



News Analysis (28 Jun, 2021)

 drishtias.com/current-affairs-news-analysis-editorials/news-analysis/28-06-2021/print

Jammu Drone Attacks

Why in News

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



PAKISTAN'S ROGUE DRONES

The neighbour ramps up the use of drones to drop weapons across the border

AUG. 13, 2019

Police recover a crashed hexacopter drone from Mohawa village in **Amritsar**, Punjab



SEPT. 9-16, 2019

Eight drone sorties delivered arms into Punjab, according to information provided by terrorists arrested from **Tarn Taran**, Punjab, on Sept. 22



JUNE 20, 2020

BSF shoots down a spy drone in the Hiranagar sector of Jammu and Kashmir's **Kathua** district



SEPT. 19, 2020

J&K police arrest three Kashmir Valley-based Lashkar terrorists from **Jammu** who had received weapons via drones the previous night

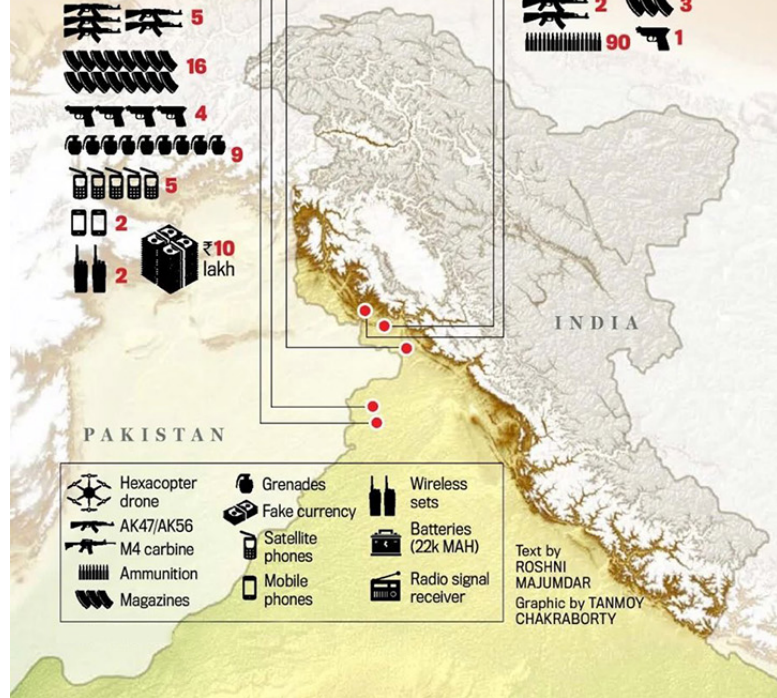


SEPT. 22, 2020

J&K police find weapons delivered via drones at a village in **Akhnoor** sector



• 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:**
 - 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**.
 - It also seeks to **create a framework for drones use by businesses**.
 - **National Counter Rogue Drones Guidelines 2019:**
 - The guidelines had suggested a **number of measures to counter rogue drones** depending on the vitality of assets being protected.
 - 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**.
 - 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**.

Source: TH

Cyber Capabilities and National Power Report: IISS

Why in News

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:**

- Strategy and doctrine
- Governance, command and control
- Core cyber-intelligence capability
- Cyber empowerment and dependence
- Cyber security and resilience
- Global leadership in cyberspace affairs
- Offensive cyber capability

- **Key Observations:**

- The report has **divided the 15 states into three tiers of cyber power:**
 - **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.
 - **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.
 - **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.
 - In advanced cyber technologies and their exploitation for economic and military power, the **US is still ahead of China.**
 - 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”.

Source: IE

US' Digital Millennium Copyright Act

Why in News

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 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.
 - Protection **must not be any less** in any way than the one being given to a domestic copyright holder.
 - 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:
 - **Budapest Treaty** on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure.
 - **Paris Convention** for the Protection of Industrial Property.
 - **Berne Convention** for the Protection of Literary and Artistic Works.
 - Protocol Relating to the **Madrid Agreement** Concerning the International Registration of Marks- Madrid Protocol.
 - **Washington Treaty** on IP in respect of Integrated Circuits.
 - **Nairobi Treaty** on the Protection of the Olympic Symbol.
 - **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:**

- Policy forum **to shape balanced international IP rules** for a changing world.
- Global services **to protect IP across borders and to resolve disputes**.
- Technical infrastructure **to connect IP systems** and share knowledge.
- Cooperation and capacity-building programs **to enable all countries to use IP for economic, social and cultural development**.
- A world reference **source for IP information**.

Indian Laws which Cover Intellectual Property

- Trade Marks Act, 1999.
- **Patents Act, 1970** (as amended in 2005).
- **Copyright Act, 1957**.
- Designs Act, 2000.
- **Geographical Indications of Goods (Registration and Protection) Act, 1999**.
- Semiconductor Integrated Circuits Layout Design Act, 2000.
- **Protection of Plant Varieties and Farmers' Right Act, 2001**.
- **Information Technology Act, 2000**.

Source: IE

New Chinese Militia Units for High Altitudes

Why in News

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:**

- China has started the first bullet train line in Tibet, linking **Lhasa to Nyingchi** near the border with Arunachal Pradesh.
- 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:**

- **In January 2021**, there were reports of **Chinese construction of three villages** in Arunachal Pradesh 5 kilometres from the Bum La pass.
- In 2020, satellite images emerged showing a new village called Pangda built 2-3 km into what Bhutan sees as its land.
- 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:**

- 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.

- 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 Nechipu 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.

Source: TH

Indian Initiatives Shaping Energy Transition

Why in News

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)**.
It was organized in collaboration with the **Permanent Mission of India (PMI)** to the **United Nations** and the **Council on Energy, Environment and Water (CEEW)**.
- The Minister also **launched a website** which will act as a **repository of energy transition related knowledge resources from around the world**.

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)**.

 - **CDP** is a **global disclosure system** that enables companies, cities, states and regions to measure and manage their environmental impacts.
 - **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:**
 - **Viability Gap Funding** options for Offshore **Wind Energy**.
 - **Green Term Ahead Market** and **Green Day Ahead Market**.
 - Rules for facilitating RE through **Open Access**.
 - **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

SustainableTransport

- **Faster Adoption and Manufacturing of (Hybrid &) Electric Vehicles (FAME):** Driving India's vision for reliable, affordable, and efficient electric mobility
 - **Indian Railways: Going Green:** Fuelled by environmental conservation, racing towards net zero carbon emissions by 2030
 - **Sustainable Aviation:** Integrating cleaner fuels, energy efficiency and ecosystem preservation with aircraft and airport operations
-

Climate Smart Cities	<ul style="list-style-type: none"> • Smart City Mission (SCM): Developing sustainable and resilient urban habitats via 'smart solutions' • 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	<ul style="list-style-type: none"> • International Solar Alliance (ISA): Harnessing the infinite power for the Sun for sustainable human development • Clean Energy Ministerial (CEM): Fostering international cooperation for a technology-driven transition to a global clean energy economy • Mission Innovation (MI): Investing in innovation in breakthrough clean energy technologies to deliver impact at scale

Source: PIB

International MSMEs Day

Why in News

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.

What's MSME

Revised Classification applicable w.e.f 1st July 2020			
Composite Criteria: Investment in Plant & Machinery/equipment and Annual Turnover			
Classification	Micro	Small	Medium
Manufacturing Enterprises and Enterprises rendering Services	Investment in Plant and Machinery or Equipment: Not more than Rs.1 crore and Annual Turnover ; not more than Rs. 5 crore	Investment in Plant and Machinery or Equipment: Not more than Rs.10 crore and Annual Turnover ; not more than Rs. 50 crore	Investment in Plant and Machinery or Equipment: Not more than Rs.50 crore and Annual Turnover ; not more than Rs. 250 crore

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.

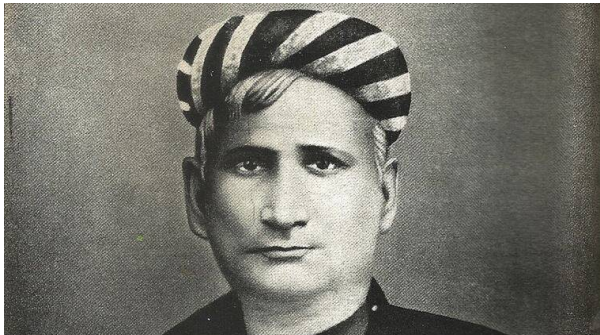
- **Credit Guarantee Scheme for Micro and Small Enterprises:** Launched to facilitate easy flow of credit, guarantee cover is provided for collateral free credit extended to MSMEs.
- **Micro and Small Enterprises Cluster Development Programme (MSE-CDP):** It aims to enhance the productivity and competitiveness as well as capacity building of MSEs.
- **Credit Linked Capital Subsidy and Technology Upgradation Scheme (CLCS-TUS):** CLCSS 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.

Source: HT

Bankim Chandra Chattopadhyay

Why in News

Indian Prime Minister paid homage to Rishi Bankim Chandra Chattopadhyay on his Jayanti on 27th June.



Key Points

- **About:**
 - He was **one of the greatest novelists and poets of India.**
 - He was **born on 27th June 1838 in the village of Kanthapura** in the town of North 24 Parganas, Naihati, present day **West Bengal.**
 - He **composed the song Vande Mataram in Sanskrit**, which was a source of inspiration to the people in their freedom struggle.
 - In 1857, there was a strong revolt against the rule of East India Company but Bankim Chandra Chatterjee continued his studies and passed his B.A. Examination in 1859.
The Lieutenant Governor of Calcutta appointed Bankim Chandra Chatterjee as Deputy Collector in the same year.
 - He was **in Government service for thirty-two years** and retired in 1891.
 - He **died on 8th April, 1894.**

- **Contributions to India's Freedom Struggle:**
 - **His epic Novel Anandamath** - set in the background of the **Sanyasi Rebellion (1770-1820)**, when Bengal was facing a famine too - made Bankim Chandra Chattopadhyay **an influential figure on the Bengali renaissance**.
 - He kept the people of Bengal intellectually stimulated through his literary campaign.
 - India got its national song, **Vande Mataram, from Anandamath**.
 - He also **founded a monthly literary magazine, Bangadarshan, in 1872**, through which Bankim is credited with influencing the emergence of a Bengali identity and nationalism.
 - Bankim Chandra wanted the magazine to work as the medium of communication between the educated and the uneducated classes.
 - The **magazine stopped publication in the late 1880s**, but was **resurrected in 1901 with Rabindranath Tagore as its editor**.
 - While it carried Tagore's writings - including his first full-length novel Chokher Bali - the 'new' Bangadarshan retained its original philosophy, nurturing the nationalistic spirit.
 - During the **Partition of Bengal (1905)**, the magazine played a vital role in giving an outlet to the voices of protest and dissent. Tagore's Amar Sonar Bangla - the national anthem of Bangladesh now - was first published in Bangadarshan.
- **Other Literary Contributions:**
 - He had studied Sanskrit and was very interested in the subject, but later took on the responsibility to make Bengali the language of the masses. However, his first published work - a novel - was in English.
 - His **famous novels** include Kapalkundala (1866), Debi Choudhurani, Bishabriksha (The Poison Tree), Chandrasekhar (1877), Rajmohan's wife and Krishnakanter Will.

Sanyasi Rebellion

- The Sanyasi Uprisings took place in Bengal between the periods of **1770- 1820s**.
- The Sanyasis rose in rebellion after the great famine of 1770 in Bengal which caused acute chaos and misery.
- However, the immediate cause of the rebellion was the **restrictions imposed by the British upon pilgrims visiting holy places** among both Hindus and Muslims.

Source: PIB

International Day Against Drug Abuse and Illicit Trafficking

Why in News

Recently, the Minister for Social Justice & Empowerment launched the website for the **Nasha Mukta Bharat Abhiyaan (NMBA)** on the occasion of **International Day Against Drug Abuse and Illicit Trafficking (26th June)**.

The **Ministry of Social Justice & Empowerment** is the nodal ministry for Drug Demand Reduction, implements various programmes for drug abuse prevention across the country.

Key Points

- **About:**

In order to strengthen action and cooperation in achieving the goal of a world free of drug abuse, the **United Nations (UN) General Assembly**, in **December 1987**, decided to mark **26th June as the International Day Against Drug Abuse and Illicit Trafficking**.

- **2021 Theme:**

"Share Facts On Drugs, Save Lives"

- **Related Initiatives:**

- **Single Convention on Narcotic Drugs**, 1961.
- The **Convention on Psychotropic Substances**, 1971.
- The **UN Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances**, 1988.

India is a signatory to all three and has enacted the **Narcotics Drugs and Psychotropic Substances (NDPS) Act, 1985**.

- Every year, the UN publishes a **World Drug Report**.

Indian Initiatives

- **Nasha Mukht Bharat Abhiyaan/Drugs-Free India Campaign:**

- It was flagged off on **15th August 2020 (Independence Day)** across 272 districts of the country found to be most vulnerable based on the data available from various sources.
- Its focal points are **preventive, mass education and sensitization, capacity building** of service providers, **positive partnership** with educational institutions, and **augmentation of treatment, rehabilitation and counselling facilities**.

- **National Action Plan for Drug Demand Reduction:**

- This Ministry of Social Justice & Empowerment has **begun implementation of a National Action Plan for Drug Demand Reduction (NAPDDR) for 2018-2025**.
- It aims at **reduction of adverse consequences of drug abuse** through a multi-pronged strategy involving **education, de-addiction and rehabilitation** of affected individuals and their families.
- It focuses on preventive education, awareness generation, identification, counselling, treatment and rehabilitation of drug-dependent persons and training and capacity building of the service providers through **collaborative efforts of the Central and State Governments and Non-Governmental Organizations**.

There are more than **500 voluntary organizations across the country, which are assisted financially** under the NAPDDR scheme.

Source: PIB

Project Seabird: INS Kadamba

Why in News

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).
 - 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**).
 - **SAGAR** was launched in **2015**. It is India's strategic vision for the **Indian Ocean Region (IOR)**.

Source: TH
