- **Rationalizing subsidy:** Antyodaya category should receive foodgrains at prices notified in NFSA while for others, the prices can be set more rationally.
- **Better Targeting:** Keeping in line with Tendulkar Committee poverty estimation, NFSA coverage should be rationalised.
- **Diversifying procurement basket:**
 1. Eastern and hinterland states should be focussed upon while rationalising food crops especially from Green Revolution belt like north-west India where environmental challenges have also started creeping like soil alkalinity, depleting groundwater table.
 2. MSP regime should make coarser grains marketable by incentivising farmers, especially in drylands. This will help in better nutritional security also.
- De-centralised procurement by states.

Way Forward

These along with other recommendations of Shanta Kumar Committee can help overcome the challenge of grain management in India thereby making India food secure along with curtailing Fiscal Deficit.

DAILY QUIZ

Q1. Consider the following statements:

1. The Constitution of India empowers the Parliament to enact a law to provide for matters relating to citizenship.
2. The children of foreign diplomats posted in India can acquire Indian citizenship by birth.

All persons acquiring citizenship of India must take an oath of allegiance before they are registered as citizens of India.

Which of the given above statements is/are correct?

- a. **1 and 3 only**
- b. 1 only
- c. 2 and 3 only
- d. 1, 2 and 3

Q2. Consider the following statements regarding the “Performance Grading Index”:

1. It is a survey mechanism used to measure the level of student participation at universities and colleges in India.
2. It is initiated by the Department of School Education and Literacy (DoSEL).

Which of the given above statements is/are correct?

- a. 1 only
- b. **2 only**
- c. Both 1 and 2
- d. Neither 1 nor 2

Q3. Consider the following statements:

1. In viral-vectored vaccines, a virus is used to carry the target antigen gene into human cells.
2. Covaxin is an adenovirus viral vector vaccine for COVID-19 jointly developed by Bharat Biotech and the Indian Council of Medical Research.

Which of the given above statements is/are correct?

- a. **1 only**
- b. 2 only
- c. Both 1 and 2
- d. Neither 1 nor 2

Q4. The CEO Water Mandate is a special initiative of

- a. The UN Secretary-General and the UN Global Compact
- b. The UNEP Secretariat and the UN Global Compact
- c. **The UNFCCC Secretariat and the UN Global Compact**
- d. None of the above

Q5. The “Tiananmen square massacre” was in news recently, is mentioned in the news in the context of the affairs of:

- a. Israel
- b. **China**
- c. Russia
- d. Germany