

# OFFICERS' PULSE

Issue no. 28 | 5th December to 11th December, 2021



YOU OWE IT  
TO YOURSELF  
TO TRY

AT A GLANCE  
& IN DEPTH.

## COVERAGE.

The Hindu

The Indian Express

PIB

Rajya Sabha TV

All India Radio

Polity and Social Issues

Economy

International Relations

Environment

Science and Tech

Culture

**CURRENT AFFAIRS WEEKLY**  
THE **PULSE** OF UPSC AT YOUR FINGER TIPS



# News @ a glance

<b>POLITY..... 3</b>	
1) When can an individual get statutory bail? 3	1) Smart superconducting fault current limiter ..... 13
2) National Policy for Rare Diseases 2021 ..... 3	2) Dhawan -1 ..... 14
3) Beti Bachao Beti Padhao..... 5	3) Facial recognition..... 15
4) How is hallmarking being implemented?... 6	<b>DEFENCE ..... 17</b>
<b>ENVIRONMENT..... 7</b>	1) Chief of Defence Staff..... 17
1) ₹48,000 crore released to 32 States for Afforestation ..... 7	2) Naga Conflict ..... 18
2) National Nutrition Mission (POSHAN Abhiyaan) ..... 7	<b>ART AND CULTURE ..... 22</b>
<b>ECONOMY..... 9</b>	1) Culture mapping..... 22
1) Payments banks ..... 9	<b>PIB ANALYSIS..... 23</b>
<b>INTERNATIONAL RELATIONS ..... 11</b>	1) PM SVANidhi ..... 23
1) International Solar Alliance ..... 11	2) ASEEM Portal ..... 23
2) 21st India-Russia summit..... 11	3) Pradhan Mantri Matsya Sampada Yojana 23
<b>SCIENCE AND TECHNOLOGY..... 13</b>	4) Agricultural Technology Management Agency Scheme ..... 24

# News in Depth

<b>AIR NEWS.....25</b>	4) Swachh Bharat Mission 2.0- Analysis ..... 31
1) CPGRAMS.....25	<b>INDIAN EXPRESS EXPLAINED..... 33</b>
2) Pradhan Mantri Khanij Kshetra Kalyan Yojana .....25	1) Laser Communications Relay Demonstration ..... 33
3) Bhasha Sangam .....26	2) Cabinet nod to Ken-Betwa river link.....33
<b>THE HINDU EDITORIALS.....28</b>	<b>INFOGRAPHIC OF THE WEEK ..... 35</b>
1) India- Russia relations.....28	1) National Social Assistance Programme ..... 35
2) High LPG prices are scorching the air pollution fight.....29	35
3) GST as an unfinished agenda.....30	

# News @ a glance

## POLITY

### 1) When can an individual get statutory bail?

#### Background

- The National Investigation Agency (NIA) has approached the Supreme Court against a Bombay High Court order granting bail to advocate and activist Sudha Bharadwaj. In its bail order, the court has asked the NIA Court to decide the conditions for her release. While she was given 'default bail', eight others were denied the benefit in the same case.
- The case highlights the nuances involved in a court determining the circumstances in which statutory bail is granted or denied, even though it is generally considered "an infeasible right".

#### What is default bail?

- Also known as **statutory bail**, this is a **right to bail that accrues when the police fail to complete investigation within a specified period in respect of a person in judicial custody**. This is enshrined in **Section 167(2) of the Code of Criminal Procedure** where it is not possible for the police to complete an investigation in 24 hours, the police produce the suspect in court and seek orders for either **police or judicial custody**. This section concerns the total period up to which a person may be remanded in custody prior to filing of charge sheet.
- For most offences, the police have **60 days** to complete the investigation and file a final report before the court. However, where the offence attracts death sentence or life imprisonment, or a jail term of not less than 10 years, the period available is **90 days**. In other words, **a magistrate cannot authorise a person's judicial remand beyond the 60-or 90-day limit**.
- At the end of this period, if the investigation is not complete, the court shall release the person **"if he is prepared to and does furnish bail"**.

#### How does the provision vary for special laws?

- The 60- or 90-day limit is only for **ordinary penal law**. **Special enactments** allow greater latitude to the police for completing the probe. In the Narcotic Drugs and Psychotropic Substances Act, the period is 180 days. However, in cases involving substances in commercial quantity, the period may be extended up to one year.
- In the Unlawful Activities (Prevention) Act, the default limit is 90 days only. The court may grant an extension of another 90 days, if it is satisfied with a report by the Public Prosecutor showing the progress made in the investigation and giving reasons to keep the accused in further custody. These provisions show that the extension of time is **not automatic but requires a judicial order**.

#### What are the laid-down principles on this aspect?

- Default or statutory bail is a **right, regardless of the nature of the crime**. The stipulated period within which the charge sheet has to be filed begins from the day the accused is remanded for the first time. It includes days undergone in both police and judicial custody, but **not days spent in house-arrest**.
- A requirement for the grant of statutory bail is that the **right should be claimed by the person in custody**.

### 2) National Policy for Rare Diseases 2021

#### Context

- The Union Health & Family Welfare Ministry is taking measures to spread awareness about the "National Policy for Rare Diseases 2021".

#### What is a rare disease?

- A rare disease is a health condition of **low prevalence that affects a small number of**

**people** compared with other prevalent diseases in the general population.

- Rare diseases include genetic diseases, rare cancers, infectious tropical diseases and degenerative diseases.
- **80% of rare diseases are genetic in origin** and hence disproportionately impact children.

#### Definition of a rare disease

- There is **no universally accepted definition** of rare disease.
- These diseases have **differing definitions** in various countries and range from those that are prevalent in 1 in 10,000 of the population to 6 per 10,000. According to the **Indian Council of Medical Research (ICMR)** registry definition, "A disease or disorder is defined as Rare in India when it **affects fewer than 1 in 2500 individuals**".
- So far about 450 rare diseases have been recorded in India and it is estimated that about 6-8% of the country's population is affected by a rare disease.

#### Challenges associated with rare diseases

- There are 7,000-8,000 classified rare diseases, but **less than 5% have therapies available to treat them**. About 95% rare diseases have no approved treatment and less than 1 in 10 patients receive disease-specific treatment.
- The field of rare diseases is very complex and heterogeneous and prevention, treatment and management of rare diseases have multiple challenges. **Early diagnosis** of rare diseases is a major challenge owing to a variety of factors that include **lack of awareness among primary care physicians, lack of adequate screening and diagnostic facilities etc.**
- There are also fundamental challenges in the **research and development** for the majority of rare diseases as relatively little is known about the pathophysiology or the natural history of these diseases particularly in the Indian context.
- Rare diseases are also **difficult to research upon** as the patients pool is very small and it often results in inadequate clinical experience. **Availability and accessibility to medicines** are also important to reduce morbidity and mortality associated with rare disease.
- The **cost of treatment of rare diseases is prohibitively expensive**. Various High

Courts and the Supreme Court have also expressed concern about lack of a national policy for rare diseases.

#### National Policy for Rare Diseases 2021

- To address all these challenges, the Union Health & Family Welfare Ministry approved the "National Policy for Rare Diseases 2021" in April 2021.

#### Highlights of the Policy

- In the new policy, rare diseases have not been defined but **classified into three groups**.
  - **Group 1** has disorders amenable to one-time curative treatment, including osteopetrosis and Fanconi anaemia.
  - **Group 2** has diseases requiring long-term or lifelong treatment with relatively lower cost of treatment and benefit has been documented in literature, including galactosemia, severe food protein allergy, and homocystinuria.
  - **Group 3** has diseases for which definitive treatment is available, but challenges are to make optimal patient selection for benefit, and very high cost and lifelong therapy, covering diseases such as spinal muscular atrophy (SMA), Pompe disease, and Hunter syndrome.

#### Lowering the Cost of Treatment

- The Rare Diseases Policy aims to lower the high cost of treatment for rare diseases with **increased focus on indigenous research** with the help of a **National Consortium** to be set up with the Department of Health Research, Ministry of Health & Family Welfare as convener.
- Increased focus of research and development and local production of medicines will lower the cost of treatment for rare diseases.

#### National Hospital Based Registry

- The policy also envisages creation of a **national hospital based registry of rare diseases** so that adequate data is available for definition of rare diseases and for research and development related to rare diseases within the country.

#### Screening, Prevention & Treatment

- The Policy also focuses on **early screening and prevention through primary and secondary health care infrastructure** such as Health and Wellness Centres and District Early Intervention Centres (DEICs)

and through counselling for the high-risk parents.

- Screening will also be supported by **Nidan Kendras** set up by the Department of Biotechnology.
- Policy also aims to **strengthen tertiary health care facilities** for prevention and treatment of rare diseases through **designating 8 health facilities as Centre of Excellence (CoEs)** and these CoEs will also be provided one-time financial support of up to Rs 5 crores for upgradation of diagnostics facilities.

#### **Crowd Funding Mechanism**

- Besides, the Policy also envisages a **crowd funding mechanism** in which corporates and individuals will be encouraged to extend financial support through a robust IT platform for treatment of rare diseases.
- Funds collected will be utilized by Centres of Excellence for treatment of all three categories of rare diseases as first charge and then the balance financial resources could also be used for research.

#### **Rashtriya Arogya Nidhi**

- A provision for **financial support up to Rs. 20 lakhs under the Umbrella Scheme of Rashtriya Arogya Nidhi** is proposed for treatment of those rare diseases that require a one-time treatment (diseases listed under **Group 1** in the rare disease policy).
- **Beneficiaries** for such financial assistance would **not be limited to BPL families**, but the benefit will be **extended to about 40% of the population**, who are eligible under Pradhan Mantri Jan Arogya Yojana.
- The **state governments** would be asked to undertake treatment of diseases covered under **Group 2** which largely include disorders managed with special dietary formulae or food for special medical purposes (FSMP) and disorders that are amenable to other forms of therapy.
- For diseases classified under **Group 3**, which require life-long expensive treatments, the government would create a **digital platform to bring together Centres for Excellence, patients undergoing treatment and corporate donors or prospective voluntary individuals who could help fund treatment.**

#### **Criticisms**

- Families of rare diseases patients and their advocacy groups are unhappy with the **lack**

**of financial support for diagnosed Group 3 diseases patients** in the new policy.

- Patients and their support groups had recently written to the health ministry seeking **creation of a seed-funding of Rs 80-100 crore** while rolling out the national policy so that life-saving therapies to all those patients with treatable Group 3 disorders can be provided, thereby reducing any further loss of life.

#### **Way Forward**

- The Centre can set aside a **substantial corpus to fund life-saving treatments**, instead of leaving patients at the mercy of crowdfunding.
- Further, there is a need to support the development of and commercialisation of drugs for treatment, and improve funding for research on rare diseases.

### **3) Beti Bachao Beti Padhao**

#### **About the Scheme**

- Beti Bachao Beti Padhao (BBBP) scheme is a **tri-ministerial initiative** of Ministries of Women and Child Development, Health & Family Welfare and Human Resource which focuses on awareness and advocacy campaign for changing mind-sets, multi-sectoral action, enabling girls' education and effective enforcement of Pre-Conception & Pre Natal Diagnostic Techniques (PC & PNDT) Act.
- Launched in 2015, BBBP **addresses the declining Child Sex Ratio (CSR) and related issues of women empowerment over a life-cycle continuum.**
- The objectives of the Scheme are as under:
  - To prevent gender biased sex selective elimination
  - To ensure survival and protection of the girl child
  - To ensure education and participation of the girl child

#### **First Phase**

- The 100 districts have been identified on the basis of low Child Sex Ratio as per Census 2011 covering all States/UTs as a pilot with at least one district in each state.

#### **Second Phase**

- The scheme has further been expanded to 61 additional districts selected from 11 States/UT having CSR below 918.

#### **Pan India Expansion of BBBP**

- The Pan India Expansion of Beti Bachao Beti Padhao covering all 640 districts (as per census 2011) of the country was launched in 2018.

#### Why in News?

- The Parliamentary Committee on Empowerment of Women in its report tabled in Lok Sabha noted that the **government spent a whopping 80% of funds under its flagship Beti Bachao, Beti Padhao scheme on media campaigns and must now revisit this strategy and invest in measurable outcomes in health and education for girls.**
- It adds that over the last six years, through focussed advocacy BBBP has been able to capture the attention of political leadership and national consciousness towards valuing the girl child. Now, it is time to focus on other verticals by making ample financial provisions to help achieve measurable outcomes related to education and health envisaged under the scheme.

### 4) How is hallmarking being implemented?

#### Context

- The Government of India has made **hallmarking of gold jewellery mandatory** in the country. It is now being implemented by the **Bureau of Indian Standards (BIS)** in a phased manner.
- With an aim to bring transparency in the jewellery trade and increase trust among consumers, the Government has also made it mandatory for the introduction of a **Hallmark Unique Identification (HUID) number** in every piece of jewellery.
- In the first phase, it is being rolled out in 256 districts of the country, though the move was opposed by jewellers' trade bodies.

#### What is HUID?

- HUID is a **six-digit alphanumeric code**, or one that consists of numbers and letters. It is

**given to every piece of jewellery at the time of hallmarking and is unique for each piece.**

- Jewellery is stamped with the unique number manually at the Assaying & Hallmarking (A&H) centre. The hallmark consists of **three symbols** which give some information about the jewellery piece. The first symbol is the **BIS logo**; the second indicates **purity and fineness**; and the third symbol is the **HUID**.
- Before buying any piece of gold jewellery, the buyer should check all these three symbols. Hallmarking & HUID are **mandatory** for 14-, 18- and 22-carat gold jewellery and artefacts.

#### Why is it being introduced?

- HUID gives a distinct identity to each piece of jewellery enabling traceability. It is critical to the **credibility of hallmarking** and to help **address complaints against adulteration**.
- In HUID-based hallmarking, registration of jewellers is an **automatic process with no human interference**. In addition to its role in authentication, it also helps **check malpractice by members of the trade**.
- Jewellers' trade bodies, however, say it's **cumbersome** to number each piece of jewellery and HUID **cannot be engraved in tiny pieces** and also that it will **increase cost for consumers**.

#### What does this mean for the consumer?

- Given that gold plays a big role in the lives of Indians, mandating gold hallmarking is aimed at protecting consumer interests.
- The World Gold Council is of the view that the HUID system has the potential to be rolled out globally to enhance trust in gold at the retail end and remove a strong barrier to gold-buying.

**For doubts and queries email us at [doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

# ENVIRONMENT

## 1) ₹48,000 crore released to 32 States for Afforestation

### About CAMPA

- CAMPA (Compensatory Afforestation Fund Management and Planning Authority) is a **well-defined act** brought by the Government of India to **compensate for the loss of forest area and to maintain the sustainability**.
- In 2002, the Supreme Court had observed that collected funds for afforestation were under-utilised by the states and it ordered for centrally pooling of funds under ad hoc Compensatory Afforestation Fund.
- The court had set up the ad hoc **National Compensatory Afforestation Fund Management and Planning Authority (CAMPA)** to manage the fund.
- In 2009, states had also set up state CAMPAs that received **10 percent** of funds from the national level CAMPA to use for afforestation and forest conservation.
- It seeks to **transfer fund** amounts to dedicated, **non-lapsable interest bearing funds under public account of the Union of India and each State** so as to bring these funds within the overall oversight and control of the Parliament and the State legislatures.  
**The funds will receive payments for:**  
(i) compensatory afforestation,  
(ii) net present value of forest (NPV),  
(iii) other project specific payments.
- It provides for transfer of **90 % of the accumulated amounts to the States** for creation and maintenance of compensatory afforestation and the remaining **10 % amounts to be retained at the National level** will be used for monitoring and evaluation of activities to be undertaken by the States/UTs and Central Government from these funds and to provide, research and technical support to the States.
- It also establishes the National and State Compensatory Afforestation Fund Management and Planning Authorities to manage the National and State Funds.
- The **CAF Act 2016** Rules specify that the funds are to be used for **catchment area treatment, wildlife management, forest**

**fire prevention, soil and moisture conservation work in the forest.**

### What's the news?

- The Compensatory Afforestation Fund Management and Planning Authority (CAMPA) has so far disbursed **₹48,606 crore to 32 States**, according to a response by the Environment Ministry in the Lok Sabha.

## 2) National Nutrition Mission (POSHAN Abhiyaan)

### About the scheme

- POSHAN Abhiyaan (also known as **National Nutrition Mission**) is a flagship programme of the **Ministry of Women and Child Development** that aims to improve nutrition amongst children, pregnant women, and lactating mothers.
- Launched in 2018, it is a multi-ministerial convergence mission with the vision to ensure attainment of **malnutrition free India by 2022**.
- The mission targets to reduce **stunting, under-nutrition, anemia** (among young children, women and adolescent girls) and reduce **low birth weight** by 2%, 2%, 3% and 2% per annum respectively.
- The mission also strives to achieve a reduction in **Stunting** from 38.4% (NFHS-4) to 25% by 2022 (**Mission 25 by 2022**).

### Significance

- Amongst India's most serious yet marginally addressed development challenges is malnutrition, which contributes significantly to the country's disease burden.
- Even as **National Family Health Survey 2015-16 (NFHS-4)** data shows that the country's malnutrition rates have gone down, half of all children from families in the lowest income quintile are still stunted (51 percent) or underweight (49 percent).
- Today, India is home to the largest number of stunted children (46.6 million) and wasted children (25.5 million) in the world. **More than a third of children under five suffer from stunting and wasting and 40% of children between one and four are anaemic.**

- According to the NFHS-4, **over 50% of pregnant and non-pregnant women were found to be anaemic.**

#### Poshan Maah

- To ensure community mobilisation and bolster people's participation, every year the month of September is celebrated as Rashtriya Poshan Maah under POSHAN Abhiyaan across the country.
- The activities in the Poshan maah are focussed on **Social Behavioural Change and Counselling (SBCC)**. The broad themes are: antenatal care, optimal breastfeeding (early and exclusive), complementary feeding, anaemia, growth monitoring, girls' education, diet, right age of marriage, hygiene, and sanitation, eating healthy and food fortification.

#### Why in news?

- According to Government figures, State governments and Union Territories utilised only **56% of the total funds** released under the Poshan Abhiyan or Nutrition Mission in the past three years.
- Out of a total amount of ₹5,312 crore disbursed by the Centre between financial

years 2019 to 2021, a sum of ₹2,985 crore was utilised

#### News in detail

- The five States and UTs with **lowest utilisation** were **Arunachal Pradesh (25.14%), Puducherry (28.03%), Ladakh (31.2%), Punjab (33.62%) and Uttar Pradesh (33.73%)**.
- The five States and UTs that made the **most use** of the funds were **Nagaland (98.34%), Meghalaya (98.14%), Mizoram (94.22%), Sikkim (93.13%) and Dadra and Nagar Haveli (88.2%)**.
- West Bengal, which has refused to adopt Poshan Abhiyan, was allocated ₹267 crore in the past three years but continued to have zero utilisation.
- According to a survey conducted by States, the total number of **"severely acute malnourished" children in the country was less than 15 lakh.**

**For doubts and queries email us at: [doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

# ECONOMY

## 1) Payments banks

### About Payments banks

- Payments banks are the new age banks with limited facilities. These banks mostly operate through the small vendors and shopkeepers. It exists in between the mobile wallet and regular banks.
- Payments banks are permitted to set up their own outlets such as branches, Automated Teller Machines (ATMs), Business Correspondents (BCs), etc. to undertake only certain restricted activities permitted to banks under the Banking Regulation Act, 1949.
- A payments bank provides following services to its customers:
  - Accept demand deposits (restricted upto Rs.2 lakhs)
  - Remittance services
  - Mobile payments
  - Fund transfers
  - Debit card and associated services (Payments banks, however, cannot issue credit cards)
  - Net Banking services
  - Sell third-party financial products like insurance and mutual funds
- However, payments banks cannot undertake the following activities:
  - They **cannot undertake lending activities**
  - They **cannot set up subsidiaries to undertake non-banking financial services activities**
  - They are **not eligible to accept NRI deposits.**

### Objectives

- The main objective of payments banks is to widen the spread of payment and financial services to small business, low-income households, and the migrant labour workforce in a secured technology-driven environment.
- With payments banks, RBI seeks to increase the penetration level of financial services to the remote areas of the country.
- The Reserve Bank expects payments banks to target India's migrant labourers, low-income households and small businesses,

offering savings accounts and remittance services with a low transaction cost.

### Eligible promoters

- Existing non-bank Pre-paid Payment Instrument (PPI) issuers authorised under the Payment and Settlement Systems Act, 2007
- Other entities such as individuals / professionals; Non-Banking Finance Companies (NBFCs), corporate Business Correspondents (BCs), mobile telephone companies, supermarket chains, companies, real sector cooperatives; that are owned and controlled by residents; and public sector entities may apply to set up payments banks.

### Regulations

- Payments banks are registered as a **public limited company** under the **Companies Act, 2013**, and licensed under Section 22 of the **Banking Regulation Act, 1949**.
- Deposits mobilised by the payments bank are covered under the **deposit insurance scheme of the Deposit Insurance and Credit Guarantee Corporation of India (DICGC)**.
- Apart from amounts maintained as **Cash Reserve Ratio (CRR)** with RBI on its outside demand and time liabilities, Payments banks are required to invest **minimum 75 per cent of its "demand deposit balances"** in Government securities/Treasury Bills with maturity up to one year that are recognized by RBI as eligible securities for maintenance of Statutory Liquidity Ratio (SLR) and hold **maximum 25 per cent in current and time / fixed deposits** with other scheduled commercial banks for operational purposes and liquidity management.
- The **minimum paid-up equity capital for payments banks shall be Rs. 100 crore**, of which the promoter's contribution would be minimum 40 percent of paid-up equity capital for the first 5 years of commencement of the business.
- The foreign shareholding in the payments bank would be **as per the Foreign Direct Investment (FDI) policy for private sector banks** as amended from time to time. As per the current FDI policy, the aggregate foreign investment in a private sector bank

from all sources will be allowed upto a maximum of 74 per cent of the paid-up capital of the bank.

#### Why in News?

- Paytm Payments Bank has received **Scheduled Bank status** from the RBI and has been included in the Second Schedule to the Reserve Bank of India Act, 1934.
- Being a Scheduled Payments Bank, Paytm Payments Bank can now explore new business opportunities. It now becomes eligible for refinancing facility from the RBI at the bank rate and gets access to currency storage facility.
- Paytm Payments Bank would now also be eligible to partner in government-run financial inclusion schemes.
- Even with a status upgrade, being a payments bank, it still **cannot lend or issue credit cards** on its own. According to RBI guidelines, the maximum balance an individual payments bank customer can hold is **Rs 2 lakh**. Therefore, a scheduled bank status will not fundamentally alter the way in which Paytm Payments Bank is conducting its business.

**For doubts and queries email us at:  
[doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

# INTERNATIONAL RELATIONS

## 1) International Solar Alliance

### About ISA

- International Solar Alliance (ISA) was launched in 2015 by Prime Minister Narendra Modi and former President of France Francois Hollande at the 21st session of the United Nations Climate Change Conference of the Parties (COP-21) in Paris, France.
- The **Paris Declaration** that established the ISA states that the countries share the collective ambition to undertake innovative and concerted efforts to reduce the cost of finance and technology for deployment of solar generation assets.
- ISA was conceived as a coalition of **solar-resource-rich countries** (which lie either completely or partly between the Tropic of Cancer and the Tropic of Capricorn) to address their special energy needs.
- As guided by the Framework Agreement of the ISA, the interests and objectives of the ISA are as follows:
  - To collectively address key common challenges to scale up solar energy applications in line with their needs;
  - To mobilize investments of more than **USD 1000 billion by 2030**;
  - To take coordinated action through programmes and activities launched on a voluntary basis, aimed at better harmonization, aggregation of demand, risk and resources, for promoting solar finance, solar technologies, innovation, R&D, capacity building etc.;
  - Reduce the cost of finance to increase investments in solar energy in member countries by promoting innovative financial mechanisms and mobilizing finance from Institutions;
  - Facilitate collaborative research and development (R&D) activities in solar energy technologies among member countries.
- **Countries that do not fall between the Tropics can also join the ISA and enjoy all benefits as other members, with the exception of voting rights.**
- The Permanent Secretariat of ISA will be located in India at **Gurugram**, the first time that an inter-governmental treaty-based

alliance will have its headquarters in India. The Interim Secretariat of the ISA is located at the National Institute of Solar Energy (NISE), Gurugram.

### Why in News?

- The UN General Assembly has conferred **Observer Status** to the International Solar Alliance, a historic decision which India said would help provide for a well-defined cooperation between the Alliance and the United Nations that would benefit global energy growth and development.
- In a short span of six years, the ISA has become an example of how positive global climate action can be taken forward through partnerships. ISA provides a dedicated platform for cooperation among Governments, multilateral organisations, industry, and other stakeholders to help achieve a common goal.
- The granting of Observer Status to ISA in the General Assembly would help provide for regular and well-defined cooperation between the Alliance and the United Nations that would benefit global energy growth and development.
- A total of 80 countries have signed and ratified the ISA Framework Agreement and 101 countries have only signed the agreement.

## 2) 21st India-Russia summit

### What's in the news?

- Prime Minister Narendra Modi and President Vladimir Putin recently held the 21st India-Russia summit, covering an array of areas with an aim to further enhance the special and privileged strategic partnership between the two countries.
- Mr Modi said the strategic partnership between the two sides was getting stronger and both sides remained in touch on the situation in Afghanistan and other issues.
- The summit talks took place hours after the **foreign and defence ministers** of the two countries held their inaugural '**2+2**' **dialogue** with an aim to widen the ambit of discussions on strategically important issues.

### Agreements Signed

- Both the countries concluded 28 pacts spanning military, trade, energy and geological exploration.
- The countries concluded a much-awaited ₹5,100-crore deal for the joint production of more than **600,000 AK-203 assault rifles** at a facility in Uttar Pradesh to advance self-reliance in the defence manufacturing sector.
- The rifles will be manufactured in a joint venture called **Indo-Russian Rifles Private Limited (IRRPL)**. The Indian and the Russian entities hold a share capital of 50.5% and 49.5%, respectively.
- The 7.62mm X 39mm caliber AK-203 rifle has an effective range of **300 metres**. The AK-203 rifles will replace INSAS rifles inducted more than three decades ago.
- The two countries also renewed their **military-technical cooperation arrangement for 2021-31**. This 10-year defence cooperation programme outlines the ongoing defence cooperation and future possible cooperation between the two countries. Such agreements have been signed since 1994.

#### Other Major Agreements

- **Roadmap for science, technology and innovation cooperation** between the Ministry of Science and Higher Education of the Russian Federation and the Ministry of Science and Technology of the Government of the Republic of India.
- A **cultural exchange programme** between the Ministry of Culture of the Government of the Republic of India and the Ministry of Culture of the Russian Federation for the years 2021-2024.
- An agreement between the Government of the Republic of India and the Government of the Russian Federation on **technology protection** due to cooperation in the field of research and **use of outer space for peaceful purposes and building and operation of launch vehicles and ground-based space infrastructure**.
- A cooperation agreement between Reserve Bank of India and the Bank of Russia in the **field of responding to cyber attacks**.
- Cooperation in inland waterways, civilian ship building, fertilizers and coking coal were some of the areas being looked at.
- It should be noted that the two countries have a **target of \$30 billion in trade and \$50 billion in investment by 2025**.

For doubts and queries email us at: [doubts@officerspulse.com](mailto:doubts@officerspulse.com)

## SCIENCE AND TECHNOLOGY

### 1) Smart superconducting fault current limiter

#### Why in News?

- Researchers from Indian Institute of Technology (IIT) Kanpur have come up with an innovation that can help protect power grids against sudden, unexpected current surges.
- An innovative **variation of the superconducting fault current limiter (SFCL)**, this smart SFCL not only **shields the grid from large current surges and consequent fire accidents**, it can also sense when the current surges will happen and warn the system about it.

#### The need for superconducting fault current limiter

- **Power grids need protection from sudden surges** in the current (fault current) that arise due to short-circuits, **sudden overdraw of power or excess power generated** due to a falling demand.
- These surges cause heating of the wires and perhaps **melting and consequent short-circuits** and fire accidents.
- **Earlier** this used to be controlled by using **circuit breakers**, which would cut off the current in the event of a surge. These suffered from the limitation that if the response time to the current surge was too large, they would fail to be effective.
- Also, once the circuit was broken to avert the accident, the switch **had to be manually turned** on once again, and this could lead to longer power cuts.

#### How to tackle this

- In the last decade, mainly in developed countries, a **new way to tackle this situation** is being explored – using **superconducting fault current limiters (SFCL)**.
- This device **uses a superconductor**, which **allows a dissipationless passage of current** under normal circumstances, as it **offers zero resistance** to current flow in the **superconducting state**.
- However, **if the current flowing through it increases beyond a threshold value**, as during a fault, its **resistance increases sharply**. The operation of a SFCL is very **rapid and automatic**.

- Once the fault current reduces and the current flow returns to below the threshold value, the resistance of the SFCL also automatically goes down to zero.

#### What did the team achieve in this technology

- The sensor circuitry IIT has incorporated **also serves the purpose of monitoring the current flow** in the SFCL, which, in turn, can be used to detect the initial stages of the current surge during the appearance of a fault.
- This can help the **detection of a fault situation** even while it is developing and therefore, before the large surge fully sets in, one can take pre-emptive action to intentionally switch the SFCL into a high resistive state and limit the increase in fault current and also divert the excess current through a lower resistance path.
- There is also another aspect of smartness to the device. All SFCLs are susceptible to internal **thermal instabilities**. The prototype they have developed is able to sense this too. This is an added advantage.

#### Related information

- A **superconductor** is a **material that can conduct electricity or transport electrons** from one atom to another **with no resistance**.
- This means no heat, sound or any other form of energy would be released from the material when it has reached "**critical temperature**" (**T<sub>c</sub>**), or the temperature at which the material becomes superconductive.
- Another property of a superconductor is that it will exclude magnetic fields, a phenomenon called the **Meissner effect**.

#### Uses of superconductivity

- **Maglev** (magnetic levitation) trains. These work because a superconductor repels a magnetic field so a magnet will float above a superconductor – this virtually eliminates the friction between the train and the track.
- **Large hadron collider or particle accelerator**.
- **SQUIDS** (Superconducting QUantum Interference Devices) are used to detect even the weakest magnetic field. They are

used in mine detection equipment to help in the removal of landmines.

- Superconductors also makes **electricity generation more efficient**
- Very fast **computing**.
- Superconducting magnets have become the natural choice for any application where strong **magnetic fields are needed** – for magnetic resonance imaging (MRI) in hospitals, for example, or for magnetic separation of minerals in industry.

*Try read about superconductivity at room temperature-*

<https://officerspulse.com/first-room-temperature-superconductor/>

## 2) Dhawan -1

### What's in News?

- **Skyroot Aerospace** (an Indian private aerospace manufacturer and commercial launch service provider) successfully tested **Dhawan-1**, India's first privately developed fully cryogenic rocket engine.
- With this, Skyroot Aerospace has become the **country's first privately developed fully cryogenic rocket engine** running on two high-performance **rocket propellants** — **liquid natural gas (LNG) and liquid oxygen (LoX)**.
- The **indigenous engine** was developed using 3D printing with a **superalloy**.
  - **Superalloys**, or high performance alloys, are alloys that exhibit **excellent mechanical strength and creep resistance at high temperatures, good surface stability, and corrosion and oxidation resistance**. The development of superalloys has primarily been driven by the **aerospace and power industries**.

### What the company plans to do

- The company **plans** to put its **first launch vehicle, Vikram-1 based on a solid propulsion engine**, in space. This was after successfully designing and developing the **solid propulsion rocket engine, the first private firm in the country to do so**.
- They also **plan** to launch the **first private space launch vehicle using cryogenic engine Vikram-2** into orbit in two years.

### Related information

#### Cryogenics

- A **cryogenic rocket engine** is one that **employs cryogenic fuel or oxidizer**, which means that its **fuel or oxidizer (or both) are gases that have been liquefied and kept at extremely low temperatures**.
- A Cryogenic rocket stage is **more efficient and provides more thrust** for every kilogram of propellant it burns **compared to solid and earth-storable liquid propellant rocket stages. Specific impulse (a measure of the efficiency) achievable with cryogenic propellants (liquid Hydrogen and liquid Oxygen) is much higher** compared to earth storable liquid and solid propellants, giving it a substantial payload advantage.

### Rocket Propellants

- The **propellant is a chemical mixture composed of a fuel and an oxidizer** that is burned to **produce thrust** in rockets.
  - **Fuel** is a **substance that burns when combined with an oxidizer** to power a vehicle.
  - The **oxidizer is a substance that releases oxygen for use in combination** with a fuel. The mixture ratio refers to the **oxidizer-to-fuel ratio**.
- Propellants are classed **based on their state, which might be liquid, solid, or hybrid**.

### Propellants in liquid form:

- The **fuel and oxidizer are stored in separate tanks** in a liquid propellant rocket and are fed to a combustion chamber where they are combined and burned to produce thrust.
- **Advantages:** Although liquid propellant engines are more sophisticated than solid propellant engines, they have some advantages. The engine can be throttled, halted, or restarted by managing the flow of propellant to the combustion chamber.
- **Disadvantages:** The primary issues with liquid propellants are oxidizers. Storable oxidizers, like nitric acid and nitrogen tetroxide, are exceedingly poisonous and highly reactive, although cryogenic propellants can also have reactivity/toxicity difficulties when stored at low temperatures.
- There are **three types of liquid propellants** utilised in rocketry: **petroleum, cryogenics, and hypergolic**.

- Petroleum fuels are processed from crude oil and are a complex mixture of hydrocarbons
- Cryogenic propellants are liquefied gases held at extremely low temperatures, with liquid hydrogen (LH2) serving as the fuel and liquid oxygen (LO2 or LOX) serving as the oxidizer.
- Hypergolic propellants and oxidizers that spontaneously ignite when they come into touch with each other and do not require an ignition source. Hypergolics are useful for spacecraft manoeuvring systems due to their ease of start and restart.

#### Solid propellant rockets

- **Solid propellant rockets** are the **most basic** of all rocket designs. They are made of a casing, usually made of steel, that is **filled with a mixture of solid compounds (fuel and oxidizer) that burn quickly**, ejecting hot gases through a nozzle to produce thrust.
- **Advantages:** Unlike liquid propellant rockets, solid propellant rockets are much easier to store and handle. The high propellant density also results in a small size.
- **Disadvantages:** Unlike liquid-propellant engines, solid propellant engines cannot be turned off. When ignited, they will burn until the propellant is depleted.

#### Hybrid propellant engines:

- These engines are a cross between solid and liquid propellant engines. **One of the components is solid, usually the fuel, while the other is liquid, usually the oxidizer.** The liquid is injected into the solid, which also functions as a fuel reservoir and a combustion chamber.
- The fundamental benefit of such engines is that they have **great performance**, comparable to solid propellant engines, **but the combustion may be slowed, stopped, or even restarted.** Because it is difficult to apply this concept to very big thrusts, hybrid propellant engines are rarely produced.

### 3) Facial recognition

#### What is it?

- **Face recognition** is a **technology** capable of **identifying or verifying a subject through an image, video or any audiovisual**

**element** of his face. Generally, this identification is used to access an application, system or service.

- The facial recognition system works primarily by recording the face and its features with a camera and then reconstructing those aspects with various types of software.
- The **captured face, together with its features, is saved in a database**, which may be combined with any type of software used for security, banking services, and so on.

#### How it works

- The **big database** (including images and videos of people's faces) is **utilised** in the **Automated Facial Recognition System (AFRS)** to **match and identify** the person. Using Artificial Intelligence technology, an image of an unidentified person from CCTV footage is compared to the existing database for pattern-finding and matching.
- The **use of iris scans, fingerprints and facial recognition** to identify travellers has been operational in some international airports. They use **algorithmic systems** to get a face grab of passengers at the first security checkpoint.
- A **camera scans** the passenger's face, and takes measurements of their facial features to **build a biometric profile** of them. And then, when the same person boards the flight, another camera takes a picture of their face and runs an algorithm to check whether the two images match with the boarding pass.

#### Other Uses

- It is increasingly being used for everything from **mobile phone unlocking to identity verification, from auto-tagging digital photographs to tracking missing people**, and from **targeted advertising to law enforcement.**
- In India, where there are **only 144 constables for every 100,000 citizens**, this can operate as a **force multiplier**. As a result, this technology, along with the existing personnel, has the potential to be a game changer.
- It is **used for identification and authentication.** The **National Crime Records Bureau's Crime and Criminal Tracking Network & Systems (CCTNS)**, for example, uses **computerised facial**

**recognition to identify criminals, missing people, and unexplained dead bodies, as well as for crime prevention.**

#### Why in News?

- Under the **Digi Yatra** initiative, Varanasi, Pune, Kolkata and Vijayawada airports are going to implement facial recognition technology which aims to make air travel paperless and hassle-free.

#### What is Digi Yatra?

- Digi Yatra initiative **aims to make air travel paperless and hassle-free in the country**, and proposes to simplify passenger-related processes at various checkpoints at the airport by using **Facial recognition technology-based biometric scanning**.
- Once implemented, air travellers who choose to use the service **won't have to show their tickets, boarding passes, or physical identity cards** at several points at the airport. This in turn would **reduce queue waiting time and accelerate processing time**.
- The Ministry of Civil Aviation plans to build an **identity management platform** that will **enable biometric-based scanning** across all airports in India. The platform will include **passengers' digital identities, like Aadhaar, passport details or other identity cards**.
- The '**Common Digi Yatra ID**' platform will be used to **enrol passengers, authenticate their data, and share consenting passengers' profiles** with other airport partners. The app-based interface will be built as a **shared national infrastructure, which will provide APIs to airports**. It will also allow other apps to be integrated with it.
- According to the Aviation ministry, the **biometric information collected from the passengers will be deleted 24 hours after**

**flight departure** and will also be compliant with the country's data privacy and protection practices.

#### Issues

- A growing body of research shows that **biometric scanning technologies coupled with AI have an inherent bias**. A report by the U.S. National Institute of Standards and Technology noted that facial recognition technology found **Black, Brown and Asian individuals to be 100 times more likely to be misidentified** than white male faces.
- India introduced the **Personal Data Protection Bill (PDPB), 2019** in the Parliament, **which falls short of the standards set by the Justice Srikrishna Committee**. The Bill fails to build a legal structure on the landmark **Justice K.S. Puttaswamy vs Union of India judgment on the right of privacy**. It diverges from the Committee's 2018 draft, which proposed a judicial oversight in selecting members of the Data Protection Authority.
- Globally, the rapid adoption of Facial Recognition Technology (FRT) raises several concerns, primarily related to the **possibility of the technology's potential to undermine the right to privacy**. Policies focused on mitigating risks associated with use of FRT must be developed to protect personal data.
- **Artificial intelligence and big data are expensive** to implement. The amount of data stored is enormous, necessitating the use of massive network and data storage facilities, both of which are currently unavailable in India.

**For doubts and queries email us at: [doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

# DEFENCE

## 1) Chief of Defence Staff

### About the role of CDS

- The Chief of Defence Staff (CDS) acts as a **single-point military adviser to the government as suggested by the Kargil Review Committee in 1999.**
  - In 2012, the **Naresh Chandra Committee** suggested the creation of a Permanent Chairman of the Chiefs of Staff Committee as a stopgap measure to alleviate concerns about the CDS.
  - The **Lt. General D.B. Shekatkar (retd.) Committee** also recommended the CDS position
- CDS acts as the **principal military adviser to the defence minister on all tri-service matters.** But the three Chiefs continue to advise the defence minister on matters exclusively concerning their respective services.
- The CDS is a **four star general who also heads the department of military affairs.**
- In addition to heading the **Department of Military Affairs (DMA)**, the CDS is also the **permanent chairman of the Chiefs of Staff Committee.** The three service chiefs will be members of the Chiefs of Staff Committee.
- However, **CDS doesn't exercise any military command including over three service chiefs.**
- CDS **will be in charge of the tri-services organizations/agencies involved in cyber and space.**
- CDS will **investigate contract monitoring, increasing the use of indigenous equipment,** leveraging and reforming existing systems, and better prioritising the procurement of defence equipment.
- He will also **prioritise capital purchase bids based on inter-services based on the anticipated budget.**
- CDS will **implement changes to strengthen the forces' combat capability** and is likely to assess plans for 'out of area contingencies' for countries in India's neighbourhood.

### Functions of CDS

- To **head the Department of Military Affairs** in the Ministry of Defence and function as its Secretary.
- To act as the **Principal Military Advisor to the Defence Minister on all Tri-Service matters.**
- To function as the **Permanent Chairman of the Chiefs of Staff Committee**
- To **administer the Tri-Service organizations/agencies/commands.**
- To be a **member of Defence Acquisition Council chaired by Defence Minister**
- To function as the **Military Advisor to the Nuclear Command Authority.**
- To bring about **jointness in operation, logistics, transport, training, support services,** communications, repairs and maintenance, etc of the three Services.
- To ensure **optimal utilisation of infrastructure and rationalise** it through jointness among the Services.
- To **implement Five-Year Defence Capital Acquisition Plan** and Two-Year roll-on Annual Acquisition Plans, as a follow up of Integrated Capability Development Plan.
- To **assign inter-services prioritisation** to capital acquisition proposals based on the anticipated budget.
- To bring about **reforms** in the functioning of three Services with the aim to **augment combat capabilities** of the Armed Forces by reducing wasteful expenditure.

### Service Requirements

- The Defence **Ministry** has changed the rules for the Army, Air Force, and Navy to allow the **Chief of Defence Staff to serve until the age of 65.**
- **After demitting** as the CDS, he will be **ineligible to occupy any government post.**

### Significance

- With the **increasing complexity** of security concerns in the current conflict arena, an integrated approach to defence strategy was required. There are **communication challenges,** as well as **budgetary overruns** by individual commands, which necessitated the **collaboration of the Army, Navy, and Air Force.**
- As the "**first among equals,**" CDS will serve as a **single point of contact** and may be held accountable for his actions and choices. Military commands that have been restructured to make better use of resources

will eliminate excessive redundancy and wasteful spending.

- Because CDS has been in the services for so long, **expertise and understanding** in dealing with adverse situations may be correctly leveraged in order to achieve the intended goals, thereby **developing an architecture for joint commands**.
- There is a **need to induce integration** (bringing together the three Services at various levels and placing them under one commander) in various services. However, there is a distinction to be made between integration and jointness of command.
- CDS will **ensure and promote jointness** (the three services working together independently) through joint planning of command operations, logistics, transportation, training, communications, repairs, and maintenance. This will ensure **close cooperation and collaboration amongst the defence forces**.

#### Why in News?

- Chief of Defence Staff General Bipin Rawat died when an Indian Air Force (IAF) Mi-17V5 helicopter crashed into the Nilgiris in western Tamil Nadu.

## 2) Naga Conflict

### Who are the Nagas?

- Nagas are **members of the Indo-Mongoloid Family**.
- They are a **hill tribe** that live in the isolated and rugged terrain between the Indian states of **Assam and Burma**. Their population is estimated to be over 2.5 million (1.8 million in Nagaland, 0.6 million in Manipur, and 0.1 million in Arunachal states).
  - In **Burma, there are other Naga groups**.
- The **Nagas are not a single tribe**, but an ethnic community made up of various tribes who inhabit Nagaland and its surrounding areas.
  - Aos, Angamis, Changs, Chakesang, Kabuis, Kacharis, Khain-Mangas, Konyaks, Kukis, Lothas (Lothas), Maos, Mikirs, Phoms, Rengmas, Sangtams, Semas, Tankhuls, Yamchumgar, and Zeeliang are the nineteen major Naga tribes

### The history of Nagaland



- In **1881**, the **Naga Hills** were **annexed** by **British India**.
- The **Naga Club** was **formed in 1918** as a consequence of an endeavour to bring disparate Naga clans together.
- In **1929**, the **Naga club** rejected the **Simon Commission**
- In **1946**, the **club** was **renamed** the **Naga National Council (NNC)**.
- The **NNC**, led by **Angami Zapu Phizo**, declared Nagaland an independent state on **August 14, 1947**, and held a "referendum" in **May 1951**, claiming that **99.9 percent** of Nagas favoured a "sovereign Nagaland."
- **Phizo established the Naga Federal Government (NFG)** and **Naga Federal Army** on **March 22, 1952**.
- The **Indian government dispatched the army to quash the rebellion** and adopted

the **Armed Forces (Special Powers) Act in 1958**.

- Nagaland became a state in December 1963. Nagaland was founded by combining Assam's Naga Hills district with the then-North East Frontier Agency (NEFA) province (now Arunachal Pradesh).
- When the government signed the **Shillong Accord in 1975**, this segment of the NNC and NFG agreed to lay down their guns.
- In 1980, a group of roughly 140 people led by **Thuingaleng Muivah**, who was in China at the time, **refused to accept the Shillong Accord and created the National Socialist Council of Nagaland (NSCN)**. Muivah was accompanied by Isak Chisi Swu and S S Khaplang.
- After a violent clash, the **NSCN split** into the NSCN (IM) and the NSCN (K) in **1988**.
- While the NNC began to decline and Phizo died in London in 1991, the **NSCN (IM)** became known as the "**mother of all insurgencies**" in the region.

#### **Demands of Naga Groups**

- The primary demand of Naga groups has been for **Greater Nagalim (sovereign statehood)**, which entails **redrawing boundaries to include all Naga-inhabited areas** in the Northeast under one administrative umbrella.
- It also **encompasses parts of Arunachal Pradesh, Manipur, Assam, and Myanmar**.
- The independent **Naga Yezabo (Constitution) and Naga national flag** are also part of the demand.

#### **Related Accords/Agreements related to Naga conflict**

- **Shillong Accord (1975)**: In Shillong, a peace treaty was reached in which the NNC leadership agreed to lay down their armaments. However, other leaders refused to accept the accord, causing the NNC to split.
- **Ceasefire Agreement (1997)**: The NSCN-IM and the government struck a ceasefire agreement to stop attacks on Indian army personnel. In exchange, the government would halt all offensive counter-insurgency operations.
- **Framework Agreement of 2015**: The Nagas' unique history, culture, and status, as well as their sentiments and ambitions, were recognised in this agreement by the Government of India.

- The State administration recently agreed to prepare the **Nagaland Register of Indigenous Inhabitants**, however due to pressure from various factions, the decision was put on hold.

#### **Issues in resolving the conflicts**

- The demands that the union government may find difficult to meet include recognition of **Naga sovereignty, merger of all Naga-speaking territories into a Greater Nagaland, a separate constitution, and a separate flag**.
- The NSCN (IM)'s present demands have shifted from total sovereignty to greater autonomy within the Indian constitutional framework, with proper recognition for the distinctiveness of Naga history and culture.
  - But, negotiations with the NSCN-IM, on the other hand, have remained difficult since Nagas want the incorporation of their ancestral homelands, which comprise regions in Assam, Manipur, and Arunachal Pradesh.
  - The three states have refused to give territory.
  - In a plea, Manipur has stated that any compromise with Manipur's territorial integrity will not be accepted.
  - The other two states have stated unequivocally that they will not sacrifice their territorial integrity.
- The Centre would face a **difficult task in ensuring that all weapons are relinquished** at the moment of the final agreement.
- Because of the **permeable border and rugged terrain**, it is difficult for Security Forces to cross borders where they are protected and fed.
- In the early stages, the Naga guerrillas were given what became known as a "**safe haven**" in Myanmar.
- At one point, India's opponents (**China and Pakistan**) also provided them with **critical external backing**.
- Another critical question is **how weaponry would be managed in the NSCN-IM camps**. As a 'ceasefire' group, its cadres are supposed to keep their weapons inside designated camps for self-defense only, but many influential cadres are frequently seen moving with weapons in civilian areas, causing many problems.

#### **Why in News?**

- Amid outrage over the mistaken killings of 14 civilians in a botched army operation against insurgents, the Nagaland government and several Naga groups have demanded the Centre to repeal the Armed Forces Special Powers Act (AFSPA), a law that gives sweeping powers to the army in troubled regions.
- Nagaland also called off the Hornbill Festival, an annual event that draws thousands of domestic and foreign tourists.

### Related Information AFSPA

- The Act was enacted decades ago in the context of escalating violence in the North-eastern States, which state administrations found difficult to regulate.
- **AFSPA empowers armed troops to protect public order in "disturbed areas."** They have the **ability to prevent a gathering of five or more people in a given location, to use force, or even to open fire after providing sufficient warning** if they believe someone is breaking the law.
- If there is **probable suspicion**, the **army can also arrest someone without a warrant**, enter or **search a person's home without a warrant**, and **prohibit the possession of firearms**.
- **Anyone arrested or detained may be handed over** to the officer in **charge of the local police station**, along with a report explaining the facts that led to the arrest.
- A disturbed area is one that has been declared through notice under Section 3 of the AFSPA. It can be used in situations where the employment of armed troops in support of civil power is required.

### What exactly is a "disturbed area"?

- A **disturbed area** is one that has been declared by notification in accordance with Section 3 of the AFSPA.
- Disagreements between members of different religious, racial, linguistic, or regional groups, castes, or communities can be called "disturbed area"

### Who has the authority to declare it?

- The **Central Government, or the Governor of the State or administrator of the Union Territory can declare the whole or part of the State or Union Territory as a disturbed area.**

- A suitable **notification** would have to be **made in the Official Gazette**.
- As per **Section 3**, it can be invoked in places where "the use of armed forces in aid of the civil power is necessary".
- **The Disturbed Areas (Special Courts) Act of 1976** states that once a territory is deemed "disturbed," it continues such for three months. The state government can decide whether or not the Act is required in the state.

### Various Recommendations regarding AFSPA

#### Jeevan Reddy Committee:

- In 2004, a committee led by Justice Jeevan Reddy was formed to review AFSPA. Despite the fact that the committee determined that the powers granted by the Act are not absolute, it concluded that the Act should be repealed. It did, however, suggest that key elements of the Act be incorporated into the Unlawful Activities (Prevention) Act of 1967.

#### The important recommendations of Jeevan Reddy Committee:

- If the circumstances calls for it, the state administration may request that the army be deployed for no more than six months.
- The Union government may also deploy the armed forces without the state's request. However, after six months, the situation should be evaluated, and Parliament's consent should be sought to extend the deployment.
- Non-commissioned officers may retain the power to shoot.
- In each district where the Act is in effect, the Union government should establish an independent grievances cell.

#### Justice Verma report

- The Act was mentioned in the **Justice Verma report** as part of a section on crimes against women in conflict zones. "Sexual violence against women by members of the armed forces or uniformed personnel must be brought within the purview of ordinary criminal law," the report stated, adding that "there is an urgent need to review the continuation of AFSPA and AFSPA-like legal protocols in internal conflict areas as soon as possible." This is consistent with the Supreme Court's judgement that the Army and police are not permitted to employ excessive force even

under the AFSPA. However, none of these have had a significant impact on AFSPA.

- The **Second Administrative Reforms Commission** suggested **repealing AFSPA and incorporating its key provisions into the UAPA.**

#### **Hornbill Festival**

- In **Nagaland**, the festival is known as the "**Festival of Festivals.**"
- Nagaland celebrates the Hornbill Festival to **promote inter-tribal interaction.**

- It is one of Nagaland's largest indigenous festivals, organised by the state government to promote tourism in the state.
- The festival is held each year in the first week of December to preserve, protect, and revitalise the uniqueness and richness of Naga heritage.

**For doubts and queries email us at: [doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

# ART AND CULTURE

## 1) Culture mapping

### Why in News:

- The Ministry of Culture has announced that culture mapping of 80 villages associated with noted personalities in history, in particular the freedom movement, unique crafts and festivals, had been started as a pilot project.

### About the project

- Villages with a **connection to the Independence struggle** as well as those with their own **art practices** had been selected **for the pilot project** being conducted by the Indira Gandhi National Centre for the Arts (IGNCA).
- The **aim** is to **create a huge database related to our villages and the culture, customs and traditions there.**
- The project would lead to a **national register and interactive database of artists and art practices** from the villages of India.
- Each artist would be given a **unique ID and an e-commerce platform set up.**
- **IGNCA**, which is an **autonomous organisation under the administrative control of the Ministry of Culture**, has been designated as implementation **agency for the National Mission on Cultural Mapping.**
- The work under the mission involves coordinating the data collection through ground and field surveys conducted on the basis of detailed formats and

questionnaires, mobile application, interactive web-portal and an Over-The-Top (OTT) platform to showcase ethnographic documentaries/ cultural events/ festival/ melas etc. of villages.

### Some of the villages in the current list

- **Sempore or Pandrenthan in Budgam district of Jammu and Kashmir** that is associated with **14th Century mystic Lal Ded or Lalleshwari.**
- From **Ladakh**, the pilot project included **Choglamsar and Wanla villages**, known for **wood carving.**
- **Khatkar Kalan village in Punjab**, which has a **memorial of Bhagat Singh;**
- **Reni village of Uttarakhand**, where the **Chipko movement started;**
- **Kathputli Colony in Delhi**, known for the **“migrant kathputli artists”.**
- **Two villages of Tamil Nadu - Ettayapuram (the birthplace of poet Subramania Bharathi) and Thiruchigadi (a village of “women potters”)** - are also on the list.
- **Kanjirapally village**, associated with **Accama Cherian**, an **Independence activist** known as the **Jhansi Rani of Travancore**, was on the list.

*To read about National Mission on Cultural Mapping-*

<https://officerspulse.com/national-mission-on-cultural-mapping/>

## PIB ANALYSIS

### 1) PM SVANidhi

#### About the scheme

- The Prime Minister Street Vendor's Atma Nirbhar Nidhi (PM SVANidhi) Scheme was launched by the **Ministry of Housing and Urban Affairs** for **providing affordable Working Capital loans to street vendors** to resume their livelihoods that have been adversely affected due to Covid-19 lockdown. It was launched in 2020.
- Under the Scheme, vendors can avail a working capital loan of up to **Rs. 10,000**, which is repayable in monthly instalments in the tenure of **one year**. The loans would be **without collateral**.
- If the vendor repays the instalments in time or earlier, they will develop his credible credit score that makes him eligible for a higher amount of term loan to 20 thousand rupees and so on.
- On timely/ early repayment of the loan, an **interest subsidy @ 7% per annum** will be credited to the bank accounts of beneficiaries through Direct Benefit Transfer on quarterly basis.
- There will be no penalty on early repayment of loan. The scheme promotes digital transactions through cash back incentives up to an amount of Rs. 100 per month.
- The scheme targets to benefit over **50 lakh street vendors**. The duration of the scheme is till March 2022.
- **SIDBI** is implementing the scheme.
- The lending institutions under the Scheme include Scheduled Commercial Banks, Regional Rural Banks, Small Finance Banks, Cooperative Banks, NBFCs, Microfinance institutions and Self Help Group banks.

#### Why in News?

- More than 25 lakh beneficiaries have availed the working capital loan under the PM SVANidhi Scheme.

### 2) ASEEM Portal

#### About the Portal

- In an endeavour to improve the information flow and bridge the demand-supply gap in the skilled workforce market, the **Ministry of Skill Development and Entrepreneurship (MSDE)** launched 'Atma

Nirbhar Skilled Employee Employer Mapping (ASEEM)' portal in 2020 to **help skilled people find sustainable livelihood opportunities**. It acts as a **directory of skilled workforce**.

- Apart from recruiting a skilled workforce, the **Artificial Intelligence-based platform** has been envisioned
  - to strengthen their career pathways by handholding them through their journeys to attain industry-relevant skills and
  - to explore emerging job opportunities which will help migrant labour, who have been severely impacted by the socio-economic fallout of the COVID pandemic.

#### Benefits

- ASEEM is used as a **match-making engine to map skilled workers with the jobs available**.
- Through ASEEM, employers, agencies and job aggregators looking for skilled workforce in specific sectors have the required details at their fingertips.
- It also enables policymakers to take a more objective view of various sectors.

#### Why in News?

- Around 1.3 crore candidates have been registered on ASEEM portal.

### 3) Pradhan Mantri Matsya Sampada Yojana

#### About PMMSY

- The central government launched the Pradhan Mantri Matsya Sampada Yojana (PMMSY) in 2020 to bring about the **Blue Revolution** through sustainable and responsible development of the fisheries sector in India.
- It is a flagship scheme for **integrated, sustainable, inclusive development of marine and inland fisheries sector** in the country with an estimated investment of Rs. 20,050 crores for its implementation during a period of 5 years from FY 2020-21 to FY 2024-25 in all States/Union Territories.
- It aims at enhancing **fish production by an additional 70 lakh tonne** by 2024-25, increasing fisheries **export earnings to**

**Rs.1,00,000 crore** by 2024-25, **doubling of incomes** of fishers and fish farmers, **reducing post-harvest losses** from 20-25% to about **10%**.

- It is designed to address critical gaps in fish production and productivity, quality, technology, post-harvest infrastructure and management, modernization and strengthening of value chain, traceability and establishing a robust fisheries management framework and fishers' welfare.
- It primarily focuses on adopting '**Cluster or Area based approaches**' and creation of Fisheries clusters through backward and forward linkages.

#### Why in News?

- Under PMMSY, the Department of Fisheries has accorded approval of project proposals to the tune of Rs. 5336.96 crores.

### 4) Agricultural Technology Management Agency Scheme

#### About ATMA Scheme

- The Agricultural Technology Management Agency (ATMA) Scheme is a **centrally sponsored scheme** launched in 2005-06.
- The main aim of this scheme is to **impart technical knowledge on a broad scale to the farmers** in getting fruitful results and better per unit income.

- The scheme promotes a **decentralized farmer-friendly extension system** in the country in the form of an Agricultural Technology Management Agency at district level. It aims to make available the latest agricultural technologies and good agricultural practices in different thematic areas of agriculture and allied areas to farmers through different extension activities viz; Farmers Training, Demonstrations, Exposure Visits, Kisan Mela, Mobilization of Farmers Groups and organizing Farm Schools etc.
- ATMA has active participation of farmers/farmer-groups, NGOs, Krishi Vigyan Kendras (KVKs), Panchayati Raj Institutions and other stakeholders operating at district level and below.
- Presently, the scheme is being implemented in 691 districts of 28 states & 5 UTs in the country.

#### Why in News?

- The Ministry of Agriculture & Farmers' Welfare has provided details of Farmers benefited under ATMA Scheme for the year 2021-22 in the Parliament.

**For doubts and queries email us at [doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

# News in Depth

## AIR NEWS

### 1) CPGRAMS

#### About CPGRAMS

- The Centralized Public Grievance Redress And Monitoring System (CPGRAMS), is an online web-enabled system developed by the **National Informatics Centre** in association with the **Department of Administrative Reforms and Public Grievances (DARPG)**.
- It has been developed with an objective of **speedy redress and effective monitoring**

of **grievances** by Ministries/Departments/Organizations of Government of India.

- The CPGRAMS provides the facility to lodge a grievance online **from any geographical location**.
- It enables the citizen to track online the grievance being followed up with Departments concerned and also enables DARPG to monitor the grievance.

The screenshot displays the CPGRAMS website interface. At the top, there is a navigation bar with links for Home, Contact Us, About Us, and FAQs/Help. Below this is the CPGRAMS logo and the text 'Centralized Public Grievance Redress And Monitoring System'. The main content area features a 'REDRESS PROCESS FLOW' diagram with four steps: 01 Citizen Lodges Complaint, 02 Check Grievance Status, 03 Assessment, and 04 Redirection of Concern Authority. Below the flow diagram are three statistics cards: 'CPGRAMS On Mobile', 'Receipts 4,61,611', and 'Disposals 5,03,883'. At the bottom, there are two red banners: 'Handling Public Grievances pertaining to COVID-19 in Ministries /Departments of GoI' and 'Handling of Public Grievances received in CPGRAMS on COVID-19 in States/UTs'.

#### Why in News?

- The government announced that a total of more than 1 crore grievances have been filed under CPGRAMS platforms in the last 10 years and most of them have been disposed of.
- Similarly, more than 50000 appeals were filed in CPGRAMS since the introduction of the **appeal facility** in CPGRAMS in **January 2021**.

#### About NIC

- The National Informatics Centre was established in 1976, as an attached office under the **Ministry of Electronics and Information Technology**.
- The NIC provides infrastructure to help support the delivery of government IT services and the delivery of some of the initiatives of Digital India.

### 2) Pradhan Mantri Khanij Kshetra Kalyan Yojana

#### About PMKKKY

- Launched in 2015, the Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY) is meant to provide for the **welfare of areas and people affected by mining related operations.**

#### Objectives

- The overall objective of PMKKKY scheme include
  - to implement various **developmental and welfare projects/programs in mining affected areas**, and these projects/ programs will be complementing the existing ongoing schemes/projects of State and Central Government;
  - to **minimize/mitigate the adverse impacts**, during and after mining, on the environment, health and socio-economics of people in mining districts; and
  - to ensure **long-term sustainable livelihoods** for the affected people in mining areas.

#### Implementation

- PMKKKY is implemented by the **District Mineral Foundations (DMFs)** of the respective districts using the funds accruing to the DMF.
- The **Mines and Minerals (Development & Regulation) Amendment Act, 2015**, mandated the setting up of **District Mineral Foundations in all districts in the country affected by mining related operations.**
- Where mining leases are granted after 2015, miners will have to contribute an **amount equal to 10% of the royalty payable by them to the DMFs.**
- Using the funds generated by this contribution, the DMFs are expected to implement the PMKKKY.
- **At least 60% of PMKKKY funds will be utilized for high priority areas** like: (i) drinking water supply; (ii) environment preservation and pollution control measures; (iii) health care (iv) education; (v) welfare of women and children; (vi) welfare of aged and disabled people; (vii) skill development; and (viii) Sanitation.
- The rest of the funds will be utilized **undertaking works** like for: (i) physical infrastructure; (ii) irrigation; (iii) energy and watershed development; and (iv) any

other measures for enhancing environmental quality in mining districts.

#### Why in News?

- The Union Government has released the details of funds allocated from the District Mineral Fund to various projects to be taken up through Pradhan Mantri Khanij Kshetra Kalyan Yojana.

### 3) Bhasha Sangam

#### What's in the news?

- The **Ministry of Education** has launched a mobile app called Bhasha Sangam in order to **help people acquire basic conversation ability in languages other than one's mother tongue** to at least 75 lakh people.
- This language learning initiative has been taken under **Ek Bharat Shreshtha Bharat Programme.**
- The App has more than 100 sentences of common usage, both in text and audio format, in 22 Indian languages.

#### Related Information

##### Ek Bharat Shreshtha Bharat

- The initiative 'Ek Bharat Shreshtha Bharat' was announced by Prime Minister Narendra Modi on 31st October, 2015 to commemorate the 140th birth anniversary of Sardar Patel to **revive a sense of 'nationhood'.**
- The programme aims to **actively enhance interaction between people of diverse cultures** living in different States and UTs in India, with the objective of promoting greater mutual understanding amongst them.
- As per the programme, each year, **every State/UT would be paired with another State/UT** in India for reciprocal interaction between the people.
- It is envisaged through this exchange, that the knowledge of the language, culture, traditions and practices of different states will lead to an enhanced understanding and bonding between one another, thereby strengthening the unity and integrity of India.
- The broad objectives of the initiative are as follows:
  - **To CELEBRATE** the Unity in Diversity of our Nation and to maintain and strengthen the fabric of traditionally

- existing emotional bonds between the people of our Country;
- **To PROMOTE** the spirit of national integration through a deep and structured engagement between all Indian States and Union Territories through a year-long planned engagement between States;
  - **To SHOWCASE** the rich heritage and culture, customs and traditions of either State for enabling people to understand and appreciate the diversity that is India, thus fostering a sense of common identity
  - **TO ESTABLISH** long-term engagements and,
  - **TO CREATE** an environment which promotes learning between States by sharing best practices and experiences.

**For doubts and queries email us at [doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

# THE HINDU EDITORIALS

## 1) India- Russia relations

### Context

- Russian President Vladimir Putin's recent visit to New Delhi for the 21st India-Russia Summit meeting with Prime Minister Narendra Modi highlights the **constant efforts by both leaders** to nurture and to provide further impetus to the '**India-Russia Special and Privileged Strategic Partnership**'.

### Strategic partnership

- The resilience of both the countries is built on the **firm foundation of strategic national interest and the synergy of geopolitics**.
- In the post-Cold War era, while India has emerged as an **economic powerhouse** and a key stakeholder in today's global debate be it **climate change, international trade, or the menace of terrorism**, Russia with its global status and presence presents a win-win situation for deeper cooperation.
- This relation between both countries has evolved with time, deepening the integration and widening the breadth of the relation.

### Areas of Convergence

#### Defence

- Russia is the key and **principal supplier of arms and armaments** to the Indian armed forces accounting for over 60% of weapons.
- It comprises the whole gamut covering the Indian Army, Indian Air Force and Indian Navy.
- India recently inducted the **S-400 Triumf missile systems**.
- **Sukhoi Su-30 fighter aircraft, T-90 tanks, and the Talwar and the Krivak class stealth frigates** are key weapons in the armoury of the Indian armed forces.
- The India-Russia defence cooperation has evolved from a buyer-seller model to new areas of military-technical collaboration.
- The **BrahMos missile system** was a successful collaboration of joint research, development, and production.
- **Science and technology, nuclear energy, and space** have been key driving forces.

#### Strategic partnership

- "**Declaration on the India-Russia Strategic Partnership**" was signed by Russia in October 2000 that unlocked new opportunities in strategic, science and technology, space, energy, nuclear ties, trade and commerce, culture and a people-to-people connect and it was elevated to the level of a "Special and Privileged Strategic Partnership".
- For smooth functioning of this strategic partnership, it was governed by an institutionalised dialogue mechanism involving key stakeholders at the political and official levels.
- The **inaugural '2+2' dialogue** between the Foreign and Defence Ministers of the two countries promises to provide new vitality to the special and privileged strategic partnership.

#### Bilateral trade

- Bilateral trade has seen the two countries **progressing** from defence and energy to IT, pharmaceuticals, agro-industries, mineral and metallurgy, fertilizers, and infrastructure projects.
- India-Russia trade was valued at the **U.S.\$10.11 billion** in 2019-20.

#### Areas of divergence

- Changes in interests and capabilities are being fuelled by geopolitical differences which are widening the divergence between India and Russia.
- In terms of geostrategy, **Russia is aligned with China** and India is more anchored toward the United States which was apparent in the Indian and Russian approach over Afghanistan.

#### Way forward

##### Strengthen multilateralism

- Apart from convergence in defence, trade and investment, energy, and science and technology, India and Russia need to work together in a trilateral manner or using other flexible frameworks, particularly in Southeast Asia and Central Asia.
- Their growing collaboration can be a force of stability and will bring more diversity to the region while strengthening multilateralism.

##### Encourage youth exchanges

- The two countries also need to look at peoples' power — youth exchanges as well as deeper links in various fields including sport, culture, spiritual and religious studies.

### Conclusion

- In the new era of **multipolarity and globalisation**, it is of utmost importance for dependable partners to ensure enduring sensitivity to their mutual interests. The Modi-Putin meeting has sent the unambiguous signal to the world that the India-Russia partnership is an **incredible friendship ensuring stability and diversity**.

## 2) High LPG prices are scorching the air pollution fight

### Context

- This article describes how far we have managed to dissuade households from biomass and what more we need to do as a country to move further.

### LPG- Primary cooking fuel

- As per the **Global Burden of Disease Study 2019**, Solid fuel use for cooking is the leading contributor to air pollution and related premature deaths in India
- As per the **India Residential Energy Survey (IRES) 2020**, conducted by the **Council on Energy, Environment and Water (CEEW)** and the **Initiative for Sustainable Energy Policy**, LPG has now replaced biomass as the most common cooking fuel in India.
- Nearly 85% of Indian homes have an LPG connection and 71% use it as their primary cooking fuel, compared to only 30% a decade back.
- This reversal of trends could be attributed to the success of the **Ujjwala, consumption-linked subsidies and gradual strengthening of the LPG distributorship**.

### Current issues

- Around 30% of Indian households **continue to rely on biomass** as their primary cooking fuel, mainly due to high LPG prices.
- The practice of biomass usage is predominantly concentrated in **rural areas**, particularly among States such as

Bihar, Jharkhand, Chhattisgarh, Madhya Pradesh, Odisha and West Bengal.

- **Urban slums** are also critical hotspots where the use of biomass for cooking is widely prevalent.
- **Easy availability of free biomass and lack of home delivery of LPG refills** further reduce the efficacy of LPG as a reliable and affordable proposition.

### Steps to be taken

- To sustain the country's momentum on clean cooking energy access and thereby, cleaner air for all, the following steps have been proposed.

#### Reinstate the subsidies on LPG refill for low-income households

- At the current refill prices, an average Indian household would have to spend around 10% of its monthly expense on LPG to meet all its cooking energy needs.

#### Explore diverse approaches to identify beneficiaries.

- This may include limiting the subsidy provision to seven to eight LPG refills annually and excluding well-to-do households using robust indicators.
- At the bare minimum, subsidy must be resumed for the households granted LPG connections under the Ujjwala scheme.

#### Strengthen LPG supply chain

- Boost timely availability of LPG for all consumers.
- Gaps in the doorstep delivery of LPG cylinders is a major factor behind the use of biomass among urban slum and rural households.
- There is a need to strengthen the LPG supply chain and enforce timely service delivery, particularly in States with a large number of Ujjwala connections and slum population.
- This must be complemented by higher incentives for rural distributors.

#### Create a new market for locally available biomass

- The Government needs to pilot initiatives focused on promoting the **use of locally available biomass in decentralised processing units** that manufacture briquettes and pellets for industrial and commercial establishments.
- Households can be incentivised to supply locally available biomass (including crop stubble or dung cakes) to **Compressed**

**Biogas (CBG) production plants** being set up under the Sustainable Alternative Towards Affordable Transportation (**SATAT**) scheme.

- Such measures would help enhance local income and livelihood opportunities, in turn encouraging rural families to use LPG on a regular basis.

#### Conclusion

- The recently launched Ujjwala 2.0 scheme to distribute 10 million additional free LPG connections to poorer households. But **ensuring affordability and timely availability of LPG** cylinders for refills would be a must to **wean households away from polluting biomass** and reap the benefits of the investments made in the Ujjwala scheme over the past five years which would go a long way in improving the health and well-being of our citizens.

### 3) GST as an unfinished agenda

#### About Goods and Services Tax

- Goods and Services Tax, an institutional tax innovation intensively marketed in many countries by the International Monetary Fund and the World Bank.
- Goods and Services Tax (GST) is an **indirect tax (or consumption tax)** used in India on the supply of goods and services.
- It is a **comprehensive, multistage, destination-based tax**:
  - Comprehensive because it has **subsumed almost all the indirect taxes** except a few state taxes.
  - Multi-staged as it is, the GST is **imposed at every step in the production process**, but is meant to be refunded to all parties in the various stages of production other than the final consumer and
  - Destination-based tax, it is **collected from point of consumption** and not point of origin like previous taxes.
- The tax **came into effect from 1 July 2017** through the implementation of the **One Hundred and First Amendment** of the Constitution of India by the Indian government.
- The GST **replaced existing multiple taxes** levied by the central and state governments.

- The tax rates, rules and regulations are **governed by the GST Council**.
- **Tax structure**:
  - CGST levied by the Centre
  - SGST by the States
  - UTGST by the Union Territories and
  - IGST levied on inter-State supply including imports.
- **Applicability**: GST is applicable to all goods and services except alcohol for human consumption and five specified petroleum products with a common threshold exemption applicable to both CGST and SGST.
- **GST Architecture**: India's GST architecture is built on the firm foundations of a GST Council and the GST Network (GSTN).
  - **GST Council**: The GST Council is the key decision-making body, chaired by the Union Finance Minister with a Minister of State in charge of Finance and the Finance Ministers of States as members. This is envisaged as a federal process to protect the interests of the States.
  - **GST Network**: GSTN generates high frequency data and subjects them to analytics for informed policy making.
- Built on this foundation, India's GST paradigm stands on **two key pillars: revenue neutrality and GST compensation for the States**.

#### Significance of GST

- Expected to **improve tax-GDP ratio**
- **End tax cascading**
- Enhance efficiency, competitiveness, growth, and **ensure lower prices**.
- It was also projected as a **watershed in India's fiscal federalism**.
- While the States have forgone a substantial part of their own tax revenue, they were in turn **guaranteed a GST compensation** assuring 14% growth in their GST revenue during the initial five years.
- **Many exemptions, along with different tax rates**, as against the single rate in many countries, have been accommodated to protect the interests of different stakeholders.

#### Unresolved issues

**Assured revenue neutrality remains a mirage**

- Many States have experienced a **declining tax-GDP ratio**.

- While the share of the Centre in total GST increased by 6%, that of States put together lagged behind with only a 4.5% increase.
- **Stark differences between the Revenue Neutral Rates (RNR) for the producing States and consumption State** have been observed.
- **Exemptions and subventions** complicated and worsened the situation.
  - The **South African** experience illustrates how zero rating and large exemptions have defeated revenue goals.

#### **Against cooperative federalism**

- GST in India was possible only because the **States surrendered much of their constitutionally inherited indirect taxes.**
- Although the States collectively forewent 51.8% of their total tax revenue compared to the Centre that surrendered only 28.8%, yet GST is shared equally between the Centre and States.
- Many of the States are **dependent on GST compensation** because of revenue neutrality failure and even the constitutionally guaranteed compensation for five years has not been implemented in letter and spirit, forcing the States to beg for their entitlement which is not conducive to sustainable cooperative federalism.

#### **GSTN- data monopoly**

- **GSTN neither makes effective use** of the massive and invaluable **data being generated** nor shares them to enable others to make use of them.
- Such practice in “data monopoly” was a fact of history in India’s statistical system.

#### **No one benefits**

- Neither the States nor the consumers seem to have benefited since the rate reductions are not translated into prices due to **profiteering and cascading.**

#### **Way forward**

##### **Global precedence**

- The **Canadian** experience with GST shows that GST could be improved by limiting zero rating, tax-exemptions and harmonising tax rates.
- The **Brazilian** experience indicates that transfers through social security or subsidies tend to be more progressive than subventions or exemptions because reduced rates or zero rating do not usually

get passed on to target groups or industries as happening in India.

- The **Malaysian** experience demonstrates the need for swift and transparent functioning of the input tax credit system through a flawless IT infrastructure. and has to go sooner rather than later.

#### **Conclusion**

- GST should be seen purely from a revenue point of view and as a **fiscal policy tool for efficiency, competitiveness and growth.**
- GST is a crucial and **long-term structural reform** which can address the fiscal needs of the future, strike the right and desired balance to **achieve cooperative federalism** and also lead to enhanced economic growth.
- It is the duty of the centre to address the unresolved issues surrounding GST to make it wholesome.

## **4) Swachh Bharat Mission 2.0- Analysis**

### **About SBM**

- Swachh Bharat Mission (SBM), launched on 2nd October 2014, is a massive mass movement that seeks to create a Clean India by October 2, 2019 (150th birth anniversary of Mahatma Gandhi).
  - It has 2 components - urban and rural.
1. **SBM Urban** aims for the elimination of open defecation, conversion of unsanitary toilets to pour flush toilets, eradication of manual scavenging, municipal solid waste management and bringing about a behavioural change in people regarding healthy sanitation practices.
  2. **SBM Rural** aims to make India an open defecation free country. It seeks to improve the levels of cleanliness in rural areas through Solid and Liquid Waste Management activities and making Gram Panchayats Open Defecation Free (ODF), clean and sanitised.
- The urban component of the mission is implemented by the **Ministry of Housing and Urban Affairs**, and the rural component by the **Department of Drinking Water and Sanitation, Ministry of Jal Shakti.**

### **SBM Rural 2.0**

- In 2020, the Union Cabinet approved the **Phase II of the Swachh Bharat Mission (Grameen)** till 2024-25.
- It will focus on Open Defecation Free Plus (ODF Plus), which includes ODF sustainability and Solid and Liquid Waste Management (SLWM). The program will also work towards ensuring that no one is left behind and everyone uses a toilet.

### SBM Urban 2.0

- The Union Cabinet has recently approved the **continuation of Swachh Bharat Mission (Urban) till 2025-26** with a **focus on sustainability of Open Defecation Free outcomes**.
- Over the next five years, the focus of the mission will be on sustaining the sanitation and solid waste management outcomes achieved. This will accelerate the momentum generated, to achieve a Garbage Free Urban India.
- The Mission will focus on **ensuring complete access to sanitation facilities** to serve additional populations migrating from rural to urban areas in search of employment and better opportunities over the next five years.
- This will be done through the construction of over three lakh 50 thousand individual, community and public toilets.

### Significance of SBM 2.0

- The recently released Swachh Bharat Mission (SBM) 2.0 guidelines continue to take forward the aims of the SBM launched in 2014, but add an important dimension focused on **solid waste management**.
- This goes beyond the efficient collection and transportation of waste and brings **focus on processing all types of waste** like plastic, construction and demolition waste, as well as providing **budgetary support for remediating old waste disposed in all dumpsites** across 4,372 cities in India before March 2023.
- Its components include
  - **source segregation**
  - **door-to-door collection** of waste
  - **separate transportation** of different types of wastes

- **processing** of wet waste, dry waste, and construction and demolition waste.

### Why SBM 2.0?

SBM 2.0 could be an important intervention because of the following reasons

#### Delay in setting up waste processing units

- As part of SBM, Urban local bodies (ULBs) in several States had prepared detailed project reports (DPRs) for setting up waste processing systems for wet and dry waste but the process of setting up these facilities was **delayed due to lack of funding and techno process knowledge**, and **delayed DPR approvals**.

#### Dumping unprocessed wastes in landfills

- Unprocessed waste being dumped in several sites needs to be processed through bioremediation before space can be created for new waste processing plants. *(Bioremediation of old waste is the process of dismantling old waste heaps, sieving the material to recover bio earth (enriched soil) and refuse-derived fuel which can be used as heating material in cement kilns.)*
- Only about 25% of the waste generated by urban areas is being processed; the rest is disposed of in landfills every year.

### Issues with SBM 2.0

- SBM 2.0 allocates funding **only to set up waste processing facilities** and requests for buying vehicles for collection of waste, issuing bins for source segregation or modernizing the collection and transportation system are not in its scope.

### Conclusion

- **Lack of funds** was one of the main reasons for the partial success of SBM in solid waste management.
- As SBM 2.0 is committing to paying a significant portion of the project cost, the ULBs are likely to take up projects by matching the shortfall with their reserved funds, thereby hoping to achieve the GoI target of **waste disposal sites being free from old waste by March 2023**.

**For doubts and queries email us at [doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

## INDIAN EXPRESS EXPLAINED

### 1) Laser Communications Relay Demonstration

#### Why in News?

- Recently, NASA launched its new Laser Communications Relay Demonstration (LCRD) — the agency's first-ever laser communications system from Cape Canaveral Space Force Station in Florida, USA.
- The LCRD will help the agency test optical communication in space.
- Currently, most NASA spacecraft use radio frequency communications to send data. Optical communications will help increase the bandwidth 10 to 100 times more than radio frequency systems.
- LCRD will demonstrate all of the advantages of using laser systems and allow us to learn how to use them best operationally.
- With this capability further proven, we can start to implement laser communications on more missions, making it a standardized way to send and receive data.
- LCRD has **two optical terminals** – one to receive data from a user spacecraft, and the other to transmit data to ground stations.
- The modems will translate the digital data into laser signals. This will then be transmitted via encoded beams of light. These capabilities make LCRD NASA's first two-way, end-to-end optical relay.

#### Laser VS radio

- Laser communications and radio waves use **different wavelengths of light**. Laser uses **infrared light and has a shorter wavelength than radio waves**.
- It would take roughly nine weeks to transmit a completed map of Mars back to Earth with current radio frequency systems. With

lasers, we can **accelerate** that to about nine days.

- Using infrared lasers, LCRD will send data to Earth at 1.2 gigabits-per-second (Gbps). At this speed, it will take less than a minute to download a movie.

#### Other advantages

- Optical communications systems are **smaller in size, weight, and require less power** compared with radio instruments.
- A smaller size means more room for science instruments. Less weight means a less expensive launch. Less power means less drain on the spacecraft's batteries.
- With optical communications supplementing radio, missions will have unparalleled communications capabilities.

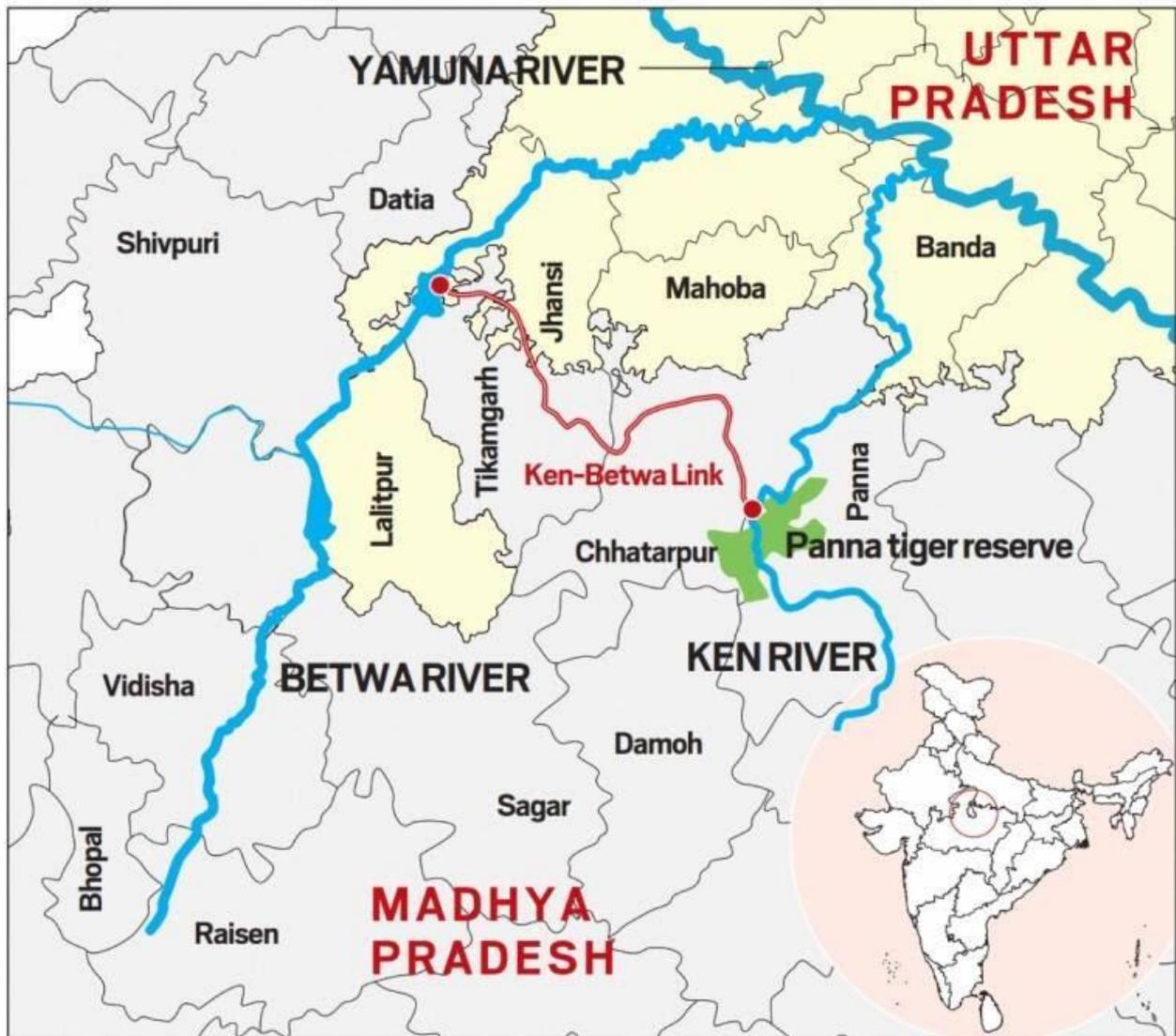
### 2) Cabinet nod to Ken-Betwa river link

#### What's in the news?

- The Union Cabinet approved the funding and implementation of Ken-Betwa interlinking of rivers project with a total cost of Rs 44,605 crore.

#### What is the Ken-Betwa Link Project?

- It is the first project under the **National Perspective Plan for interlinking of rivers**. It envisages transferring **water from the Ken river to the Betwa river, both tributaries of the Yamuna**.
- The Ken-Betwa Link Canal will be 221 km long, including a 2-km long tunnel.
- The project lies in Bundelkhand, a drought-prone region, which spreads across 13 districts of Uttar Pradesh and Madhya Pradesh.
- The project is expected to provide annual irrigation of 10.62 lakh hectares, supply drinking water to about 62 lakh people, and generate 103 MW of hydropower and 27 MW of solar power.



- The Centre has also set in motion the process of creation of **National Interlinking of Rivers Authority (NIRA)**, an independent autonomous body for planning, investigation, financing and implementation of the interlinking of river (ILR) projects in the country.
- **How old is the concept of river linking in India?**
- In the 1970s, the idea of transferring surplus water from a river to a water-deficit area

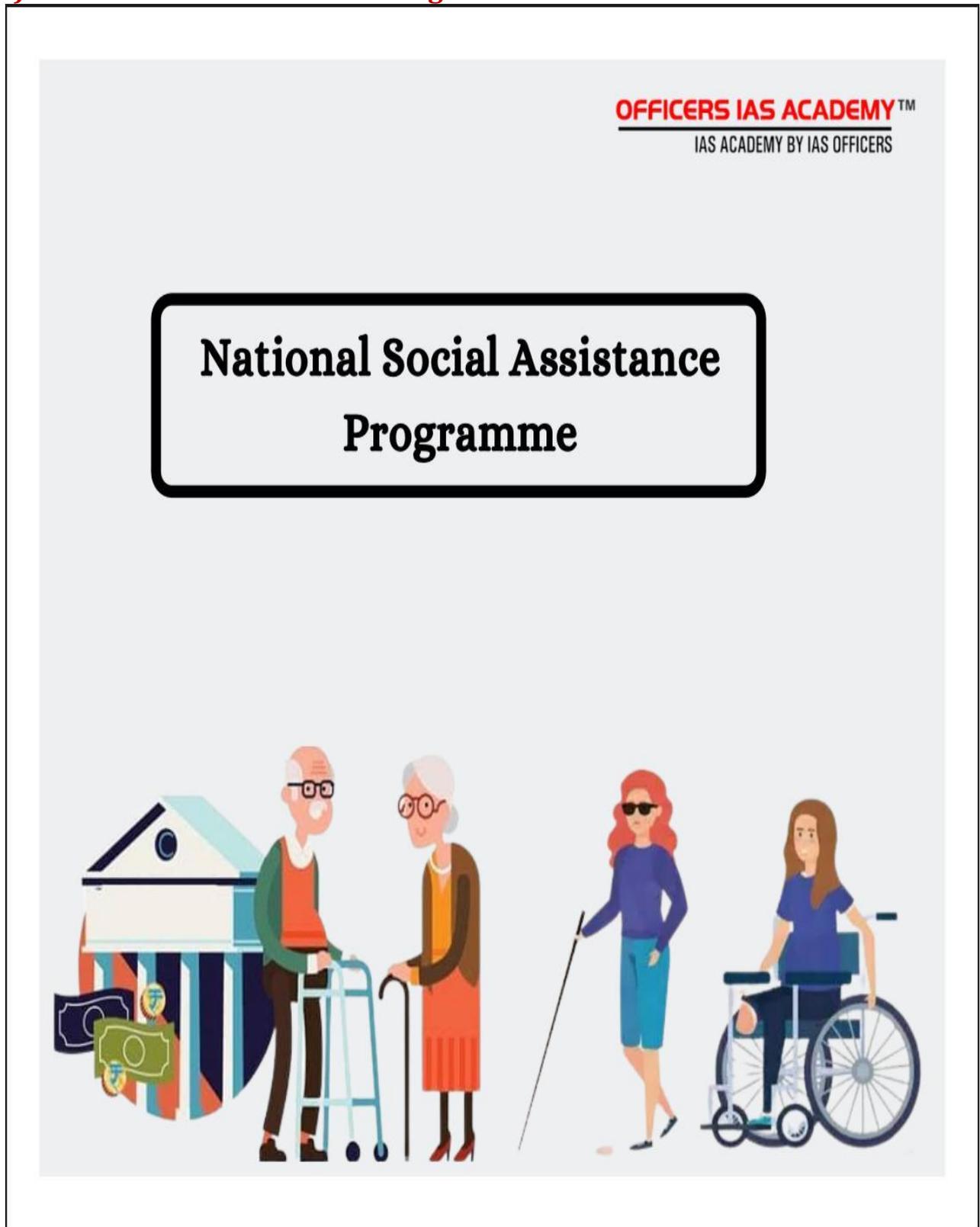
was mooted by the then Union Irrigation Minister Dr K L Rao.

- Himself an engineer, he suggested construction of a **National Water Grid** for transferring water from water-rich areas to water-deficit areas.
- Later, the river-linking idea was revived during the Atal Bihari Vajpayee regime. The Ken-Betwa Link Project is one of the 16 projects under the peninsular component.

**For doubts and queries email us at [doubts@officerspulse.com](mailto:doubts@officerspulse.com)**

## INFOGRAPHIC OF THE WEEK

### 1) National Social Assistance Programme



For more such graphic learnings, visit <https://officerspulse.com/infographics/>

For free learning, visit [www.officerspulse.com](http://www.officerspulse.com)

## About NSAP

Launched in 1995, the National Social Assistance Programme (NSAP) is a welfare programme being administered by the **Ministry of Rural Development.**



सत्यमेव जयते

**Ministry of Rural  
Development**

1995



Rural



Urban

This programme is being implemented in **rural areas as well as urban areas.**

For more such graphic learnings, visit <https://officerspulse.com/infographics/>

NSAP represents a significant step towards the fulfilment of **Article 41 of the Constitution of India** which directs the State to provide public assistance to its citizens in case of unemployment, old age, sickness and disablement and in other cases of undeserved want within the limit of its economic capacity and development.



**Presently NSAP comprises of five schemes, namely –**

Indira Gandhi National Old Age Pension Scheme (IGNOAPS),



Old Age Pension

For more such graphic learnings, visit <https://officerspulse.com/infographics/>

For free learning, visit [www.officerspulse.com](http://www.officerspulse.com)

Indira Gandhi National Widow  
Pension Scheme (IGNWPS),



**OFFICERS IAS ACADEMY™**  
IAS ACADEMY BY IAS OFFICERS

Indira Gandhi National  
Disability Pension Scheme  
(IGNDPS),



National Family Benefit Scheme  
(NFBS) and



Annapurna.



For more such graphic learnings, visit <https://officerspulse.com/infographics/>

For free learning, visit [www.officerspulse.com](http://www.officerspulse.com)

## Eligibility and scale of assistance



For getting benefits under NSAP the applicant must belong to a **Below Poverty Line (BPL)** family according to the criteria prescribed by the Govt. of India. The other eligibility criteria and the scale of central assistance under the sub - schemes of NSAP are as follows.

**80 YEARS**



**Indira Gandhi National Old Age Pension Scheme (IGNOAPS):** A monthly pension of Rs.200/- to old age BPL persons in age group 60-79 years and **Rs.500/-** to old age BPL persons of age of 80 years and more.

**60-70 YEARS**



For more such graphic learnings, visit <https://officerspulse.com/infographics/>

For free learning, visit [www.officerspulse.com](http://www.officerspulse.com)

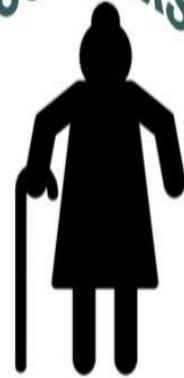
**Indira Gandhi National Widow Pension Scheme (IGNWPS):** A monthly pension of **Rs.300/-** to BPL widows aged 40-79 years and **Rs.500/-** upon attaining the age of 80 years.

40-70 YEARS



**Rs.300/-**

80 YEARS



**Rs.500/-**



**Indira Gandhi National Disability Pension Scheme (IGNDPS):** A monthly pension of **Rs.300/-** is given to disabled BPL persons aged 18-79 years and **Rs.500/-** upon attaining the age of 80 years.

**Rs.500**

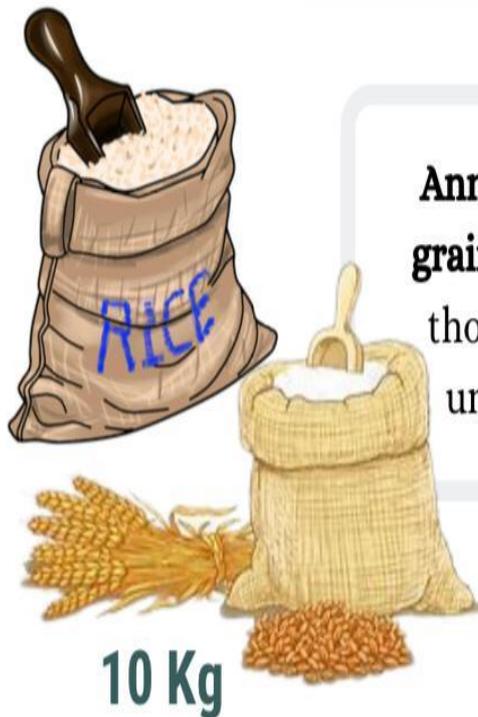
**Rs.300**

**18-70 years 80 years**

For more such graphic learnings, visit <https://officerspulse.com/infographics/>

For free learning, visit [www.officerspulse.com](http://www.officerspulse.com)

**National Family Benefit Scheme (NFBS):** A one-time assistance of **Rs.20,000/-** to the surviving members of a BPL family upon the death of the primary breadwinner.



**Annapurna Scheme:** 10 kg food grains (wheat or rice) is given to those BPL elderly who remain uncovered under IGNOAPS.

For more such graphic learnings, visit <https://officerspulse.com/infographics/>

## Why in News?

The Ministry of Rural Development conducted a nationwide review of the National Social Assistance Programme recently.



## Reference:

<https://nsap.nic.in/circular.do?method=aboutus>

For more such graphic learnings, visit <https://officerspulse.com/infographics/>

## References

### POLITY

- <https://www.thehindu.com/news/national/explained-when-can-an-individual-get-statutory-bail/article37846868.ece>
- <https://pib.gov.in/PressReleasePage.aspx?PRID=1780141>
- <https://www.thehindu.com/news/national/beti-bachao-beti-padhao-whopping-80-of-funds-spent-on-media-campaigns-says-parliamentary-committee/article37922778.ece>
- <https://www.thehindu.com/business/Industry/explained-how-is-hallmarking-being-implemented/article37847127.ece>

### ENVIRONMENT

- <https://www.thehindu.com/news/national/48000-crore-released-to-32-states-for-afforestation/article37872622.ece>
- <https://pib.gov.in/newsite/mbErel.aspx?relid=147937>
- <https://www.downtoearth.org.in/blog/forests/campa-funds-should-be-used-to- conserve-nature-65717>
- <http://prsindia.org/billtrack/the-compensatory-afforestations-fund-bill-2015-3782>
- <https://www.thehindu.com/news/national/nutrition-mission-states-used-only-56-of-funds-in-last-three-years/article37903729.ece>
- [https://icds-wcd.nic.in/nnm/NNM-Web-Contents/UPPER-MENU/AboutNNM/PIB\\_release\\_NationalNutritionMission.pdf](https://icds-wcd.nic.in/nnm/NNM-Web-Contents/UPPER-MENU/AboutNNM/PIB_release_NationalNutritionMission.pdf)

### ECONOMY

- <https://www.thehindubusinessline.com/money-and-banking/paytm-payments-bank-receives-scheduled-bank-status-from-rbi/article37910051.ece>

### IR

- <https://www.thehindu.com/news/international/observer-status-granted-to-international-solar-alliance/article37927868.ece>
- <https://www.livemint.com/news/india/india-russia-sign-record-28-agreements-11638810443044.html>
- <https://theprint.in/diplomacy/these-are-the-28-agreements-india-russia-signed-at-summit-level-talks/777650/>

### SCIENCE AND TECHNOLOGY

- <https://www.thehindu.com/sci-tech/science/an-innovation-that-can-better-protect-power-grids/article37842349.ece>
- <https://www.thehindu.com/news/cities/Hyderabad/citys-rocketmen-duo-aim-for-the-skies/article37859035.ece>
- <https://www.isro.gov.in/gslv-d5-gsat-14/indigenous-cryogenic-engine-and-stage>
- <https://history.nasa.gov/conghand/propellant.htm>
- <http://www.braeunig.us/space/propel.htm>
- <https://www.thehindu.com/news/national/facial-technology-at-airports-from-2022-says-govt/article37811424.ece>

### DEFENCE

- <https://www.thehindu.com/news/national/chief-of-defence-staff-gen-bipin-rawat-wife-11-others-die-in-iaf-helicopter-crash-near-coonoor-in-tamil-nadu/article37893955.ece>
- <https://indianexpress.com/article/explained/nagaland-civilian-killings-indian-army-repeal-of-afspa-northeast-7661460/>
- [https://www.mha.gov.in/sites/default/files/armed\\_forces\\_special\\_powers\\_act1958.pdf](https://www.mha.gov.in/sites/default/files/armed_forces_special_powers_act1958.pdf)
- <https://indianexpress.com/article/explained/naga-peace-talks-nagaland-insurgent-group-7533021/>
- <http://www.idsa-india.org/an-jul-700.html>
- <https://www.thehindu.com/opinion/op-ed/the-search-for-an-end-to-the-complex-naga-conflict/article32546842.ece>
- <https://www.thehindu.com/news/national/centre-reaches-out-to-naga-groups-in-damage-control/article37856666.ece>
- <https://www.hornbillfestival.com/about-hornbill-festival>

### ART AND CULTURE

- <https://www.thehindu.com/news/national/culture-mapping-of-80-villages-kicks-off/article37842557.ece>

### PIB

- <https://pib.gov.in/PressReleasePage.aspx?PRID=1778474>
- <https://pib.gov.in/PressReleasePage.aspx?PRID=1778500>
- <https://pib.gov.in/PressReleasePage.aspx?PRID=1778924>

- <https://pib.gov.in/PressReleasePage.aspx?PRID=1778910>

#### **AIR**

- <https://pib.gov.in/PressReleasePage.aspx?PRID=1779310>
- <https://pib.gov.in/PressReleasePage.aspx?PRID=1779266><https://newsonair.gov.in/News?title=Education-Ministry-launches-mobile-app-called-Bhasha-Sangam&id=431121>

#### **Editorials**

- <https://www.thehindu.com/opinion/op-ed/expanding-indias-engagement-envelope-with-russia/article37874608.ece>
- <https://www.thehindu.com/opinion/op-ed/high-lpg-prices-are-scorching-the-air-pollution-fight/article37904630.ece>
- <https://www.thehindu.com/opinion/lead/goods-and-services-tax-as-an-unfinished-agenda/article37928330.ece>
- <https://www.thehindu.com/opinion/op-ed/being-free-of-old-waste/article37887832.ece>

#### **INDIAN EXPRESS**

- <https://indianexpress.com/article/explained/explained-what-is-nasas-new-communications-system-lcrd-its-importance-7661272/>
- <https://indianexpress.com/article/explained/ken-betwa-river-linking-project-explained-7664323/>