OFFICERS' PULSE

Issue no. 05 | 27th June to 3rd July, 2021

IT'S THE LITTLE THINGS

AT A GLANCE & IN DEPTH.

Polity and Social Issues
Economy
International Relations
Environment
Science and Tech
Culture

COVERAGE.
The Hindu
The Indian Express
PIB
Rajya Sabha TV
All India Radio

CURRENT AFFAIRS WEEKLY
THE PULSE OF UPSC AT YOUR FINGER TIPS
# News @ a glance

<table>
<thead>
<tr>
<th>POLITY</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) UDISE+ Report</td>
<td>3</td>
</tr>
<tr>
<td>2) NITI Aayog</td>
<td>4</td>
</tr>
<tr>
<td>3) BharatNet Programme</td>
<td>4</td>
</tr>
<tr>
<td>4) SC dismisses Maratha verdict review pleas</td>
<td>6</td>
</tr>
<tr>
<td>ENVIRONMENT</td>
<td>8</td>
</tr>
<tr>
<td>1) A fabled wonder in danger</td>
<td>8</td>
</tr>
<tr>
<td>2) Lightning deaths double since 2004: IMD data</td>
<td>10</td>
</tr>
<tr>
<td>3) New Semi-slug species in Western Ghats</td>
<td>11</td>
</tr>
<tr>
<td>4) Conservation plan for vultures</td>
<td>12</td>
</tr>
<tr>
<td>ECONOMY</td>
<td>14</td>
</tr>
<tr>
<td>1) Govt. unveils stimulus post 2nd COVID wave</td>
<td>14</td>
</tr>
<tr>
<td>2) Disinvestment Policy</td>
<td>15</td>
</tr>
<tr>
<td>INTERNATIONAL RELATIONS</td>
<td>17</td>
</tr>
<tr>
<td>1) COVID-19 and Tourism: An Update</td>
<td>17</td>
</tr>
<tr>
<td>2) Trafficking in Persons report</td>
<td>17</td>
</tr>
<tr>
<td>3) OECD/G20 global tax deal</td>
<td>17</td>
</tr>
<tr>
<td>SCIENCE AND TECHNOLOGY</td>
<td>19</td>
</tr>
<tr>
<td>1) India Digital Ecosystem of Agriculture (IDEA)</td>
<td>19</td>
</tr>
<tr>
<td>2) Flash Flood</td>
<td>20</td>
</tr>
<tr>
<td>3) Multi Drug Resistance in Bacteria</td>
<td>23</td>
</tr>
<tr>
<td>DEFENCE</td>
<td>25</td>
</tr>
<tr>
<td>1) Agni-P</td>
<td>25</td>
</tr>
<tr>
<td>2) Drones</td>
<td>26</td>
</tr>
<tr>
<td>ART AND CULTURE</td>
<td>28</td>
</tr>
<tr>
<td>1) 4000 year old settlement</td>
<td>28</td>
</tr>
<tr>
<td>PIB ANALYSIS</td>
<td>29</td>
</tr>
<tr>
<td>1) PM Formalisation of Micro Food Processing Enterprises (PM FME) scheme</td>
<td>29</td>
</tr>
<tr>
<td>2) Indian Ocean Naval Symposium</td>
<td>30</td>
</tr>
<tr>
<td>3) Enforcing Contracts Portal</td>
<td>30</td>
</tr>
<tr>
<td>4) AIM: Fostering Innovation</td>
<td>31</td>
</tr>
</tbody>
</table>
News in Depth

AIR NEWS .................................................. 33
1) National Social Assistance Programme..... 33
2) India recorded highest ever merchandise export............................................. 33

THE HINDU EDITORIALS ................................ 35
1) On the margins with full equality still out of reach ......................................... 35
2) The power of an apology .................................. 36
3) Rattling foreign investors ............................ 37
4) Méndez’s anti-torture vision is still distant for India ..................................... 38
5) The law of sedition is unconstitutional......39
6) What lies ahead for IBC and stressed assets resolution? ................................. 40

INDIAN EXPRESS EXPLAINED .......................... 43
1) Ration card reforms ........................................ 43

RSTV BIG PICTURE ........................................ 44
1) Global Cyber Security- India in top 10 .......44

INFOGRAPHIC OF THE WEEK ......................... 45
1) e-Sanjeevini .................................................. 45
1) UDISE+ Report

**What’s in the news?**
- The Ministry of Education has released “The Unified District Information System for Education Plus (UDISE+)” report which collates data from more than 15 lakh schools across the country.

**Highlights of the Report**

**Challenges of Digital education**
- In the academic year that ended with school closures due to COVID-19, **only 22% of schools in India had Internet facilities.** Among government schools, less than 12% had Internet in 2019-20, while less than 30% had functional computer facilities.
- This affected the kind of digital education options available to schools during the pandemic, as well as plans for hybrid learning in the days ahead.
- As the first wave of COVID-19 entered India in early 2020, schools were closed in mid-March, just weeks before the end of the 2019-20 academic year. The vast majority of the country’s 26 crore schoolchildren have not stepped foot in a school since then, depending instead on various forms of distance education.
- The availability of digital education — whether via live, synchronous teaching on apps like Zoom, or through recorded lectures, emails, WhatsApp or educational apps — was largely dependent on whether schools, teachers and parents had access to the necessary infrastructure.
- In many States, teachers came to school and taught in their own empty classrooms, using their blackboards and lab facilities, while facing a computer screen that communicated the lessons to their students at home.

**Digital Divide**
- However, the UDISE+ data makes clear the digital divide, which made this a viable option only in some States. In many Union Territories, as well as in the State of Kerala, more than 90% of schools, both government and private, had access to working computers.
- In States such as Chhattisgarh (83%) and Jharkhand (73%), installation of computer facilities in most government schools paid off, while in others such as Tamil Nadu (77%), Gujarat (74%) and Maharashtra (71%), private schools had higher levels of computer availability than in government schools.
- However, in States such as Assam (13%), Madhya Pradesh (13%), Bihar (14%), West Bengal (14%), Tripura (15%) and Uttar Pradesh (18%), **less than one in five schools had working computers.** The situation is worse in government schools, with less than 5% of U.P.’s government schools having the facility.
- The connectivity divide is even starker. Only three States — Kerala (88%), Delhi (86%) and Gujarat (71%) — have Internet facilities in more than half their schools. This will make it hard for most schools to implement the options for hybrid learning as schools try to re-open with staggered attendance post the pandemic.

**COVID-19 safety protocols**
- More encouragingly, **90% of schools across the country have facilities for handwashing,** which will gain added importance as they implement COVID-19 safety protocols while reopening.
- More than 80% of schools conducted medical check-ups during the year before the pandemic. Temperature testing and monitoring of symptoms need to become a daily activity, according to the Centre’s health protocol for schools wishing to reopen.

**GER & Dropout Rate**
- The Gross Enrolment Ratio (GER) improved in 2019-20, with 98% of
students in Classes 1-8 attending school, though the GER for secondary and senior secondary students stood at 78% and 51% respectively.

- The dropout rate at secondary level was 17% in 2019-20, with experts warning that dropouts are likely to surge due to the pandemic.

2) NITI Aayog

About
- The National Institution for Transforming India, also called NITI Aayog, was formed via a resolution of the Union Cabinet on January 1, 2015.
- NITI Aayog is the premier policy 'Think Tank' of the Government of India, providing both directional and policy inputs.
- While designing strategic and long term policies and programmes for the Government of India, NITI Aayog also provides relevant technical advice to the Centre and States.

Objectives
- To foster cooperative federalism through structured support initiatives and mechanisms with the States on a continuous basis, recognizing that strong States make a strong nation.
- To develop mechanisms to formulate credible plans at the village level and aggregate these progressively at higher levels of government.
- To ensure, in areas that are specifically referred to it, that the interests of national security are incorporated in economic strategy and policy.
- To pay special attention to the sections of our society that may be at risk of not benefitting adequately from economic progress.
- To provide advice and encourage partnerships between key stakeholders and national and international like-minded Think Tanks, as well as educational and policy research institutions.
- To create a knowledge, innovation and entrepreneurial support system through a collaborative community of national and international experts, practitioners and other partners.

Governing Council of NITI Aayog

- The Governing Council of NITI Aayog is chaired by the Prime Minister and comprises Chief Ministers of all the States and Union Territories with legislatures; Lt Governors of other Union Territories; Ex-Officio Members; Vice Chairperson; Full-time Members; Special Invitees and Chief Executive Officer.
- It is the premier body tasked with evolving a shared vision of national priorities and strategies, with the active involvement of States, in shaping the development narrative.
- The Governing Council, which embodies the objectives of cooperative federalism, presents a platform to discuss inter-sectoral, inter-departmental and federal issues to accelerate the implementation of the national development agenda.

Important reports released by Niti Aayog
- Healthy States, Progressive India Report
- Composite Water Management Index
- SDG India Index

Why in News?
- Niti Aayog Chief Executive Officer (CEO) Amitabh Kant’s tenure has been extended by one-year extension till June 2022.
- The Appointments Committee of the Cabinet has approved the extension in tenure of Kant.

About Appointments Committee of the Cabinet
- It is chaired by the Prime Minister.
- It decides all higher-level appointments in the Central Secretariat, Public Enterprises, Banks and Financial Institutions.

3) BharatNet Programme

About BharatNet
- BharatNet is a project of national importance to establish a highly scalable network infrastructure accessible on a non-discriminatory basis, to provide on demand, affordable broadband connectivity for all households. It was launched in 2011.
- The project is implemented by Bharat Broadband Network Ltd (BBNL), a special purpose vehicle set up under the Department of Telecommunications (DoT).
- The entire project is being funded by Universal Service Obligation Fund (USOF).
With the BharatNet initiative, the Centre aims to connect all 2.5 lakh gram panchayats through optical fibre.

The project is a Centre-State collaborative project, with the States contributing free Rights of Way for establishing the Optical Fibre Network.

The objective is to facilitate the delivery of e-governance, e-health, e-education, e-banking, Internet and other services to rural India.

**Why in News?**

- The Union Cabinet has accorded approval for revised implementation strategy of BharatNet through Public Private Partnership mode in 16 States of the country. BharatNet will now extend upto all inhabited villages beyond Gram Panchayats (GPs), in the said States.
- The States covered under the Cabinet approval are Kerala, Karnataka, Rajasthan, Himachal Pradesh, Punjab, Haryana, Uttar Pradesh, Madhya Pradesh, West Bengal, Assam, Meghalaya, Manipur, Mizoram, Tripura, Nagaland and Arunachal Pradesh. An estimated 3.61 lakh villages including GPs will be covered.
- The PPP Model for BharatNet will enhance efficiency, quality of service, consumer experience and leverage private sector expertise, entrepreneurship and capacities for accelerating achievement of digital India.

**Approval to cover all inhabited villages**

- The Cabinet also accorded in principle approval for extending BharatNet to cover all inhabited villages in the remaining States and UTs. The Department of Telecommunication will separately work out the modalities for these (remaining) States/UTs.
- At present, more than 1.56 lakh crore gram panchayats have already been connected with the scheme and are service ready. The Centre plans to connect the remaining villages in the coming days too.
- The extension of the scheme was announced by Prime Minister Narendra Modi on August 15 last year, with a vision to ensure broadband connectivity to all 6 lakh villages in the country in 1,000 days.
- Extension of the reach of BharatNet to all inhabited villages with reliable, quality, high speed broadband will enable better access of e-services offered by various central and state government agencies.
- It would facilitate online education, telemedicine, skill development, e-commerce and other applications of broadband, while generating more revenue apart from generating direct and indirect employment.

**Related Information**

**About USOF**

- In 2003, the Universal Service Obligation Fund (USOF) was set up by The Indian Telegraph (Amendment) Act, 2003 which gave its statutory status.
- The main aim of USOF is to provide access to telecom services in a non-discriminatory manner to people in the rural and remote areas at affordable and reasonable prices, thereby bridging the rural-urban digital divide.
- It also aims at equitable distribution of the fruits of the telecom/digital revolution and fair allocation of national resources via targeted subsidies.

**Foundational Pillars of USOF**

- **Availability**: the level of service should be the same for all users in their place of work or residence, at all times and without geographical discrimination
- **Affordability**: for all users, the price of the service should not be a factor that limits service access
- **Accessibility**: all subscribers should be treated in a non-discriminatory manner with respect to the price, service and quality of the service, in all places, without distinction of race, sex, religion, caste etc.

**UAL**

- USOF inflow comes from the collection of Universal Access Levy (UAL) through the license fee charged on licensees of the Department of Telecommunications @ 5% of the adjusted gross revenue (AGR).
- For commercially non-viable rural and remote areas, USOF provides subsidy support in the form of Net Cost or Viability Gap Funding (VGF) to incentivize telecom service providers.
- It should be noted that USOF is a non-lapsable fund, i.e., the unspent amount under a targeted financial year does not lapse and is accrued for next years’ spending.
Project funded by USOF
- BharatNet
- Refer Above

Other Projects funded by USOF include
- Comprehensive Telecom Development plan (CTDP) for North East Region
- Comprehensive Telecom Development plan (CTDP) for Islands
- Providing Mobile services in Left Wing Extremism (LWE) affected areas
- Providing Mobile services in Aspirational & Uncovered villages

4) SC dismisses Maratha verdict review pleas

Background
- In May, a five-judge constitution bench of the Supreme Court struck down the Maharashtra State Reservation for Socially and Educationally Backward Classes (SEBC) Act, 2018 which extended reservation to the Maratha community in public education and employment in excess of the ceiling limit of 50% fixed by the Supreme Court earlier.
- In the Indra Sawhney v Union of India judgement (1992), the nine-judge bench had ruled that only extraordinary circumstances would justify grant of reservation in excess of the 50% ceiling.
- In Indra Sawhney, the bench noted that Dr B.R. Ambedkar, chairman of the Constituent Assembly’s Drafting Committee, himself contemplated reservation being “confined to a minority of seats”. No other member of the Constituent Assembly suggested otherwise.
- The five-judge bench found no extraordinary circumstances to grant reservation to the Maratha community over and above the 50% ceiling.
- The bench also found that the M.G. Gaikwad Commission too did not articulate any exceptional circumstances to justify the excess quota. The commission’s report, which was submitted in 2018 to the state government, found that Marathas are socially, educationally and economically backward and eligible to be included as a backward class.
- On the basis of the Gaikwad Commission report, the state legislature passed a Bill giving 16% reservation in government jobs and education to the Marathas over and above the ceiling limit fixed by the Supreme Court in Indra Sawhney.

Ruling on identifying backward classes
- In the judgment that declared the Maratha reservation unconstitutional, the Constitution Bench of the Supreme Court dealt with another issue.
- By a 3:2 majority, it ruled that after the passage of the 102nd Constitution Amendment Act in 2018, the States do not have any power to identify ‘socially and educationally backward’ (SEBC) classes.
- The Union government argued that it was never its intention to deprive State governments of their power to identify SEBCs, but the Court interpreted the bare text of the Amendment to the effect that only the President can publish a list of backward classes in relation to each State and that only Parliament can make inclusions or exclusions in it.

What does the 102nd Amendment say?
- The Amendment established a National Commission for Backward Classes, a constitutional body, by adding Article 338B to the Constitution.
- The five-member Commission was tasked with monitoring safeguards provided for socially and educationally backward classes, giving advice on their socio-economic development, inquiring into complaints and making recommendations, among other functions.
- Significantly, it was laid down that the Centre and the States shall consult the Commission on all policy matters concerning the SEBCs.
- The Amendment also added Article 342A, under which the President shall notify a list of SEBCs in relation to each State and Union Territory, in consultation with Governors of the respective States.
- Once this ‘Central List’ is notified, only Parliament could make inclusions or exclusions in the list by law. This provision is drafted in exactly the same word as the one concerning the lists of Scheduled Castes and Scheduled Tribes.
- Further, a definition of ‘SEBCs’ was added to the Constitution — ‘SEBC’ means “such backward classes as are so deemed under
Article 342A for the purposes of this Constitution”.

Why did this Amendment come up for judicial interpretation?
- The reservation for the Maratha community was challenged in the Bombay High Court on various grounds. One of the grounds was that the Act creating the Maratha quota through a new category called ‘SEBC’ was unconstitutional because after the introduction of the 102nd Amendment, the State legislature had no power to identify any new backward class.
- Separately, a writ petition was also filed in the Supreme Court questioning the validity of the Amendment as it violated the federal structure and deprived the States of their powers. In this context, the court had to examine the validity of the Amendment.

What were the rival contentions?
- The crux of the issue was whether the State government’s role in identifying backward classes had been denuded by the Amendment. The Union government said Parliament’s intent was only to create a Central List that would be applied only in the Central government and its institutions. It had nothing to do with the State Lists of backward classes or the State governments’ powers to declare a community backward.
- Those who questioned it contended that the effect of the Amendment was that only the President, or the Union government, was authorised to make a list in relation to each State, and thereafter, any change in it would be made only by Parliament.

How did the Supreme Court reach these conclusions?
- The apex court adopted a literal interpretation of the 102nd Amendment, holding that there was no ambiguity in its drafting that warranted a “purposive interpretation”. It cited three main reasons.
- One, the text was clear that the President alone could notify the list, and subsequent changes could be made only by Parliament by law.
- Two, the text was identical to the provisions governing the National Commission for Scheduled Castes and the procedure to identify SCs was exactly the same, which led to the conclusion that Parliament intended to “replicate” the same process for backward classes, too.
- Third, a definition clause was added to the effect that only a class found in the list notified by the President under Article 342A was an SEBC. Further, the definition was for “the purposes of the Constitution”, which meant that it was to apply to the Constitution as a whole, including Article 15(4) and Article 16(4), which enable special provisions for backward classes, including reservation in public services, and are also implemented by the States.
- The Supreme Court’s judgment also drew on deliberations before a Rajya Sabha Select Committee that showed that the Centre had rejected suggestions from members who demanded that a specific clause be added saying that States would continue to have the power to identify SEBCs.

What next?
- The Supreme Court has directed the Centre to notify the list of SEBCs for each State and Union territory, and until it is done, the present State Lists may continue to be in use.

Why in News?
- The Supreme Court has refused to review its judgment holding the Maratha reservation law unconstitutional.
- The court had also held, in a majority view, that the Centre alone is empowered to identify socially and educationally backward classes (SEBC) to include them in the Central List for claiming reservation benefits.

For doubts and queries email us at doubts@officerspulse.com
ENVIRONMENT

1) A fabled wonder in danger
The Great Barrier Reef

- The Great Barrier Reef is the world's largest coral reef system composed of over 2,900 individual reefs and 900 islands stretching for over 2,300 kilometres over an area of approximately 3.4 lakh square kilometres.
- It is found in the northeastern coast of Queensland state, Australia.
- It has a geological history going back an estimated 23 million years to the Miocene epoch, and has survived many challenges.
- It has been on UNESCO's World Heritage Site List since 1981.

What is Coral?

- Coral is a living animal. Coral has a symbiotic relationship with zooxanthellae microscopic algae which live on corals.
- Zooxanthellae assist the coral in nutrient production through its photosynthetic activities.
- These activities provide the corals with fixed carbon compounds for energy, enhance classification, and mediate elemental nutrient flux.

- There are two types of corals: hard corals and soft corals, such as sea fens and gorgonianians. Hard corals are the primary reef-building corals.
- The tissues of corals themselves are actually not the beautiful colors of the coral reefs, but are instead clear (white). The corals receive their coloration from the zooxanthellae living within their tissues.
- Corals occur in shallow tropical areas where the sea water is clean, clear and warm.
- They are also called the “rainforests of the seas”.

Benefits of coral reef ecosystems

- Coral reefs protect coastlines from storms and erosion,
- provide jobs for local communities, and offer opportunities for recreation.
- They also are a source of food and new medicines.
- Over half a billion people depend on reefs for food, income, and protection.
- Fishing, diving, and snorkeling on and near reefs add hundreds of millions of dollars to local businesses.

Coral Bleaching

Coral bleaching is a consequence of climate change. Healthy coral, Stressed coral, and Bleached coral are depicted with different levels of bleaching. Causes include Warming oceans and other factors, such as change in ocean temperature, runoff and pollution, overexposure to sunlight, and extreme low tides.

For free learning, visit www.officerspulse.com
Coral bleaching happens when corals lose their vibrant colors and turn white. But there’s a lot more to it than that.

When the ocean environment changes—if it gets too hot, for instance—the coral stresses out and expels the algae. As the algae leaves, the coral fades until it looks like it’s been bleached. If the temperature stays high, the coral won’t let the algae back, and the coral will die.

Coral bleaching matters because once these corals die, reefs rarely come back. With few corals surviving, they struggle to reproduce, and entire reef ecosystems, on which people and wildlife depend, deteriorate.

The crown-of-thorns starfish

The crown-of-thorns starfish is a sea star named for the spines that cover its body and arms.

These spines are somewhat flexible in life and are used for locomotion and for defense from potential predators.

This species is a well-known coral predator, and outbreaks of tens of thousands of individuals have been known to cause serious harm to coral reefs in some areas.

Why in the news?

The Great Barrier Reef (GBR) is constantly facing threats and depreciating rapidly.

The World Heritage Committee has drawn up a resolution to inscribe the reef on the UNESCO’s 'List of World Heritage in Danger' based on the 2019 Outlook Report of the Great Barrier Reef Marine Park Authority.

What is causing danger to the GBR?

The List of World Heritage in Danger is designed to inform the international community of conditions which threaten the very characteristics for which a property was inscribed on the World Heritage List, and to encourage corrective action.

- At the heart of the crisis is climate change, which has led to three big events of coral bleaching in 2016, 2017 and 2020.
- The Australian continent has recorded a rise in its average temperature by 1.4 degrees C since 1910.
- In 2018, coral larvae declined by 89% averaged across the region, arising from consecutive bleaching events, as the adult broodstock was reduced.
- Warmer temperatures led to feminisation of green turtles originating from nesting...
beaches in the northern Region, potentially leading to significant scarcity or absence of adult males in the future.

- Coral growth is also endangered by the **proliferation of crown-of-thorns starfish**, which consumes them.
- Excessive influx of eco-tourists.

**What needs to be done?**

- Currently an updated Reef 2050 Plan is being pursued for conservation by Australia.
- Further, the government should stop destructive impacts of human activity such as land-based and farm run-off that has polluted waters, coastal development and other commercial uses.

2) **Lightning deaths double since 2004: IMD data**

**What is Lightning?**

- Lightning is the occurrence of a natural electrical discharge of very short duration and high voltage between a cloud and the ground or within a cloud. This violent and sudden electrostatic discharge generates a bright flash and thunder.

- In the early stages of development, air acts as an insulator between the positive and negative charges in the cloud and between the cloud and the ground.
- When the opposite charges build up enough, this insulating capacity of the air breaks down and there is a rapid discharge of electricity that we know as lightning.
- Inter cloud or **intra cloud (IC) lightning** which are visible and are harmless.
- It is **cloud to ground (CG) lightning**, which is harmful as the ‘high electric voltage and electric current’ leads to electrocution.

**Why in the news?**

- The Indian Meteorological Department (IMD) conducted an awareness workshop on lightning and thunderstorms.
- It reported that lightning is killing 2000 people annually in India. This has doubled from 1,000 to over 2,500 between 1968 and 2019.
- Lightning incidents **may be directly related to the climate crisis, and the availability of more moisture over land due to warming**.

As per the report, **Kalbaishakhi—Norwesterns**, which are violent thunderstorms with lightning—claims life in eastern India; pre-monsoon lightning
deaths occur mostly in Bihar, Jharkhand, Chhattisgarh and UP.

- Lightning is an extremely localised phenomenon, and the **warnings often don’t reach the last mile**.
- Lightning deaths were recorded higher in areas where forest cover and tree cover had reduced. If the number of trees is less, people working outside are more exposed. People working outside often run to a lone tree to take shelter underneath and are then struck by lightning.
- The **use of electrical appliances** has also increased significantly in the past 30 years — from mobile phones to TVs to power lines. Lightning can interfere with their electromagnetic field.

**Do’s and Don’ts during lightning**

**Species in the news**

3) **New Semi-slug species in Western Ghats**

**What is a semi slug?**

- They are **kind of snails** but their shells are too small to fit them.
- It represents an intermediate stage of evolution, where it’s managed to develop a shell, but it’s far too small to fit its body inside.
- They’re found everywhere, from rainforests to bush, under logs and fallen palm fronds, and even in suburban gardens.

**Why in the news?**

- **Varadia amboliensis**, a new species of semi-slug, has been found in the **Western Ghats** by scientists from Shivaji University and others.
- In the new semi-slug, the parts of the mantle (snail’s skin) covering the shell lobes are **retractable**, so that the shell can be completely covered by the mantle or largely exposed.
- The semi-slug is **endemic** (found only in certain places) to the northern and central Western Ghats and primarily found in natural forests. It is most **active at night** and is known from only a handful of localities in Maharashtra, Goa and Karnataka.

**Significance of Snails**

- Land snails are **ecological indicators**, they are susceptible to slight climatic fluctuations.
- They feed on leaf litter present on the forest floor and dead insects.
- They are the **natural source of calcium** to the wild animals as they recycle nutrients such as potassium, manganese and magnesium.
4) Conservation plan for vultures

About Valmiki Tiger Reserve

- **It is the only Tiger Reserve in Bihar.** It is located in the Terai region in West Champaran District bordering Nepal.
- **Situated in Gangetic plains bio-geographic zone of the Country, the forests of this Tiger Reserve has a combination of bhabhar and terai tracts.** Boulder and pebble deposits by the Himalayan rivers in foothills characterize the bhabhar tract while the finer sediments deposits feature terai lands.
- **It is home to 23 tigers according to the recent census.** Water bodies in and around the reserve also attract winter migrant birds.
- **River Gandak** forms the western boundary of Valmiki Tiger Reserve.
- **Tharu and Dangar** Schedule Tribes live in these forests.
- **The porous international boundary with Nepal, intense biotic pressure, encroachment, weed invasion (dwarf Phoenix etc.), lack of availability of grassland, heavy soil-erosion from mighty rivers flowing through the reserve, involving local people in protection measures and eco-tourism are the major managerial issues of this Tiger Reserve.

Vultures in India

- Vultures, by cleaning up carcasses and other organic waste in the environment, provide critically important ecosystem services that also directly benefit humans.
- **India has 9 vulture species in the country.** Most of their populations are declining.
  1. The long-billed vulture (Gyps indicus) (Critically Endangered)
  2. The slender-billed Vulture (G. tenuirostris) (Critically Endangered)
  3. The white-rumped vulture (G. bengalensis) (Critically Endangered)
- Their first two had declined by 97%, while the last one had declined nearly 99% between 1992 and 2007.
- Their decline is associated with use of drugs for cattle treatment which then end up in their digestive system making them vulnerable to kidney failure and poisoning.

Diclofenac and vulture

- **Diclofenac** is a common anti-inflammatory drug administered to livestock (cattle and other domestic animals) and is used to treat the symptoms of inflammation, fevers and/or pain associated with disease or wounds. It was widely used in India beginning in the 1990s.
- But vultures which eat dead cattle are vulnerable to Diclofenac. This drug causes kidney failure in the vultures.
• Though the drug was banned in 2006, it is reportedly still available for use.

**Integrated Development of Wildlife Habitats’**

- Integrated Development of Wildlife Habitats’ (IDWH) is an **on-going Centrally Sponsored Scheme**, under which financial assistance is provided to State/UT Governments for protection and conservation of wildlife and its habitats in Protected Areas (PAs) as well as outside PAs and also for the recovery programmes of the critically endangered species.

**Why in the news?**

- Authorities in Valmiki Tiger Reserve have started planning for conservation of vultures after 150 of the birds were sighted recently in the protected area.
- This proposed plan for vulture conservation had been sent to the Integrated Development of Wildlife Habitats, which after approval is initiated.
- It has also been ensured that there is no use of diclofenac in the 10-km radius of the vulture safe zone.

**For doubts and queries email us at doubts@officerspulse.com**

For free learning, visit www.officerspulse.com
1) Govt. unveils stimulus post 2nd COVID wave

*What's in the news?*

- Finance Minister Nirmala Sitharaman has announced some fresh relief measures for the economy, the first such package after the second COVID-19 wave, focusing largely on extending loan guarantees and concessional credit for pandemic-hit sectors and investments to ramp up healthcare capacities.

*News in detail*

**Rs 50,000 crore for scaling up medical infrastructure**

- The Finance Minister announced a **Rs 1.1 lakh crore loan guarantee scheme** for the COVID-affected sectors. Of these Rs 1.1 lakh crore, Rs 50,000 crore has been allocated to the health sector and Rs 60,000 crore for other sectors.
- The government's significant investment towards health is aimed at upscaling medical infrastructure targeting underserved areas.
- There will be a guarantee cover for expansion and new projects related to health and medical infrastructure in **cities other than 8 metropolitan cities**.

**Emergency Credit Line Guarantee Scheme**

- An **additional Rs 1.5 lakh crore** has been granted under the Emergency Credit Line Guarantee Scheme (ECLGS). This will be over and above the existing Rs 3 lakh crore corpus of the scheme. Rs 2.69 lakh crore has already been disbursed by banks under the ECLGS.

1. The Government launched the ECLGS in May 2020 to help the pandemic hit economy. This scheme aimed to provide Rs.3 lakh crore of **unsecured loans to MSMEs and business enterprises** to mitigate the distress caused by the coronavirus-induced lockdown.

2. Apart from providing financial assistance to the MSMEs to address their working capital needs, the ECLGS 3.0 will also be **extended to enterprises from the hospitality, travel and tourism, leisure and sporting sectors** that were worst hit due to the pandemic.

---

Measures to help tourist guides and travel agencies

- **Working capital or personal loans** will be provided to people in the tourism sector to discharge liabilities and restart businesses affected by COVID-19. Loans will be administered by the **Ministry of Tourism**.
- Once visa issuance begins again, the **first 5 lakh tourist visas will be issued totally free of charge** to promote tourism in the country.

**Atmanirbhar Bharat Rozgar Yojana extended**

- The government also extended the Atmanirbhar Bharat Rozgar Yojana which was launched in 2020 till **March 31, 2022**. The scheme was so far valid till June 30, 2021.
- It aims at incentivising employers to create new jobs and restore loss of employment through the EPFO.

1. **Under the scheme, the government provides subsidy for new employees earning less than Rs. 15,000 a month through full EPF contributions (24% of salary) for two years in firms with less than 1,000 employees.**

2. For firms with **over 1,000 employees, the government is bearing half of the EPF contribution.**

---

**Focus on pediatric care**

- A separate **₹23,220 crore** has been allocated for public health with a focus on **paediatric care**, which will also be utilised for increasing ICU beds, oxygen supply and augmenting medical care professionals for the short term by recruiting final year students and interns.

**Climate-resilient crops**

- The government is committed to doubling the farmers’ income. From a focus on high-yielding seeds, now the focus is to have **crops that are climate-resilient** through the research of the Indian Council of Agricultural Research (ICAR).
- ICAR has now developed **bio-fortified crop varieties**, which if given to farmers, can...
help better quality crops with higher nutrition values. This is now being made available for 21 crops - rice, maize, soyabean, buckwheat and so on.

**PLI scheme for electronics manufacturing extended**

- The government has extended the tenure of the PLI scheme for large scale electronics manufacturing by one year till 2025-26.
- The scheme, which was launched for five years, between 2020-21 and 2024-25, will now be valid up to 2025-26. The move is aimed at providing relief to companies that could not ramp up their production due to Covid-related disruptions.

1. Launched in mid-2020, the Rs 40,995-crore Production Linked Incentive (PLI) scheme for large scale electronics manufacturing aims to grow local production to Rs 10.5 trillion in five years with Rs 6.5 trillion worth of exports.

2. As a part of the scheme, companies which set up new electronics manufacturing units or expanded their present units would get incentives of 4 to 6 per cent, after they achieve their investment and production value target for each year. These incentives will be offered for a period of 5 years.

3. So far, 16 companies, including global majors like Foxconn, Wistron, Pegatron and Samsung, along with local firms like Lava and Micromax, among others, have secured approval under the scheme.

4. However, the majority of them had not been able to meet the required targets to claim incentives in 2020-21 due to the lockdowns.

2) **Disinvestment Policy**

**Background**

- In the Union Budget 2021-22, the government proposed a disinvestment target of ₹1.75 lakh crore for this fiscal year.
- Out of the total ₹1.75 lakh crore, ₹1 lakh crore is to come from selling government stake in public sector banks and financial institutions, including 2 PSU banks and one insurance company. About ₹75,000 crore would come as Central Public Sector Enterprises (CPSEs) disinvestment receipts.
- To fast-track the disinvestment policy, the government announced that NITI Aayog would work out on the next list of central public sector companies that would be taken up for strategic disinvestment.

**New Disinvestment Policy**

- During the budget presentation, the government also outlined its new disinvestment policy.
- According to that, four sectors — Atomic energy, Space and Defence; Transport and Telecommunications; Power, Petroleum, Coal and other minerals; and Banking, Insurance and financial services — would be strategic sectors. In strategic sectors, there will be bare minimum presence of the public sector enterprises.
- The remaining CPSEs in the strategic sectors will be privatised or merged or subsidarised with other CPSEs or closed. In non-strategic sectors, CPSEs will be privatised, otherwise shall be closed.

**Why in News?**

- Chief economic advisor Krishnamurthy Subramanian said that the target of mopping up ₹1.75 lakh crore from disinvestments is on track and groundwork is being prepared for the goal.
- The disinvestment plan for this fiscal year includes strategic sale of IDBI Bank, BPCL, Shipping Corp, Container Corporation, Neelachal Ispat Nigam Ltd, among others.

**Related Information**

**What is Disinvestment?**

- Divestment or disinvestment means selling a stake in a company, subsidiary or other investments.
- Governments resort to divestment generally to reduce financial burden due to inefficient public sector undertakings (PSUs) and to improve public finances. It introduces competition and market discipline and helps to depoliticise non-essential services.

**What is Strategic disinvestment?**

- Strategic disinvestment implies the sale of a substantial portion of the Government shareholding of a central public sector enterprises (CPSE) of up to 50%, or such higher percentage as the competent authority may determine, along with transfer of management control.

**Nodal Authority**

- The Department of Investment and Public Asset Management (DIPAM) under
the Ministry of Finance is the nodal department for the strategic disinvestment.

- **DIPAM and NITI Aayog** jointly identify PSUs for strategic disinvestment.

For doubts and queries email us at: doubts@officerspulse.com
INTERNATIONAL RELATIONS

1) COVID-19 and Tourism: An Update
What’s in the news?
- The UN Conference on Trade and Development (UNCTAD) and the UN World Tourism Organisation (UNWTO) have released a report titled “COVID-19 and Tourism: An Update”.

Highlights of the Report
- The collapse of international tourism due to COVID-19 could cost the world at least $4 trillion in terms of global GDP for 2020 and 2021.
- India experienced a 54% drop in tourist arrivals in 2020.
- Tourism is not expected to return to pre-COVID levels until 2023 or later, costing the world somewhere between $1.7 trillion and $2.4 trillion in 2021, based on three scenarios (optimistic, pessimistic, and a third scenario in which the uneven rollout of vaccines is considered).
- On average, in the absence of any economic stimulus, a drop in tourist sales leads to a 2.5 fold loss in real GDP due to linkages with upstream sectors like agriculture.
- Developing countries could account for 60% of these losses owing to asymmetric vaccine roll-out globally. Tourism is likely to pick up faster this summer in North America and Europe where vaccination rates are higher.
- The impact of travel restrictions could be felt particularly by women and young people who are employed in significant proportions by the tourism sector, where barriers to entry are low. Some 100 -120 million tourism jobs are at stake as per the report.
- The report recommends quick rollout of vaccines globally to bring back tourism, including in developing countries.
- The report also recommends socio-economic measures to protect livelihoods in the tourism sector.

2) Trafficking in Persons report
What’s in the news?
- The U.S. State Department has released its annual Trafficking in Persons report.

Highlights of the Report
- The pandemic resulted in an increase in vulnerability to human trafficking and interrupted existing anti-traffic efforts.
- On India, the report says that while it did not meet the minimum standards to eliminate trafficking, the government was making significant efforts, although these were inadequate, especially when it came to bonded labour.
- The concurrence of the increased number of individuals at risk, traffickers’ ability to capitalise on competing crises, and the diversion of resources to pandemic response efforts has resulted in an ideal environment for human trafficking to flourish and evolve.
- Twelve governments were determined, by the State Department, to have a policy or pattern of human trafficking resulting in their countries being assigned a ‘Tier 3’ rating in the report. Afghanistan, Burma, China, Cuba, Eritrea, North Korea, Iran, Russia, South Sudan, Syria and Turkmenistan were on this list.
- The report said that the Chinese government engaged in widespread forced labour, including through the continued mass arbitrary detention of more than one million Uyghurs, ethnic Kazakhs, ethnic Kyrgyz, and other Muslims in Xinjiang.

3) OECD/G20 global tax deal
What is BEPS?
- Typically, a company needs to pay tax for the income or profits they earn.
- Base Erosion and Profit Shifting (BEPS) is a tax avoidance strategy by which firms make profits in one country, and shift them across borders by exploiting gaps and mismatches in tax rules, to take advantage of lower tax rates.
- It results in not paying taxes in the country where the profit is made (known as Base erosion).

About OECD/G20 Inclusive Framework on BEPS
- The OECD/G20 Inclusive Framework on BEPS brings together over 130 countries (including India) and jurisdictions to
collaborate on the implementation of the BEPS Package.

- The BEPS package provides 15 Actions that equip governments with the domestic and international instruments needed to tackle tax avoidance.
- The Framework on BEPS allows interested countries and jurisdictions to work with OECD and G20 members on developing standards on BEPS related issues and review and monitor the implementation of the BEPS Package.

**Why in News?**

- India and majority of the members OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS) have adopted a statement that seeks to reform international tax rules and ensure that multinational enterprises pay their fair share wherever they operate.
- However, India will have to roll back the equalisation levy that it imposes on companies such as Google, Amazon and Facebook when the global tax regime is implemented.
- Indian Finance Ministry said significant issues including share of profit allocation and scope of subject-to-tax rules were yet to be addressed, and a ‘consensus agreement’ was expected by October.

**Two pillars of framework**

- The framework has two pillars, one dealing with transnational and digital companies and the other with low-tax jurisdictions to address cross-border profit shifting and treaty shopping.
- The first pillar ensures that large multinational enterprises, including digital companies, pay tax where they operate and earn profits. Most such companies have so far been paying low taxes by shifting profits to low-tax jurisdictions.
- Under Pillar One, taxing rights on more than $100 billion of profit are expected to be reallocated to market jurisdictions each year.
- The second pillar seeks to put a floor under competition among countries through a global minimum corporate tax rate, currently proposed at 15%. This is expected to generate an additional $150 billion in tax revenues.
- If implemented, countries such as the Netherlands and Luxembourg that offer lower tax rates, and so-called tax havens such as Bahamas or British Virgin Islands, could lose their sheen.

**Related Information**

**Equalisation levy**

- In 2016, India imposed an equalisation levy of 6% on online advertisement services provided by non-residents. This was applicable to Google and other foreign online advertising service providers.
- The government expanded its scope from April 1, 2020, by imposing a 2% equalisation levy on digital transactions by foreign entities operating in India or having access to the local market.
- Revenue under the levy for the last financial year amounted to Rs 1,492 crore until January 30, about 30% more than the Rs 1,136.5 crore collected in FY20. This levy will have to be withdrawn under the new regime expected to be rolled out in 2023.
- Experts said India will need to evaluate the revenue expected under the new rules against what it gets from the equalisation levy, besides examining their applicability.

For doubts and queries email us at: doubts@officerspulse.com
SCIENCE AND TECHNOLOGY

1) India Digital Ecosystem of Agriculture (IDEA)

**Why in News?**
- The Centre’s digital agriculture proposals raised concerns of exploitation of farmers, data protection and consent, mismanaged land records, exclusion of landless cultivators and the corporatisation of agriculture, according to the feedback to the government.

**About government’s new proposal**
- The Centre recently published a consultation paper on India Digital Ecosystem of Agriculture (IDEA).
- It aims to keep farmers at the centre of agro-ecology by promoting free digital technologies. This is to be achieved through creating ‘AgriStack’ (a collection of technology-based interventions in agriculture), on which all the other services/platforms can be built.
- Recognizing the importance of digitization in agriculture, the Ministry of Agriculture and Farmers’ Welfare is preparing a centralised farmers database and formulating various services based on it in order to create a digital ecosystem for agriculture.
- This database will be linked with the land records of farmers across the country and unique farmer IDs will be generated.
- Under an integrated database for farmers, information related to all benefits and assistance provided through various schemes of the central and state governments can be kept at one place and it can be a source of information for providing benefits to the farmers in future.
- A database with the details of about 5 crore farmers has been prepared so far. It is expected that the database will soon be completed by incorporating the details of all landholding farmers into it.
- The available data related to PM Kisan, Soil Health Card and PM Crop Insurance Scheme have already been integrated.
- The process of collating data from other databases of the Ministry of Agriculture as well as the Ministries of Fertilizers, Food and Public Distribution is in progress.

**Objectives of India Digital Ecosystem of Agriculture (IDEA)**
- To create a National Digital Agriculture Ecosystem, increase the efficiency and production of the Indian agriculture sector, and boost farmer welfare and income.
- Increasing farmer income through timely access to the relevant information and innovative services- To help reach the target of doubling farmers income by 2022
- Keeping policies, programmes, and plans of the federal and state governments, as well as the business sector and Farmers Producer Organizations, in sync with one another (FPOs).
- More efficient use of resources, such as land, water, seeds, fertilisers, pesticides, and farm mechanisation, by making information more accessible.
- To provide location-specific and customised extension services across the agriculture lifecycle while also protecting personal data privacy.
- To develop capacities in a variety of areas, including digital agriculture and precision agriculture.
- Encourage agricultural R&D and innovation by providing high-quality data.
- Adoption of standards to ensure interoperability and information flow across ecosystems.

**Advantages**
- Enhances productivity and profitability of the farmers: Farmers will be able to make informed decisions about which crop to grow, what type of seed to use, when to sow and what best practices to adopt to maximize yield.
- Increases efficiency of logistics and supply chain system: Those involved in the agricultural supply chain can plan their procurement and logistics with accurate and timely information.
- Help in providing localized solutions and tailored recommendations to the farming community as per their needs. An accurate and smart farming can be possible by getting proper information at the right time.
- Integration with the market economy: Farmers can decide whether they have to
sell or store their produce, and further when, where and at what price they have to sell it. In the process, farmers get benefitted from innovative solutions and individual-specific services powered by emerging technologies.

**Concerns**
- **Issue of data privacy and consent**, especially because India’s Personal Data Protection bill, 2019 is yet to be passed.
- **Information asymmetry**: farmers, particularly small and marginal farms, may further be exploited if information is skewed toward technology businesses.
- There is a **digital divide** in rural India, both in terms of farmers' "access" to technology and their "digital education."
- **Issue of Commercialization**: This could result in private corporations charging unreasonable charges for these services.
- **Landless cultivators are excluded** because they lack digitised land records.
- **Poor quality and implementation of the digital land record programme**: Many states have not adopted, or have only partially completed, the land digitization initiative.

2) Flash Flood

**What is a flash flood?**
- Flash floods are **defined as floods that occur within six hours of heavy rainfall or another cause**. However, flash floods can sometimes happen within minutes or just a few hours of a heavy rain.
- Flash floods are particularly **dangerous** because they combine a flood's normal potential for damage with unpredictability and a rapid time frame. During a flash flood, normally dry creeks and river beds can fill with water and overflow before people have time to react.
- **How does it happen?**
  - The **intensity of the rainfall**, the location and distribution of the rainfall, the land use and topography, vegetation types and growth/density, soil type, and soil water-content all determine just how quickly the Flash Flooding may occur, and influence where it may occur.
  - It **mostly happens due to extremely heavy rainfall from thunderstorms**.
  - **Heavy rainfall isn't the only potential cause of a flash flood. Melting snow and ice jams** in mountain streams can send torrents of water unexpectedly into low-lying areas. **Flash Flooods can occur due to Dam or Levee Breaks, and/or Mudslides (Debris Flow).**

**Areas prone to flash floods**
- Certain areas are prone to flash flooding because of a variety of conditions. For example, **urban areas** can be dangerous because the **construction of buildings, highways**, and large parking lots reduces the amount of soil available to absorb heavy rains.
- **Areas near rivers and large streams** are also prone to flash flooding, since heavy rains will naturally find their way to established waterways. **Deep canyons and other areas** near mountains and steep hills can be deadly when the surrounding topography produces rapid runoff that can flood normally dry areas in a matter of minutes.

**Issues Associated with Flash Floods**
- **Forecasting of flash floods** is tough.
- **Frequency of events have increased** due to **climate change**.
- **Himalayas are a volatile mountain system**.
- **Overlooking environmental norms** may cause flash floods and this is primarily seen after dams are constructed without adequate risk analysis.

**Why in News:**
- The **Geological Survey of India** said that the flash flood on February 7 in Chamoli district, Uttarakhand, was due to a large mass of snow, ice and rock avalanche along with a hanging mass of rock crashing into the Raunthi Garh valley floor.

**How Chamoli disaster happened**
- A contributory factor was **unusually warm weather** in the region.
- Observed change in the **hydro-meteorological conditions** (heavy snowfall followed by sudden warmer climate) possibly triggered this huge snow and rock avalanche/landslide causing sudden domino effect of flash flood in the downstream.
- **Climate change** that was triggering **higher temperatures** in the upper reaches of the Himalaya had a role and the constant
freezing and thawing of ice made parts of rocks weak making them vulnerable to collapse.

TRAIL OF DESTRUCTION

1. Glacier bursts in Raini village of Chamoli in Garhwal Himalayias, damages hydropower plant at NTPC Tapovan, several bridges and nearby villages
2. A swollen Dhauliganga flows down to Vishnuprayag
3. The river, Alaknanda at this point, washes away under-construction Tapovan-Vishnuugad hydropower project on Rishiganga
4. The stream now reaches Srinagar
5. Then Devprayag
6. Rishikesh
7. Haridwar

- There was no evidence of a Glacial Lake Outburst Flood (GLOF) having caused the event.
- Areas having risks posed by smaller mountain glaciers were also becoming important sites where such hazards formed.
- The steep higher order streams and the narrow river valleys in the high-altitude areas of Himalayas remain extremely hazard prone, which are not only vulnerable to GLOF (Glacial Lake Outburst Flood) /Landslide Lake Outburst Flood (LLOF) hazards but have also become locale for a major disaster caused due to the domino effect of large/mega landslide and avalanche.

How to prevent flash floods?
- Framework For Vulnerable Zones: framework for robust early warning systems, infrastructure development, construction, and excavation in vulnerable zones must be evolved.
- Construction of any habitation should be prohibited in the high hazard zone.
- Research on Glacial Lakes should be carried out.

Related Information

GLOF
- A glacial lake outburst flood (GLOF) is a release of meltwater from a moraine-or ice-dam glacial lake due to dam failure. GLOFs often result in catastrophic flooding downstream, with major geomorphic and socioeconomic impacts. Some of the largest floods in Earth's history have been GLOFs
- Moraine-dammed lakes form during periods of glacier retreat from a moraine. As a glacier margin retreats, water collects in the topographic low between the ice-front and the abandoned frontal and/or lateral moraine. Most existing moraine-dammed lakes formed when mountain glaciers began to retreat from large moraine ridges constructed during the Little Ice Age.
In contrast to moraine-dammed lakes, **ice-dammed lakes form** when drainage is blocked by a glacier that advances or becomes thicker. Consequently, ice-dammed lake growth is closely related to glacier mass balance and climate. Ice-dammed lakes form wherever a glacier blocks the drainage of meltwater.

**GLOFs have three main features:**
- They involve sudden (and sometimes cyclic) releases of water.
- They tend to be rapid events, lasting hours to days.
- They result in large downstream river discharges (which often increase by an order of magnitude).

**LLOF**
- Landslide Lake Outburst Floods (LLOFs) are common in the Himalayan river basins. These are caused by breaching of lakes created by landslides.

**India’s fight against flash flood**

- India is leading a delegation of countries, including Bhutan, Sri Lanka, Bangladesh, and Nepal, in the **exchange of hydrological and meteorological data** in order to prepare flash flood forecasts.
- The system was developed in collaboration with India’s National Disaster Management Authority (NDMA) and the Central Water Commission (CWC).
- The India Meteorological Department (IMD) has launched the South Asian Flash Flood Guidance System (FFGS), which is designed to assist disaster management teams and governments in developing timely evacuation plans ahead of a flooding event.

**Geological Survey of India**
- The Geological Survey of India (GSI) is a scientific agency of India. Founded in 1851, it functions under the Ministry of Mines.
- It is one of the oldest of such organisations in the world and the second oldest survey in India after Survey of India.
(founded in 1767), for conducting geological surveys and studies of India.

- It is also the prime provider of basic earth science information to government, industry and general public, as well as the official participant in steel, coal, metals, cement, power industries and international geoscientific forums.

3) Multi Drug Resistance in Bacteria

Why in News?
- New research published in the journal Ecology Letters from the Population Biology Lab at IISER Pune could hold a key to Multi Drug Resistance in Bacteria.

What is multi drug resistance?
- When an organism is resistant to more than one drug, it is said to be multidrug-resistant.

What did the study find?
- Possessing multi-drug resistance implies that the bacteria is adept at handling multiple antibiotics simultaneously. This would increase its fitness appreciably.
- The study showed that, all else being equal, whether the bacteria mutations depend on the population size they evolve in.
- Researchers found that the larger populations of bacteria contained a greater number of mutations. The smaller populations only had mutations related to metabolism of one kind of carbon source whereas the larger populations had known mutations for metabolism of multiple types of carbon sources.

How is AMR different from MDR?
- Antimicrobial resistance (AMR) is the ability of a pathogenic microbe to develop a resistance to the effects of an antimicrobial medication.
- AMR occurs when bacteria, viruses, fungi and parasites change over time and no longer respond to medicines making infections harder to treat and increasing the risk of disease spread, severe illness and death. As a result, the medicines become ineffective and infections persist in the body, increasing the risk of spread to others.
- The term antibiotic resistance is a subset of AMR, as it applies to bacteria that become resistant to antibiotics.

- Microorganisms that have antimicrobial resistance are sometimes called "superbugs".

The issue of AMR
- Antibiotic resistance is one of the biggest challenges of modern medicine. This antimicrobial resistance mounts problems beyond the geographical as well as species barriers and can transmit from animals to humans. AMR needs to be addressed in totality by all sectors including healthcare, veterinary and agricultural domains.
- WHO has declared that AMR is one of the top 10 global public health threats facing humanity.
- Antibiotic resistant organisms have become rigidly established in our environment with many infections failing to respond to available antimicrobials.
- The emergence of antimicrobial resistance (AMR) is creating ‘superbugs’ that make treating basic infections difficult (and in some cases impossible) and surgery risky.

Causes of AMR
- Over-prescription and self-prescription of antibiotics.
- Patients not finishing the entire antibiotic course.
- Overuse of antibiotics in livestock and fish farming.
- Poor infection control in health care settings.
- Poor hygiene and sanitation.
- Current effluent standards do not include antibiotic residues, and hence they are not monitored in the pharmaceutical industry effluents, resulting in resistance.
- Bacteria can also acquire resistance naturally by:
  1. Sharing and transferring resistance genes that is already present in the population
  2. Genetic mutations that help the bacteria post it is exposed to antibiotics

Fight against AMR
- Based on the adoption of the Global Action Plan on AMR in 2015 in the World Health Assembly, member states were urged to develop National Action Plans based on the global framework within 2 years and share data with the WHO on implementation steps and AMR trends.

For free learning, visit www.officerspulse.com
In 2019, a new AMR indicator was included in the SDG monitoring framework.

WHO launched the Global Antimicrobial Resistance and Use Surveillance System (GLASS) in 2015 to continue filling knowledge gaps and to inform strategies at all levels.

WHO estimates that, in 2018, there were about half a million new cases of rifampicin-resistant TB (RR-TB) identified globally, of which the vast majority have multi-drug resistant TB (MDR-TB), a form of tuberculosis that is resistant to the two most powerful anti-TB drugs. In 2018, an estimated 3.4% of new TB cases and 18% of previously treated cases had MDR-TB/RR-TB and the emergence of resistance to new ‘last resort’ TB drugs to treat drug resistant TB poses a major threat.

National Action Plan on AMR (NAP-AMR) was released at the Delhi Declaration on Antimicrobial Resistance – an inter-ministerial consultation aimed at adopting a holistic and collaborative approach towards prevention and containment of AMR in India and increasing cooperation between various ministries.

The Government of India adopted the National Action Plan on AMR (NAP-AMR) in 2017, with the Ministry of Health and Family Welfare (MoHFW) as the nodal ministry and the National Centre for Disease Control (NCDC) as the key surveillance body.

India is amongst the nations with the highest burden of bacterial infections.

In 2008, about 29% of isolates of Staphylococcus aureus were methicillin resistant, and by 2014, this had risen to 47%.

The NCDC has prepared guidelines for the development of State Action Plans

In 2012, India's medical societies adopted the Chennai Declaration, a set of national recommendations to promote antibiotic stewardship.

Red Line campaign – demands that prescription-only antibiotics be marked with a red line, to discourage the over-the-counter sale of antibiotics.

The Food Safety and Standards Authority of India (FSSAI) banned the use of antibiotics and several pharmacologically active substances in fisheries.

The Ministry of Health has capped the maximum levels of drugs that can be used for growth promotion in meat and meat products.

Way Forward

One Health Approach through coherent, integrated, multi sectoral cooperation and actions, since human, animal and environmental health are integrated for fighting against AMR.

Lack of clean water and sanitation and inadequate infection prevention and control promotes the spread of microbes, some of which can be resistant to antimicrobial treatment. India in particular is known for its lack of clean water. Hence, the Ministry of Jal Shakti scheme, “Swajal” (demand-driven programme involving the community to provide sustainable access to safe drinking water to people in rural areas) has to be given more seriousness.

Strengthening resistance tracking– New infections should be collected and analysed, that can inform as to the degree of antibiotic resistance seen in different bacterial species or isolates from different types of infection

Creating awareness, stopping self-medication, and investing in finding new antibiotics.

New effluent standards that treat pharmaceutical industry effluents.

For doubts and queries email us at: doubts@officerspulse.com
1) Agni-P  
**Why in News:**  
- A new generation nuclear capable ballistic missile **Agni-P (Prime)** was successfully test-fired by the Defence Research and Development Organisation (DRDO).  
- **Ballistic missile** is a rocket-propelled self-guided strategic-weapons system that follows a ballistic trajectory to deliver a payload from its launch site to a predetermined target. Ballistic missiles can carry conventional high explosives as well as chemical, biological, or nuclear munitions.

**What makes Agni-P different?**  
- **Agni-P** is a new generation advanced variant of the **Agni class of missiles**. It is a canisterised missile with range capability between 1,000 and 2,000 km.  
- Agni-P has improved parameters including manoeuvring and accuracy.  
- Canisterisation of missiles reduces the time required to launch the missile while improving its storage and mobility.  

**Agni Class of Missiles**  
- **Agni class** of missiles are the **mainstay of India’s nuclear launch capability** which also includes the Prithvi short range ballistic missiles, submarine launched ballistic missiles and fighter aircraft. The longest of the Agni series, **Agni-V**, an Inter-Continental Ballistic Missile (ICBM) with a range of over 5,000 km.  
  1. In the last few years, India has also operationalized its submarine-based nuclear launch capability, **completing the nuclear triad**.  
  2. This is especially important given India’s No-First-Use policy while reserving the right of massive retaliation if struck with nuclear weapons first.

**Evolution of Agni**  
- **Agni I**: Range of 700-800 km.  
- **Agni II**: Range more than 2000 km.  
- **Agni III**: Range of more than 2,500 Km  
- **Agni IV**: Range is more than 3,500 km and can fire from a road mobile launcher.  
- **Agni-V**: The longest of the Agni series, an **Inter-Continental Ballistic Missile (ICBM)** with a range of over 5,000 to 8000 km. An ICBM is a missile with a minimum range of 5,500 kilometres primarily designed for nuclear weapons delivery.

**Related Information**  
**IGMDP (Integrated Guided Missile Development Program)**  
- It was conceived by Former President Dr. A.P.J. Abdul Kalam to enable India attain self-sufficiency in the field of missile technology.  
- The 5 missiles developed under this program are:  
  1. **Agni**: Ballistic missiles with different ranges, i.e. Agni (1,2,3,4,5)  
  2. **Akash**: Medium range surface to air missile.  
  3. **Prithvi**: Short range surface to surface ballistic missile.  
  4. **Trishul**: Short range low level surface to air missile.  
  5. **Nag**: 3rd generation anti-tank missile.

**Canister Based Launch System**  
- **Canister-based launch system**—serves as a **transporting container, a shelter** to store in a ship, and gives **operational flexibility**.  
- A canister launch system can be either **hot or cold**. In cold launch, the missile is expelled by gas produced by a gas generator which is not part of the missile itself, and then the missile ignites.  
- Cold launch is safer than hot launch because the ejection system will automatically expel the missile if it fails. The problem with hot launches is the heat generated by the missile at the time of launch.  
- The hot launch is preferable for small missiles because the ejection is handled by the missile’s own engine.

**Nuclear Triad**  
- The **nuclear triad** is a three-pronged military force organisation that includes...
land-based nuclear missiles, nuclear-missile-armed submarines, and strategic aircraft (such as the Rafale) equipped with nuclear bombs and missiles.

- India has been able to complete its nuclear triad in recent years. Given India’s No-First-Use policy, which reserves the right to overwhelming retribution if attacked with nuclear weapons first, this is especially crucial.

2) Drones

What are drones?

- An unmanned aerial vehicle (UAV) or uncrewed aerial vehicle, commonly known as a drone, is an aircraft without any human pilot, crew or passengers on board.
- There are three subsets of Unmanned Aircraft- Remotely Piloted Aircraft, Autonomous Aircraft and Model Aircraft.
- Remotely piloted aircraft have been divided into five categories based on their weight-
  1. Nano: Less than or equal to 250 grams.
  4. Medium: From 25kg to 150kg.
  5. Large: Greater than 150kg.
- Drones are used for a variety of reasons, including package delivery, agriculture (spraying insecticides, etc.), environmental monitoring, aerial photography, and search and rescue missions.
- Drones are now used for various purposes from taking photographs or shooting videos to military warfare and space exploration.

Concern

- Drones fly low and are therefore undetectable by radar systems.
- According to government records, 167 drone sightings were registered along the Pakistani border in 2019, with 77 sightings in 2020.
- Even in the safest cities on the planet, the prospect of a drone attack cannot be ruled out due to the rapid expansion of drone technology and the exponential rise of its global market in recent years.
- Drones are becoming a security risk, especially in war zones where non-state actors are active and have easy access to technology (example- 2019 twin drone attacks on Saudi Aramco crude oil production in Saudi Arabia).
- Drones are far smaller than conventional aircraft and are utilised for cross-border smuggling of weapons and ammunition as well as attacks.
- Because of their low altitude and small radar, ground forces must rely on optical sightings and aural communications to track them electronically.
- Punjab and Jammu and Kashmir are prone to cross-border smuggling and terror strikes since they are border states with a history of terrorism.
- Drone activity has increased in border areas, according to security authorities, with multiple incidents of drones violating Indian airspace and dropping weaponry and ammunition on this side of the border.

Reason for Increasing Drone Attacks:

- Cheap: Drones are relatively cheaper than traditional weapons, but they can produce significantly more destructive outcomes. This is the fundamental reason for their growth.
- Controlled remotely: The most significant benefit of employing a drone for battle is that it can be controlled from afar and does not put any members of the assaulting side in danger.
- Simple to Use: It is because of this easy-to-procure, easy-to-operate, and demonstrated damage potential that anti-drone warfare equipment is critical for any country's troops.

Rules for Drone Regulations in India:

Unmanned Aircraft System (UAS) Rules, 2020:

- It is a set of government-issued regulations aimed at regulating the manufacturing, import, commerce, ownership, development of drone ports (airports for drones), and operation of unmanned aircraft systems (UAS). It also aims to establish a framework for corporations to deploy drones.

National Counter Rogue Drones Guidelines 2019:

- Depending on the criticality of the assets to be secured, the guidelines offered a variety of counter-rogue drone techniques.
- The rules required the deployment of a model consisting of primary and passive detection means such as radar, Radio Frequency (RF) detectors, electro-optical,
and infrared cameras in places of crucial national interest.

- Soft and hard kill measures such as RF jammers, GPS spoofers, lasers, and drone catching nets were also suggested to be installed.

Other Initiatives

Directed-Energy Weapon:

- The Defense Research and Development Organization (DRDO) has developed two anti-drone Directed-Energy Weapon (DEW) systems, one with a 10-kilowatt laser for a 2-km range and the other with a 2-kilowatt laser for a 1-km range. However, they have yet to be mass-produced in large numbers.

Smash-2000 Plus:

- The military is now importing a small number of other systems, such as the Israeli 'Smash-2000 Plus' computerised fire control and electro-optic sights, which can be fitted on guns and rifles to combat the danger of small hostile drones in both day and night settings.

Why in News?

- Days after a drone attack at an Air Force base in Jammu, authorities in Srinagar banned the sale, possession and use of such unmanned aerial vehicles in the city.
- Two explosives-laden drones had crashed into the Indian Air Force station at Jammu airport recently and there were other suspicious sightings of UAVs, triggering a security alert.

For doubts and queries email us at: doubts@officerspulse.com

For free learning, visit www.officerspulse.com
ART AND CULTURE

1) 4000 year old settlement

Why in News?
- The Odisha Institute of Maritime and South East Asian Studies (OIMSEAS), an archaeological wing of the State government, has discovered a 4,000-year-old settlement and ancient artifacts in Balasore district of Odisha.
- After uncovering traces of fortified early historic sites near Balasore town, the OIMSEAS had sought permission from the Archaeological Survey of India (ASI) to document the site at the Durgadevi village.

About the excavation
- Archaeologists have come across distinct traces of three cultural phases at the excavation site — Chalcolithic (2000 BCE to 1000 BCE), the Iron Age (1000 BCE to 400 BCE) and the Early Historic Period (400 BCE to 200 BCE).
- Excavation was started with an aim to correlate the simultaneous growth and development of maritime activities, and urbanisation in the east coast of India, linking the Ganga valley in north and the Mahanadi valley in central Odisha, more particularly to focus on early cultural development in northern Odisha.
- Archaeologists have come across a human settlement, and artifacts belonging to the Chalcolithic period.

From Chalcolithic Period
- The major discovery of the Chalcolithic period of Durgadevi is the base of a circular hut, black on red painted pottery, black slipped ware, red slipped ware, and copper objects. The floor of the circular hut is rammed with red soil.
- From the base of the circular hut and the utilitarian objects found, the lifestyle of the people has been derived. People were mostly leading a settled life and had started agriculture, and domestication of animals and fishing.

From Iron Age Period
- Similarly, the cultural material evidence and remains found from the Iron Age phase include pottery, remains of black burnished ware, black and red ware, iron objects like nails, arrow heads, and crucible and slag of various kinds belonging to the Iron Age.
- The use of iron is a landmark phase in the growth of civilisation in Odisha, particularly in north Odisha. There are several Iron Age sites discovered by archaeologists in the upper and middle Mahanadi valley, but in north Odisha, this is the first site.

From Early Historic Period
- Cultural materials from the early historic period such as pottery specimens of red ware, terracotta ear studs, bangles, beads, and some conical objects, were also discovered from the site.
- The lifestyle of the people, which is derived from the cultural materials, was very improved at that time, from an agricultural base to trade and construction of fortification around the site with a moat, which signify the emergence of urbanisation at Durgadevi around 400 BCE to 200 BCE.

For doubts and queries email us at: doubts@officerspulse.com
PIB ANALYSIS

1) PM Formalisation of Micro Food Processing Enterprises (PM FME) scheme

**Background**
- The **unorganized food processing sector** in the country comprises nearly 25 lakh food processing enterprises which are unorganized and unregistered.
- With only 7% of investment in plant & machinery and 3% of outstanding credit, the unorganized enterprises contribute to **74% of employment (a third of which are women)**, 12% of output and 27% of the value addition in the food processing sector.
- The sector faces a number of challenges including the inability of the entrepreneurs to access credit, high cost of institutional credit, lack of access to modern technology and inability to integrate with the food supply chain and compliance with the health and safety standards.
- To address these problems, the Government of India approved an all India **Centrally Sponsored Scheme “PM Scheme for Formalisation of Micro food processing Enterprises (PM FME)” in 2020.**

**About the scheme**
- The PM Formalisation of Micro Food Processing Enterprises scheme aims to
  1. **Modernize and enhance the competitiveness** of the existing individual micro enterprises and ensure their transition to formal sector
  2. To support FPOs/SHGs/Cooperatives for delivery of package of services, creation of common infrastructure along the value chain, ensure backward & forward linkages, branding & marketing, etc.
- Strengthening this segment will lead to reduction in wastage, creation of off-farm job opportunities and aid in achieving the overarching Government objective of doubling farmers’ income.
- The expenditure under the scheme would be shared in a **60:40 ratio** between the Central and State governments and in **90:10 ratio** with North Eastern and Himalayan States.

**Objectives of the scheme**
- Increase in access to finance by micro food processing units.
- Increase in revenues of target enterprises.
- Enhanced compliance with food quality and safety standards.
- Strengthening capacities of support systems.
- Transition from the unorganized sector to the formal sector.
- Special focus on women entrepreneurs and Aspirational districts.
- Encourage Waste to Wealth activities.
- Focus on minor forest produce in Tribal Districts.

**Salient features**
- 2,00,000 micro-enterprises are to be assisted with credit linked subsidies.
- Scheme will be implemented over a 5 year period from 2020-21 to 2024-25.
- Micro food enterprises will be supported with **credit linked subsidy @ 35%** of the eligible project cost with a **ceiling of Rs.10 lakh**.
- Beneficiary contribution will be minimum 10% and balance through loan.
- The scheme also supports SHGs/FPOs/ Cooperatives in brand building and marketing for the micro-enterprises.
- It also envisages linkage of clusters with lead buyers.
- The Scheme would be monitored at the Centre by an Inter-Ministerial Empowered Committee (IMEC) under the Chairmanship of Minister, Food Processing Industries.
- A third party evaluation and mid-term review mechanism would be built in the programme.

**Benefits of the scheme:**
- Nearly eight lakh micro- enterprises will benefit through access to information, better exposure and formalization.
- Credit linked subsidy support and hand-holding will be extended to 2,00,000 micro enterprises for expansion and upgradation.
- It will enable them to formalize, grow and become competitive.
- The project is likely to generate nine lakh skilled and semi-skilled jobs.
- Scheme envisages increased access to credit by existing micro food processing
entrepreneurs, women entrepreneurs and entrepreneurs in the Aspirational Districts.

- Better integration with organized markets.
- Increased access to common services like sorting, grading, processing, packaging, storage etc.

**Why in the news?**

- Pradhan Mantri Formalisation of Micro food processing Enterprises (PMFME) Scheme marks the completion of its one year implementation.

2) **Indian Ocean Naval Symposium**

**About:**

- Indian Ocean Naval Symposium (IONS) is a biennial event conceived by the Indian Navy in 2008.
- It seeks to enhance maritime cooperation among Navies of the littoral states of the Indian Ocean Region by providing an open and inclusive forum for discussion of regionally relevant maritime issues that would lead to common understanding on the way ahead.
- The forum helps to preserve peaceful relations between nations, and thus is critical to building an effective maritime security architecture in the Indian Ocean Region and is also fundamental to our collective prosperity.
- The chairmanship of IONS has been held by India (2008-10), UAE (2010-12), South Africa (2012-14), Australia (2014-16), Bangladesh (2016-18) and Islamic Republic of Iran (2018-21).
- **France** assumed the Chairmanship on 29 Jun 21 for a two-year tenure.

**Members**

- IONS includes 24 nations that permanently hold territory that lies within the Indian Ocean, and 8 observer nations:
  - **South Asian Littorals:** Bangladesh, India, Maldives, Pakistan, Seychelles, Sri Lanka and United Kingdom (British Indian Ocean Territory)
  - **West Asian Littorals:** Iran, Oman, Saudi Arabia and United Arab Emirates
  - **East African Littorals:** France (Reunion), Kenya, Mauritius, Mozambique, South Africa, and Tanzania.
  - **South East Asian and Australian Littorals:** Australia, Indonesia, Malaysia, Myanmar, Singapore, Thailand and Timor-Leste.

**Observers:** China, Germany, Italy, Japan, Madagascar, the Netherlands, Russia and Spain.

**Significance of IONS**

- IONS fits into India’s three-fold ambitions in the region:
  1. Strengthening and deepening the relations with the Indian Ocean littoral states;
  2. Establishing its leadership potential and aspirations of being a net-security provider; and
  3. Fulfilling India’s vision of a rules-based and stable maritime order in the IOR.

**Why in the news?**

- The 7th edition of Indian Ocean Naval Symposium (IONS) was hosted by the French Navy at La Réunion from 28 June to 01 July 2021.

3) **Enforcing Contracts Portal**

**What is in the news?**

- The Department of Justice under the Ministry of Law and Justice has launched the “Enforcing Contracts Portal”.

**Background**

- Within this, the Ease of Doing Business (EoDB) index is a ranking system which is an indication of an economy’s position relative to that of other economies across 11 areas of business regulation namely.
- Starting a Business, Dealing with Construction Permits, Getting Electricity, Registering Property, Getting Credit, Protecting Minority Investors, Paying Taxes, Trading across Borders, Enforcing Contracts, and Resolving Insolvency.
- The “Enforcing Contracts” indicator is one such essential area that measures time and cost to resolve a standardized commercial dispute as well as a series of good practices in the judiciary.
- Currently, only the cities of Delhi and Mumbai are under the purview of the Ease of Doing Business survey by World Bank.
- Kolkata and Bengaluru are likely to be included in the Doing Business Reporting future.
Department of Justice, Ministry of Law and Justice, as the nodal department has been monitoring an array of legislative and policy reforms to strengthen the "Enforcing Contracts" regime for Ease of Doing Business in India in coordination with e-Committee, Supreme Court of India and the High Courts of Delhi, Bombay, Calcutta and Karnataka.

About the portal
- The portal aims to promote ease of doing business and improve the 'Contract Enforcement Regime' in the country.

Features of the portal
- The portal is envisioned to be a comprehensive source of information pertaining to the legislative and policy reforms being undertaken on the "Enforcing Contracts" parameters.
- It includes the latest data related to the functioning and disposal of commercial cases in the Dedicated Commercial Court Of Delhi, Mumbai, Bengaluru and Kolkata. These Dedicated Commercial Courts have been established for speedy resolution of commercial disputes and boast of dedicated infrastructure and exclusive judicial human power.
- The new portal also hosts online reporting by all High Courts regarding the Mediation and Arbitration centres annexed to the Commercial Courts.

Need for the Portal
- However, to ensure that India's ranking in this indicator comes within TOP 50 this portal was launched.

4) AIM: Fostering Innovation

Atal Innovation Mission
- The Atal Innovation Mission (AIM) is a flagship initiative set up by the NITI Aayog to promote innovation and entrepreneurship across the length and breadth of the country.
- AIM’s objective is to develop new programmes and policies for fostering innovation in different sectors of the economy, provide platform and collaboration opportunities for different stakeholders, create awareness and create an umbrella structure to oversee the innovation ecosystem of the country.

Initiatives under Atal Innovation Mission

Atal Tinkering Labs - at School Level
- AIM has launched the establishment of thousands of Atal Tinkering Labs enabling students from grade 6 to grade 12 to have access to and tinker with innovative tools and technologies like 3D printers, robotics, miniaturised electronics do-it-yourself kits, thus stimulating a problem solving innovative mindset to solve problems in the community they are in.
- Some activities related to ATL Operational Excellence, Proactive Promotion of Innovation & Thought Leadership, Collaborations & Partnerships and New Initiatives by AIM:
  1. ATL Gandhian Challenge - launched in all schools along with UNICEF.
  2. India Stamp Creativity challenge - launched with UNICEF and India Post.
  3. PM India Innovative Learning DHRUV Program – AIM invited as key partner by MHRD.

Atal Incubators at Universities, Institutions, Industry Level
- To promote creation of a supporting ecosystem for start-ups and entrepreneurs, AIM has been establishing world-class incubators called Atal Incubation Centres (AICs) in universities. Institutions, corporates, etc. that would foster innovative start-ups and become scalable and sustainable enterprises.

Atal Community Innovation Centres - Serving Unserved and Under-Served Regions of India
- To promote the benefits of technology led innovation to the unserved/ underserved regions of India including Tier 2, Tier 3 cities, aspirational districts, tribal, hilly and coastal areas, AIM is setting up Atal Community Innovation Centres (ACICs) with a unique partnership driven model wherein AIM would grant up to Rs. 2.5 crore to an ACIC subject to a partner proving equal or greater matching funding.

Atal New India Challenges - Product and Service Innovations with National Impact

For free learning, visit www.officerspulse.com
To create product and service innovations having national socio-economic impact, AIM has launched over 24 Atal New India Challenges in partnership with five different ministries and departments of the central government.

**Applied Research and Innovation for Small Enterprises (ARISE)**
- To promote innovation in a phased manner in the MSME/Start-up sector AIM will be launching ARISE along with partner Ministries so that great research ideas are converted to viable innovative prototypes followed by product development and commercial deployment.

**Mentorship and Partnerships - with Public, Private sector, NGOs, Academia, Institutions**
- To enable all the initiatives to succeed, AIM has launched the "Mentor India – The Mentors of Change" programme, in collaboration with the public sector, corporates and institutions, to support all the initiatives of the mission.

**Why in the news?**
- Atal Innovation Mission has recently concluded its first fintech cohort of AIM-iLEAP - an initiative to back tech start-ups with much-needed access to industry, markets and investors.
- The Fin-Tech cohort consisted of start-ups from a wide range of areas such as payments, international money transfers, personal finance, consumer banking, insurance, neo bank etc.

**About AIM-iLEAP**
- AIM-iLEAP stands for Atal Innovation Mission- Innovative leadership for entrepreneurial agility and profitability.
- The objective of the AIM-iLEAP program is to invite technology start-ups across a broad range of functions and have them present their solutions to the corporate leadership and innovation team for enabling market access and industry partnerships.

For doubts and queries email us at doubts@officerspulse.com
1) National Social Assistance Programme

About NSAP
- Launched in 1995, the National Social Assistance Programme (NSAP) is a welfare programme being administered by the Ministry of Rural Development.
- This programme is being implemented in rural areas as well as urban areas.
- 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 -
  1. Indira Gandhi National Old Age Pension Scheme (IGNOAPS),
  2. Indira Gandhi National Widow Pension Scheme (IGNWPS),
  3. Indira Gandhi National Disability Pension Scheme (IGNDPS),
  4. National Family Benefit Scheme (NFBS) and
  5. Annapurna.

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.
  - **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.
  - **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.
  - **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.
  - **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.

Why in News?
- The Ministry of Rural Development conducted a nationwide review of the National Social Assistance Programme recently.

2) India recorded highest ever merchandise export

What's in the news?
- India has recorded the highest ever merchandise export of $95 billion in the first quarter of April to June this year despite the severity of the second wave of COVID-19 pandemic, surpassing the previous record of $90 billion in January-March 2020.
- The exports rose by 47.34% to $32.46 billion in June following strong growth in sectors such as engineering, gems and jewellery and petroleum products. However, India was a net importer in June 2021 with a trade deficit of $9.4 billion.
- The country has received the highest ever FDI inflow of 81.72 billion US dollar in the last financial year.
- Commerce and Industry Minister Piyush Goyal said that India has set a target of 400
billion US dollar merchandise exports in this financial year.
- Sector specific government’s interventions, involvement of all the stakeholders and simplification of procedures have resulted in record performance of exports.

For doubts and queries email us at doubts@officerspulse.com
THE HINDU EDITORIALS

Dear students,

In Pulse issue #1 ‘Close the vaccination gap, in global lockstep’ topic, it is given that “Pandemic is affecting developed countries more due to lack of social mechanisms and economic policy levers.”

It is an error. It should have been “Pandemic is affecting developing countries more due to lack of social mechanisms and economic policy levers”. Error is regretted.

1) On the margins with full equality still out of reach

GS-1 Salient Features of Indian Society, Issues Related to Transgenders

NEWS

▶ Despite judicial verdicts, India’s sexual minorities face discrimination in employment, health issues and personal rights.

CONTEXT

▶ It is of huge concern that in India, the queer community is still a stigmatised and invisible minority, while in the last two decades many nations have witnessed tremendous progress in establishing civil rights for the LGBTQIA+ community.
▶ This fact is alarmingly incompatible with the country’s living, liberal and inclusive Constitution.

INDIAN CONSTITUTION AND MINORITIES RIGHTS

▶ The Constitution was conceived by India’s founding fathers as a beacon of fundamental rights, leading once enslaved Indians to the promised land of life and freedom.
▶ Despite such a liberating Constitution, the Indian state and the law have been abusing, giving many marginalised segments of the citizenry such as the queer community of India the cold shoulder.

PROACTIVE ROLE PLAYED BY THE JUDICIARY

▶ The meagre gains that the queer community won have been granted by the judiciary and not by legislatures.

In the tug of war between the demands of the traditional conception of society and the rights of individuals to their identity and dignity, the Supreme Court has come down firmly in favour of individuals.

RELEVANT JUDGMENTS BY COURTS

Navtej Singh Johar & Ors. vs Union of India (2018)

▶ In this case the Supreme Court ruled that the application of Section 377 of the Indian Penal Code (IPC) to consensual homosexual behaviour between adults was “unconstitutional, irrational, indefensible and manifestly arbitrary”.
▶ This judgment came as a great victory to the Indian individual in his quest for identity and dignity. It also provided a launch pad for the LGBTQ+ jurisprudence and queer liberation movement in India.

Naz Foundation vs Government of NCT of Delhi (2009)

▶ In this case, the Delhi High Court’s verdict was a 38th parallel in the law of sexuality and equality jurisprudence in India.
▶ The court held that Section 377 offended the guarantee of equality enshrined in Article 14 of the Constitution.
▶ It rather creates an unreasonable classification and targets homosexuals as a class.
▶ Despite these progressive judgments of the Supreme Court, full equality is still a dream for the queer community in India.
▶ The sexual minorities still face a lot of discrimination in the matters of employment, health and personal relationship.
▶ It is only when these problems are adequately addressed that the LGBTQ+ community will be able to enjoy full autonomy and agency.

LEGAL SANCTIONS POSED BY UNION OF INDIA

On the contrary to the progressive judgments by the judiciary, the Union of India has recently opposed any move to accord legal sanction to same-sex marriages in India.
The union have forwarded its stance stating that the decriminalisation of Section 377 of the Indian Penal Code does not automatically translate into a fundamental right for same-sex couples to marry.

This opposition by the Union came in the response to the Delhi High Court notice to a plea by LGBTQ+ activists and couples who sought recognition of same-sex marriages.

WAY FORWARD

Embracing changing trends:
- Justice Anthony Kennedy of the U.S. Supreme Court, in Obergefell vs Hodges (2015) underscored the emotional and social value of the institution of marriage and asserted that:
  - The universal human right of marriage should not be denied to a same-sex couple.
  - As of 2021, same-sex marriage is legally performed and recognised in 29 countries.
  - Hence, there is a need that Indian society and the state should synchronise themselves with changing trends.

Amending Article 15
- In 1996, South Africa became the first country to constitutionally prohibit discrimination based on sexual orientation.
- India can also take the South Africa example and include ‘sexual orientation’ in addition to religion, race, caste, sex or place of birth in Article 15.
- (Article 15 secures the citizens from every sort of discrimination by the state, on the grounds of religion, race, caste, sex or place of birth or any of them.)

Providing justice to prisoners of sexual conscience:
- In 2017, the UK passed the “Alan Turing law”.
- The law granted amnesty and pardon to the men who were cautioned or convicted under historical legislation that outlawed homosexual acts.
- India should also enact a law on these lines to make up for the excesses the LGBTQ+ community has been subject to in the past and present.

Sensitise the general public:
- The SC in Navtej Singh Johar & Ors., had directed the Government to sensitise the general public and officials, including police officials, to reduce and finally eliminate the stigma associated with LGBTQ+ community through the mass media and the official channels.
- School and university students too should be sensitised about the diversity of sexuality to deconstruct the myth of heteronormativity.
- (Heteronormativity is the belief that heterosexuality is the only natural expression of sexuality in our society.)
- It is time for change, but the burden should not be left to the political powers. Instead, the onus remains with the civil society, the citizenry concerned and the LGBTQ+ community itself.

2) The power of an apology

GS-2 International Relations

CONTEXT
- Recently Germany officially apologised to Namibia for the massacre of the Herero and Nama people in 1904-1908 and called it a genocide for the first time.
- Around the same time, French President Emmanuel Macron asked Rwandans to forgive France for its role in the 1994 Rwandan genocide in which about 800,000 ethnic Tutsis and moderate Hutus died.

SIGNIFICANCE OF APOLOGIES
- The importance of such apologetic gestures cannot be overestimated, as they can generate multiple positive effects.
  - Apart from strengthening the relations between the countries involved, apologies by leaders help people in:
    1. Reconciling with the past
    2. Countries and communities take lessons from history and avoid similar tragedies
  - Also, they provide some solace to the victims’ descendants and give them a sense of justice and rectitude.
  - Such apologies require courage, good will, compassion, and humility.
  - It is not an easy task to apologise, given that one has to do so for events that took place decades or even a century ago.
  - In the words of Canadian Prime Minister, Justin Trudeau “apologies for things in the past are important to make sure that we actually understand and know and share and do not repeat those mistakes”.
APOLOGY FOR KOMAGATA MARU SHIP INCIDENT

- In 2016, Canadian Prime Minister, Justin Trudeau had apologised before the descendants of passengers of the Komagata Maru ship.
  1. In 1914, the Canadian government of the day had decided to turn away the ship carrying South Asian migrants, mostly Sikhs.
  2. The ship was forced to return to India.
  3. Back home, the British suspected the passengers to be revolutionaries and many passengers were shot dead.

IN CONTEMPORARY TIMES

- In contemporary geopolitics, a sense of humility is a rare phenomenon.
- As we are witnessing a re-emergence of political leaders, from Nicaragua to Myanmar, who are ready to resort to any means in order to remain in power.
- In this environment, apologetic voices become even more precious as they help us reconcile with tragic events of the past and remove the stains of history.
- Besides, they add a moral dimension to international relations.

CONCLUSION

- To be a pillar of the multipolar world is not to be a military power, manufacturing hub, or a global investor alone.
  1. Countries that strive for global leadership should be able to provide moral leadership as well.
  2. This includes critical self-reflection, humility, compassion, and care not only towards their own people, but also towards the most vulnerable communities around the world.

3) Rattling foreign investors

GS-2 Judiciary; GS-3 Growth & Development

NEWS

- India’s failure to honour adverse international judicial rulings hurts its image as an investment destination.

CONTEXT

- Recently the Commerce Ministry reported that India attracted the highest ever FDI of $81.72 billion in 2020-21.
- However, several economists have argued that the surge in FDI inflows is driven by unprecedented short-term portfolio investment inflows and a few major acquisition deals involving select corporations.

ISSUES INVOLVED

- An important factor that attract investors to invest in foreign lands is that-
  - The host state will keep its side of the bargain by honouring contracts and enforcing awards even when it loses.
  - But over the last few years India has been refusing to comply with the tribunal awards.
  - Such behaviour of India has shook the confidence of investors in the country’s credibility towards the rule of law, and has escalated the regulatory risk enormously.

INDIA’S DEFIANCE OF AWARDS

- Last year, India lost two high-profile bilateral investment treaty (BIT) disputes to two leading global corporations — Vodafone and Cairn Energy — on retrospective taxation.
- The responsibility for these two adverse arbitral awards lies with the previous government that startlingly amended the tax law retrospectively after losing a case to Vodafone at the Supreme Court.
- The current government, instead of remedying the past mistake by honouring both the arbitral awards and restoring India’s lost credibility in the eyes of the investor community, continues to exhibit the same defiance.
- Currently, India has challenged both the awards at the courts of the seat of arbitration.
- As India drags its feet on the issue of compliance, Cairn has launched legal proceedings in the U.S. to enforce the arbitral award by seizing the assets of Air India.
- The other set of high-profile BIT disputes for India arose from the cancellation of an agreement between Antrix, a commercial arm of the Indian Space Research Organisation, and Devas Multimedia, a Bengaluru-based start-up, for the lease of satellite spectrum.
- The agreement was arbitrarily annulled on the grounds of national security.
- India has lost all three disputes involved in the case.
As a result the ICC arbitration tribunal has ordered Antrix to pay $1.2 billion to Devas after a U.S. court confirmed the award earlier this year.

India in turn has challenged the tribunal award in the Swiss Federal Tribunal (being the court of supervision of the arbitration) requesting for annulment, but lost the case.

Also after the ICC award, Indian agencies started investigating Devas accusing it of corruption and fraud.

CONCLUSION

A closer reading of these cases reveals that whenever India loses a case to a foreign investor, immediate compliance rarely happens.

Instead, efforts are made to delay the compliance as much as possible.

Although these efforts may be legal, they send out a deleterious message to foreign investors.

It shows an uncooperative attitude towards adverse judicial rulings.

This attitude of the Indian governments will only hurt India’s credibility in the eyes of the investor community and will deter the scope of possible foreign investments in the future.

4) Méndez’s anti-torture vision is still distant for India

GS-2 Transparency & Accountability

NEWS

The belief in the utility of torture is embedded in institutional culture and accommodated by law.

CONTEXT

A latest effort, the ‘Principles on Effective Interviewing for Investigations and Information Gathering’, to combat torture during investigation, reinforces empirical evidence that torture does not work.

The principles were dubbed as ‘Méndez Principles’ and were developed through a comprehensive, expert-driven consultative process.

AIM OF THE PRINCIPLES

The Méndez Principles aim to provide a cohesive blueprint of practical measures to replace torture and coercive interrogation with “rapport-based” interviews, reinforced through legal and procedural safeguards at every step.

SIGNIFICANCE OF THE PRINCIPLES

The principles offer:

1. practical guidance for non-coercive interrogations;
2. address heightened vulnerabilities in custody;
3. provide specific guidance on training, accountability and implementation.

They are to apply to all authorities who have the power to detain and question people, including the police, military, and intelligence.

At their core, the Principles seek to prevent coercive techniques and torture by introducing a paradigm shift away from “confession” based information gathering.

BASIS OF THESE PRINCIPLES

The principles are grounded in scientific empirical studies across disciplines — psychology, criminology, sociology, neuroscience.

These studies have establish that:

1. Coercive interrogation is counterproductive.
2. Extreme torture tactics, such as forced stress positions, have been shown to significantly damage the affected person’s memory and recollection of information.
3. Aggressive questioning is more likely to make the interviewee resistant, or ‘say anything’ just for the threat of violence to stop.
4. Coercive interviewing leads to unreliable information and false confessions.

Thus, these studies provide scientific evidence to reject the widely-held misconception that a certain degree of ‘pressure’, or physical pain, will yield accurate information.

IT’S PERSISTENCE IN INDIA

A study was conducted to assess whether the Méndez Principles can readily apply to the Indian context.

In the study it was found that the Indian context typifies the belief in the utility of torture, and is embedded in institutional culture and accommodated by law.

1. In spite of the prohibition of and safeguards against “third degree methods”, they are normalised in police practice.
2. Even the National Human Rights Commission has said that “custodial violence and torture is so rampant in this country that it has become almost routine”.

For free learning, visit www.officerspulse.com
Similar results were reflected in a 2019 survey of about 12,000 police personnel across India, published by Common Cause and Lokniti, according to which:

1. Three out of four personnel felt that it is justified for the police to be violent towards “criminals”,
2. Four out of five personnel responded that there is nothing wrong in the police beating criminals to extract confessions.

Studies have revealed practices of using tools such as wooden sticks in interrogation, signalling the presence of tools to beat or intimidate.

**WHAT FUELS THE PERSISTENCE OF TORTURE?**

**Structural constraints:**
- The investigating officers work under perceived or actual constraints, of inadequate resources, political pressure, and an overburdened legal system, which compel them to take the matters into their own hands.
- They are in short supply, and have little scope to develop specialisation in investigative work.

**Popular acceptance:**
- Popular films, and political and public support to illegal police killings as in the Hyderabad ‘Disha’ case, further legitimise the vigilante cop as the only ‘hope’ for serving justice.

**Implied acceptance of law:**
- Indian law creates conditions which further permit torture through the “back door”.
- Though the confessions before a police officer are not admissible evidence (to prevent the police from resorting to torture), but other legal provisions have the effect of indirectly accommodating the use of torture in investigative practice.

1. **Section 27 of the Indian Evidence Act** permits the admissibility of statements before the police to the extent that they relate to the recovery of material objects, often called ‘recovery evidence’.
2. Thus, investigators still have incentive to seek “disclosures”, and information implicit in a confession, as central to their investigation.

Even in an opinion study of former Supreme Court judges published in 2018, 12 out of 58 judges acknowledged the heightened risk of torture as the shortcut method to obtain recovery evidence.

**ISSUE IN THE APPROACH TO FIND THE SOLUTION**
- The introduction of so-called scientific techniques of interrogation, such as lie detectors and narco-analysis, are often presented as the solutions to end physical torture.
- But an analysis named, The Truth Machines (2020) reveals that-
  - Introduction of these techniques, without addressing the existing conditions which perpetuate torture, has resulted in psychological forms of torture, supplementing coercive interrogation strategies.
- Despite the scientific validity of these techniques in determining the “truth” is suspected, Indian law allows evidence voluntarily given by an accused through these techniques to be used as corroborative evidence.

**CONCLUSION**
- In all of the ways, Indian law fails to fully prevent torture and coercion from creeping in.
- Structural constraints, popular culture, and political approval have shaped policing institutional cultures to valorise violence and coercion.
- Without urgent introspection and fundamental shift in police thinking, Méndez’s anti-torture vision will remain distant for India.

**5) The law of sedition is unconstitutional**

**NEWS**
- An urgent review of the Kedar Nath judgment is necessary as ‘sedition’ violates the basic right of speech and expression.

**CONTEXT**
- Recently in the Vinod Dua’s case (2021), the Supreme Court of India reaffirmed the law of sedition laid down in Kedar Nath
Singh and directed governments to adhere to it.

BACKGROUND
Kedar Nath Singh v State of Bihar (1962)
1. In 1962, the Supreme Court upheld the constitutional validity of sedition as defined in Section 124A of the Indian Penal Code in Kedar Nath Singh v State of Bihar.
2. It upheld the constitutionality of sedition, but limited its application to only those writings or speeches which incite people to violence against the Government.
3. Hence, as per this judgment, unless speeches or writings tend to cause violence or disorder, there is no sedition.

GOVERNMENT ACTIONS CONTRADICTORY TO JUDICIAL JUDGMENTS
- Contrary to the Supreme Court’s assertion in the Kedar Nath case, governments of all the time have charged citizens of all ages with sedition for merely criticising the authorities.
- The Lakshadweep case is the latest example, in which the Sedition case has been filed against Lakshadweep filmmaker for calling the Governor of the Union Territory a 'bio-weapon'.

WHERE DOES THE PROBLEM LIES?
- The problem actually lies in the fact that the law of sedition was not struck down by the Supreme Court in 1962 as unconstitutional.
- There was every justification for doing that because sedition, as defined in Section 124A of the IPC, clearly violates Article 19(1)(a) of the Constitution.
- Sedition, as defined in Section 124A of the IPC, clearly violates Article 19(1)(a) of the Constitution which confers the Fundamental Right of freedom of speech and expression, the most valuable right of free citizens of a free country.

Not a reasonable restriction:
- The section does not get protection under Article 19(2) on the ground of reasonable restriction.
1. Initially the word sedition was included in the draft of Article 19 by the Constituent Assembly, but later it was deleted when the final adoption of the article 19 was done.
2. It clearly shows that the Constitution makers did not consider sedition as a reasonable restriction.
3. However, the Supreme Court interpreted the words ‘in the interest of public order’ used in Article 19(2) and held that the offence of sedition arises when seditious utterances can lead to disorder or violence.
- Hence, the act of reading down Section 124A by the Supreme court, brought it clearly under Article 19(2) and saved the law of sedition. Otherwise, sedition would have had to be struck down as unconstitutional.

Historical underpinnings:
- This law was enacted by the British colonial government in 1870 with the sole object of suppressing all voices of Indians critical of the government.
- The history of this most draconian law during colonial rule, like in the Bangobasi case in 1891, Bal Gangadhar Tilak’s case in 1897 and 1908 and Mahatma Gandhi’s case in 1922, shows that -
- incitement to violence or rebellion is not a necessary part of sedition under Section 124A of the IPC and a mere comment which the authorities think has the potential to cause disaffection towards the government is seditious and the person can be arrested and put on trial.

CONCLUSION
- The Kedar Nath judgment makes it possible for the law enforcement machinery to easily take away the fundamental right of citizens.
- In a democracy, people have the inalienable right to change the government they do not like.
1. People will display disaffection towards a government which has failed them.
2. The law of sedition which penalises them for hating a government which does not serve them cannot exist because it violates Article 19(1)(a) and is not protected by Article 19(2).
- Therefore, an urgent review of the Kedar Nath judgement by a larger Bench has become necessary.

6) What lies ahead for IBC and stressed assets resolution?
GS-3 Government Policies & Interventions, Growth & Development, Transparency & Accountability

CONTEXT
- It has been five years since the IBC came into force.
- Since its implementation, the Insolvency and Bankruptcy Code (IBC), notified in 2016, has been the key mechanism for addressing corporate distress and the accumulation of bad loans in the financial sector since its implementation.

WHAT IS IBC?
- The IBC was enacted in 2016, with the aim to streamline and speed up the resolution process of failed businesses.
- It was enacted for reorganization and insolvency resolution of corporate persons, partnership firms and individuals in a time bound manner for maximization of the value of assets of such persons.
- It is one of the biggest insolvency reforms in the economic history of India.

UNDERSTANDING THE TERMS
Insolvency:
- It is a situation where individuals or companies are unable to repay their outstanding debt.

Bankruptcy:
- It is a situation whereby a court of competent jurisdiction has declared a person or other entity insolvent, having passed appropriate orders to resolve it and protect the rights of the creditors.
- It is a legal declaration of one’s inability to pay off debts.

EFFECTIVENESS OF THE PROCESS
- Overall, over the last five years, it has done quite well. The recoveries and resolutions have been quite good, quite fast, compared to other measures available to the lenders.
- Today, on average, it takes about three years for recoveries and resolutions as compared to an earlier timeline of five years, six years or more.
- Also introduction of Section 29A [of the IBC] in the code, have also helped in resolving some of these problems.

Section 29A:
- This provision makes the defaulting person (promoter) ineligible for bidding of the asset (buying back) if the asset has been NPA for a year or more.
- The intent of section 29A is to prevent persons who, by their misconduct or fraudulent motives contributed to the default of the corporate debtor, from “buying back” the corporate debtor from the creditors, potentially at steep discounts.

ISSUES INVOLVED
Promoter owned companies:
- Unlike in most of the developed countries, companies are run by professionals and the ownership is widely spread, in India companies are mainly promoter-owned and owners run the companies.
- This duality of the role by the same entity creates a problem in taking over the asset.

Infrastructure issues:
- There are a lot of delays in the appointments, despite several vacancies.
- Also IBC is inflicted with the problem of insufficient number NCLAT [National Company Law Appellate Tribunal] benches.

Delays in NCLT’s functioning:
- There have been a lot of delays in implementation, whether it’s in terms of approvals, having an application admitted itself.
- These kinds of delays are a significant issue with the implementation of the code.

Repetition of litigations:
- Though the Supreme Court has clarified a number of legal positions around the IBC, the tribunal of the country still allows the same issues to be litigated again.

Extent of haircuts:
- There are concerns about the extent of haircuts that banks and financial creditors are having to take in order to achieve resolution.

WAY FORWARD
- There needs to be timely appointments in case of availability of vacancies in the system.
- The NCLT should be adequately funded and provided with an adequate number of members as well as infrastructure to deal effectively with the cases brought in front of it.
- Resolution within the mandated timelines should be prioritized as it will help increase the predictability of the process.
- The size of the haircut should not be the measure of the success of the IBC process, rather focus should be on attracting a

For free learning, visit www.officerspulse.com
more diverse range of strategic buyers to bid for assets, and submit resolution plans under the code.

- There is a need to broaden the scope of who can submit a resolution plan, by relaxing Section 29A. Under it promoters should also be allowed to submit the resolution plans with adequate safeguards in place to avoid its misuse.
- The proposed national ARC (Asset Reconstruction Company, also called as Bad Banks) should be set up at the earliest.

- Tribunals should avoid the duplication of the litigation process, as clarified by the Supreme Court in its previous judgment.
- The IBC should not be the only solution for resolving stress. Apart from strengthening the IBC framework, it’s equally important to look at the range of different options outside the IBC for resolving distress, like one-time settlements, restructuring packages, etc.

For doubts and queries email us at doubts@officerspulse.com
1) Ration card reforms

Why in the News?
- Recently, the Supreme Court directed all states and Union Territories to implement the One Nation, One Ration Card (ONORC) system, which allows for inter- and intra-state portability, by July 31.

What is One Nation One Ration Card (ONORC)?
- The ONORC scheme is aimed at enabling migrant workers and their family members to buy subsidised ration from any fair price shop anywhere in the country under the National Food Security Act, 2013.
- For instance, a migrant worker from, say, Basti district of Uttar Pradesh will be able to access PDS benefits in Mumbai, where he or she may have gone in search of work. While the person can buy food grains as per his or her entitlement under the NFSA at the place where he or she is based, members of his or her family can still go to their ration dealer back home.
- To promote this reform in the archaic Public Distribution System (PDS), the government has provided incentives to states.
- The Centre had even set the implementation of ONORC as a precondition for additional borrowing by states during the Covid-19 pandemic last year.

How does ONORC work?
ONORC is based on technology that involves details of beneficiaries’ ration card, Aadhaar number, and electronic Points of Sale (ePoS).

The system identifies a beneficiary through biometric authentication on ePoS devices at fair price shops.

The system runs with the support of two portals — Integrated Management of Public Distribution System (IM-PDS) (impds.nic.in) and Annavitrjan (annavitran.nic.in), which host all the relevant data.

When a ration card holder goes to a fair price shop, he or she identifies himself or herself through biometric authentication on ePoS, which is matched real time with details on the Annavitrjan portal.

Once the ration card details are verified, the dealer hands out the beneficiary’s entitlements. While the Annavitrjan portal maintains a record of intra-state transactions - inter-district and intra-district - the IM-PDS portal records the inter-state transactions.

How many people will it benefit?
- Under the National Food Security Act, 2013, about 81 crore people are entitled to buy subsidised food grains - rice at Rs 3/kg, wheat at Rs 2/kg, and coarse grains at Re 1/kg – from designated fair price shops.
- Each NFSA ration card holder is assigned to a fair price shop near the place where his ration card is registered.

What factors led to the launch of ONORC?
- Earlier, NFSA beneficiaries were not able to access their PDS benefits outside the jurisdiction of the specific fair price shop to which they have been assigned. The government envisioned the ONORC to give them access to benefits from any fair price shop.
- Full coverage will be possible after 100% Aadhaar seeding of ration cards has been achieved, and all fair price shops are covered by ePoS devices (there are currently 4.74 lakh devices installed across the country).
- ONORC was initially launched as an inter-state pilot. However, when the Covid-19 pandemic forced thousands of migrant workers to return to their villages last year, a need was felt to expedite the rollout.

For doubts and queries email us at doubts@officerspulse.com
1) Global Cyber Security- India in top 10

Context
- Recently, India has been ranked 10th in Global Cyber Security Index (GCI) 2020 released by the International Telecommunication Union (ITU), the United Nations (UN) agency for information and communication technologies (ICT).
- The US topped the chart, followed by the UK and Saudi Arabia tied on the second position, while Estonia was ranked third in the index.
- GCI assessment is done on the basis of performance on five parameters of cybersecurity including
  1. Legal measures,
  2. Technical measures,
  3. Organisational measures,
  4. Capacity development, and
  5. Cooperation.

A Glance at increasing pace of Cyber attacks in India
- In today's era, despite several measures taken, India has a high rate of cyber attacks which is increasing day by day as India is one of the largest internet and smartphone economies with 624 million internet users across the country.
- The primary reason for such an increasing number of cyber attacks is the digitization of Society.
- As of now, Cyberspace is a 133 billion dollar economy which may reach 403 billion dollars by 2027.
- By 2025, Cyber crime may account for 10.5 trillion dollars of revenue loss as the number of cyber attacks is increasing by 10-15% every year.
- In 2020, India has recorded 7 lakh cyber security incidents which is more than the combined data of the last 4 years.

- Around 71% of cyber attacks are financial related attacks which is a primary concern for the country.

Challenges faced in tackling Cyber crime
- Lack of awareness about the evolving technologies among the masses.
- Absence of data privacy law for protecting the data of Government, Business and Individuals who are key drivers for the country's development.
- Use of offensive technologies and encrypted apps by terrorists to spread fake news, hack the personal data etc.
- Tracing fake propaganda accounts.

Way Forward
- The foremost thing which needs to be done is setting up critical infrastructure to ensure open, secure, free, accessible & stable cyberspace.
- Framing policies by identifying the vulnerable points of contacts in accordance with the National Cyber strategy 2020.
- Ensuring integrity and security of products involved in Cyber services.
- Building awareness among users as well as developers with regard to configuration of products.
- Setting up of an apex body for coordinating on various cyber space issues among the government and various agencies is the need of the hour.

Conclusion
- Although India's rank is among the top 10 countries, still there is a need for global commitment to ensure openness in the cyber space in order to tackle the emerging global issue of cyber crime.

For doubts and queries email us at doubts@officerspulse.com
INFOGRAPHIC OF THE WEEK

1) e-Sanjeevani
For more such graphic learnings, visit https://officerspulse.com/infographics/
Launched in 2009 by the Ministry of Health & Family Welfare, 'eSanjeevani' is a web-based comprehensive telemedicine solution. It aims to provide healthcare services to patients in their homes.

Besides enhancing the quality of medical services, addressing issues about uneven distribution and shortage of infrastructural as well as human resources, eSanjeevani also aims to make healthcare services equitable by bridging the digital divide that exists between the urban vs. rural, rich vs. poor etc.

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

For free learning, visit www.officerspulse.com
The portal was designed & developed by the **Centre for Development of Advanced Computing (C-DAC)**, a premier R&D organization of the Ministry of Electronics and Information Technology (MeitY).

**eSanjeevani** can also be used to provide **medical education** to interns, people across Various Common Service Centers (CSCs), etc.

For more such graphic learnings, visit [https://officerspulse.com/infographics/](https://officerspulse.com/infographics/)

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

eSanjeevani platform has enabled two types of telemedicine services viz.
- Doctor-to-Doctor (eSanjeevani) and
- Patient-to-Doctor (eSanjeevani OPD) Tele-consultations.

eSanjeevani

It is being implemented under the Ayushman Bharat Health and Wellness Centre (AB-HWC). It aims to implement Doctor-to-Doctor teleconsultation in all the 1.5 lakh Health and Wellness Centres in conjunction with identified Medical College hospitals in a ‘Hub and Spoke’ model.

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

For free learning, visit www.officerspulse.com
States have identified and set up dedicated ‘Hubs’ in Medical Colleges and District hospitals to provide teleconsultation services to ‘Spokes’, i.e SHCs, PHCs and HWCs.

**eSanjeevani OPD**

Owing to the ongoing COVID-19 pandemic, the Health Ministry launched the second tele-consultation service enabling patient-to-doctor telemedicine through ‘eSanjeevaniOPD’.

This service is available as an Android mobile application as well. This has made it convenient for the people to avail of the health services without having to travel.

For more such graphic learnings, visit [https://officerspulse.com/infographics/](https://officerspulse.com/infographics/)

For free learning, visit www.officerspulse.com
This e-health service is offered free of cost and has proved a boon in containing the spread of COVID while simultaneously enabling provisions for non-COVID essential healthcare.

**Why in the news?**

Union Health Ministry’s National Telemedicine Service – eSanjeevani has crossed a milestone by completing 6 million (60 lakh) consultations through more than 375 online OPDs.

For more such graphic learnings, visit [https://officerspulse.com/infographics/](https://officerspulse.com/infographics/)

For free learning, visit www.officerspulse.com
References

**Polity:**
- [https://officerspulse.com/vulture-conservation-plan-targets-drug/](https://officerspulse.com/vulture-conservation-plan-targets-drug/)

**Environment**
- [https://www.nssl.noaa.gov/education/svrx101/lightning/](https://www.nssl.noaa.gov/education/svrx101/lightning/)
- [https://epaper.thehindu.com/Home/ShareArticle?OrgId=G1M8N73TE1&imageview=0](https://epaper.thehindu.com/Home/ShareArticle?OrgId=G1M8N73TE1&imageview=0)
- [https://en.wikipedia.org/wiki/World_Heritage_Site](https://en.wikipedia.org/wiki/World_Heritage_Site)

**Economy**

**S&T**

**DEFENCE**

**ART AND CULTURE**

**PIB**
- https://doj.gov.in/edb/

**AIR**
- https://nsap.nic.in/circular.do?method=aboutus

**Editorials**
- https://www.thehindu.com/opinion/lead/the-law-of-sedition-is-unconstitutional/article35027081.ece
- https://www.thehindu.com/opinion/lead/mndezs-anti-torture-vision-is-still-distant-for-india/article35045990.ece
- https://www.thehindu.com/opinion/op-ed/rattling-foreign-investors/article35026303.ece

**INDIAN EXPRESS**

**RSTV**
- https://www.youtube.com/watch?v=M15WPSw-V8

For free learning, visit www.officerspulse.com