ABOUT CURRENT CONNECT

It gives us immense pleasure to present an innovative approach to master current affairs. Current is a passing wind and diverse issues happen at the same time. It is to an extent chaotic. Newspapers, magazines and various other sources report the chaos per se. With our experience of current affairs we have tried to give "the current" a medium to travel. It is the syllabus of the UPSC with their components that are the medium through which the "Current is Passed" to the readers. Ever since the new syllabus of the UPSC came into existence, current has been gaining significance both at prelims as well as mains examination. This book is meant to cover current affairs and related questions arising from those events. We have not only covered the current events for their factual contents but also presented it in such a way that any question asked from that topic gets covered. Moreover, topics are also "peppered" with the relevant facts/key concepts that are related to the theme. We have also given questions for practice both, subjective and objective, so that candidates are oriented to the examination mode. It is a collection covering myriad source yet in a manageable size. To use this book we recommend you to master the components of general studies (GS) syllabus as broken into rows and columns (provided in the beginning after preface). Each cell comprising of the portion of GS becomes the connect for the current and every news subsequently covered guides the reader to the address of the syllabus. It is logical to expect that same issue may be connected to more than one topic of the syllabus. Further, the news also has some additional vistas opened for the readers by adding a box with a title "PEPPER IT WITH" where we expect the students to build further around the theme.

We are also trying to reach the remotest part of the country with our spirit and zeal of "Mains Answer Writing", which has been admired by students, CSE rankholders and other scholars. Continuing in line with the effort, we have started with programs like 7 Question (7Q) Challenge, Shell Points, Stock Points, Content Enrichment Booklet etc.

When it comes to evaluation, we are altogether at a different level. We are also reaching every nook and corner with this expertise for the aspirants of CSE. Now you can write a Mains Answer and get it evaluated from our Expert Team and can get Feedback. Drop a mail at evaluation@ksgindia.com for registering yourself in our race to perfection. Don't wait, it's your golden chance to crack this exam and fulfill your passionate dream.

Team KSG

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SCIENCE & TECHNOLOGY

SECURITY

Art & Culture

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Mis.											

POLITY

Merger of the Cinema Regulatory Bodies

News Excerpt

The Union Ministry of Information and Broadcasting issued orders to merge production of documentaries and short films, organization of film festivals and preservation of films to the National Film Development Corporation (NFDC), a PSU working under the ministry which was established in 1975.

Pre-Connect

- In December 2021, actors, filmmakers and other members of the Indian film industry had sent a letter to the Union Ministry of Information and Broadcasting against the government's decision to merge all the branches of the Films Division, Directorate of Film Festivals, National Film Archive of India (NFAI) and Children's Film Society of India with the National Film Development Corporation (NFDC).
- In the letter, the signatories expressed surprise that the 2019 **Bimal Julka High-Powered Committee report** was submitted "without engaging with the primary stakeholders", including "members of the film fraternity and employees of the above-mentioned institutions".
- The ministry had announced in December 2020 to merge the four public bodies with NFDC, a "loss-making" public sector undertaking.

National Film Development Corporation (NFDC)

- ➢ National Film Development Corporation of India is the central agency established to encourage the good cinema movement in the country.
- ➢ The primary goal of the NFDC is to plan, promote and organize an integrated and efficient development of the Indian film industry and foster excellence in cinema.
- ➢ Over the years NFDC has provided a wide range of services essential to the growth of Indian cinema. The NFDC (and its predecessor the **Film Finance Corporation**) has so far funded / produced over 300 films.
- ➢ Over the years NFDC has worked with some of the most acclaimed filmmakers of India including Satyajit Ray, Mira Nair, Aparna Sen, Shyam Benegal, Govind Nihalani, Mrinal Sen, Richard Attenborogh, Adoor Gopal krishnan and Ketan Mehta.
- ➢ NFDC has also started co-producing projects involving public-private partnerships.
- ➢ NFDC facilitates line production services of shooting in India and animation services of overseas clients.
- ➢ **NFDC organizes Film Bazaar India**- a co-production and distribution market for the South Asian region alongside the International Film Festival of India, Goa.

Mission of the NFDC

NFDC aims at fostering excellence in cinema and promoting the diversity of its culture by supporting and encouraging films made in various Indian languages.

Vision of the NFDC

To create domestic and global appreciation and celebration of the independent Indian cinema.

Objectives of the NFDC

- ✓ To develop talent and to facilitate the growth of Indian cinema in all languages through productions and co-productions, script development and need based workshops.
- ✓ To promote Indian culture through cinema in India and overseas.
- To build a lean and flexible organisation responsive to the needs of the Indian film industry.

Analytica

- ▪ The mandate of production of feature films is already being carried out by NFDC.

- It will give a strong impetus to the production of films of all genres including feature films, documentaries, children films and animation films; promotion of films through participation in different international festivals and organizing various domestic festivals; preservation of filmic content, digitization and restoration of films; and distribution and outreach activities.
- The ownership of the assets available with these units will, however, remain with the Government of India.
- By the orders, the mandate of production of documentaries that was earlier done by Films Division has been completely transferred to NFDC.
- The legacy and brand name of Films Division will be taken further and the Production Vertical for production of documentaries in the NFDC will be named as "Films Division".
- The organization of film festivals that was the mandate of Directorate of Films Festivals has been transferred to NFDC. This will bring the organization of different national and international film festivals under one roof, thereby bringing in more synergy and a focused international outreach.
- Some of the major upcoming Film Festivals to be organized by NFDC are the Mumbai International Film Festival, International Film Festival of India at Goa, and Children's Film Festival.

PEPPER IT WITH
Film and Television Institute of India, National Film Awards, Public Sector Undertaking, Central Board of Film Certification, Certification of movies in India

Conclusion

Bringing all the cinema activities under a single management will reduce the overlap of various activities and ensure better utilisation of public resources.

Credibility of Central Bureau of India

News Excerpt

Chief Justice of India N.V. Ramana said, with the passage of time, like every other institution of repute, the Central Bureau of Investigation (CBI) had also come under deep public scrutiny. Its actions and inactions had raised questions regarding its credibility, in some cases.

GS CONNECT											
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Pre-Connect

- With the police and public order under the State list, and rightly so, the burden of investigation is primarily on the State police.
- There is no reason why State investigative agencies, which handle most of the investigations, cannot enjoy the same level of credibility as that of the national agency.
- The State agencies must be equipped to deal with increasing challenges in the field of investigation.

Issues with the Central Agency

- The issues included lack of infrastructure, insufficient manpower and modern equipment; in-human conditions, especially at the lowest rung; questionable methods of procuring evidence; officers failing to abide by the rule book; and lack of accountability of erring officers.
- The issues leading to delay in trials were lack of public prosecutors and standing counsels; seeking adjournments; arraying hundreds of witnesses and filing voluminous documents in pending trials; undue imprisonment of undertrials; change in priorities with the change in the political executive; cherry picking of evidence; and repeated transfers of officers leading to a change in the direction of probe.

✓ Analytica

- ✓ The police and the probe agencies should not allow any authoritarian tendencies to creep in. Government needs to function within democratic framework as prescribed under the Constitution. Any deviation will hurt the institutions and will weaken democracy.

- ✓ The police and the investigative agencies may have de-facto legitimacy, but yet, as institutions, they still have to gain social legitimacy.
- ✓ The Central Bureau of Investigation is required to be created under a statute, clearly defining its powers, functions and jurisdictions. Such a law will also lead to much needed legislative oversight.
- ✓ CBI should be headed by an independent and impartial authority, appointed by a committee akin to the one which appointed the CBI Director. Its head could be assisted by deputies having specialisation in different domains.
- ✓ CJI Ramana recommended for an umbrella autonomous institution to bring central agencies under one roof. This umbrella organisation will end multiplicity of proceedings.
- ✓ A single incident these days gets investigated by multiple agencies, often leading to dilution of evidence, contradiction indepositions, prolonged incarceration of innocents. It will also save the institution from being blamed as a tool of harassment. Once an incident is reported, the organisation should decide as to which specialised wing should take up investigation.
- ✓ One additional in-built safeguard is to have separate and autonomous wings for prosecution and investigation, to ensure total independence. A reasonable check and balance would be a provision in the proposed law for annual audit of the institution's performance by the appointing committee.
- ✓ There is a need for adequate representation of women in the criminal justice system.
- ✓ CJI also stated that the need of the hour is to reclaim social legitimacy and public trust and the first step to gain the same is to break the nexus with the political executive.

Conclusion

India has a vested interest in strengthening democracy, because the citizens believe in democratic way of living. Indians love freedom. When any attempt has been made to snatch their freedom, the alert citizenry did not hesitate to seize the power back from autocrats. So, it is essential that, all the institutions including the police and the investigative bodies uphold and strengthen the democratic values.

PEPPER IT WITH
Central Vigilance Commission,
National Investigation Agency

The justice delivery system of independent India drew its legitimacy from the Constitution. Unfortunately, our investigative agencies still do not have the benefit of being guided by a comprehensive law. Need of the hour is the creation of an independent and autonomous investigative agency. There should be a harmonious relationship between the State and Central agencies and collaboration is the key, given that the goal of all those organisations is to secure justice.

Supreme Court on Vanniyar Quota

News Excerpt

Supreme Court confirmed that the grant of 10.5% internal reservation to Vanniyakula Kshatriya community violates the fundamental rights of equality, non-discrimination and equal opportunity of 115 other Most Backward Communities (MBCs) and De-Notified Communities (DNCs) in Tamil Nadu.

Pre-Connect: Reservation in Tamil Nadu

- Reservation in Tamil Nadu comprises 69% under a 1994, Act protected under the Ninth Schedule of the Constitution. Of the 69%, backward classes, including Christians and Muslims, get 30%; MBCs get 20%; Scheduled Castes 18%; and Scheduled Tribes 1%.
- The Special Reservation Act, 2021 had scooped 10.5% of the total 20% MBC quota for Vanniyakula Kshatriyas alone, citing their "extreme backwardness".

'Antiquated data'

➢ A Double Judge Bench of the Apex Court held that the allotment of 10.5% reservation to a single community from within the total MBC quota of 20% in the State, leaving only 9.5% to 115 other communities in the MBC category, was without "substantial basis".

➢ Supreme Court upheld the Madras High Court's conclusion that the reservation afforded to the community under the 2021, Act was based on "antiquated data".

➢ The verdict winches to fore the push for conducting a caste survey to get the latest figures in backwardness in the State.

➢ The court said there was no assessment or analysis done prior to the 2021, Act to back the claim that the Vanniyakula Kshatriyas were relatively more backward than the other MBCs and DNCs.

➢ The court underscored that "while caste can be the starting point for internal reservation, it is incumbent on the State government to justify the reasonableness of the decision [to provide quota to a particular community] and demonstrate that caste is not the sole basis".

➢ The court held, Equal laws would have to be applied to all in the same situation, and there should be no discrimination between one person and another. The classification should never be arbitrary, artificial or evasive.

➢ Supreme Court observed that the entire basis for the 2021 Act was a letter from Justice Thanikachalam recommending the certain percentage of internal reservation for the Vanniyakula Kshatriya community.

➢ Supreme Court said that the State government had erred by ignoring the apprehensions of other members of the Commission about the *"absence of updated caste-based data"*. They had warned that internal reservations could not be "fruitfully made" without the latest caste-based statistics.

➢ The Court noted that the letter from Justice Thanikachalam does not refer to any analysis or assessment on the relative backwardness or representation of the communities within the MBCs and DNCs.

FASTER (Fast and Secured Transmission of Electronic Records)

❖ It is a digital platform to communicate interim orders, stay orders, bail orders etc., of the Supreme Court to authorities concerned through a secured electronic communication channel.

❖ Orders passed by the Supreme Court and other High Courts have to be transmitted safely without tinkering by third parties.

❖ The court had hit upon the concept after coming across a newspaper report about delay in release of prisoners owing to the delay in physical orders reaching the prison authorities.

❖ In past year, a bench headed by the CJI had taken suo motu cognisance of the delayed release of convicts lodged in the Agra central jail even three days after the court had granted them bail.

❖ The court then directed the Supreme Court Secretary General to submit a proposal suggesting the modalities to implement the FASTER system.

➤ The Apex Court held that the population was made the sole basis for recommending internal reservation for Vanniyakula Kshatriya, which is directly in violation with the law laid down by this court.

➤ The Supreme Court held the 2021 Act was "ultra vires" the Constitution. It however refrained from making any comments on the merits of the 1994 Act, which provides 69% reservation in the State even as the ceiling limit on quota is 50%.

➤ Though the court held the 2021 Act and its percentages of reservation unconstitutional, it upheld the legislative competence of the State to enact a law sub-classifying and apportioning percentages within identified backward classes.

➤ It was also observed that the there is no bar to the sub-classification among backward classes.

Conclusion: Ancillary legislation

The court further found that the 2021, Act was only an ancillary legislation to the 1994, Act and was not in conflict with the latter. Justice Rao reasoned, "Detailing the extent of reservation for communities already identified as MBCs/DNCs, which is the thrust of the 2021 Act, cannot be said to be in conflict with the 1994 Act." The Supreme Court held that the placing of the 1994, Act in the Ninth Schedule cannot also operate as a "hurdle" for the State legislature to enact a legislation on matters ancillary to the 1994, Act.

❖ The idea of caste-based reservation system was originally conceived by **William Hunter and Jyoti Rao Phule in 1882**.

❖ The prevailing reservation system in today's India was introduced in 1933 by British Prime Minister Ramsay Macdonald in the form of the '**Communal Award**'.

❖ Under the provisions of the communal award, there were separate electorates for Europeans, Anglo-Indians, Indian Christians, Muslims, Sikhs, and the Dalits.

❖ But on 24th September 1932 when the **Poona Pact** agreement between Mahatma Gandhi and Dr. Ambedkar was signed, it was decided that for Hindus there would be a single elective with certain reservations for the depressed classes in it.

❖ The provision of reservation for the socially backward classes was introduced in the Constitution of India.

❖ Reservations were initially introduced for a period of 10 years and only for SCs and STs, but it kept on extending with several changes in it.

❖ In 1991, OBCs were also included in the ambit of the reservation after the recommendations of the **Mandal Commission**.

❖ In the **103rd Constitutional Amendment Act**, 2019 the new reservation was introduced by the legislature. This amendment introduced a 10% reservation for the economically weaker section of the society popularly known as EWS.

PEPPER IT WITH
Dorairajan Case, Indra Sawhney v. Union of India, Reservation in Promotion, Nalla RajaReddy Case

State of Denotified Tribes

News Excerpt

A standing committee of Parliament, has criticised the functioning of the development programme for de-notified, nomadic and semi-nomadic tribes.

Pre-Connect: De-Notified, Nomadic and Semi-Nomadic Tribes

• These are communities who are the most vulnerable and deprived. Denotified Tribes (DNTs) are communities that were 'notified' as being 'born criminal' during the British regime under a series of laws starting with the **Criminal Tribes Act of 1871**. Nomadic and semi-nomadic

communities are defined as those who move from one place to another rather than living at one place all the time.

- A National Commission for De-notified, Nomadic and Semi-Nomadic Tribes (NCDNT) was constituted in 2006. It was headed by **Balkrishna Sidram Renke** and submitted its report in 2008, in which it said, "It is an irony that these tribes somehow escaped the attention of our Constitution makers and thus got deprived of the Constitutional support unlike Scheduled Castes and Scheduled Tribes."

- The Renke Commission estimated their population at around 10.74 crore based on Census 2001. A new Commission constituted in February 2014 to prepare a state-wise list, which submitted its report in 2018, identified many communities as De-Notified, Nomadic and Semi-Nomadic.

- While a number of these tribes are categorised under SC, ST and OBC, many are not: The standing committee report in Parliament has cited a statement by the Secretary, Department of Social Justice and Empowerment, that many DNT communities are not covered under any reserved categories.

- These communities are frequently left out because they are less visible and difficult to reach.

History of Deprivation Faced by these Communities

➢ This has a long history, first during colonial rule, and then in independent India. The Renke Commission stated that this is partly because these communities are largely politically 'quiet' — they do not place their demands concretely before the government for they lack vocal leadership and also lack the patronage of a national leader.

➢ Many commissions and committees constituted since Independence have referred to the problems of these communities. These include the **Criminal Tribes Inquiry Committee**, 1947 constituted in the United Provinces (now Uttar Pradesh), **Ananthasayanam Ayyangar Committee in 1949** (it was based on the report of this committee the Criminal Tribes Act was repealed), and **Kaka Kalelkar Commission** (also called first OBC Commission) constituted in 1953.

➢ In 1965, an Advisory Committee constituted for revision of the SC and ST list under the chairmanship of **B N Lokur** referred to denotified tribes. The B P Mandal Commission constituted also made recommendations on the issue.

➢ The National Commission to Review the Working of the Constitution under the chairmanship of Justice M N Venkatachaliah, said in its 2002 report that the denotified tribes/communities have been wrongly stigmatized as crime prone and subjected to high handed treatment as well as exploitation by the representatives of law and order as well as by the general society.

What is DWBDNC, and what is its role?

✓ The commission report submitted in 2018 had recommended the setting of up a permanent commission for these communities. But since most DNTs are covered under SC, ST or OBC, the government felt setting up a permanent commission, which would deal with redress of grievances, would be in conflict with the mandate of existing commissions for SCs (National Commission for Scheduled Castes), STs (National Commission for Scheduled Tribes) and OBCs (National Commission for Backward Classes).

✓ The government set up the DWBDNCs under the Societies Registration Act, 1860 under the aegis of Ministry of Social Justice and Empowerment for the purpose of implementing welfare programmes.

✓ The DWBDNC was constituted in 2019 under the chairmanship of Bhiku Ramji Idate. Also, a committee has been set up by the NITI Aayog to complete the process of identification of the de-notified, nomadic and semi-nomadic communities (DNCs).

✓ Ethnographic studies of DNCs are being conducted by the Anthropological Survey of India, with a budget of Rs 2.26 crore sanctioned. On March 30, 2022 the DoPT issued an advertisement for the recruitment of consultants in the DWBDNC.

Highlights of the Standing Committee Report

▪ The Standing Committee on Social Justice and Empowerment, tabled its 31st report in Parliament.

▪ The report said the "Committee are constrained to note that the Scheme for economic empowerment of DNT communities formulated to provide coaching, health insurance, facilitate livelihood and financial assistance for construction of homes for the members of DNT, with total outlays of Rs 200 crore for the period of five years from 2021-22 to 2025-26 and the Department could not spend even a single rupee in 2021-22 and the budgetary allocation has been reduced to Rs 28 crore for 2022-23 against the budgetary allocation of Rs 50 crore for 2021-22.

▪ The Committee also said that they are dismayed that the Department has already delayed in formulation of the Scheme for welfare of Denotified, Nomadic and Semi Nomadic communities.

▪ About the functioning of the Development and Welfare Board for De-notified, Nomadic and Semi-Nomadic Communities (DWBDNC), the standing committee said that at present 269 such Denotified, Nomadic and Semi-Nomadic communities are specified and a survey is now in under process to place these castes in SC, ST and BC categories.

> **PEPPER IT WITH**
> Parliamentary Committees, 105th Constitutional Amendment

▪ The Committee also said that it is surprised to find that the Department has not been able to take any decision till date hence they would like the Department to take necessary action in this regard so that these castes are placed either under SCs, STs or BCs and avail benefits.

Conclusion

The tribe and caste dichotomy are also a major issue for the NT and DNT communities. This is primarily because they are made of both caste and forest tribe historically as they trespass both the geographical zones and depend on caste and forest society for their survival. In this process, many groups from both caste and tribal communities had joined the nomadic communities. So, the nomadic community in India was making and unmaking throughout history. The diversity of the nomadic communities can be attributed to the very rationale of nomadism. Nomadism is not a social and political organisation or world view, but it was a strategy adopted by people and communities to overcome challenges posed by historical conditions. In this sense, nomadism is a response to socio-economic, political and ecological circumstances.

CAG report on UIDAI

News Excerpt

The country's top auditor, the Comptroller and Auditor General (CAG) of India, has pulled up the Unique Identification Authority of India (UIDAI) for "deficient data management".

Pre-Connect

• UIDAI is a statutory authority established under the provisions of the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016 ("Aadhaar Act 2016") in 2016 by the Government of India, under the Ministry of Electronics and Information Technology (MeitY). The Aadhaar Act 2016 has been amended by the Aadhaar and Other Laws (Amendment) Act, 2019 (14 of 2019) w.e.f. 25.07.2019.

• UIDAI was created to issue Unique Identification numbers (UID), named as "Aadhaar", to all residents of India. The UID had to be (a) robust enough to eliminate duplicate and fake identities, and (b) verifiable and authenticable in an easy, cost-effective way. As on 31st October 2021, the Authority has issued 131.68 crore Aadhaar numbers to the residents of India.

• UIDAI has a two-step process to identify duplicate enrolments where the first stage matches demographic data and the second stage looks for biometric matching of fingerprint and iris.

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- Before its establishment as a statutory authority, UIDAI was functioning as an attached office of the then Planning Commission (now NITI Aayog) from 2009.
- The first UID number was issued on 29 September 2010 to a resident of Nandurbar, Maharashtra.
- In 2015, the Government revised the Allocation of Business Rules to attach the UIDAI to the Department of Electronics & Information Technology (DeitY) of the then Ministry of Communications and Information Technology.

The problems with UIDAI that have been identified by the CAG

➤ There are issues of data-matching, errors in authentication, and shortfall in archiving.

➤ The data of Aadhaar card holders have not been matched with their Aadhaar number even after 10 years in some cases.

➤ The absence of a system to analyse the factors leading to authentication errors. Even though UIDAI was maintaining one of the largest biometric databases in the world.

➤ It did not have a data archiving policy, which is considered "a vital storage management best practice".

➤ The UIDAI provided Authentication services to banks, mobile operators and other agencies free of charge till March 2019, contrary to the provisions of their own Regulations, depriving revenue to the Government.

➤ The CAG has flagged that UIDAI has not ensured that the applications or devices used by agencies or companies for authentication were not capable of storing the personal information of the residents, which put the privacy of residents at risk.

➤ The Authority had not ensured security and safety of data in Aadhaar vaults. They had not independently conducted any verification of compliance to the process involved.

➤ The UIDAI has not prescribed any specific proof, document, or process to confirm whether a person who is applying for Aadhaar has resided in India for the period specified by the Rules. Therefore, there is no assurance that all the Aadhaar holders in the country are 'Residents' as defined in the Aadhaar Act.

Analytica

✓ When the challenge to the UID project was still in court, disturbing reports of deaths due to hunger had begun to emerge. Some of them were attributable to biometric problems.

✓ UIDAI cannot provide authentication failure rates at the state level since it does not track location of the authentication transactions. At the national level, the 'failed rate' was 8.5% for authentication using iris, and 6% using fingerprints.

✓ The UIDAI took the burden off their shoulders, passing it on to "requesting entities (who) are obliged under the law to provide for exception handling mechanisms".

✓ Economists and activists have been reporting exclusion from food, work, pension and wages, in good measure because of the problem with biometrics. The audit report is consistent with these reports, and explains why the UID has produced exclusion of those most needing state support.

| **PEPPER IT WITH** |
| National Register of Citizens, Citizenship (Amendment) Act, 2019 |

Conclusion

UIDAI generated Aadhaar numbers with incomplete information, which, along with the lack of proper documentation or poor-quality biometrics, have resulted in multiple or duplicate Aadhaar cards being issued to the same person.The UIDAI should go beyond self-declaration, and prescribe a procedure and require documentation other than self-declaration, in order to confirm and authenticate the residence status of applicants.

Supreme Court clears FCRA changes

News Excerpt

Supreme Court upholds constitutional validity of Foreign Contribution (Regulation) Amendment Act, 2020, says it serves to safeguard India's 'sovereignty and integrity'.

Pre-Connect:

- The Foreign Contribution (Regulation) Amendment Bill, 2020 was passed in both houses of Parliament in 2020. It seeks to regulate the process involving acceptance and utilisation of foreign contributions by individuals, associations and companies.
- Petitioners had moved the Apex court, challenging the legislation. In their writ petition, the petitioners had stated that amendments to the Foreign Contribution (Regulation) Act, 2010 put excessive restrictions on the acceptance of foreign contributions.
- The petitioners, argued that the amendments suffered from the "vice of ambiguity, over-breadth or over-governance" and violated fundamental rights. They said the government amounts to a blanket ban on the capacity of intermediary organisations in India to distribute foreign donations to smaller and less visible NGOs.

Foreign Contribution Regulation Act (FCRA)

- ➤ The FCRA was enacted during the Emergency in 1976 in an atmosphere of apprehension that foreign powers were interfering in India's affairs by pumping in funds through independent organisations. These concerns had been expressed in Parliament as early as in 1969.
- ➤ The law sought to regulate foreign donations to individuals and associations so that they functioned "in a manner consistent with the values of a sovereign democratic republic".
- ➤ An amended FCRA was enacted in 2010 to "consolidate the law" on utilisation of foreign funds, and "to prohibit" their use for "any activities detrimental to national interest".
- ➤ The law was amended again in 2020, giving the government tighter control and scrutiny over the receipt and utilisation of foreign funds by NGOs.
- ➤ Broadly, the FCRA requires every person or NGO wishing to receive foreign donations to be registered under the Act, to open a bank account for the receipt of the foreign funds in State Bank of India, Delhi, and to utilise those funds only for the purpose for which they have been received and as stipulated in the Act.
- ➤ They are required to file annual returns, and they must not transfer the funds to another NGO.
- ➤ The Act prohibits receipt of foreign funds by candidates for elections, journalists or newspaper and media broadcast companies, judges and government servants, members of legislature and political parties or their office-bearers, and organisations of a political nature.

How is FCRA registration granted?

- ✓ NGOs that want to receive foreign funds must apply online in a prescribed format with the required documentation. FCRA registrations are granted to individuals or associations that have definite cultural, economic, educational, religious, and social programmes.
- ✓ Following the application, the MHA makes inquiries through the Intelligence Bureau into the antecedents of the applicant, and accordingly processes the application.
- ✓ Under the FCRA, the applicant should not be fictitious or benami; and should not have been prosecuted or convicted for indulging in activities aimed at conversion through inducement or force, either directly or indirectly, from one religious faith to another.
- ✓ The applicant should not have been prosecuted for or convicted of creating communal tension or disharmony; should not have been found guilty of diversion or misutilisation of funds; and should not be engaged or likely to be engaged in the propagation of sedition.
- ✓ The MHA is required to approve or reject the application within 90 days. In case of failure to process the application in the given time, the MHA is expected to inform the NGO of the reasons for the same.

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- ✓ In a judgment that may hit Non-Governmental Organisations (NGOs) working at the grass-root level with no direct link to foreign donors, the court reasoned that unbridled inflow of foreign funds may destabilise the sovereignty of the nation.
- ✓ The restrictions involve a bar on using operational FCRA accounts to receive foreign contributions; mandatory production of the Aadhaar card for registration under the FCRA. They require NGOs and recipients to open a new FCRA account at a specified branch of the State Bank of India in New Delhi as a "one-point entry" for foreign donations.

For how long is approval granted?

- Once granted, FCRA registration is valid for five years. NGOs are expected to apply for renewal within six months of the date of expiry of registration. In case of failure to apply for renewal, the registration is deemed to have expired, and the NGO is no longer entitled to receive foreign funds or utilise its existing funds without permission from the ministry.
- According to the MHA, NGOs failing to apply before the due date can petition the ministry with cogent reasons within four months of the expiry of registration, following which their applications can be reconsidered.
- Many NGOs do not apply for renewal for a variety of reasons, which include either completion of the project for which the FCRA registration had been taken or the NGO itself folding up.

On what basis is approval cancelled?

- The government reserves the right to cancel the FCRA registration of any NGO if it finds it to be in violation of the Act.
- Registration can be cancelled if an inquiry finds a false statement in the application; if the NGO is found to have violated any of the terms and conditions of the certificate or renewal; if it has not been engaged in any reasonable activity in its chosen field for the benefit of society for two consecutive years; or if it has become defunct.
- It can also be cancelled if "in the opinion of the Central Government, it is necessary in the public interest to cancel the certificate", the FCRA says.
- Registrations are also cancelled when an audit finds irregularities in the finances of an NGO in terms of misutilisation of foreign funds.
- According to FCRA, no order of cancellation of certificate can be made unless the person or NGO concerned has been given a reasonable opportunity of being heard. Once the registration of an NGO is cancelled, it is not eligible for re-registration for three years.
- The ministry also has powers to suspend an NGO's registration for 180 days pending inquiry, and can freeze its funds.
- All orders of the government can be challenged in the High Court.

Highlights of the Supreme Court Judgement

- Supreme Court has endorsed the Centre's Foreign Contribution (Regulation) Amendment Act, 2020, adding that accepting foreign donations "cannot be an absolute or even a vested right".
- Supreme Court has affirmed the validity of the Foreign Contribution (Regulation) Amendment Act, 2020, which imposes new conditions on receipt and use of funds by NGOs, besides making it mandatory for them to receive foreign funds only in an SBI account.
- The court countered that the amendments only provide a strict regulatory framework to moderate the inflow of foreign funds into the country.
- The court authored in the verdict that no one can be heard to claim a vested right to accept foreign donations, much less an absolute right.
- The court said that the presence/inflow of foreign contribution in the country ought to be at the minimum level, if not completely eschewed. The influence may manifest in different ways, including in destabilising the social order within the country.
- The court noted that the third-world countries may welcome foreign donations, but it is open to a nation, which is committed and enduring to be self-reliant and variously capable of

shouldering its own needs, to opt for a policy of complete prohibition of inflow/acceptance of foreign contribution (donation) from a foreign source.

+ Justice Khanwilkar observed, unregulated inflow of foreign donations would only indicate that the government was incapable of looking after its own affairs and needs of its citizens.

+ The court noted how 19,000 certificates of registration under the FCRA were cancelled for violating statutory compliances. The annual inflow of foreign contribution had almost doubled between the years 2010 and 2019. There was a spurt of criminal investigations. Donations had been re-routed. Successive transfers and creation of a layered trail of money had made it difficult to trace the flow and final utilisation of foreign donations despite the "firm regime" in place since 2010.

+ The court held that the restrictions in the amendments were "reasonable" and "founded on intelligible criteria". It fixed accountability on the recipients, increased the efficacy of "continual supervision" over foreign contributions, did not discriminate and served the purpose of the FCRA 2010.

+ The Court observed that the mere plea of inconvenience is not enough to attract constitutional inhibition. There is intrinsic evidence to indicate that the change effected by the amendments is to serve the legitimate government purpose and has a rational nexus to the object of the principal Act of 2010.

+ The court read down one of the provisions — Section 12 (A) — of the 2020 Amendment Act, which mandated the production of Aadhaar card for registration. The Bench allowed the office-bearers of NGOs to use their Indian passports as an identification document.

Conclusion

Free and uncontrolled inflow of foreign funds has the potential to impact the socio-economic structure and polity of the country. Philosophically, foreign contribution (donation) is akin to gratifying intoxicant replete with medicinal properties and may work like a nectar. However, it serves as

> **PEPPER IT WITH**
> Foreign Exchange Regulation Act, Salient Features of the Prevention of Money Laundering Act, 2002, Hawala Transactions

a medicine so long as it is consumed (utilised) moderately and discreetly, for serving the larger cause of humanity. Otherwise, this artifice has the capability of inflicting pain, suffering and turmoil as being caused by the toxic substance (potent tool) — across the nation.

Charity could be found at home. NGOs could look within the country for donors. Fundamental rights have to give way in larger public interest to the need to insulate the democratic polity from the "adverse influence of foreign contributions". The amendments do not prohibit inflow of foreign contributions, but are a regulatory measure to permit acceptance by registered persons or persons having prior permission to do so with condition that they must themselves utilise the entire contribution.

Olga Tellis Judgment

News Excerpt

North Delhi Municipal Corporation's recent use of bulldozers' against roadside stalls, and push carts in Delhi's Jahangirpuri was seen by a constitution Bench of the Supreme Court.

Pre-Connect: Background

- A 37-year-old Constitution Bench judgment of the Supreme Court which held that pavement dwellers are different from trespassers may become a game-changer in the Jahangirpuri case.

- The apex court ruled that pavement dwellers live on "filthy footpaths out of sheer helplessness" and not with the object of offending, insulting, intimidating or annoying anyone. They live and earn on footpaths because they have "small jobs to nurse in the city and there is nowhere else to live."

What is the Olga Tellis judgment?

➢ The judgment, *Olga Tellis vs Bombay Municipal Corporation, in 1985* by a five-judge Bench led by then Chief Justice of India Y.V. Chandrachud agrees that pavement dwellers do occupy public spaces unauthorised. However, the court maintained they should be given a chance to be heard and a reasonable opportunity to depart "before force is used to expel them."

➢ The Supreme Court reasoned that eviction using unreasonable force, without giving them a chance to explain is unconstitutional. Pavement dwellers, too, have a right to life and dignity. The right to life included the right to livelihood. They earn a meagre livelihood by living and working on the footpaths. A welfare state and its authorities should not use its powers of eviction as a means to deprive pavement dwellers of their livelihood.

What led to the judgment?

✓ Sometime in 1981, the State of Maharashtra and the Bombay Municipal Corporation decided that pavement and slum dwellers in Bombay city should be evicted and "deported to their respective places of origin or places outside the city of Bombay."

✓ Some demolitions were carried out before the case was brought to the Bombay High Court by pavement dwellers, residents of slums across the city, NGOs and journalists. While they conceded that they did not have "any fundamental right to put up huts on pavements or public roads", the case came up before the Supreme Court on larger questions of law.

What were the questions discussed before the Supreme Court?

▪ One of the main questions was whether eviction of a pavement dweller would amount to depriving him/her of their livelihood guaranteed under Article 21 of the Constitution. The Article mandates that "no person shall be deprived of his life or personal liberty except according to procedure established by law."

▪ The Constitution Bench was also asked to determine if provisions in the Bombay Municipal Corporation Act, 1888, allowing the removal of encroachments without prior notice, were arbitrary and unreasonable. The Supreme Court decided to examine the question whether it was constitutionally impermissible to characterise pavement dwellers as trespassers.

What was the State government's defence?

The State government and the corporation countered that pavement dwellers should be estopped (estoppel is a judicial device whereby a court may prevent or "estop" a person from making assertions. Estoppel may prevent someone from bringing a particular claim) from contending that the shacks constructed by them on the pavements cannot be demolished because of their right to livelihood. They cannot claim any fundamental right to encroach and put-up huts on pavements or public roads over which the public has a 'right of way.'

How did the Supreme Court rule?

➕ The Bench threw out the government's argument of estoppel, saying "there can be no estoppel against the Constitution." The court held that the right to life of pavement dwellers were at stake here. The right to livelihood was an "integral component" of the right to life. They can come to court to assert their right. "If the right to livelihood is not treated as a part of the constitutional right to live, the easiest way of depriving a person of his right to life would be to deprive him of his means of livelihood to the point of abrogation. Any person who is deprived of his right to livelihood except according to just and fair procedure established by law, can challenge the deprivation as offending the right to life."

➕ Again, on the second question whether provisions in law allowing statutory authorities to remove encroachments without prior notice was arbitrary, the court held that such powers are designed to operate as an "exception" and not the "general rule." The procedure of eviction should lean in favour of procedural safeguards which follow the natural principles of justice like giving the other side an opportunity to be heard. The right to be heard gives affected persons an opportunity to participate in the decision-making process and also provides them with a chance to express themselves with dignity.

+ Finally, the court emphatically objected to authorities treating pavement dwellers as mere trespassers. "They (pavement dwellers) manage to find a habitat in places which are mostly filthy or marshy, out of sheer helplessness. It is not as if they have a free choice to exercise as to whether to commit an encroachment and if so, where. The encroachment committed by these persons are involuntary acts in the sense that those acts are compelled by inevitable circumstances and are not guided by choice."

+ Besides, the court noted, even trespassers should not be evicted by using force greater than what is reasonable and appropriate. What is more, the court had said, a trespasser "should be asked and given a reasonable opportunity to depart before force is used to expel him."

> **PEPPER IT WITH**
> The Law of Estoppel, Res-Judicata, Kesavananda Bharati vs. State of Kerala, Article 21 of the Constitution

Conclusion

To conclude, the whole Benthamite principle applied by Justice Chandrachud on behalf of all the brother Justices can be summarized in one sentence stated in Para 46 of the judgment, Human compassion (happiness) must soften the rough edges of justice in all situations. Thus, it can be concluded the Supreme Court adopted the Utilitarian Principle in terms of the pleasure and pain calculus or the hedonistic calculus of Jermy Betham.

Phone Tapping in India

News Excerpt

The Mumbai Police investigating the alleged phone tapping case against senior Indian Police Service (IPS) officer Rashmi Shukla submitted a chargesheet before the magistrate at Esplanade court.

Pre-Connect

* Phone tapping in India is governed by The Indian Telegraph Act, 1885.
* Section 5(2) says that "on the occurrence of any public emergency, or in the interest of the public safety", phone tapping can be done by the Centre or states if they are satisfied it is necessary in the interest of "public safety", "sovereignty and integrity of India, the security of the State, friendly relations with foreign States or public order or for preventing incitement to the commission of an offence".
* There is an exception for the press: "press messages intended to be published in India of correspondents accredited to the Central Government or a State Government shall not be intercepted or detained, unless their transmission has been prohibited under this sub-section".
* The competent authority must record reasons for tapping in writing.

How are phones tapped in India?

➢ In the era of fixed-line phones, mechanical exchanges would link circuits together to route the audio signal from the call. When exchanges went digital, tapping was done through a computer.
➢ When most conversations happen through mobile phones, authorities make a request to the service provider, which is bound by law to record the conversations on the given number and provide these in real time through a connected computer.

What happens in an emergency?

✓ In unavoidable circumstances, such an order may be issued by an officer, not below the rank of a Joint Secretary to the Government of India, who has been authorised by the Union Home Secretary, or the State Home Secretary.

✓ In remote areas or for operational reasons, if it is not feasible to get prior directions, a call

> **Who can tap phones?**
> ❖ In the states, police have the powers to tap phones.
> ❖ At the Centre, 10 agencies are authorised to do so: Intelligence Bureau, CBI, Enforcement Directorate, Narcotics Control Bureau, Central Board of Direct Taxes, Directorate of Revenue Intelligence, National Investigation Agency, R&AW, Directorate of Signal Intelligence, and the Delhi Police Commissioner.
> ❖ Tapping by any other agency would be considered illegal.
>
> **Who authorises phone tapping?**
> ❖ Rule 419A of the Indian Telegraph (Amendment) Rules, 2007, says phone tapping orders "shall not be issued except by an order made by the Secretary to the Government of India in the Ministry of Home Affairs in the case of Government of India and by the Secretary to the State Government in-charge of the Home Department in the case of a State Government".
> ❖ The order has to conveyed to the service provider in writing; only then can the tapping begin.

can be intercepted with the prior approval of the head or the second senior-most officer of the authorised law enforcement agency at the central level, and by authorised officers, not below the rank of Inspector General of Police, at the state level.

✓ The order has to be communicated within three days to the competent authority, who has to approve or disapprove it within seven working days. "If the confirmation from the competent authority is not received within the stipulated seven days, such interception shall cease," the rule says.

✓ For example, during the 26/11 attacks in Mumbai, the authorities had no time to follow the complete procedure, and so a mail was sent to the service provider by the Intelligence Bureau, and phones of terrorists were put under surveillance. "The proper procedure was followed later. Many times, in grave situations such as terror attacks, service providers are approached with even verbal requests, which they honour in the interest of the nation's security," an intelligence official said.

What are the checks against misuse?

▪ The law is clear that interception must be ordered only if there is no other way of getting the information.

▪ "While issuing directions under sub-rule (1) the officer shall consider possibility of acquiring the necessary information by other means and the directions under sub-rule (1) shall be issued only when it is not possible to acquire the information by any other reasonable means," Rule 419A says.

▪ The directions for interception remain in force, unless revoked earlier, for a period not exceeding 60 days. They may be renewed, but not beyond a total of 180 days.

▪ Any order issued by the competent authority has to contain reasons, and a copy is to be forwarded to a review committee within seven working days. At the Centre, the committee is headed by the Cabinet Secretary with the Law and Telecom Secretaries as members. In states, it is headed by the Chief Secretary with the Law and Home Secretaries as members.

▪ The committee is expected to meet at least once in two months to review all interception requests. "When the Review Committee is of the opinion that the directions are not in accordance with the provisions referred to above it may set aside the directions and orders for destruction of the copies of the intercepted message or class of messages," the law says.

▪ Under the rules, records pertaining to such directions shall be destroyed every six months unless these are, or are likely to be, required for functional requirements. Service providers too

are required to destroy records pertaining to directions for interception within two months of discontinuance of the interception.

Is the process transparent?

- There are multiple provisions aimed at keeping the process transparent.
- Directions for interception are to specify the name and designation of the officer or the authority to whom the intercepted call is to be disclosed, and also specify that the use of intercepted call shall be subject to provisions of Section 5(2) of the Telegraph Act.
- The directions have to be conveyed to designated officers of the service providers in writing by an officer not below the rank of SP or Additional SP or equivalent. The officer is expected to maintain records with details of the intercepted call, the person whose message has been intercepted, the authority to whom the intercepted calls have been disclosed, date of destruction of copies etc.
- The designated nodal officers of the service providers are supposed to issue acknowledgment letters to the security/law enforcement agency within two hours on receipt of an intimation. They are to forward every 15 days a list of interception authorisations received to the nodal officers of the security and law enforcement agencies for confirmation of authenticity.
- "The service providers shall put in place adequate and effective internal checks to ensure that unauthorised interception of messages does not take place and extreme secrecy is maintained...," the rule says.
- It makes the service providers responsible for actions of their employees. In case of unauthorised interception, the service provider may be fined or even lose its licence.

> **PEPPER IT WITH**
> Right to Privacy, R.M. Malkani v. State of Maharashtra, Justice K.S. Puttaswamy & Anr v/s Union of India & Ors.

Conclusion

- Right to privacy is a part of personal liberty which is provided under Article 21 of the Indian Constitution. A person has also the right to safeguard his privacy. There are some cases when the government has to act contrary to the fundamental rights of a person. One of them is interception of telephone. This is a very major step taken by government and to intercept a telephone of an individual, reasonable grounds to take such a step should be mentioned as it is a matter of someone's privacy.
- Interception of telephone is not in violation of right to privacy only if it is done for the interest of public or in a case of emergency, as stated under section 5(2) of the Telegraph Act. Any evidence acquired through interception of telephone is also not in violation of right to privacy and it is also considered as admissible evidence. Interception of telephone without the permission of government is in violation of right to privacy of a person as a person may talk about his problems, child education, health etc. which he would not like to share it with anyone else.
- The powers conferred upon the authorities to intercept telephone are not absolute. There are some reasonable restrictions attached to it. Telephone of an individual cannot tap unless and until reasonable grounds are shown to do such act as no person shall be deprived of its personal liberty. Hence, phone taping is not in violation of right to privacy unless and until it is done for the interest of public or in a case of emergency.
- Incidents of telephone tapping should be viewed seriously as such violations reduce the individual's constitutional and human right to mockery and subject him to indignity and ridicule. Such invasions are undemocratic and uncivilized.

Issues related with the Panchayati Raj

News Excerpt

Inaugurating a string of projects in Jammu and Kashmir as part of a strong infrastructure push, Prime Minister of India assured the youth of Kashmir

Valley that they "will never face the kind of sufferings" their parents and grandparents faced in the past.

Pre-Connect

- 24th April is observed by the Ministry of Panchayati Raj as National Panchayati Raj Day every year to celebrate the constitutional status accorded to the Panchayati Raj System in the country.
- This occasion provides an opportunity for direct dialogue with Panchayat representatives from all over the country as well as recognizing their achievements to empower and motivate them.
- The objective of celebrating the National Panchayati Raj Day is to increase awareness about Panchayats and Gram Sabhas, the institutions of the local self-governments for the rural areas mandated by the Constitution, and also about their roles, responsibilities, achievements, concerns, resolutions etc.
- National Panchayat Awards are also conferred to well-performing Panchayats on this occasion.

Issues related with the Panchayati Raj System

(i)   While elections are held regularly but Gram Sabhas, Block Committees and Zila Parishads do not hold their meetings regularly.

(ii)   Most of the state governments are not ready to provide powers to the Local Governments.

(iii)   States have not implemented the 73rd/74th Constitutional Amendments completely in real sense. Rural and urban bodies have no say over resources.

Analytica

➢ Twenty-five years have gone by since India passed the 73rd/74th Constitutional Amendments heralding decentralised governance, and 23 years since all the States passed the conformity legislations ushering in the third tier of government in Indian federal polity. Looking back, this was a momentous event, a paradigm shift in democratic governance and fiscal federalism.

➢ While the fiscal federalism literature of the West treats citizens as customers or consumers, the Constitutional Amendments envisage citizens as political entities engaged in the transformation of their environment. The pattern of decentralisation in India since the Government of India Act, 1935 and even after the inauguration of the Republic in 1950 was at best only a deconcentration exercise which happens when a superior assigns duties and responsibilities to a subordinate agent to carry out specific tasks. But Constitutional Amendments envisage a devolution package which implies autonomy in regard to assigned functions backed up by funds and functionaries.

➢ Devolution as provided for in parts IX and IXA of the Constitution is a process towards ushering in participatory democracy. This process is set in a framework with several standardised features such as quinquennial elections, reservations for historically marginalised communities and women, the introduction of participatory institutions for governance, the creation of a State Finance Commission to rationalise State-sub State level fiscal relations, the establishment of a district planning committee to evaluate resource endowments, to do spatial planning, and manage the conservation of resources with a mandate to draw up a draft development plan for the district as a whole, and so on.

➢ Besides, State legislatures have to endow Local Governments with powers, authority and responsibilities to function as institutions of self-government tasked to prepare and implement schemes "for economic development and social justice". But looking back, the central tendency of local democracy in India tells a story of indifference if not neglect.

Conclusion

To be sure, while the Constitutional Amendments provided all the necessary conditions, other conditions were left to be designed by the State legislatures and governments.

With no champions to keep afloat the much-needed social demand for deepening democracy, an agenda for economic reforms, demonetization and the like took precedence over this foundational reform. E.g., as the Constitutional Amendments do not provide a separate list for local governments, the Eleventh Schedule that lists 29 subjects for PRIs, and the Twelfth Schedule with 18 subjects for Urban Local Governments, carry no operational meaning because almost all local functions are State-Concurrent. The need for clear functional assignments broken up into activities and sub-activities to ensure clarity in roles and responsibilities is loud and clear.

The Governments should not be a silent spectator to the erosion of democracy at the local level. We live in a time when we celebrate ceremonial values and neglect instrumental values. The outcome of the 73rd/74th Constitutional Amendment Acts has been a classic case of upholding ceremonial process rather than instrumental process. The political scientist Alexis de Tocqueville famously said that for democracy to succeed it should take roots in the "habits and hearts" of the people.

PEPPER IT WITH

Deen Dayal Upadhyay Panchayat Sashaktikaran Purushkar, Nanaji Deshmukh Rashtriya Gaurav Gram Pushkar, Child-friendly Panchayat Award, Gram Panchayat Development Plan Award, e-Panchayat Puraskar

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SOCIAL ISSUES, GOVERNMENT SCHEMES, REPORT

Poverty in India: World Bank Report

News Excerpt

Extreme poverty in India declined by 12.3 percentage points to 10.2 per cent in 2019, from 22.5 per cent in 2011, according to the World Bank.

Pre-Connect

- A major shift has been taken place in the country's policy-orientation towards poverty alleviation and employment generation—in place of wage employment, **the focus has shifted to self-employment** – so that 'gainful employment' could be created and poverty could be alleviated permanently.

- Earlier, the Planning Commission used to estimate poverty using data from the large sample surveys on household consumer expenditure carried out by the National Sample Survey Office (NSSO) every five years. It defines poverty line on the basis of monthly per capita consumption expenditure (MPCE).

- Poverty elimination has remained a major challenge right from independence and lies at the core of India's national development agenda to create a just and equitable society. Given the limited resources, reliable estimation of poverty is the first step towards eradication of poverty as a basic input for design, implementation and monitoring of anti-poverty programmes. Poverty measurement is also important to serve as a barometer of the extent of the success of strategies for inclusive growth and poverty reduction.

Poverty Estimation in India

- Poverty can be defined as a condition in which an individual or household lacks the financial resources to afford a basic minimum standard of living. However, the perception regarding what constitutes poverty may vary over time and across countries. The conventional approach to measuring poverty is to specify a minimum expenditure (or income) required to purchase a basket of goods and services necessary to satisfy basic human needs. This expenditure is called the poverty line.

- Households with consumption expenditures below the poverty line are said to be "Below the Poverty Line (BPL)" and deemed poor.

- The basket of goods and services necessary to satisfy basic human needs is the Poverty Line Basket (PLB).

- Poverty can be measured in terms of the number of people living below this line (with the incidence of poverty expressed as the Head Count Ratio (HCR) or the poverty ratio - number of poor to the total population expressed as percentage).

- Thus, estimation of poverty in India has been based on two critical components:

- Information on the consumption expenditures and its distribution across households is provided by the NSS consumption expenditure surveys;

- These expenditures by households are evaluated with reference to a given poverty line.

Pre-Independence Poverty Estimation

- ✓ **Poverty and Un-British Rule in India (1901):** Dadabhai Naoroji in his book Poverty and Un-British Rule in India made the earliest estimate of poverty line at 1867-68 prices (₹16 to ₹35 per capita per year) based on the cost of a subsistence diet for the emigrant coolies during their voyage living in a state of quietude.

- ✓ **National Planning Committee (1938):** In 1938, the National Planning Committee set up under the chairmanship of Jawaharlal Nehru suggested a poverty line (ranging from ₹15 to ₹20 per capita per month) based on a minimum standard of living.

✓ **The Bombay Plan (1944):** Bombay Plan proponents suggested a poverty line of ₹75 per capita per year, which was much more modest than that of the NPC.

Post- Independence Poverty Estimation

Various expert groups constituted by the Planning Commission have estimated the number of people living in poverty in India:

- **Working Group (1962):** The poverty line in India was quantified for the first time in 1962 by this Group in terms of a minimum requirement (food and non-food) of individuals for healthy living.

- **Study by VM Dandekar and N Rath (1971):** Although this was not a study commissioned by the Planning Commission, the origins of India's poverty line lie in the seminal work of two economists, V N Dandekar and N Rath, who first established the consumption levels required to meet a minimum calorie norm of an average calorie norm of 2,250 calories per capita per day.

- **Task Force on "Projections of Minimum Needs and Effective Consumption Demand" headed by Dr. Y. K. Alagh (1979):** It was constituted in 1977 and it submitted its report in 1979. Official poverty counts began for the first time in India based on the approach of this Task Force.

- **Lakdawala Expert Group (1993):** Until the 1990s, no attempt was made to capture differences in prices or differences in consumption patterns across states or over time. Poverty estimates were revised with each quinquennial NSS survey and price indices were used to adjust for price changes over time.

- **Tendulkar Expert Group (2009):** In 2005, another expert group chaired by Suresh Tendulkar was constituted to review the methodology for poverty estimation. It was to address the three key shortcomings of the previous methods:
  □ Poverty estimates being linked to the 1973-74 Poverty Line Baskets (PLBs) of goods and services did not reflect significant changes in consumption patterns of poor over time;
  □ Issues with the adjustment of prices for inflation, both spatially (across regions) and temporally (across 6 time); and
  □ Presumption of provision of health and education by the State only.

- **Rangarajan Committee (2014):** Due to widespread criticism of Tendulkar Committee approach as well as due to changing times and aspirations of people of India, Rangarajan Committee was set up in 2012.

Highlights of the Report

✓ The World Bank working paper, titled "Poverty in India Has Declined over the Last Decade But Not As Much As Previously Thought", has been authored by economists Sutirtha Sinha Roy and Roy van der Weide.

> **PEPPER IT WITH**
> NITI Aayog, Ujjwala Yojana, PM Awaas Yojana, Swachh Bharat Mission, Jan Dhan and Mission Indradhanush, Multi Dimensional Poverty

✓ The paper is based on the Consumer Pyramid Household Survey (CPHS) of the Centre for Monitoring Indian Economy (CMIE), which is conducted continuously at four-month intervals since its inception in 2014. Moreover, while the former estimated poverty reduction after the pandemic, the latter focussed on the scenario before the Covid outbreak.

✓ Extreme poverty in India dropped to 10.2% in the pre-Covid year of 2019 from as much as 22.5% in 2011 and the pace of reduction in rural India has been more dramatic than in urban areas, according to a World Bank working paper.

✓ The poverty level in rural and urban areas declined by 14.7 and 7.9 percentage points, respectively, during the 2011-2019 period. While it eased to 11.6% in rural areas in 2019, the urban poverty level stood at 6.3%.

✓ Extreme poverty has been measured in terms of the number of people living on less than $1.90 a day (roughly Rs 145). Interestingly, urban poverty inched up by 2 percentage points in the demonetisation year of 2016 and rural poverty rose by 10 basis points in 2019 (coinciding with an economic slowdown before the Covid spread its tentacles), the paper showed.

✓ There has been a slight moderation in consumption inequality since 2011, but by a margin smaller than what is reported in the unreleased 2017 NSS report.

✓ Consumption inequality in the country has eased after 2011, with barely any change between 2015 and 2019. Farmers with small landholding sizes have experienced higher income growth.

✓ Real incomes for farmers with the smallest landholdings have risen by 10% in annualised terms during the 2013-2019 period.

Conclusion

Notably, the World Bank defines 'living in extreme poverty' in India as living on $1.9 or less in purchasing power parity (PPP) terms. While debates on the World Bank's methodology continue to rage, it is important to understand how poverty in rural areas was reduced at a faster pace. Much of the success can be credited to all government departments, especially their janbhagidari-based thrust on pro-poor public welfare that ensured social support for the endeavour. It will nevertheless be useful to delineate the key factors that contributed to the success. Poverty has reduced significantly because of the current government's thrust on improving the ease of living of ordinary Indians through schemes such as the Ujjwala Yojana, PM Awaas Yojana, Swachh Bharat Mission, Jan Dhan and Mission Indradhanush in addition to the Deendayal Antyodaya Yojana-National Rural Livelihood Mission and improved coverage under the National Food Security Act.

New Pensions Scheme and Old Age Pension Saga

News Excerpt

On February 23, Rajasthan government announced restoration of the old pension scheme for the government employees, who joined the service on or after January 1, 2004.

Pre-Connect

o The old pension scheme or the Defined Pension Benefit Scheme assured life-long income, post-retirement. Usually, the assured amount is equivalent to 50% of the last drawn salary. The Government bears the expenditure incurred on the pension. The scheme was discontinued in 2004.

o Union government took a decision in 2003 to discontinue the old pension scheme and introduced the NPS. The scheme is applicable to all new recruits joining the Central Government service (except armed forces) from April 1, 2004. On introduction of NPS, the Central Civil Services (Pension) Rules, 1972 was amended.

o It is a participatory scheme, where employees contribute to their pension corpus from their salaries, with matching contribution from the government. The funds are then invested in earmarked investment schemes through Pension Fund Managers. At retirement, they can withdraw 60% of the corpus, which is tax-free and the remaining 40% is invested in annuities, which is taxed. It can have two components — Tier I and II. Tier-II is a voluntary savings account that offers greater flexibility in terms of withdrawal, and one can withdraw at any point of time, unlike Tier I account. Even private individuals can opt for the scheme.

o As on February 28, there were 22.74 lakh Central government employees and 55.44 lakh State government employees enrolled under the NPS.

How will the National Pension Scheme benefit the employees? What are the changes introduced in the scheme?

➢ On February 23, Rajasthan government announced restoration of the old pension scheme for the government employees, who joined the service on or after January 1, 2004. The announcement meant that the National Pension System (NPS) would be discontinued in the

State. Following this, Chhattisgarh announced restoration of the Defined Pension Benefit Scheme (DPBS/OPS).

➤ In the month of April, protests were organised in J&K, Punjab, Andhra Pradesh, Himachal Pradesh and Madhya Pradesh. Trade unions across the country organised a two-day strike on March 28 and 29 and demanded scrapping of the old pension scheme. The Finance Ministry had earlier ruled out proposals by a federation of Central and State governments employees saying that the "changes will be financially untenable."

What were the changes introduced in 2019?

➤ In 2019, the Finance Ministry said that Central government employees have the option of selecting the Pension Funds (PFs) and Investment Pattern in their Tier-I account.

➤ The default pension fund managers are the LIC Pension Fund Limited, SBI Pension Funds Pvt. Limited and UTI Retirement Solutions Limited in a predefined proportion.

Who is the regulatory authority to manage the funds of government employees that are linked to the market?

➤ The Pension Fund Regulatory and Development Authority (PFRDA) is the regulator for NPS.

➤ PFRDA was set up through the PFRDA Act in 2013 to promote old age income security by developing pension funds to protect the interest of subscribers to schemes of pension funds.

What is the latest directive from the government on the pension system?

• The Department of Personnel and Training (DoPT) informed Parliament on March 24 that there is no proposal to reintroduce the old pension scheme for Central government civil employees under consideration of the Government of India.

• Centre said that the returns being market-linked is a basic design feature of the NPS.

PEPPER IT WITH
Pension Fund Regulatory and Development Authority, National Pension System Trust, Social Security Schemes

• Pension being a long-term product also enables the investments to grow with decent returns, despite short term volatility.

• The prudential guidelines stipulated by the PFRDA, the skills of the professional Fund Managers chosen through a rigorous process, and choice of asset allocation across various asset classes (Equity, Corporate Bond, Government Securities) enable the subscriber's accumulations to grow over the long term, riding over the short-term volatility.

Conclusion

According to Rajasthan Karmachari Samyukta Mahasangh, the move would benefit over 4 lakh employees. In Chattisgarh, the move will benefit over three lakh employees, who joined service after January 1, 2004.

Wage rates under MGNREGA

News Excerpt

Centre increased wage rates for states under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) by five to seven per cent.

Pre-Connect

• National Rural Employment Guarantee Act 2005 (NREGA), later renamed as the Mahatma Gandhi National Rural Employment Guarantee Act or MGNREGA in 2009, is an Indian labour law and social security measure that aims to guarantee the 'right to work'.

- This act was passed in 23 August 2005 under the UPA government.
- It aims to enhance livelihood security in rural areas by providing at least 100 days of wage employment in a financial year to atleast one member of every household whose adult members volunteer to do unskilled manual work.
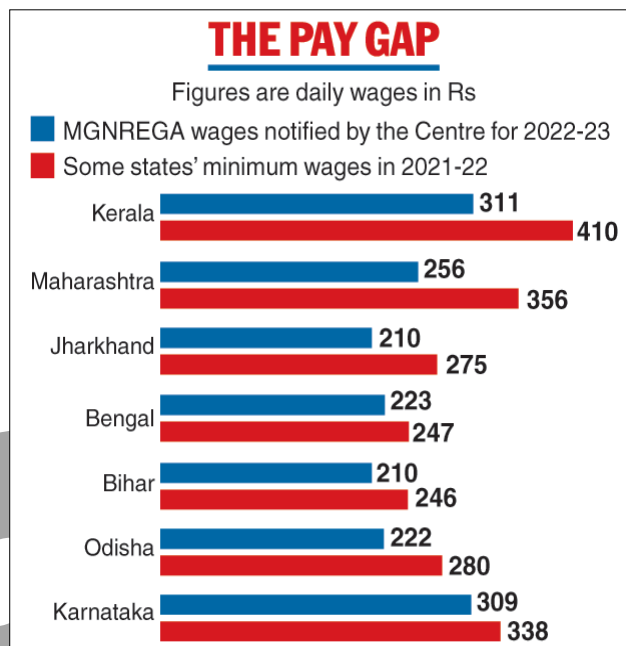
Salient Features of the MGNREGA

➤ Gives legal guarantee of wage employment to the adult members of rural households who are willing to do unskilled manual labour subject to a maximum of 100 days per household. It is applicable for all the villages in the district.

➤ Every rural household has the right to register and Job cards issued to every household registered under MGNREGA.

➤ Job cards issued within 15 days from the date of receipt of application for the job card registration. The registered job card holders can seek employment by giving a group / individual application.

➤ A minimum of 10 job seekers shall apply to sanction a new work under MGNREGA.

➤ Employment provided by sanctioning one of the works under "Shelf of Works" as identified and prioritized by the village community within 15 days from the date of receipt of applications for providing employment under MGNREGA.

➤ The village community has the right to choose works under 8 permissible categories of works. Shelf of works will be identified by the village community for 5 years which can be taken up in their villages as per the job demand and entitled person days.

➤ The works proposed by the village community cannot be altered by anyone unless they are not in conformity with the guidelines of MGNREGA.

	2021-2022	2022-2023	Percent increase	Absolute change
Andaman & Nicobar	294	308	4.76	14
Andhra Pradesh	245	257	4.9	12
Arunachal Pradesh	212	216	1.89	4
Assam	224	229	2.23	5
Bihar	198	210	6.06	12
Chhattisgarh	193	204	5.7	11
Dadra & Nagar Haveli	269	278	3.35	9
Daman and Diu	269	278	3.35	9
Goa	294	315	7.14	21
Gujarat	229	239	4.37	10
Haryana	315	331	5.08	16
Himachal Pradesh	254	266	4.72	12
Jammu & Kashmir	214	227	6.07	13
Jharkhand	198	210	6.06	12
Karnataka	289	309	6.92	20
Kerala	291	311	6.87	20
Lakshadweep	266	284	6.77	18
Madhya Pradesh	193	204	5.7	11
Maharashtra	248	256	3.23	8
Manipur	251	251	0	0
Meghalaya	226	230	1.77	4
Mizoram	233	233	0	0
Nagaland	212	216	1.89	4
Odisha	215	222	3.26	7
Puducherry	273	281	2.93	8
Punjab	269	282	4.83	13
Rajasthan	221	231	4.52	10
Sikkim	212	222	4.72	10
Tamil Nadu	273	281	2.93	8
Telangana	245	257	4.9	12
Tripura	212	212	0	0
Uttar Pradesh	204	213	4.41	9
Uttarakhand	204	213	4.41	9
West Bengal	213	223	4.69	10

➤ The work shall be provided within 5 kms jurisdiction from the village. If the work provided is beyond 5 kms, the job seekers shall be given 10% of the minimum wages as additional amount.

➤ State government to pay 25% of minimum wage for the first 30 days as compensatory daily unemployment allowance on failure to provide employment for the families demanding the works under the MGNREG Act, and half of wage for remaining period of the year.

➤ Equal payment for men and women. Wages to be paid within a fortnight. One-third of the beneficiaries should be women. Work site facilities such as creche, drinking water and shade have to be provided. No contractors and machinery allowed.

➤ 60:40 wage and material ratio have to be maintained for all works undertaken under NREGA.

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➢ Grievance redressal mechanism to be set up for ensuring a responsive implementation process. Social Audit is a must for all the works implemented under NREGA.

➢ Provisions of RTI Act shall be applicable in letter and spirit to ensure transparency and accountability.

Key points of recent hike in wage rates

✓ The wage rates, notified by Ministry of Rural Development under sub-section (1) of Section 6 of the Mahatma Gandhi National Rural Employment Guarantee Act, 2005, was effective from April 1.

✓ The daily wages for MGNREGA workers, which had been revised from ₹245 to ₹275 in Karnataka, will be ₹289 with effect from April 1, 2021.

✓ The workers will be paid an additional ₹10 per day for equipment.

✓ The Government expected more people to given employment under the scheme this year with the launch of the Centre's 'Catch the Rain' scheme.

✓ The NEREGS wages have been increased 2-3 per cent in Assam, Tamil Nadu and Puducherry. In Maharashtra, Odisha, Dadra and Nagar Haveli and Daman and Diu, the wages have been increased 3-4 per cent, while in Gujarat, Uttar Pradesh, Uttarakhand, Rajasthan, West Bengal, Sikkim, Himachal Pradesh, Andaman & Nicobar Islands, Punjab, Andhra Pradesh and Telangana, the hike is 4-5 per cent.

✓ Only 10 states — Haryana, Chhattisgarh, Madhya Pradesh, Bihar, Jharkhand, Jammu & Kashmir, Lakshadweep, Kerala, Karnataka and Goa — have seen an increase of more than 5 per cent.

✓ According to the new wage rates, five states and UTs with the highest NREGS wages are Haryana (Rs 331 per day); Goa (315); Kerala (311); Karnataka (309); and Andaman & Nicobar Islands (308). Five states with lowest NREGS wages are Tripura (212); Bihar (210); Jharkhand (210); Chhattisgarh (204); and Madhya Pradesh (204).

✓ The NREGS wage rates stands at Rs 213 per day for both Uttar Pradesh and Uttarakhand, Rs 216 for Arunachal Pradesh and Sikkim, Rs 222 for Odisha and Sikkim, Rs 223 for West Bengal and Rs 227 for Jammu and Kashmir.

THE PAY GAP

Figures are daily wages in Rs

■ MGNREGA wages notified by the Centre for 2022-23
■ Some states' minimum wages in 2021-22

State	MGNREGA 2022-23	Minimum 2021-22
Kerala	311	410
Maharashtra	256	356
Jharkhand	210	275
Bengal	223	247
Bihar	210	246
Odisha	222	280
Karnataka	309	338

'Jala Shakti'

▪ A variety of water conservation projects including lake restoration and conservation works will be taken up under the scheme 'Jala Shakti', which is scheduled to end in November.

▪ Removal of silt, identifying the canals that recharge the water bodies and restoring them will be part of the works to be taken under MGNREGA for the scheme.

▪ The scheme will not only provide employment, but also recharge groundwater. The government is also committed to providing 'fluoride-free' drinking water to the people.

Solar power

✦ Ministry for Rural Development and Panchayat Raj will equip all gram panchayat offices with solar power generation system. Once installed, the officials will not be able to send away visitors to the office on the pretext of absence of power.

✦ After generation of power, the excess will be sold to the grid. Once it will be executed, the Gram Panchayats will not only save on power bills, but also earn money.

Other facilities

o Ministry for Rural Development and Panchayat Raj will spend upto ₹5 lakh under MGNREGA scheme on construction of buildings for schools and anganwadis.

o This, was in addition to the ₹5 lakh that is spent by the Department of Women and Child Welfare. Toilets, drinking water, construction of playground and compounds will also be taken up under the scheme.

Analytica

o MGNREGA workers in Madhya Pradesh and Chhattisgarh will receive a daily wage of Rs 204, the lowest among states, up from Rs 193. Workers in Bengal will get Rs 223 for a day's work, a hike of Rs 10. The amount varies based on difficulty of terrain and working conditions.

o Currently, the scheme gives work to 10 crore people. Demand for work under the national job scheme has increased amid the pandemic that has wrecked the economy and rendered millions jobless.

o Social activists criticised the central government for not accepting the demand to set MGNREGA wage rates on a par with the minimum wages paid by the states, mostly for agrarian work.

o Workers would not be able to maintain minimum living standards with the paltry hike under the NREGA.

o The minimum NREGA wages remaining lower than the states' payouts amounted to denial of basic standards of living to those opting for the national job scheme.

Conclusion

An expert committee under Mahendra Dev had (in 2014) recommended that the MGNREGA rates cannot be lower than the states' minimum wages for agricultural workers. According to the MGNREGA Act, the wage for each state is revised every year on April 1 in keeping with the Consumer Price Index for Agricultural Labour (CPIAL), which factors in inflation based on consumption by farm workers.

> **PEPPER IT WITH**
>
> Consumer Price Index for Agricultural Labourers, Nehru Rozgar Yojana, National Food for Work Programme, Training of Rural Youth for Self-Employment

Manual Scavenging

News Excerpt

A total of 971 people lost their lives while cleaning sewers or septic tanks since 1993, the year law prohibiting employment of manual scavengers was enacted, according to the Social Justice and Empowerment Ministry.

Pre-Connect

o Manual scavenging is the practice of removing human excreta by hand from sewers or septic tanks. India banned the practice under the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 (PEMSR).

o The Act bans the use of any individual for manually cleaning, carrying, disposing of or otherwise handling in any manner, human excreta till its disposal.

o In 2013, the definition of manual scavengers was also broadened to include people employed to clean septic tanks, ditches, or railway tracks.

o The Act recognizes manual scavenging as a "dehumanizing practice," and cites a need to "correct the historical injustice and indignity suffered by the manual scavengers."

Why is manual scavenging still prevalent in India?

➢ The lack of enforcement of the Act and exploitation of unskilled labourers are the reasons why the practice is still prevalent in India.

> Like, the Mumbai civic body charges anywhere between Rs 20,000 and Rs 30,000 to clean septic tanks. The unskilled labourers, meanwhile, are much cheaper to hire and contractors illegally employ them at a daily wage of Rs 300-500.

The Act and Its Implementation

✓ The Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013 aims to eliminate insanitary latrines (those not connected to pits/septic tanks/sewage lines) alongside tracking the rehabilitation of manual scavengers in other occupations and conducting periodic surveys.

✓ To eliminate this practice, the act has provisions for stringent penalties, for direct or indirect employment of any person in hazardous cleaning of sewers or septic tanks by any person, local authority or agency. For example, even the first instance of its contravention is punishable with imprisonment up to two years or fine up to Rs 2 lakh or both.

✓ If a worker dies while performing such work, even with safety gear and other precautions, the employer is required to pay compensation of Rs 10 lakh to the family.

✓ Despite such stringent provisions, hardly any action is visible on the ground — not a single FIR was filed in 2014, according to the 57th Standing Committee of Social Justice and Empowerment, 2017-2018.

✓ Two cases under the law were reported from Karnataka in the National Crime Records Bureau Report of 2015, where only one went for trial. Karnataka has maintained its lead in its compliance with the law by filing 55 FIRs. This clearly reveals a lack of empathy on part of the state, bureaucracy and even society.

✓ As per the National Commission for Safai Karamcharis (NCSK) database, 608 manual scavengers have died between 2013 and 2017 while cleaning septic tanks. However, many advocacy groups have raised concern over the authenticity of this data, claiming that the actual number would be much more.

✓ NCSK reported 123 deaths during January-August 2017, whereas, the SKA reported 429 deaths in the same duration in the National Capital Region alone.

✓ While the contemporary official records evidently underestimate the employment and deaths of manual scavengers in India, the implementation of policies pertaining to their welfare have fallen short in terms of reach and coverage.

✓ The Self Employment Scheme for Liberation and Rehabilitation of Scavengers (SRMS) was set up in January 2007 with the objective of rehabilitating them and their dependents with alternative livelihoods. The benefits and entitlements offered under the SRMS are as follows:

   o An immediate one-time cash assistance of Rs 40,000 to one member of the family of the identified manual scavenger.

   o A concessional loan of up to Rs ten lakh for self-employment projects.

   o A monthly stipend of Rs 3,000 for up to 2 years and access to skill-training programmes for all manual scavengers and the dependents.

   o A credit-linked back-ended capital subsidy of Rs 3,25,000 against aforementioned loan.

No death due to Manual Scavenging

▪ Recently, replying to a question Union Minister of Social Justice and Empowerment said no death due to manual scavenging, which is defined as the lifting of human excreta from insanitary latrines, had been reported. However, people had died "due to accidents while undertaking hazardous cleaning of sewer and septic tanks", he stated. "Not a single insanitary latrine has been confirmed so far" through the app launched by the Ministry in 2020 for the public to report such latrines.

▪ In the month of March, six people died in accidents at a sewage treatment plant in Kondli and a sewer in Rohini in Delhi. While issuing notices to the authorities on March 31, the National

Human Rights Commission said "any laxity on the part of the employer poses a serious threat to the right to life and right to health of these workers".

Swachh Bharat Abhiyan vs Manual Scavenging

- Under the Swachh Bharat Abhiyan, India claims to have constructed approximately 1,000 lakh toilets since 2014, thereby providing approximately 95% households with access to toilets.
- The constructed toilets are connected either to twin pit, septic tanks with soak pit, single pits or are connected to sewerage lines. National Annual Rural Sanitation Survey 2017-18 estimates that 13% of the toilets constructed had twin pits, while 38% were equipped with septic tanks with soak pits and 20% had single pits.
- While the twin pit variety does not require human handling of faecal matter, the other two varieties require manual or mechanical extraction of faecal matter after a period of time.
- Given the abundance of septic tank with soak pit and single pit varieties of toilets and the low availability of suction pumps at the village level for mechanical extraction, it is obvious that most of these toilets in rural areas would be cleaned manually.
- Given the present policy climate which has relegated the scourge of manual scavenging to just an urban challenge, it is pertinent that the situation of rural sanitation be highlighted.
- While it is irrefutable that the Swachh Bharat Abhiyan has made unprecedented and positive behavioural and infrastructural changes with regard to the usage of toilets, India needs more effort and time to substantially reduce manual scavenging. Perhaps, at a policy level, the Swachh Bharat Abhiyan has addressed the issue of access to toilets, ignoring those cleaning them.

Conclusion

Given the gaps in assessment and laxity in implementation, it is unlikely that manual scavenging would end anytime soon. However, the judiciary has taken a proactive role in addressing this issue. There was a survey conducted to estimate the number of manual scavengers in India was held at the behest of the judgement passed by the Supreme Court in the matter of Safai Karamchari Andolan and others versus the Union of India and others.

> **PEPPER IT WITH**
> Article 17 and 18 of the Indian Constitution, Swachh Bharat Abhiyan, National Commission for Safai Karamcharis

The state and society need to take active interest in the issue and look into all possible options to accurately assess and subsequently eradicate this practice. It also warrants an engagement of all stakeholders for the proper introduction of mechanisation and ensuring that it is made available to all those who are forced to engage in this undignified practice.

Food Price Index of FAO

News Excerpt

Global food prices have surged to a new all-time high.

Pre-Connect

- The FAO Food Price Index (FFPI) is a measure of the monthly change in international prices of a basket of food commodities.
- It consists of the average of five commodity group price indices weighted by the average export shares of each of the groups over 2014-2016.

Highlights of the recent release

- The UN Food and Agriculture Organization's (FAO) Food Price Index averaged 159.3 points in March, up from the previous month's 141.4 points, which had itself broken an earlier record of 137.6 points scaled 11 years ago in February 2011.
- The release of the benchmark gauge for international food prices came on the day the Reserve Bank of India kept its key policy interest rates unchanged. This, even as its monetary policy

committee warned about "elevated global price pressures in key food items" imparting "high uncertainty" to the inflation outlook and "warranting continuous monitoring".

➤ The FAO index has exhibited huge volatility in the last two years through the Covid-19 pandemic and now the Russia-Ukraine war.

➤ The index had crashed to a four-year low of 91.1 points in May 2020, due to demand destruction triggered by pandemic-induced lockdowns across countries. But as demand returned with governments lifting economic activity and movement restrictions, supply chain disruptions — from shortages of everything, from harvesting labourers to packaging materials and shipping containers — came to the fore.

➤ The supply shortages have worsened with the Black Sea region tensions, leading to the index moving up almost 24 points or 17.5% between January and March.

➤ The FAO's cereal and vegetable oil price indices hit record highs of 170.1 points and 248.6 points, respectively, in March. That isn't surprising, given Russia and Ukraine's combined share of 28.3%, 19.5%, 30.8% and 78.3% in global exports of wheat, corn (maize), barley and sunflower oil, respectively.

➤ All these were projections for 2021-22 made by the US Department of Agriculture in early-February, before the Russian invasion happened. Since then, port closures in the Black Sea and Azov Sea, plus Russian banks being cut off from the international payments system, have resulted in massive shipping disruptions from key Agri-commodities supply region.

➤ FAO's meat and dairy price indices, too, averaged 120 points (an all-time high) and 145.2 points (highest since April 2014), respectively in March. These have possibly been driven by the increased cost of cattle feed ingredients (maize, soyabean, groundnut, mustard and cottonseed oilcake) and prices of animal fat (butter, ghee, beef tallow and pork lard) tracking vegetable fats (especially palm oil). Besides, lower milk production has been reported from major suppliers, including New Zealand, Western Europe and the US.

➤ From India's standpoint, the comfortable level of public wheat and rice stocks – way above the required minimum buffer norms – should provide some insulation against soaring international

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Food Price Index: Consists of the average of 5 commodity group price Indices, weighted with the average export shares of each of the groups for 2014-2016.

Meat Price Index: Based on 35 average export unit values/market prices of four meat types (bovine, pig, poultry and ovine) from 10 representative markets.

Dairy Price Index: Computed using 8 price quotations of four dairy products (butter, cheese, SMP and WMP) from two representative markets. Within each dairy product, prices are weighted by the trade shares of their respective markets, while the dairy products are weighted by their average export shares.

Cereals Price Index: Compiled using the International Grains Council (IGC) Wheat Price Index (an average of 10 different wheat price quotations), the IGC maize price index (an average of 4 different maize price quotations), the IGC barley price index (an average of 5 different barley price quotations), 1 sorghum export quotation and the FAO All Rice Price Index.

Vegetable Oil Price Index: Consists of an average of 10 different oils weighted with average export trade shares of each oil product for 2014-2016.

Sugar Price Index: Index form of the International Sugar Agreement prices with 2014-2016 as base.

RECORD LEVEL
FAO Food Price Index is at an all-time high
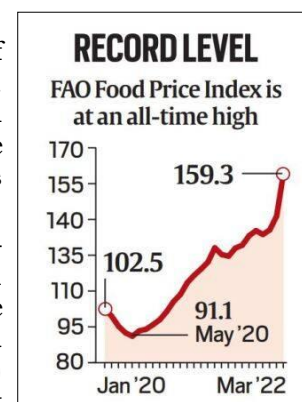
food prices. High global prices have enabled the country's agricultural exports to grow by 19.9% and reach a historic high of $50.21 billion in 2021-22.

Fertilisers

✓ The situation is worse in fertilisers. Di-ammonium phosphate (DAP) is currently being imported into India at $800 per tonne, including of cost and ocean freight. Muriate of potash (MOP) is available for no less than $450 a tonne. These are close to the prices that prevailed during the world food crisis of 2007-08.

✓ Together with fertilisers, the prices of their intermediates and raw materials such as rock phosphate, sulphur, phosphoric acid and ammonia have also skyrocketed due to a combination of demand-pull (from higher crop plantings) and cost-push (from oil and gas).

> **PEPPER IT WITH**
> Food and Agriculture Organisation, Food Safety and Standards Authority of India (FSSAI)

Analytica

- One reason why petroleum and Agri-commodity prices move in tandem is the bio-fuels link.
- When crude prices rise, blending ethanol from sugarcane and corn (maize) with petrol or diverting palm and soyabean oil for biodiesel production becomes that much more attractive.
- Cotton turns relatively affordable vis-à-vis petrochemicals-based synthetic fibres.
- Since corn is primarily an animal feed, its diversion to ethanol leads to substitution by other grains, including wheat, for livestock use. That, then, pushes up prices of foodgrains as well. The same happens to sugar, as mills step up the proportion of cane crushed for fermenting into alcohol.
- The present global cotton rates of 125 cents-plus per pound were last seen in July 2011. Corn and sugar prices, too, are ruling way higher compared to a year ago.
- Large price increases also tend to rub off on other farm produce through creation of positive "sentiment". Thus, skimmed milk powder prices averaged $3,627 per ton at the Global Dairy Trade online portal's latest fortnightly auction on November 3, the highest since the $3,810 of July 1, 2014. International coffee prices have nearly doubled in the last one year and, like most other Agri-commodities, also strengthened along with crude oil in the last three months.

Conclusion

The downside to this is that farmers are also paying much more for diesel, fertilisers and crop protection chemicals – whose prices have also gone up alongside Brent crude and other international commodity prices. The real challenge, whether it is to do with availability of fertilisers or monsoon rain, will come in the ensuing kharif planting season from June. The coming weeks will present a huge challenge for the government to make fertilisers (particularly phosphatic and potassic nutrients) available in reasonable quantities, to enable farmers meet the requirements for their wheat, mustard, potato, onions and rabi pulses crops. That would matter for food prices down the line — at a time when fuel and fertilisers are also on fire.

Integrated Command and Control Centres

News Excerpt

During a two-day Smart Cities Conference in Surat, Union Housing and Urban Affairs Minister announced that 80 Integrated Command and Control Centres (ICCCs), an integral component of the Smart Cities Mission, have already been set up, while the remaining 20 would be completed by August 15 this year.

Pre-Connect

➢ The Smart Cities Mission aims at developing 100 cities, which were shortlisted, into self-sustainable urban settlements.

➢ The mission was launched on June 25, 2015 and was projected as one aimed at transforming the process of urban development in the country.

DELHI: VIJAY NAGAR 9717380832 & **OLDRAJENDER NAGAR** 9811293743 | **JAIPUR**: 8290800441
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➢ Among its strategic components is 'area-based development', which includes city improvement (retrofitting), city renewal (redevelopment) and city extension (greenfield development), plus a pan-city initiative in which 'smart solutions' are applied covering larger parts of the city.

➢ Key focus areas of the scheme include construction of walkways, pedestrian crossings, cycling tracks, efficient waste-management systems, integrated traffic management and assessment.

➢ The scheme also assesses various indices to track urban development such as the Ease of Living Index, Municipal Performance Index, City GDP framework, Climate Smart Cities assessment framework, etc.

What is an Integrated Command and Control Centre?

➢ The Smart Cities Mission includes setting up ICCCs for each such city as a vital step. These ICCCs are designed to enable authorities to monitor the status of various amenities in real time. Initially aimed at controlling and monitoring water and power supply, sanitation, traffic movement, integrated building management, city connectivity and Internet infrastructure, these centres have since evolved to monitor various other parameters.

➢ The ICCCs are now linked to the CCTNS (Crime and Criminal Tracking Networks and Systems) network under the Ministry of Home Affairs.

➢ The ICCC acts of a smart city acts as a "nerve centre" for operations management. It processes a complex and large pool of data sets at an aggregated level. E.g., it is now the go-to source for integrated traffic management monitoring.

➢ The ICCC is the nodal point of availability of all online data and information relating to smart services included in a smart city, such as like LED street lighting, CCTV surveillance cameras, air quality sensors, smart parking system, WiFi, electricity and water supply and billing, GIS, e-hospitals, property tax management, estate management, engineering systems, asset management systems, and other services.

➢ During the pandemic, they also served as war-rooms for Covid-19 management.

How did the ICCCs help in management of Covid-19?

✓ During the peak of the first wave, when countries were struggling to figure out ways of combating the virus, the government used the ICCCs as war-rooms for managing the outbreak, with real-time surveillance and monitoring of districts across the country that were affected by the coronavirus disease.

✓ Converted into war-rooms, the smart cities' ICCCs used the central data dashboard and provided information about the status of Covid-positive cases in various administrative zones of these cities, officials aware of the exercise said. The war-rooms were also used for tracking people under quarantine and suspected Covid-19 cases.

Current status of the Smarts Cities Mission

▪ The ambitious project had an initial deadline of 2021 for the first lot of 20 smart cities out of the 100 selected. Although the project was announced in 2015, the cities were selected over a period of two years between 2016 and 2018, each with a deadline of completion within five years from the time of their selection.

▪ On the recommendation of NITI Aayog, the timeline was extended last year until 2023 due to delays caused by the pandemic. In its assessment, the NITI Aayog noted that progress on Sustainable Development Goals (SDGs) needed to be worked upon, and recommended the extended deadline after noting substantial delays caused by the pandemic. The period of implementation of SCM has been extended to June 2023.

> **PEPPER IT WITH**
> Heritage City Development & Augmentation Yojana, National Solar Mission

▪ According to current Ministry data, the SCM has so far covered over 140 Public-Private Partnerships, 340 'smart roads', 78 'vibrant public places', 118 'smart water' projects and over 63 solar projects.

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Conclusion

With the Centre preparing a 60-point action plan, the Ministry of Housing and Urban Affairs has begun work to finalise its recommendation for providing ICCCs as a service to states and smaller cities. Government aims to finalise an ICCC model and implement a pilot project across six major states — Uttar Pradesh, Maharashtra, Karnataka, Madhya Pradesh, Rajasthan and Tamil Nadu.

World Health Organisation & Traditional Medicine

News Excerpt

Prime Minister Narendra Modi, along with World Health Organization Director-General Dr Tedros Ghebreyesus, officially announced the first-of-its-kind WHO Global Centre for Traditional Medicine (GCTM) in Gujarat's Jamnagar.

Pre-Connect

➢ In 2016, the Ministry of AYUSH signed a project collaboration agreement (PCA) with the WHO in the area of traditional medicine. The aim was to create benchmarks for training in yoga, Ayurveda, Unani and Panchakarma, for traditional medicine practitioners.

➢ The collaboration also aimed at promoting the quality and safety of traditional medicine and consumer protection by supporting WHO in the development and implementation of the WHO Traditional and Complementary Medicine Strategy.

➢ At least 32 MoUs for undertaking collaborative research and development of traditional medicine have been signed with institutes, universities and organisations from the US, Germany, UK, Canada, Malaysia, Brazil, Australia, Austria, Tajikistan, Saudi Arabia, Ecuador, Japan, Indonesia, Reunion Island, Korea and Hungary.

➢ A constituent laboratory of the Council of Scientific & Industrial Research — Institute of Himalayan Bio-resource Technology (CSIR-IHBT), Palampur — has signed an MoU with National Research Institute of Chinese Medicine, Ministry of Health and Family Welfare, Taiwan, to collaborate in areas of mutual interest, which include medicinal plants, bioactive molecules, and, herbal formulations etc.

➢ The CSIR and the Bill & Melinda Gates Foundation have signed an MoU to identify opportunities for scientific and technological research between researchers within and outside India, including collaborations with foundation-funded entities in the areas including traditional medicine as well as beyond.

Traditional Medicine

➢ The WHO describes traditional medicine as the total sum of the "knowledge, skills and practices indigenous and different cultures have used over time to maintain health and prevent, diagnose and treat physical and mental illness".

➢ The WHO says that its reach encompasses ancient practices such as acupuncture, ayurvedic medicine and herbal mixtures as well as modern medicines.

➢ Traditional medicine in India is often defined as including practices and therapies, such as yoga, Ayurveda, Siddha, that have been part of Indian tradition historically, as well as others, such as homeopathy, that became part of Indian tradition over the years.

➢ Ayurveda and yoga are practised widely across the country; the Siddha system is followed predominantly in Tamil Nadu and Kerala; the Sowa-Rigpa system is practised mainly in Leh-Ladakh and Himalayan regions such as Sikkim, Arunachal Pradesh, Darjeeling, Lahaul & Spiti.

Global Centre for Traditional Medicine (GCTM)

✓ Dr. Tedros announced the establishment of the WHO GCTM in India. The Union Cabinet approved its establishment in Jamnagar with the signing of a host country agreement between the Government of India and the WHO. India has committed an estimated $250 million to support the GCTM's establishment, infrastructure and operations.

✓ The GCTM will aim to focus on evidence-based research, innovation, and data analysis to optimise the contribution of traditional medicine to global health. Its main focus will to develop norms, standards and guidelines in technical areas relating to traditional medicine.

✓ Ministry of AYUSH (Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homeopathy) said it will seek to set policies and standards on traditional medicine products and help countries create a comprehensive, safe, and high-quality health system.

> **PEPPER IT WITH**
> Siddha, Unani, Ayurveda, Panchakarma

✓ The GCTM will support efforts to implement the WHO's Traditional Medicine Strategy (2014-23), which aims to support nations in developing policies & action plans to strengthen the role of traditional medicine in pursuing the goal of universal health coverage.

✓ According to WHO estimates, 80% of the world's population uses traditional medicine.

Conclusion

The facility will not only work for Ayurveda, Unani, Siddha or Sowa-Rigpa, but will also focus on traditional medicines and therapies used across the globe such as in Africa, Arab, Islamic and Chinese healing practices. Jamnagar's contribution towards wellness will get a global identity with WHO's Global Centre for Traditional Medicine.

National Behaviour Change Communication Framework

News Excerpt

Swachh Bharat Mission-Urban 2.0, under the aegis of the Ministry of Housing and Urban Affairs, has launched the '**National Behaviour Change Communication Framework for Garbage Free Cities**' to strengthen the ongoing Jan Andolan for 'Garbage Free Cities'.

Pre-Connect

- Sanitation is a State subject under the Seventh Schedule of the Constitution.

- Swachh Bharat Mission – Urban (SBM-U) is more of a behaviour change programme and the results of garbage free cities are largely decided by the engagement of the Urban Local Bodies (ULBs) with the public and the 'Jan Andolan'.

- SBM-U under Ministry of Housing & Urban Affairs (MoHUA) helps the cities in Solid Waste Management (SWM) in various ways, which include financial assistance, technical protocols and standards, capacity building of ULBs, conducting Information, Education and Communication (IEC) campaigns for behaviour change, annual sanitation survey of cities (Swachh Survekshan), Information Technology (IT) platforms like Swachhatam portal and Swachhata App, protocols like Star Rating protocol of Garbage Free Cities (GFC), protocols for ODF+ and ODF++ and Water+ protocol, etc.

Swachh Bharat Mission-Urban 2.0

➢ Swachh Bharat Mission-Urban 2.0 and Atal Mission for Rejuvenation and Urban Transformation would be aimed at making cities free of garbage and ensuring safe water. It would also be ensured that no untreated water was discharged into any of the rivers in the country.

➢ Dr. B. R. Ambedkar believed in urban development as the means of removing inequality.

➢ People came to cities for better life. Even if they got employment, their living standard was often worse than what was in villages. It was a double whammy for workers, first they were away from their homes and then they were forced to live in deplorable conditions.

➢ India was processing about one lakh tons of waste every day. Under the new phases of the two missions, the garbage mountains that pile up at the borders of the cities would be processed and completely removed.

➤ Appreciating the contribution of the younger generation to the success of the first round of the Swachh Bharat Mission, Prime Minister observed that the toffee wrappers are no longer thrown on the ground but kept in pockets. Little children remind their elders not to litter.

➤ Launching the second edition of the Swachh Bharat Mission, Prime Minister applauded the country for fulfilling the pledge of making it Open Defecation Free (ODF).

National Behaviour Change Communication Framework for Garbage Free Cities

✓ Under SBM-U 2.0, the newly launched 'National Behaviour Change Communication Framework for Garbage Free Cities' shall serve as a guiding document and blueprint for States and Cities to undertake large scale multimedia campaigns along with intensive and focused inter-personal communication campaigns.

✓ Urban India has seen a social revolution in the field of sanitation, with one hundred and thirty crore citizens rallying behind the Hon'ble Prime Minister's clarion call for 'Clean India' to become a developmental priority during his Independence Day Speech on 15th August 2014.

✓ Over the last seven years, this Government policy for cleanliness has metamorphosed to become the world's largest behaviour change programme that champions the principles of sustainable urbanization, circular economy, **Reuse, Reduce, Recycle**, as well as the United Nations Sustainable Development Goals.

✓ As a consequence of SBM-U, the idea of Swachhata is now ingrained in the minds of citizens with diverse citizen groups coming together to take ownership of their city's cleanliness status and visibly improve it.

✓ At the core of the Mission lies the central belief that 'swachhata is everyone's business' and clear, consistent, and repetitive messaging around this core message has been done tirelessly over the years, through the use of traditional, digital, social media campaigns and large-scale interpersonal communication to ingrain this belief in the minds of all citizens.

✓ The framework focuses on intensifying messaging around the key focus areas of source segregation, collection, transportation, and processing of waste, plastic waste management, and remediation of legacy dumpsites to truly transform the urban landscape of India.

Conclusion

India have seen unprecedented levels of behaviour change being achieved under the Mission. Over the years, the national realization is that IEC Campaigns are most successful where local bodies have done adequate work alongside IEC activities. Campaigning and on-ground mobilization must go hand-in-hand for tangible impact to be felt on ground and across society. The citizenry must resolve to maintain the achievements earned during the last seven years of SBM while forging ahead towards achieving SBM-U 2.0's vision of 'Garbage Free Cities' through strategic partnerships and interventions.

| **PEPPER IT WITH** |
| Atal Mission for Rejuvenation and Urban Transformation |

ECONOMY

Raising and Accelerating MSME Performance (RAMP)

News Excerpt:

The Union Cabinet has approved a USD 808 million or Rs 6,062.45 crore, **World Bank assisted** programme on "Raising and Accelerating MSME Performance" (RAMP).

Pre-Connect:

- **Raising and Accelerating MSME Performance (RAMP):** It is a World Bank assisted **Central Sector Scheme**, supporting various Corona Virus Disease 2019 (COVID) Resilience and Recovery Interventions of the Ministry of Micro, Small and Medium Enterprises (MoMSME).

- It aims at improving access to market and credit, strengthening institutions and governance at the Centre and State, improving Centre-State linkages and partnerships, addressing issues of delayed payments and greening of MSMEs.

- In addition to building the MSME's capacity at the national level, the RAMP program will seek to scale up implementation capacity and MSME coverage in States.

Revised MSME Classification

Composite Criteria: Investment and Annual Turnover

Classification	Micro	Small	Medium
Manufacturing & Services	Investment < ₹ 1 cr. & Turnover < ₹ 5 cr	Investment < ₹ 10 cr. & Turnover < ₹ 50 cr.	Investment < ₹ 20 cr. & Turnover < ₹ 100 cr.

Need of RAMP:

- RAMP programme will address the generic and COVID related challenges in the MSME sector by way of impact enhancement of existing MSME schemes, especially, on the competitiveness front.

- Further, the programme will bolster the inadequately addressed blocks of capacity building, handholding, skill development, quality enrichment, technological upgradation, digitization, outreach and marketing promotion, amongst other things.

- RAMP programme, through enhanced collaboration with States, will be a job-enabler, market promoter, finance facilitator, and will support vulnerable sections and greening initiatives.

- In States where the presence of MSMEs is on the lower side, the programme will usher in larger formalization resulting from the higher impact of the schemes covered under RAMP.

- RAMP will complement the "AtmaNirbhar Bharat" mission by fostering innovation and enhancement in industry standards, practices and provide the necessary technological inputs to the MSMEs to make them competitive and self-reliant, enhancing exports, substituting imports, and promoting domestic manufacturing.

- RAMP was formulated and proposed by the Government of India, for strengthening MSMEs in line with the recommendations made by U K Sinha Committee, KV Kamath Committee and Economic Advisory Council to the Prime Minister (PMEAC).

RAMP would help as a:

- ❖ **Policy Provider:** Through the enhanced capacity for evidence-based policy and program design.
- ❖ **Knowledge Provider:** Through bench-marking, sharing and demonstrating best practices/success stories.
- ❖ **Technology Provider:** Providing access to high-end technology resulting in the digital and technological transformation of MSMEs through state of art Artificial Intelligence, Data Analytics, and Internet of things (IoT), Machine Learning etc.

It will directly or indirectly benefit all 63 million enterprises that qualify as MSMEs.

Implementation of RAMP:

✓ The programme has identified two results areas after the preliminary missions and studies:
  o Strengthening Institutions and Governance of the MSME Program, and
  o Support to Market Access, Firm Capabilities and Access to Finance.

✓ Funds would flow through RAMP into the Ministry's budget against Disbursement Linked Indicators (DLIs) to support ongoing MoMSME programmes, focusing on improving market access and competitiveness.

✓ The disbursement of funds from World Bank towards RAMP would be made on fulfilling the following Disbursement Linked Indicators:
  o Implementing the National MSME Reform Agenda
  o Accelerating MSME Sector Centre-State collaboration
  o Enhancing effectiveness of Technology Upgradation Scheme (CLCS-TUS)
  o Strengthening Receivable Financing Market for MSMEs
  o Enhancing Effectiveness of Credit Guarantee Trust for Micro and Small Enterprises (CGTMSE) and "Greening and Gender" delivery
  o Reducing the incidence of delayed payments

✓ Important component of RAMP is preparation of **Strategic Investment Plans (SIPs),** in which all states/UTs, will be invited.

✓ **Overview and monitoring:**
  o The overall monitoring and policy overview of RAMP would be done by an apex **National MSME Council,** headed by Minister for MSME, including representation from various Ministries and supported by a secretariat.
  o A **RAMP programme committee** headed by the Secretary of MoMSME to monitor the specific deliverables under RAMP.
  o Further, **for day to day implementation** there would be programme management units at the National level and in States, comprising professionals and experts competitively selected from the industry to support MoMSME and States, to implement, monitor and evaluate RAMP programme.

> **The SIPs would include:**
>
> ❖ An outreach plan for identification and mobilisation of MSMEs under RAMP,
> ❖ Identify key constraints and gaps,
> ❖ Set milestones and project the required budgets for interventions in priority sectors including renewable energy,
> ❖ Rural & non-farm business,
> ❖ Wholesale and retail trade,
> ❖ Village and cottage industries,

MSME sector and its role in Indian economy:

▪ MSMEs employ around 120 million persons, becoming the second-largest employment generating sector after agriculture.

▪ With approximately 45 lac units throughout the country, it contributes about 6.11% of GDP from manufacturing and 24.63% of the GDP from service activities.

▪ MSME ministry targets to increase its contribution towards GDP by up to 50% by 2025 as India moves ahead to become a $5 trillion economy

▪ Contributing around 45% of overall Indian exports MSMEs promote all-inclusive growth by providing employment opportunities, especially to people belonging to weaker sections of the society in rural areas.

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- MSMEs in tier-2 and tier-3 cities help in creating opportunities for people to use banking services and products, which can amount to the final inclusion of the contribution of MSMEs for the economy.
- MSMEs promote innovation by providing an opportunity to budding entrepreneurs to help them build creative products hey and thereby boost competition in business and fuel the growth.
- MSMEs are an important sector for the Indian economy and have contributed immensely to the country's socio-economic development.
- It not only generates employment opportunities but also works hand-in-hand towards the development of the nation's backward and rural areas.
- Because of the contribution to the economy it is generally referred to as the **'Backbone of the country.'**

Government steps taken aftermath the COVID-19:

- The MSME sector has been announced to be within the purview of the Atma-Nirbhar Bharat Abhiyan (ANBA). Subsequently, the Finance Minister announced six regulatory measures as part of the ANBA especially for the MSME sector:
- Revising the definition of MSME under applicable law is intended to bring more MSME enterprises under the purview of being classified as MSMEs so that they can reap benefits associated with it and grow under the watchful eyes.
- The collateral-free automatic credit line and the subordinate debt to MSMEs may be a game-changer for a sector which is finding it harder and harder to find credit support from banks and other financial institutions.
- The creation of 'Fund of Funds' was announced with a corpus of Rs 10,000 crores where the government through the funds will pick up an equity stake in the MSMEs with growth potential and viability.
- Online marketplace for MSMEs is intended to help all market participants, including end-consumer.
- Startups are not explicitly covered in the definition of MSME; however, startups operating in manufacturing and ancillary services sector especially medical devices, robotics etc. may consider registering themselves as MSME.

ANBA may be construed as import substitution. Given the fact that India is a net importer, import substitution will empower us to shift away from our dependence on other countries.

Key drivers of the MSME sector

- ❖ Favorable industrial policies: Ease of doing business is an essential factor, achieved through various policies, incentives, labour laws and regulatory clearance.
- ❖ Encouragement of FDIs: Liberalised FDI policies led to overall productivity and competitiveness in the MSME sector.
- ❖ Technology: Has played a crucial role in enhancing operations in the MSME sector and connecting with global value chains.
- ❖ Access to capital: The government finances MSMEs through schemes such as Credit Guarantee Trust Fund for Micro & Small Enterprises (CGTMSE) and Credit Linked Capital Subsidy (CLCSS).

Major Government schemes for MSME sector:

- ❖ Procurement and Marketing Support (PMS) scheme
- ❖ Credit Linked Capital Subsidy Component (CLCS & TU Scheme)
- ❖ Credit Guarantee Scheme for Micro & Small Enterprises (CGTMSE)
- ❖ Micro & Small Enterprises Cluster Development Programme (MSE– CDP)
- ❖ Scheme of Fund for Regeneration of Traditional Industries (SFURTI)
- ❖ A Scheme for Promoting Innovation, Rural Industry & Entrepreneurship (ASPIRE)
- ❖ ZED Certification Scheme. Etc.

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Way forward/A Long Term Strategy for Sustainability of MSMEs:

→ Access to Information Technology Enabled Services (ITES) at an affordable cost would bring the MSME sector on a level playing field with bigger players.

→ To promote innovation and upscale MSMEs to withstand global competitions.

→ **Technological upgradation** of the MSMEs to minimize external risks to tolerable levels.

→ Encouraging **corporatisation of the MSME sector**

→ Encouraging innovations through setting up of large number of business incubators in educational institutions;

→ Formulation of long term policies for the timely receipt of payments by MSMEs A Long Term Strategy for Sustainability of MSMEs

→ Financial Assistance to MSMEs

    o Prioritize lending to MSMEs from banks by including small enterprises in the earmarked priority sector and raising sub-target limit to 10% from 7.5%

    o Collateral free & MUDRA small loans to encourage self employment.

    o Relaxing ceiling on working capital by banks.

    o Safe Trade Policy to be devised for sectors dependent on Chinese imports e.g. Chemicals, Pharmaceuticals and electronics sectors, etc.

> **PEPPER IT WITH**
>
> Financial inclusion and Schemes mentioned

India Post Payments Bank's Fincluvation

News Excerpt:

India Post Payments Bank (IPPB), announced the launch of Fincluvation– a joint initiative to collaborate with Fintech Startup community to co-create and innovate solutions for financial inclusion.

Pre-Connect:

- IPPB aims to provide every household in India an access to efficient banking services and enable them to become financially secure and empowered.

- India Post Payments Bank, abbreviated as IPPB, is a division of India Post which is under the 100% ownership of the Department of Post, a department under Ministry of Communications of the Government of India.

- IPPB was launched as a pilot project on 30 January 2017 in Ranchi (Jharkhand) and Raipur (Chhattisgarh), with the objective of being present across India by the FY 2018-2019.

- IPPB was launched by the Prime Minister on September 1, 2018.

- IPPB has expanded its strength across India covering post offices, through a network of 650 IPPB branches/controlling offices, working on a hub and spoke model.

- The bank has been set up with the vision to build the most accessible, affordable and trusted bank for the common man in India.

- The fundamental mandate of IPPB is to remove barriers for the unbanked and under-banked and reach the last mile leveraging a network comprising 160,000 post offices (145,000 in rural areas) and 400,000 postal employees.

About Fincluvation:

The Department of Post (DoP) and India Post Payments Bank (IPPB) invite innovative startups to participate in the 75th Anniversary of Indian Independence, "Azadi ka Amrit Mahotsav" by developing and deploying solutions for Financial Inclusion.

➢ Fincluvation is a joint initiative to collaborate with Fintech Startup community to co-create and innovate solutions for financial inclusion.

➢ Fincluvation is open for startups who wish to build technology-led solutions and aspire to work for the 500 million underserved Indians.

➢ Through Fincluvation, DoP and IPPB focus on bringing technological innovation in below tracks:
   o Instant Paperless Micro Credit using alternate data sources
   o Integration of Digital Payments with money order services of India Post
   o If your product solves any problem (other than the ones mentioned above) that is relevant to us or the customers we cater to, we would like to know more about it.

> **Fincluvation will have five stages:**
>
> ❖ Ideation
> ❖ Solution Evaluation
> ❖ Solution design and mentoring
> ❖ Proof of Concept
> ❖ Partnership

How can Fincluvation benefit startups?

✓ **Add scale to startups solution**- This is an exciting opportunity to scale up startups solution by selling their product and services to a readymade customer base of 430 million customers.

✓ **First-mover advantage**- Fincluvation is a platform to acquire the mindshare of Bharat and become the preferred partner in a segment where competition is low and the opportunity to serve is high.

✓ **Access to most extensive phygital infrastructure**- Fincluvation offers direct access to a customer base of 500 million customers and a channel of more than 200,000-strong postmen with an unprecedented reach across the country.

✓ **Mentorship by experts**- Selected startups will receive mentorship and support from industry experts, government advisors, and policymakers.

✓ **Fully commercial proof of concept**- Selected startups will get an opportunity to partner with IPPB and /or DoP to demonstrate their solution and undergo a commercial agreement for the proof of concept in selected geographies.

Payment Banks

PAYMENTS BANKS

WHO CAN PROMOTE
➢ Prepaid card issuers, telecom companies, NBFCs, business correspondents, supermarket chains, corporates, realty sector co-ops & PSUs

WHAT THEY MUST DO
➢ Have a minimum capital of Rs 100cr
➢ Maintain 75% of deposits in govt bonds
➢ Maintain 25% of deposits in other banks
➢ Have at least 26% investment by Indians
➢ Get listed if net worth crosses Rs 500cr
➢ Have 25% of branches in unbanked areas
➢ Be fully networked and technology driven
➢ Have Rs 1 lakh cap for deposits in one a/c

WHAT THEY CAN DO
➢ Offer internet banking
➢ Sell mutual funds, insurance, pensions
➢ Offer bill payment service for customers
➢ Have ATMs and business correspondents (BC)
➢ Can function as BC of another bank

WHAT THEY CAN'T DO
➢ Offer credit cards
➢ Extend loans
➢ Handle cross-border remittances
➢ Accept NRI Deposits

✓ **Increased revenue with increased scale**- Startups can increase their revenue by using DoP and IPPB infrastructure to reach the large customer base effectively and conveniently.

Analytica:

Through Fincluvation:

- Startups will be encouraged to develop solutions for inclusive credit products that would be beneficial to the target population and take them to their doorsteps through the massive postal network.
- The convergence of technology and traditional postal services such as the money order service will be interoperable with digital banking services. They can also create any market-led solution that can help solve all the problems relevant to the department of posts in serving target customers.
- Fincluvation will allow startups to work with experts from India Post to develop solutions and run pilots using the postal network and India Post Payments Bank's technology stack.
- Fincluvation mentors will work closely with startups to tweak products to customer needs and align the go-to-market strategies with operating models of India Post.
- Startups will also be able to use the physical infrastructure that the department of posts has across the country.

Conclusion:

Intersection of technology with financial services coupled with traditional distribution networks is opening up new set of business opportunities. Conventional model of technology procurement led product creation by banks often lacks value in user experience leaving huge gap between customer expectations and service delivery. Traditional technology firms fail to meet these expectations with a deficit of ownership in product creation. "Our citizens have varied and complex needs that need careful thought, empathetic product design, and rapid prototyping among users. Fincluvation will lead to crowd-in the best minds to develop technology-led financial solutions for Bharat.

PEPPER IT WITH
Payment banks, small finance banks, scheduled commercial

All-India Household Consumer Expenditure Survey

News Excerpt:

The All-India Household Consumer Expenditure Survey, usually conducted by the National Statistical Office (NSO) every five years, is set to resume this year after a prolonged break.

Pre-Connect:

- **Consumer Expenditure Survey (CES)-** The CES is traditionally a quinquennial (recurring every five years) survey conducted by the government's National Sample Survey Office (NSSO) that is designed to collect information on the consumption spending patterns of households across the country, both urban and rural.

Counting the spending | The All-India Households' Consumer Expenditure Survey will be conducted between July 2022 and June 2023

What is it? Usually carried out every five years, the survey helps assess poverty levels and consumption patterns across the country, and rebase GDP calculations

What's the big deal? The last survey whose findings were made public was conducted in 2011-12

Why this long pause? A survey was conducted in 2017-18 too, but its results were not released owing to 'quality' concerns. It reportedly reflected the first drop in monthly per capita household spending since 1972-73, with a rise in poverty incidence

  - The data gathered in this exercise reveals the average expenditure on goods (food and non-food) and services and helps generate estimates of household Monthly Per Capita Consumer Expenditure (MPCE) as well as the distribution of households and persons over the MPCE classes.

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- India hasn't had any official estimates on per capita household spending, used to arrive at estimates of poverty levels in different parts of the country and to review economic indicators like the Gross Domestic Product (GDP), since 2011–12.
- The government had junked the findings of the last Survey, conducted in 2017–18, citing "data quality" issues.

Significance of CES:

➢ The estimates of monthly per capita consumption spending are vital in gauging the demand dynamics of the economy as well as for understanding the shifting priorities in terms of baskets of goods and services, and in assessing living standards and growth trends across multiple strata.

➢ From helping policymakers spot and address possible structural anomalies that may cause demand to shift in a particular manner in a specific socio-economic or regional cohort of the population, to providing pointers to producers of goods and providers of services, the CES is an invaluable analytical as well as forecasting tool.

➢ Apart from the omnibus 'Key Indicators of Household Consumer Expenditure in India, 2011-12' the Ministry released as many as six detailed reports on varied aspects of household consumer expenditure based on the survey. These included:

    o The 'Level and Pattern of Consumer Expenditure 2011-12', 'Household Consumption of Various Goods and Services in India, 2011-12' and the invaluable 'Nutritional Intake in India, 2011-12'.

    o There were also detailed findings on the energy sources used by households for cooking and lighting and another report on the Public Distribution System and other sources of household consumption.

Why 2017-18 survey was controversial and junked?

✓ A leaked version of the 2017-18 survey, have posited that the data revealed a decline in the MPCE, making it the first such drop since 1972-73. In real terms (adjusted for inflation) the MPCE slid by 3.7%.

✓ While the inflation-adjusted consumption expenditure in rural areas declined by 8.8% over the six-year period, urban households reported a marginal 2% increase.

✓ The government official position noted that there was a significant increase in the divergence in not only the levels in the consumption pattern but also the direction of the change when compared to the other administrative data sources like the actual production of goods and services.

✓ The government added, "Concerns were also raised about the ability/sensitivity of the survey instrument to capture consumption of social services by households especially on health and education. The matter was thus referred to a committee of experts which noted the discrepancies and came out with several recommendations including a refinement in the survey methodology.

Conclusion:

There was a significant increase in the divergence after the COVID-19 in not only the levels in the consumption pattern but also the direction of the change when compared to the other administrative data sources like the actual production of goods and services. There have been concerns about the ability/sensitivity of the survey instrument to capture consumption of social services by households especially on health and education. The real data in this regard becomes very significant for best policy making decisions. All the concerns should be taken care of with the participation of all the stakeholders' like-government, economists, and statisticians.

| **PEPPER IT WITH** |
| NSO, Poverty estimation in India, Tendulkar Committee |

RBI's Report on Currency and Finance

New Excerpt

The Indian economy may take more than a decade to overcome the losses caused by the outbreak of COVID-19 pandemic, according to Reserve Bank of India's (RBI) Report on Currency and Finance (RCF).s

Pre-connect

- The theme of the Report is "Revive and Reconstruct" in the context of nurturing a durable recovery post-COVID and raising trend growth in the medium-term.
- The Report reflects the views of the contributors and not of the Reserve Bank.

Highlight of the report

- ➢ The pandemic is a watershed moment and the structural changes catalysed by the pandemic can potentially alter the growth trajectory in the medium term.
- ➢ According to the report, feasible range of medium-term steady GDP growth in India works out to 6.5%-8.5%.
- ➢ Price stability is a necessary pre-condition for strong and sustainable growth.

Reform measures suggested by the report

- ✓ The blueprint of reforms proposed in the Report revolves around seven wheels of economic progress viz., aggregate demand; aggregate supply; institutions, intermediaries and markets; macroeconomic stability and policy coordination; productivity and technological progress; structural change; and sustainability.
- ✓ Timely rebalancing of monetary and fiscal policies will likely be the first step in this journey.
- ✓ Reducing general government debt to below 66 per cent of GDP over the next five years is important to secure India's medium-term growth prospects.
- ✓ Suggested structural reforms include enhancing access to litigation free low-cost land; raising the quality of labour through public expenditure on education and health and the Skill India Mission; scaling up R&D activities with an emphasis on innovation and technology; creating an enabling environment for start-ups and unicorns; rationalisation of subsidies that promote inefficiencies; and encouraging urban agglomerations by improving the housing and physical infrastructure.
- ✓ Industrial revolution 4.0 and committed transition to a net-zero emission target warrant a policy ecosystem that facilitates provision of adequate access to risk capital and a globally competitive environment for doing business.
- ✓ India's ongoing and future free trade agreement (FTA) negotiations may focus on transfer of technology and better trade terms for high quality imports from partner countries to improve the outlook for exports and domestic manufacturing.

Conclusion

Clearly, it is not enough to stabilise the economy and pull it out of the depths to which it had plunged during the first wave of infections and the dents made by the succeeding waves. The challenge is to generate a virtuous cycle of greater opportunity for entrepreneurs to innovate and invest; businesses to attract more capital and technology; and fiscal space to manage the distributional effects of the pandemic while expanding public investment in physical infrastructure and human capital.

MSME Sustainable (ZED) Certification Scheme

News Excerpt

Union Minister for Micro, Small and Medium Enterprises launched MSME Sustainable (ZED) Certification Scheme, interacts with Principal Secretaries of States/UTs on synergizing efforts, developing focused approach to prepare MSME ecosystem for the future.

Pre-connect

- ✓ MSME Sustainable (ZED) Certification Scheme is an extensive drive to enable and facilitate MSMEs adopt Zero Defect Zero Effect (ZED) practices and motivate and incentivize them for ZED Certification while also encouraging them to become MSME Champions.

- ✓ Through the journey of ZED Certification, MSMEs can reduce wastages substantially, increase productivity, enhance environmental consciousness, save energy, optimally use natural resources, expand their markets, etc.

- ✓ All MSMEs registered with the UDYAM registration portal (of the MoMSME) will be eligible to participate in MSME Sustainable (ZED) Certification and avail related benefits/incentives.

- ✓ Under the Scheme, MSMEs will get subsidy as per the following structure, on the cost of ZED certification:
  - ☐ Micro Enterprises: 80%
  - ☐ Small Enterprises: 60%
  - ☐ Medium Enterprises: 50%

- ✓ There will be an additional subsidy of 10% for the MSMEs owned by Women/SC/ST Entrepreneurs OR MSMEs in NER/Himalayan/LWE/Island territories/aspirational districts.

- ✓ In addition to above, there will be an additional subsidy of 5% for MSMEs which are also a part of the SFURTI OR Micro & Small Enterprises - Cluster Development Programme (MSE-CDP) of the Ministry.

- ✓ A provision of up to Rs. 5 lakhs (per MSME) will be made available for handholding and consultancy support for MSMEs under ZED Certification for assisting them to move towards Zero Defect Zero Effect solutions.

- ✓ The MSMEs can also avail a number of other incentives offered for ZED Certification under the MSME KAWACH (COVID-19 Support) initiative.

- ✓ Every MSME that embarks on the journey of ZED will have to take a "ZED Pledge" before applying for a ZED Certification Level (Bronze, Silver, Gold).

- ✓ After taking the ZED Pledge, the MSME can apply for any Certification Level if it feels that it can fulfil the requirements mentioned in each level.

- ✓ The intent of taking a ZED Pledge is to take a "pre-commitment" or a solemn promise by MSMEs to uphold the values of Zero Defect Zero Effect in their practices and to urge them to move ahead on the journey of ZED.

- ✓ A surveillance assessment (after a period of 18 months of achieving ZED Certification) will be conducted by QCI's Accredited Assessment Agencies as a part of the ZED Certification.

Components of the scheme:

- ➢ Industry Awareness Programmes/Workshop
- ➢ Training Programmes
- ➢ Assessment & Certification
- ➢ Handholding

➤ Benefits/Incentives
➤ PR campaign, Advertising & Brand Promotion
➤ Digital Platform

Analytica

✓ The announcement of Make in India and Zero Defect Zero Effect put in perspective the governments' intent to change the course of economy by focusing on manufacturing as an engine to sustained growth.
✓ In order to build the ecosystem to implement the idea, three important components emerged as the vehicle for this new transformation:
  o The Ease of Doing Business in India.
  o The confidence in quality of source material, components and services.
  o Making available competent human resource to drive the change.
✓ The ecosystem around ZED model is calibrated to make aware, assess & certify, counsel, handhold MSMEs and ensure that they rise up the ZED ladder, thus enhancing their competitiveness in the global marketplace and making them truly "Atmanirbhar".
✓ It also, as a consequence, provides career opportunities for the youth in India.
✓ ZED has the potential to become a national movement and that it aims to provide a roadmap to global competitiveness for the MSMEs of India.
✓ ZED will not only attempt to improve productivity & performance, it has the capability to change the mind-set of manufacturers and make them more environment conscious.

| **PEPPER IT WITH** |
| PMEGP, SFUTI, MSE-CDP, RAMP Scheme, ATI, Udyam Registration |

Conclusion

It is imperative to develop the strategic roadmap to increase the outreach of the interventions and fast-track the last mile Entrepreneurship. Moreover, MSMEs urgently need support and strength in the areas of access to finance, market linkages, technology upgradation, capacity building, innovation/ideation and industrial infrastructure development etc.

Farmer Producer Organization

News Excerpt:

Recently a National conference of Cluster Based Business Organisations (CBBOs) under central sector scheme of formation and promotion of 10,000 Farmer Producer Organizations (FPOs) was held. At the conference Union Agriculture Minister also launched the logo for 10,000 FPOs Scheme.

Pre-Connect:

- The FPOs are registered under either Companies Act 2013 or State's Cooperative society Act with minimum number of 300 farmers in plain areas and 100 farmers in hilly and North East Region, and it is an emerging as one of the most effective tools of aggregation.
- These Producer Companies are designed in such a manner that they are professionally managed and are able to take care of agricultural supply chain.
- Initially, the pilot programme involved the mobilization of approximately 2.50 lakh farmers into 250 FPOs (each with an average membership of 1000 farmers) across the country, under two sub-schemes of the **Rastriya Krishi Vikas Yojana (RKVY)**, namely:

➤ The National Vegetable Initiative for Urban Clusters and

➤ The Programme for Pulses Development for 60,000 rain-fed villages.

- In the Union budget of 2019-20, the Government of India has declared its **intention to promote 10,000 FPOs** by the years 2024-25 so as to ensure economies of scale for farmers in the country.

- Realizing the need to form and promote FPOs across the country, Government formulated a dedicated **Central Sector Scheme "Formation & Promotion of 10,000 Farmer Producer Organizations** (FPOs) and the same was launched by Hon'ble Prime Minister on 29.02.2020 at Chitrakoot (UP) for implementation.

- Farmers Producers Organization provides end-to-end support and services to the small farmers, and cover technical services, marketing, processing, and others aspects of agriculture inputs.

Essential Features of FPOs:

o It is formed by a group of producers for either farm or non-farm activities.

o It is a registered body and a legal entity.

o Producers are shareholders in the organization.

o It deals with business activities related to the primary produce/product.

o It works for the benefit of the member producers.

o A part of the profit is shared amongst the producers.

o Rest of the surplus is added to its owned funds for business expansion.

About 'Formation and Promotion of 10,000 Farmer Produce Organizations (FPOs):

❖ This is a central sector scheme launched in 2020.

❖ In this scheme, the emphasis is given on small and marginal farmers to form FPOs and enhances economic strength, bargaining power & market linkages of farmers for their empowerment.

❖ The scheme is based on the produce cluster approach and to enhance the production, productivity, market access, promote diversification, value addition, processing, and export and create Agriculture based employment opportunities with the result of economically empowered farmers.

❖ While adopting a cluster-based approach, the formation of FPOs will be focused on '**One District One Product'** for the development of product specialization.

❖ Financial benefit and technical handholding for FPOs registered either under the **Companies Act, 2013 or States' Co-operative Societies Act.**

Financial Assistance: Under the scheme, there is a provision for financial support of a maximum of Rs.18.00 lakh per FPO for 3 years as a management cost to make them sustainable and economically viable. FPO with a minimum farmer-members size of 300 shall be eligible under the scheme in plains, while in North-Eastern and Hilly areas (including such other areas of UTs), a size of 100 shall be eligible for equity grant.

❖ To strengthen the financial base of FPOs, there is also a provision for a matching equity grant of a maximum of Rs. 2000/- per member with a ceiling of Rs. 15 lakh /FPO and Credit Guarantee facility up to a bankable project loan of Rs. 2.00 crore respectively.

❖ Under the scheme, CBBOs have been provisioned with the critical role to engage themselves all along the value chain starting right from the mobilization of farmers, baseline survey, identification of produce clusters, formation of groups, registration, and capacity building to the preparation of the business plan, execution thereof with assurance to provide the market to the FPOs.

Advantage of FPOs:

✓ Numerous reports and studies have clearly captured and established the positive role of FPOs. Some of the important benefits ascribed to FPOs are as under: Cost of production or cultivation may be reduced by procuring all necessary inputs in bulk at wholesale rates, as well as use of custom hiring services of farm equipment.

✓ Aggregation of produce and bulk transport reduce marketing cost, therefore, enhancing the net value accruals to the producer.

✓ Building scale through aggregation of commodities lends advantage of economies of scale and attracts traders, processors, and retailers to the farm gate.

✓ Access to modern technology, extension services and joint training on Good Agricultural Practices (GAP) and ensuring traceability of agriculture produce.

✓ Post-harvest losses can be minimized through joint storage and value addition facilities.

✓ Adverse price fluctuations and distress sale can be managed or avoided; if good practices are imbibed. These include contract farming agreements, stocking in own common facilities or leased storage facilities with credit support, etc.

✓ Ease in communication for dissemination of information about prices and volumes in different locations and other farming-related advisories thereby reducing in formation asymmetries.

✓ Access to institutional credit against stock, without collateral by virtue of joint liability implicit in the FPO framework.

✓ Movement up the value chain and graduation into primary and secondary processing will be possible as minimum scale economies are reaped. Greater bargaining power to farmers and greater quality orientation in production and processing activities.

Recent Scenario of FPOs in the Country:

➢ More than 5.87 lakh farmers have been mobilized under the Scheme.

➢ About 3 lakh farmers have been registered as shareholders of the FPOs.

➢ Equity contribution by farmer members amounts to INR 36.82 crores.

➢ Total equity base of the FPOs, including the Equity Grant released, amounts to INR 50 crores.

➢ 201 women focused FPOs have been registered.

➢ 481 FPOs registered in tribal districts.

Challenges in Promotion of FPOs:

✓ Difficulties and Delay in farmers' mobilization.

✓ Limited organizational and management capacity of FPOs.

✓ Need for incubation and handholding support to FPOs.

✓ Membership base of an FPO: Evolving an FPO with 1000 members is a time consuming and sometimes difficult task.

✓ The limited capacity of FPOs to raise necessary equity.

✓ Policy level challenges.

✓ Limited capability to autonomously invest in primary/ secondary processing, storage and custom hiring facilities.

✓ Inability of FPOs to access institutional credit sans collateral.

Way forward

→ Capacity building and training of FPO promoting organizations is critical.

→ The need for a competent National Programme Management Agency is apparent.

→ Capacity building and training of BoDs/Leaders of FPOs, as well as their manager/ CEOs, is also important.

→ There is also a need for professional handholding and support of FPOs to help develop their capabilities and offer efficient services to members. Thus, there is a need for competent Cluster Based Business Organisations (CBBOs) with capability to effectively mobilise farmers and to offer the necessary range of incubation services. These CBBOs need to have demonstrated capabilities.

→ The FPO concept needs to be propagated and widely shared among stakeholders and several policy-level initiatives are required to be considered:

o FPOs need to be provided seed, pesticide, insecticide, fertilizer sales license, as well as APMC license and dealerships on priority basis.

o All the farmer centric schemes of the Government may be routed through FPOs to the extent feasible.

o Reforms in the APMC Act.

o Relaxation on extent of penalty for delayed filing of statutory documents and returns under the Companies act.

Conclusion

The FPOs which are being formed for the benefit of small, marginal and landless farmers, will be managed in such a way that these farmers get access to technological inputs, finances, and better markets and prices for their crops, so as to fulfil the target of doubling farmers' incomes by the year 2022. The FPOs will help to reduce the cost of production and marketing, also help to improve production in the agricultural and horticultural sectors. This will also help to increase employment opportunities.

Parliamentary Standing Committee on Finance

News Excerpt

Recently the Parliamentary standing committee on finance has suggested developing the Udyam portal into **a one-stop central data repository** for the MSME sector by linking it with other databases such as CIBIL data, utility bills data etc. The portal is currently already linked with the **Government e-Marketplace (GeM), Income Tax, GST** and **Trade Receivables Discounting System (TReDS) portals**.

Key announcements/Recommendations:

▪ Finance minister has announced linking the **Udyam portal with e-Shram, National Career Service (NCS) and Atmanirbhar Skilled Employee-Employer Mapping (ASEEM)** in the budget to enhance skilling and recruitment for MSMEs.

▪ The needs to create a '**UPI for MSME Lending' for** all MSMEs in the formal sector to access small-ticket working capital loans in a mobile-based, contactless, paperless, and low-cost way.

▪ Enabling the **digital vision of MSME** credit to come to life, the committee believe that information needs to be used to replace physical collateral.

▪ For Udyam-registered MSMEs, the panel also recommended a **'Vyapar' credit card scheme for MSMEs under SIDBI akin to the Kisan Credit Card (KCC) scheme** of the National Bank for Agriculture and Rural Development (NABARD) to bring crores of MSMEs into the formal financial system including street vendors and kirana stores.

PEPPER IT WITH
Rules Committee, Parliamentary Standing Committees, KCC, Vypar credit card scheme, MSMEs, ASEEM portal, e-Shram portal, UPI, Udyam Portal

- As per the committee, credit card can provide short-term working capital loans at low-interest rates and can be further extended to provide collateral-free loans like the Rs 1 lakh collateral-free facility available **to KCC holders.**
- The committee strongly recommend that survey/census of MSMEs in line with the changed definition, be conducted at the earliest so as to estimate the actual number of MSMEs in the country along with realistic assessments of their credit requirements
- As per the Committee, lenders may not be comfortable giving large ticket loans to MSMEs over a five or 10-year period without collateral, unsecured small-ticket loans over a 60 or 90-day period can be profitable for lenders as the transaction cost under the cash flow-based approach can be brought down.

About Standing Committee on Finance:

- The committee on Finance is one of the parliamentary standing committees under the 24 Lok Sabha Standing Committees.
- On the recommendation of Rules Committee of Lok Sabha**,** the Parliament of India introduced the system of Department Related Standing Committees (DRSCs) in 1993. Initially, consisting of 17 Committees, the DRSCs System was expanded to 24 Committees after reorganization in 2004.
- **Composition of Committee:** The Committee, constituted under **the Rules of Procedure and Conduct of Business in Lok Sabha,** consists **of 31 members**-
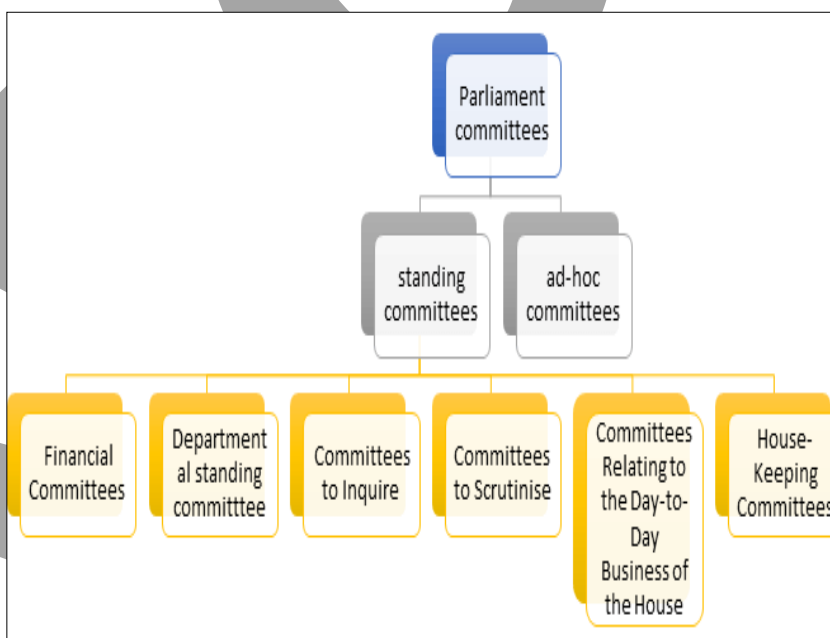
- 21 members from Lok Sabha, nominated by the Speaker, Lok Sabha and
- 10 from Rajya Sabha nominated by the Chairman, Rajya Sabha.
- ➢ The Chairman of the Committee is appointed by the Speaker from amongst the members of the Committee from Lok Sabha. The term of office of the members of the Committee does not exceed one year.
- ➢ **A minister is not eligible to be nominated** as a member of any of the standing committees. In case a member, after his nomination to any of the standing committees, is appointed a minister, he then ceases to be a member of the committee.
- ➢ **Term of office:** The term of office of each standing committee is one year from the date of its constitution.

The matters concern with Ministries examined by the Committee on Finance examines:
- ✓ The Standing Committee on Finance examines matters concerned with the following Ministries/Departments:
  - **Ministry of Finance** :–

(a) Departments of Economic Affairs

(b) Departments of Financial Services

(c) Departments of Expenditure

(d) Departments of Revenue

(e) Departments of Investment & Public Asset Management

✓ Ministry of Corporate Affairs

✓ Ministry of Planning (NITI Aayog)

✓ Ministry of Statistics and Programme Implementation.

Functions of the committee:

+ To consider the Demands for Grants of the concerned Ministries/Departments and make Reports on the same to the Houses;

+ To examine such Bills pertaining to the concerned Ministries/Departments as are referred to the Committee by the Speaker, Lok Sabha or the Chairman, Rajya Sabha as the case may be, and make Reports thereon;

+ To consider Annual Reports of the concerned Ministries/Departments and make Reports thereon;

+ To consider national basic long term policy documents presented to the houses, if referred to the Committee by the Speaker, Lok Sabha or the Chairman, Rajya Sabha as Their proceedings are devoid of any party bias.

+ The case may be, and make Reports thereon.

Merits of standing committee on finance:

→ The procedure adopted by them is more flexible than in the Lok Sabha.

→ The system makes parliamentary control over executive much more detailed, close, continuous, in-depth and comprehensive.

→ The system ensures economy and efficiency in public expenditure as the ministries / departments would now be more careful in formulating their demands.

→ They facilitate opportunities to all the members of Parliament to participate and understand the functioning of the government and contribute to it.

→ They can avail of expert opinion or pub

→ lic opinion to make the reports. They are authorised to invite experts and eminent, persons to testify before them and incorporate their opinions in their reports.

→ The opposition parties and the Rajya Sabha can now play a greater role in exercising financial control over the executive

Conclusion

The interlinking of the one stop data centres with Udyam portal means increasing the hassle free and smooth process of the different sectors. For infusing the functions in reality, the Standing committee on finance plays a vital role**.** The Recommendations of the Committee have persuasive value and are treated as considered advice given by the Committee.

INTERNATIONAL RELATIONS

The India-Australia Economic Cooperation and Trade Agreement

News Excerpt

The Governments of the India and Australia have signed the Economic Cooperation and Trade Agreement ("IndAus ECTA").

Pre-Connect

- It is the first Free Trade Agreement (FTA) that India has signed with a major developed country in over a decade.

- In February, India signed an FTA with the UAE and is currently working on FTAs with Israel, Canada, UK and the EU.

- Agreement is expected to come into force after it is ratified by the Australian Parliament.

- Bilateral trade in goods and services between India and Australia stood at $27.5 billion in FY2021.

- Merchandise exports to Australia had grown faster than exports to any other country in FY2022.

Key Points of the India-Australia Economic Cooperation and Trade Agreement

- The India-Australia Economic Cooperation and Trade Agreement ("IndAus ECTA") has potential that exists in the two economies to fulfil the needs of each other.

- Indian goods and services exports to Australia are expected to reach $20 billion in FY2027 and $35 billion in FY2035, up from about $10.5 billion in 2021.

- Australian wine imports, almonds, lentils, oranges, mandarins, pears, apricots and strawberries are set to benefit from lower tariffs under the agreement.

- Sealing a pact that their leaders hailed as a "watershed moment" and "one of the biggest economic doors there is to open in the world."

- This agreement is set to provide zero-duty access to 96 per cent of India's exports to Australia including shipments from key sectors such as engineering goods, gems and jewellery, textiles, apparel and leather.

- The agreement will give about 85 per cent of Australia's exports zero-duty access to the Indian market, including coal, sheep meat and wool, and lower duty access on Australian wines, almonds, lentils, and certain fruits.

- The pact is expected to boost bilateral trade in goods and services to $45-50 billion over five years, up from around $27 billion, and generate over one million jobs in India, according to a government estimate.

- The agreement will allow for faster approval of Indian medicines by Australian regulators as they have agreed to use inspection reports and approvals from Canada and the EU in the evaluation process for India pharmaceuticals and manufacturing facilities.

- Australia has addressed a long-standing concern of Indian IT firms on double taxation by agreeing to amend local taxation laws to stop the taxation of offshore income of Indian firms providing technical services to Australia.

- Indian Prime Minister said that the signing of the IndAus ECTA in such a short span of time reflects the depth of the mutual confidence between the two countries.

➢ The IndAus ECTA was signed by the Union Minister Piyush Goyal and Australian Minister for Trade, Tourism and Investment, Dan Tehan in a virtual ceremony, in the presence of PM Modi and his counterpart Scott Morrison.

➢ This is a watershed moment for the bilateral relations between the two countries. On the basis of this agreement, together, we will be able to increase the resilience of supply chains, and also contribute to the stability of the Indo-Pacific region.

➢ Terming 'people to people' relations as the key pillar of the relationship between India and Australia, Indian Prime Minister has said that this agreement will facilitate the exchange of students, professionals, and tourists between us, which will further strengthen these relations.

➢ Prime Minister Morrison said that the agreement further develops on the promise of the relationship. Apart from increased trade and economic cooperation, IndAus ECTA will further deepen the warm and close ties between the people of the two countries by expanding work, study and travel opportunities.

➢ Indian and Australian ministers also expressed their views on the growing strength of the relationship between the two countries before signing the agreement.

PEPPER IT WITH
Malabar Exercise, Indian Diaspora in Australia, Types of Trade Agreements

Conclusion

"IndAus ECTA" will further deepen the warm and close ties between the people of the two countries by expanding work, study and travel opportunities. It will send a powerful signal to the businesses that 'one of the biggest doors' is now open as two dynamic regional economies and like-minded democracies are working together for mutual benefit. It also delivers a clear message that democracies are working together and ensuring the security and resilience of supply chains. A number of Indian exports currently face a tariff disadvantage of 4-5% in many labour-intensive sectors relative to competitors — those with FTAs with Australia — such as China, Thailand, Vietnam. Removing this barrier, could enhance merchandise exports significantly.

Bilateral Trade between India-Turkmenistan

News Excerpt

India and Turkmenistan signed four agreements, including in financial intelligence and disaster management, as President Ram Nath Kovind m et his Turkmen counterpart Serdar Berdimuhamedov and agreed to expand bilateral trade and energy cooperation to further strengthen the multifaceted partnership.

GS CONNECT											
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Pre-Connect

• Turkmenistan, one of the Republics of the former USSR, was proclaimed as an independent State on 27 October 1991.

• It shares borders with Kazakhstan in the north, Uzbekistan in the north and North-east, Iran in the South and Afghanistan in the Southeast.

• Turkmenistan is an important partner for India in the India-Central Asia Summit framework, the first of which India hosted virtually in January this year.

TAPI: - Turkmenistan, Afghanistan, Pakistan and India (TAPI countries) signed two basic documents on 11 December 2010, marking the beginning of TAPI project. The TAPI Gas Sales & Purchase Agreement (GSPA) was signed in May 2012. At the 22nd Steering Committee Meeting of TAPI held in Ashgabat on 06 August, 2015, Turkmenistan offered to lead the Consortium. During this meeting Shareholders Agreement was initialed among the parties. Former Vice President, Hamid Ansari attended the TAPI ground-breaking ceremony in Mary city of Turkmenistan on 13 December, 2015. M.J. Akbar, the then Minister of State for External Affairs visited Turkmenistan on 21-23 February, 2018 for inauguration of the 2nd phase of the TAPI gas pipeline at Islim Cheshme (Serhetabat) on Turkmen-Afghan border.

- India enjoys close, friendly and historical ties with Turkmenistan.
- 'Turkmen Gate' built in Delhi in 1650's bears testimony to this friendship. India-Turkmenistan political relations have been warm and cordial.
- Hon'ble President of Turkmenistan Mr. Gurbanguly Berdimuhamedov visited India in May, 2010. Hon'ble Prime Minister of India Shri Narendra Modi visited Turkmenistan on 10-11 July, 2015 during which several significant MoUs and agreements were signed.

Highlights

➤ This is the first-ever visit of the President of India to independent Turkmenistan and comes just after the inauguration of new Turkmen President Berdimuhamedov.

➤ Cooperation in energy was one of the key areas of discussion. On the Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline, issues related to the security of the pipeline and key business princip les may be addressed in Technical and Expert level meetings.

➤ Turkmenistan is an important partner for India in the India-Central Asia Summit framework, the first of which India hosted virtually in January this year. Both the countries agreed to further enhance cooperation under the framework flowing from the India-Central Asia Summit.

➤ The state visit of the Indian President reaffirm the importance India attach to Turkmenistan, not only bilaterally but also in terms of extended neighbourhood concept and role in India-Central Asia partnership.

➤ Turkmenistan is strategically placed in Central Asia and connectivity is something on which India feel a partnership with Turkmenistan that will pay dividends.

➤ India have offered a line of credit worth USD 1 billion to Central Asian countries, including Turkmenistan.

➤ The International North-South Transport Corridor (INSTC) and the Ashgabat Agreement on International Transport and Transit Corridor came into the spotlight during President Kovind's visit to Turkmenistan.

➤ The Indian president stressed that the Chabahar port, jointly built by Iran and India, could be used to improve trade between India and Central Asia.

➤ Iran's second-largest seaport, Chabahar, is considered one of the key elements of the INSTC and is seen as a gateway for trade with Central Asian countries. In 2018, a part of Chabahar was transferred to the operational management of India.

➤ President Berdimuhamedow offered to organize direct negotiations on cooperation between the ports of Chabahar and Turkmenbashi. He is convinced that the transport sector is a promising area of cooperation between Turkmenistan and India.

> **Hindi Chair:** In 2015, Hindi Chair was established in Azadi Institute of World languages, Ashgabat where Hindi is being taught to university students. 'Vishwa Hindi Diwas' is celebrated in Turkmenistan every year.

Conclusion

Both the countries share centuries-old civilisational and cultural linkages. During the talks, India underlined the importance of holding regular cultural events in each other's territory. India emphasised on the need for both countries to cooperate closely on the effective management of the COVID-19 pandemic that has affected people of both the countries. Thereafter, it is on record that India has some concerns about

> **PEPPER IT WITH**
> Indian community in Turkmenistan, Connectivity with the Turkmenistan

the commercial and business aspects of the TAPI pipeline. It is a difficult neighbourhood, if we look at the geography. So, in that sense, this itself was a task in negotiating the pipeline.

India-Nepal Bilateral Ties

News Excerpt

India and Nepal discussed the Kalapani border dispute.

Pre-Connect

- As close neighbors, India and Nepal share unique ties of friendship and cooperation characterized by an open border and deep-rooted people-to-people contacts of kinship and culture. There has been a long tradition of free movement of people across the border. Nepal shares a border of over 1850 km with five Indian states – Sikkim, West Bengal, Bihar, Uttar Pradesh and Uttarakhand.
- The India-Nepal Treaty of Peace and Friendship of 1950 forms the bedrock of the special relations that exist between India and Nepal. Nepalese citizens avail facilities and opportunities on par with Indian citizens in accordance with the provisions of the Treaty. Nearly 8 million Nepalese citizens live and work in India.

Highlights of the Bilateral Talks

- ➢ The visiting Nepalese Prime Minister jointly with Prime Minister Narendra Modi inaugurated the first cross border rail link between India and Nepal. Nepal also became the 105th member country to sign on to the Framework Agreement of International Solar Alliance.
- ➢ Both the sides discussed the boundary issue and resolves to solve it through the establishment of a bilateral mechanism.
- ➢ The visit of the Nepalese leader is the first since the Kalapani boundary issue erupted in November 2019 after the revised political map of India depicted the triangular area of Kalapani-Lipulek-Limpiyadhura within the territory of Uttarakhand.
- ➢ The two leaders inaugurated the broad gauge Jaynagar-Kurtha rail link that will establish rail connectivity to Janakpur in Nepal.
- ➢ India launched the RuPay card facility in Nepal during the formal ceremony held at the Hyderabad House.
- ➢ This would open new vistas for cooperation in financial connectivity, and is expected to facilitate bilateral tourist flows as well as further strengthen people to people linkages between India and Nepal.
- ➢ The two sides came out with a Joint Vision Statement on Power Sector cooperation between India and Nepal recognising "unprecedented opportunities.

Kalapani Border Dispute

- ✓ Kalapani is a region located in the easternmost corner of Uttarakhand's Pithoragarh district. It shares a border on the north with the Tibet Autonomous Region of China and Nepal in the east and south. The region resembles a slice of cake wedged in between Limpiyadhura, Lipulekh and Kalapani.
- ✓ The area is in India's control but Nepal claims the region because of historical and cartographic reasons. The area is the largest territorial dispute between Nepal and India consisting of at least 37,000 hectares of land in the High Himalayas.

What is the cause of the dispute?

- ▪ The Kalapani region derives its name from the river Kali. Nepal's claims to the region are based on this river as it became the marker of the boundary of the kingdom of Nepal following the Treaty of Sugauli signed between the Gurkha rulers of Kathmandu and the East India Company after the Gurkha War/Anglo-Nepal War (1814-16). The treaty was ratified in 1816. According to the treaty, Nepal lost the regions of Kumaon-Garhwal in the west and Sikkim in the east. According to Article 5, the King of Nepal gave up his claims over the region west of the river Kali which originates in the High Himalayas and flows into the great plains of the Indian subcontinent.

Page 55

- According to the treaty, the British rulers recognised Nepal's right to the region that fell to the east of the river Kali. Here lies the historic origin of the dispute. According to Nepal's experts, the east of the Kali River should begin at the source of the river. The source according to them is in the mountains near Limpiyadhura, which is higher in altitude than the rest of the river's flow. Nepal claims that a land mass, high in the mountains that falls to the east of the entire stretch starting from Limpiyadhura downwards, is theirs.

- India on the other hand says the border begins at Kalapani which India says is where the river begins. The dispute is mainly because of the varying interpretation of the origin of the river and its various tributaries that slice through the mountains. While Nepal's claim of the territory east of Kali is based on the Limpiyadhura origin, India says the river actually takes the name Kali near Kalapani.

Why is Lipulekh pass important?

- The region juts into the Himalayas and is connected to the other side of the mountain range through the Lipulekh pass, which has been used for centuries by Hindu and Buddhist pilgrims and tourists on their way to Kailash Mansarovar. The nearby markets have been used by various mountain communities.

- The Himalayas have several passes that connect the Gangetic region with the Tibetan plateau but Lipulekh is strategically located as it is nearest to the heart of the Indian state or the National Capital Region and can be of particular concern in case of an armed conflict with China.

What are Nepal's claims regarding Lipulekh pass?

> The importance of Himalayan passes with the Tibetan plateau was amply highlighted in the 1962 war. During that war, Chinese forces used the pass of Se La in Tawang and reached the Brahmaputra plains in the east. The military defeat in the east clearly demonstrated that weakly guarded passes were a major vulnerability of Indian military preparedness against China. In comparison to Se La which was somewhat fortified, Lipulekh was vulnerable.

> Nepali analysts say that King Mahendra was concerned that India would take military steps to forcefully take the region of Kalapani to secure the mountain pass. He reached an agreement with Delhi and handed over the region for security purposes to India. According to another interpretation subscribed to by Kanak Mani Dixit, India, worried over an aggressive China in the 1950s, got the King of Nepal to agree to a proposal to station 18 military outposts along Nepal's northern frontier. In 1969, under bilateral negotiations all the posts were removed barring Kalapani.

Analytica

PEPPER IT WITH
Kailash Mansarovar, Gorkha Rule in the present-day Uttarakhand

> In a tit-for-tat move, Kathmandu responded by placing a revised political map of the country in the national insignia of Nepal.

> Nepal had earlier written to New Delhi seeking the meeting of the Foreign Secretary-level mechanism to discuss the border dispute at Kalapani.

> India urged Nepal to avoid "politicisation" of the boundary dispute.

> In the spirit of close and friendly relations, politicisation of such issues should be avoided.

> India's position on avoiding politicisation of the Kalapani issue appears to be aimed at the upcoming election season in the Himalayan country when emotive issues like the border dispute are expected to be raised during political campaigns by the opposition.

> The close friendship between India and Nepal has no comparison anywhere in the world.

> India and Nepal have been working on building a tourism circuit that connects the pilgrimage sites located in the two countries. The Vishwanath temple of Varanasi is part of that vision which intends to connect devotees with the Pashupatinath temple of Kathmandu.

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Conclusion

Nepal-India relations are, in essence, much more than the sum of treaties and agreements concluded between the two countries. The frequent high-level visits by the leaders of the two countries at different points of time and the interactions constitute the hallmark of the ties between the two countries. Furthermore, such visits have helped promote goodwill, trust, understanding and cooperation between the two countries and, have injected fresh momentum to further consolidate age-old and multi-faceted bilateral relations of friendship and cooperation on a more mature and pragmatic footing.

Global Security Initiative

News Excerpt

A new Global Security Initiative put forward by Chinese President Xi Jinping will look to counter the U.S. Indo-Pacific strategy and the Quad – the India, U.S., Australia, Japan grouping – according to Chinese officials.

Pre-Connect

- Global Security Initiative is a platform for research and analysis in geopolitics and international affairs.
- Global Security Initiative work collaboratively to identify critical shifts in the global geopolitical and security environment. By combining domain expertise with empirical and theoretical rigor, GSI assess their implications for global conflicts, markets, and societies.
- By aggregating, filtering, and layering vast amounts of openly available data, our OSINT team monitors the activities of key global and regional actors. GSI employ this intelligence to detect and project their effects across Political, Military, Economic, and Social Systems.
- GSI is open to sharing capabilities with other organizations and institutions that could benefit from them. GSI have produced specialized intelligence briefs, post-game assessments for crisis simulations and war games, and presentations on complex geopolitical issues for partners.

Chinese claims for the Global Security Initiative

I. Understanding deeply GSI's practical significance and its values to our times: This major initiative was proposed to meet the pressing need of the international community to maintain world peace and prevent conflicts and wars. Building on the vision of common, comprehensive, cooperative and sustainable security, the GSI seeks to promote the establishment of a balanced, effective and sustainable security architecture. It thus offers a new approach to eliminating the root causes of international conflicts and achieving durable stability and security in the world.

II. Inheriting and promoting the successful practices and valuable experience underpinning the GSI: The GSI takes root in New China's independent foreign policy of peace and the practices of this policy. Over the years, China has held high the banner of peace, development and cooperation for win-win results, and made active contributions to upholding global peace and security, setting a prime example as a major country.

III. Implementing fully the major propositions and policy goals of the GSI: Visions set the course, and actions shape the future. More than proposing the GSI, China acts on this major initiative. GSI stand ready to work with the international community to ensure that the GSI will take root and come into fruition, so that the world will enjoy greater peace, security and prosperity.

> **PEPPER IT WITH**
> Belt and Road Initiative, Maritime Silk Road, QUAD

Conclusion

With each day that fresh blood is shed in Ukraine, it becomes more painfully clear that China and the West have clashing notions of how to preserve world peace. Since President Vladimir Putin first invaded his neighbour, hopeful voices in some Western capitals have called China an ideal mediator between Russia and Ukraine. Such optimists cite the supposed pragmatism of the modern Chinese Communist Party. They note the ties of trade and investment that bind the Chinese economy to Russia, Ukraine and wider Europe, and conclude that brokering

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peace is in China's self-interest. Alas, their elegant arguments cannot overcome a stark and ugly point of difference.

Black Sea and Russia

News Excerpt

The sinking of the warship Moskva, the 600-foot, 12,500-tonne flagship of the Russian Black Sea Fleet — whether due to a Ukrainian missile strike or, as Russia claims, a fire on board — is a serious setback for Russia.

Pre-Connect

- Russia said the flagship of its Black Sea fleet was seriously damaged and its crew evacuated following a fire that caused an explosion, as a Ukrainian official said the vessel had been hit by missiles.
- The incident on the Moskva missile cruiser occurred after ammunition on board blew up, Interfax news agency quoted the Russian defence ministry as saying.
- Maksym Marchenko, governor of the region around the Black Sea port of Odesa, said in an online post that the 12,500 tons ship was hit by two missiles, without providing evidence.

Russia and the Black Sea

- The famed water body bound by Ukraine to the north and northwest, Russia and Georgia to the east, Turkey to the south, and Bulgaria and Romania to the west, which links to the Sea of Marmara through the Bosphorus and then to the Aegean through the Dardanelles, has traditionally been Russia's warm water gateway to Europe.
- For Russia, the Black Sea is both a stepping stones to the Mediterranean as well as a strategic buffer between NATO and itself. Domination of the Black Sea region is a geostrategic imperative for Moscow, both to project Russian power in the Mediterranean and to secure the economic gateway to key markets in southern Europe.
- The Black Sea Fleet has a long history, and is considered to have been founded back in 1783. It comprises warships of the Russian Navy in the Black Sea, Sea of Azov, and the eastern Mediterranean, and is headquartered at Sevastopol, the major port on the Crimean Peninsula.
- Although Crimea became part of Ukraine after the USSR collapsed, the Russian Navy continued to have its base in Sevastopol as part of an agreement between the two countries. In 2014, Russia annexed Crimea.
- In a paper titled 'The Naval Power Shift in the Black Sea' written for War on the Rocks, an online platform for analysis and debate on strategy, defence, and foreign affairs.
- While the Black Sea Fleet assists with the defence of southern maritime approaches to Russia, it also allows Moscow to use the Black Sea as a jumping off point into the eastern and central Mediterranean. From Moscow's perspective, these activities enable its diplomacy and power projection into areas where Russia previously had limited influence, and they retard what Russia believes are US and NATO efforts to destabilise its partners in places like Syria.

Black Sea in the Ukraine war

- Russia has been making efforts to gain complete control over the Black Sea since the Crimean crisis of 2014.
- During the ongoing invasion, the domination of the Black Sea has been a major Russian objective, along with the land bridge to connect Russia and Crimea. As such, there have been intense efforts to capture Mariupol, the Sea of Azov port in the breakaway eastern Ukrainian oblast of Donetsk. Mariupol appeared close to falling to the Russians.
- A former commander of the UK Joint Forces Command, has been quoted as saying that the capture of Mariupol will complete Russia's land bridge to Crimea, give it control over more than 80 per cent of the Ukrainian Black Sea coastline, and cut off its maritime trade.

✓ Russia was also expected to focus its military efforts on Odessa, to the west of Crimea. If the Odessa region were to fall as well, Ukraine would lose access to its entire Black Sea coastline and would in effect be reduced to a landlocked country. That would be a devastating blow to the Ukrainian economy.

✓ The Odessa oblast has a muti-ethnic population wherein the Russians form the second largest group. It is the largest region in Ukraine which serves as an important energy and transport corridor with abundant natural resources.

✓ The Rhine-Main-Danube canal connects the Black Sea to the Atlantic Ocean and the North Sea and the port of Odessa serves as a vital link between Ukraine and the outside world.

✓ The loss of the Moskva is expected to put brakes on an anticipated amphibious assault on Odessa. But the tempo of its attack on all points along the Black Sea which are still under Ukrainian control will likely increase. This may be through rocket forces, aerial bombardment, or offshore ships launching cruise missiles.

Conclusion

The sinking of the Moskva is believed to be the worst loss in the history of naval warfare since the sinking of the Argentine naval cruiser General Belgrano by a British submarine on May 2, 1982, during the Falklands War. The fact that the Moskva was sunk by shore-based anti-ship cruise missiles which took advantage of bad weather and used decoy UAV attacks to defeat the ship's air defence systems demonstrates the success of outside-the-box measures adopted by Ukraine in the war.

PEPPER IT WITH
Caspian Sea, Crimean War, Chernobyl Nuclear Disaster, Indo-Russia Defence Cooperation

India-United Kingdom Relations

News Excerpt

On the final day of his two-day visit to India, UK Prime Minister Boris Johnson touched upon the unfolding crisis in Ukraine and stated that everyone respects New Delhi's decades-old historic relationship with Moscow.

Pre-Connect

• There is growing disquiet in Western nations over India's refusal to directly condemn the Russian aggression in Ukraine and its decision to procure discounted Russian oil.

• The year 2022 is significant for both India and the UK as our country commemorates the 75th anniversary of its Independence and the two celebrate 75 years of bilateral ties.

• India-UK relations were elevated to a Comprehensive Strategic Partnership in 2021, based on a shared commitment towards democracy, fundamental freedoms and multilateralism, and the recent visit of Boris Johnson, prime minister of the United Kingdom, further strengthened the ties.

Areas of Collaboration

➢ The meetings between the heads of the two countries included a significant economic component related to climate change, trade, defence and healthcare that will drive the future partnership.

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➤ The CII envisions new-age partnerships across emerging sectors for the private industries of both countries, building on the overall economic framework emerging from this landmark visit.

➤ India-UK climate collaboration revolves around strengthening partnership in R&D of cutting-edge technologies and the transfer of proven tech to drive low carbon pathways.

➤ Such partnerships also provide opportunities for the private sector in developing technologies, climate finance and nature-based solutions to deliver concrete actions for achieving the 2030 nationally determined contributions.

➤ With the UK leading in the development of both blue and green hydrogen capability and India also having launched the National Hydrogen Policy, there is huge potential to curate a new global alliance on hydrogen led by India with the collaboration of other countries and support of businesses.

➤ Defence and security also form key elements of the India-UK partnership, with special focus on R&D and joint industrial cooperation to develop advanced defence capabilities. Strengthening collaboration in tackling new threats in the cyber, space, counter-terrorism and maritime domains adds to the economic partnership.

➤ India and the UK share an enhanced partnership in science, technology, education, research and innovation. Promoting collaboration in Artificial Intelligence (AI), the two countries together aim to deliver economic and social benefits to both nations. This calls for closer engagement between the higher education sectors and furthering of transnational education programmes in both countries.

India-UK Economic Partnership

✓ Today, India has become a major economic power and is a highly valued strategic partner for the UK. The discussions and agreements during the visit covered a plethora of matters ranging from job creation and economic growth to energy security and defence.

✓ In FY 2021–22, India's exports to the UK stood at $9.43 billion, while imports aggregated $6.58 billion. India's main exports to the UK include ready-made garments and textiles, gems and jewellery, engineering goods, petroleum products, transport equipment, spices, pharmaceuticals and marine products.

✓ Imports from Britain include precious and semi-precious stones, ores and metal scraps, engineering goods, chemicals and machinery. In the services sector, the UK is the largest market in Europe for Indian IT services.

✓ Similarly, investments are robust in both directions, with Indian companies as the largest and fastest-growing overseas investors in the UK.

✓ As per the CII-Grant Thornton report titled 'Britain Meets India' tracker 2021, there are 572 British companies in India. The 'India meets UK' Report 2021 shows a record 850 Indian companies operating in Britain, with combined revenues of almost £50.8 billion and employing 1,16,046 people.

The Road Ahead

✦ The UK and India have established the Science and Innovation Council in 2010 to jointly undertake scientific projects. The two countries can be partners in innovation. For the Indian side, collaborations in innovations for low-cost goods and services could help address emerging middle-class consumers as well as foster technology transfer.

✦ Looking ahead, India will be central to the world's development in the next 25 years and the recent visit of the UK prime minister ensures that bilateral ties will play a key role in a sustainable global future.

✦ The FTA is the most exciting feature of the rapidly developing economic partnership as the reduction in tariffs and non-tariff barriers will facilitate increased competitiveness in industries like automobiles and pharmaceuticals. The trade expansion will create investment and employment potential in both countries.

- The pharma sector is likely to be amongst the fastest growing sectors, as both countries have huge investments in place. Also, the communication and technology sector offer significant opportunities for UK exporters to tap into the Indian market. The agreements will give further impetus to the textile industry and the IT sector.
- The FTA will provide India with an opportunity to increase its share of exports in categories like fashion, homeware, furniture, and electrical and general industrial machinery. Strategic sectors of defence, cybersecurity, R&D and healthcare where the UK has been a strong player would benefit as well.
- In addition, India being a tech giant and home to one of the world's leading start-up ecosystems facilitates greater access for the UK market and also provides Britain with a much wider spectrum in the Indo-Pacific region.

Conclusion

During the visit, both nations recognised the need to focus on sustained economic recovery and work towards building resilience and trusted partnerships to assuage any external disruptions, thus building towards a Vision 2047 for shared security and prosperity for their people and the world. The launch of Free Trade Agreement (FTA) negotiations in January 2022 is a historic development to unlock the full potential of the trade and commercial relationship, boosting jobs, investment and exports for large sectors such as textiles, leather goods, and footwear. The agreements that were signed at the beginning of the year, aim to achieve up to 65 % of coverage for goods and up to 40% coverage for services. By the end of the final agreement in October 2022, the coverage for goods is expected to increase to more than 90%.

ENVIRONMENT

Digital Agriculture

News Excerpt

Union government and various State governments are taking various measures for the adoption of Modern Technology in Agriculture.

Pre-Connect

- According to the Economic Survey 2020-21, GDP contribution by the agriculture sector is likely to be 19.9% in 2020-21, increasing from 17.8% recorded in 2019-20.
- The agriculture sector, currently valued at US$ 370 billion, is one of the major sectors in the Indian economy.
- The Ministry of Agriculture & Farmers Welfare has developed major digital applications in order to boost technology adoption among farmers: -
  - **National Agriculture Market (e-NAM)**: It was launched in April 2016, eNAM is a pan-India electronic trading portal that links the existing Agricultural Produce Market Committee (APMC) mandis, to create a unified national market for agricultural commodities. eNAM helps farmers sell products without the interference of any brokers or mediators, by generating competitive returns from their investment
  - **Direct Benefit Transfer (DBT) Central Agri Portal**: This Portal is a unified central portal for agricultural schemes across the country. The portal helps farmers adopt modern farm machineries through government subsidies.

About Digital Agriculture

- ➢ Digital agriculture is the use of digital technology/ICT to integrate agricultural production from the paddock to the consumer.
- ➢ Digital technologies can provide the agricultural industry with tools and information to make more informed decisions and improve productivity including current market trends.

- ➢ Digital agriculture focuses on Big data.
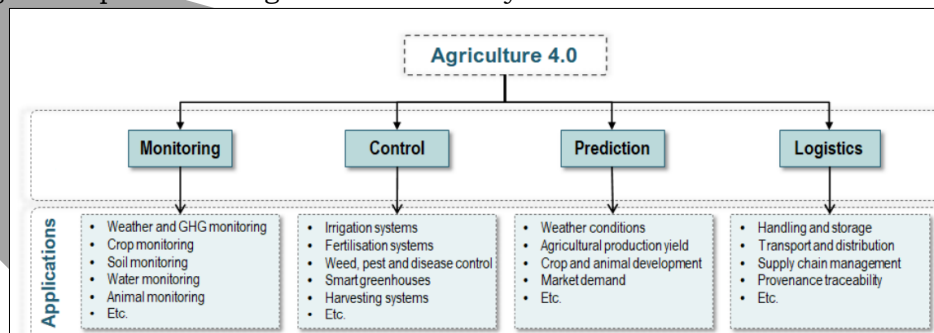
Agriculture 4.0 is a term for the next big trends facing the industry, including a greater focus on precision agriculture, the internet of things (IoT) and the use of big data to drive greater business efficiencies in the face of rising populations and climate change.

Application of Digital Agriculture in India

- ✓ Technological interventions like remote sensing, soil transducers, unmanned aerial surveying and market insights, etc., permit farmers to gather, visualise and assess crop and soil health conditions at different stages of production, in a convenient and cost-effective approach.
- ✓ They can act as an initial indicator to identify potential challenges and provide options to deal with them in a timely manner.
- ✓ Artificial Intelligence/Machine Learning (AI/ML) algorithms can generate real-time actionable insights to help improve crop yield, control pests, assist in soil screening, provide actionable data for farmers and reduce their workload.

✓ Blockchain technology offers tamper-proof and precise data about farms, inventories, quick and secure transactions and food tracking. Thus, farmers don't have to be dependent on paperwork or files to record and store important data.

Benefits of Digital Agriculture

Implementing ICT technological solutions enable reliable and stable management and monitoring of farms. As farmers get a complete digital analysis, they can act accordingly and don't have to apply excess pesticides, fertilizers and reduce overall water consumption. Other benefits include-

- o Increases agriculture productivity and reduced production cost
- o Halt soil degradation with real time monitoring
- o Reduce dependency on fertilizers and reduced instances of pollution
- o Promotes effective and efficient use of water resources
- o Uplifts socio-economic statuses of farmers
- o Reduces environmental and ecological impacts
- o Augments worker safety

Implementation of Digital Agriculture in India

A customized method would be desirable to implement digital agriculture to a Indian small farm, this can be later be scaled up and made available to many Indian farms. Following measures could be implemented to make digital agriculture a success in India: -

- o Low-cost technology-low income of Indian farmer explains the precarious financial circumstances in which a typical farmer operates in India. Thus, lowering the cost of technology will help. Moreover, adoption can only possible if cost efficient technology is used.
- o Moveable hardware-As typical Indian farms are small, plug and play hardware has a better opportunity in the Indian market. Also, agricultural land leasing is widely prevalent under various farming arrangements, therefore a farmer farming on a specific plot of land may move to another farm plot next season. In such scenarios, investing in portable equipment is better for farmers.
- o Renting and sharing platforms-Owing to both constrained financial resources and small farm plots, opportunity exists for digital platforms that offer equipment renting and sharing services instead of outright purchases. A few agri-tech start-ups like Farm kart (rent4farm), EM3 Agri Services and Trringo, are already providing equipment rental services.
- o Academic support-The local agricultural organisation and academic institutes regularly interact with farmers through various locally conducted programs and government initiatives. Training facilities provided by various academic institutes and agricultural organisations will improve digital adoption among farmers.

> **PEPPER IT WITH**
> Fertigation, Javik Bharat, Inter-Cropping, Green House Farming, Precision agriculture, Drop irrigation

Conclusion

As the Indian Agriculture and Allied sector is on the verge of adopting modern technologies, However, influential factors that will define the success of digital agriculture in India are technology affordability, ease of access and operations, easy maintenance of systems and supportive government policies. Adopting a holistic ecosystem approach to address challenges faced by the Indian agriculture sector is of national interest, to achieve objectives, like doubling farmer incomes and sustainable development. Thus, a multi-stakeholder approach will be required for the wide-scale adoption of digital agriculture in India, with the government playing a key enabler's role in the ecosystem.

UNEP Report on Noise Pollution

News Excerpt

Recently, United Nations Environment Programme commissioned a report on the environmental challenges posed by noise pollution.

Pre-Connect

- The latest 2018 World Health Organization (WHO) guidelines established a health-protective recommendation for road traffic noise levels of 53 dB.
- In India, the Central Pollution Control Board (CPCB) is mandated to track noise levels, set standards as well as ensure, via their State units, that sources of excessive noise are controlled.
- The agency has a manual monitoring system where sensors are installed in major cities and few cities have the facility to track noise levels in real time.
- The CPCB also measures noise levels before and after Diwali in major cities, to publicise the impact of firecrackers.

Key Points of the Report

- The first chapter of the report, called 'Frontiers 2022': Noise, Blazes and Mismatches, deals with noise.
- It compiles studies about noise levels in several cities around the world and illustrates a subset of 61 cities and the range of dB (decibel) levels that have been measured.
- Delhi, Jaipur, Kolkata, Asansol and Moradabad are the five Indian cities mentioned in this list and Moradabad in Uttar Pradesh was shown as having a dB range from 29 to 114.
- At a maximum value of 114, it was the second-most-noisiest city in the list. The first was Dhaka, Bangladesh at a maximum value of 119 dB.
- There were references to noise levels in Aurangabad (40-102), Chandigarh (51-75) and Kolkata (70-83).

Reasons responsible for Noise pollution

Road traffic, industry and high population density are well-known factors associated with high dB levels.

Noise standards in India

- ✓ Noise standards are notified in Environment (Protection) Rules,1986.
- ✓ The Central Pollution Control Board constituted a Committee on Noise Pollution Control. The Committee recommended noise standards for ambient air and for automobiles, domestic appliances and construction equipment, which were later notified in Environment (Protection) Rules,1986 as given below-

Code	Category of Area	Limits in dB(A)	
		Day	Night
A	Industrial area	75	70
B	Commercial area	65	55
C	Residential area	55	45
D	Silence Zone	50	40

Impacts

- Two 15-year-long studies of long-term residents of Toronto, Canada found that exposure to road traffic noise elevated risks of acute myocardial infarction and congestive heart failure, and increased the incidence of Type 2 diabetes by 8%, and hypertension by 2% cited by the report.

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- Estimates suggest that in Europe 22 million and 6.5 million people suffer from chronic noise annoyance and sleep disturbance, respectively.
- The elderly, pregnant women and shift workers are among those at risk of noise-induced sleep disturbance. Noise-induced awakenings can trigger a range of physiological and psychological stress responses because sleep is necessary for hormonal regulation and cardiovascular functioning.
- Traffic noise exposure is a risk factor for the development of cardiovascular and metabolic disorders such as elevated blood pressure, arterial hypertension, coronary heart disease and diabetes.
- Long-term exposure to environmental noise contributes to 48,000 new cases of ischemic heart disease and causes 12,000 premature deaths annually in Europe.
- Constant noise causes the blood vessels and muscles to contract. This causes a gradual loss of hearing, tension, nervousness and psychiatric illness.
- High intensity sounds emitted by many industries and supersonic aircraft, when continued for long periods of time not only disturb but also permanently damage hearing. Noise has harmful effects on non-living materials too.
- Numerous examples can be cited where old buildings and even new constructions have developed cracks under the stress of explosive sounds.
- Loud sound can have a serious impact on human health as well as on ecosystems.
- The effects of noise pollution on birds have been a key subject of study for scientists and conservationists over the last decade.
- Researchers suggest that noise pollution affects their behaviour, their fitness, breeding and growth, and often leads to chronic stress.
- Scientists say that constant noise may form an acoustic blanket muffling the audio cues birds rely on to detect predators, competitors and their species.

Control of Noise Pollution

- A green-belt effectively reduces the noise, therefore there is dire need of plantation especially in industrial areas and vehicle spots. A 20-foot-wide plantation inside the compound protects the house from the noise of vehicular traffic. Plants can also absorb aeroplane noise, so a green belt should be planted around airports.
- Decibel metres should be installed along highways and in factories to check and control the intensity of noise pollution and response mechanism.
- Specific legislation and regulations should be proposed for designing and operation of machines to include vibration control, sound-proof cabins and sound-absorbing materials.

IPCC 6th Assessment part-3

News Excerpt

The IPCC has released the third part of the Sixth Assessment Report. It was finalized during the 14th Session of Working Group III and 56th Session of the IPCC.

Pre-Connect

- The Intergovernmental Panel on Climate Change (IPCC) is the United Nations body for assessing the science related to climate change.
- The IPCC provides regular assessments of the scientific basis of climate change, its impacts and future risks, and options for adaptation and mitigation.
- IPCC was created in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP), the objective of the IPCC is to provide governments at all levels with scientific information that they can use to develop climate policies.

- IPCC reports are also a key input into international climate change negotiations. The IPCC is an organization of governments that are members of the United Nations or WMO. The IPCC currently has 195 members.
- The IPCC is divided into three Working Groups and a Task Force.
  - Working Group I deals with The Physical Science Basis of Climate Change,
  - Working Group II with Climate Change Impacts, Adaptation and Vulnerability and
  - Working Group III with Mitigation of Climate Change.
  - The main objective of the Task Force on National Greenhouse Gas Inventories is to develop and refine a methodology for the calculation and reporting of national greenhouse gas emissions and removals.

Previous Reports

➤ The first part of IPCC's report was on the physical science of climate change. It was published in 2021. It had warned that 1.5-degree Celsius warming was likely to be achieved before 2040 itself.

➤ This second report of IPCC's Assessment was published in March 2022 which was about climate change impacts, risks and vulnerabilities, and adaptation options.

➤ Recently, Third report was released which is a part of 6th assessment.

About the Assessment

✓ The Working Group III report provides an updated global assessment of climate change mitigation progress and pledges, and examines the sources of global emissions. It explains developments in emission reduction and mitigation efforts, assessing the impact of national climate pledges in relation to long-term emissions goals.

✓ Net anthropogenic GHG emissions have increased since 2010 across all major sectors globally.

✓ An increasing share of emissions can be attributed to urban areas. Emissions reductions in CO2 from fossil fuels and industrial processes, due to improvements in energy intensity of GDP and carbon intensity of energy, have been less than emissions increases from rising global activity levels in industry, energy supply, transport, agriculture and buildings.

✓ Demand-side mitigation encompasses changes in infrastructure use, end-use technology adoption, and socio-cultural and behavioural change.

✓ Demand-side measures and new ways of end-use service provision can reduce global GHG emissions in end use sectors by 40-70% by 2050 compared to baseline scenarios, while some regions and socioeconomic groups require additional energy and resources.

✓ Demand side mitigation response options are consistent with improving basic wellbeing for all.

✓ Demand-side options and low-GHG emissions technologies can reduce transport sector emissions in developed countries and limit emissions growth in developing countries.
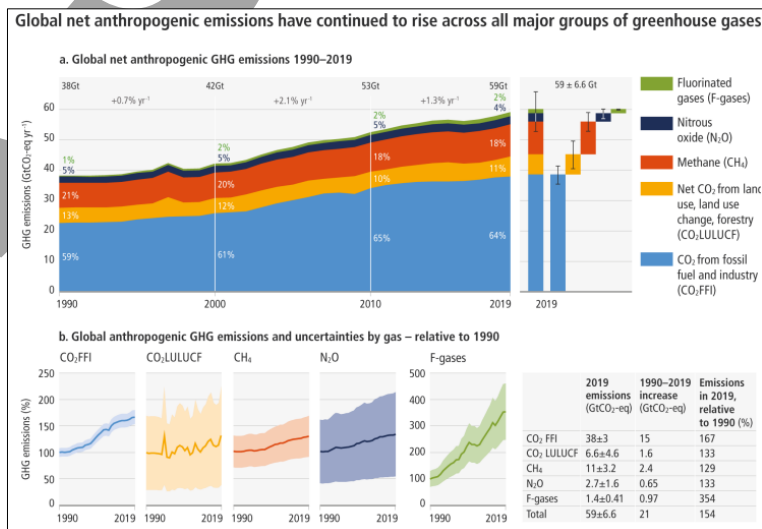
- ✓ Demand-focused interventions can reduce demand for all transport services and support the shift to more energy efficient transport modes.
- ✓ International cooperation is a critical enabler for achieving ambitious of climate change mitigation goals.
- ✓ Net-zero CO2 emissions from the industrial sector are challenging but possible. Reducing industry emissions will entail coordinated action throughout value chains to promote all mitigation options, including demand management, energy and materials efficiency, circular material flows, as well as abatement technologies and transformational changes in production processes.
- ✓ The UNFCCC, Kyoto Protocol, and Paris Agreement are supporting rising levels of national ambition and encouraging development and implementation of climate policies, although gaps remain. Partnerships, agreements, institutions and initiatives operating at the subglobal and sectoral levels and engaging multiple actors are emerging, with mixed levels of effectiveness.

Suggestions

- ▪ Urban areas can create opportunities to increase resource efficiency and significantly reduce GHG emissions through the systemic transition of infrastructure and urban form through low-emission development pathways towards net-zero emissions. Ambitious mitigation efforts for established, rapidly growing and emerging cities will encompass-
  - o Reducing or changing energy and material consumption,
  - o Electrification, and
  - o Enhancing carbon uptake and storage in the urban environment.
  - o Cities can achieve net-zero emissions, but only if emissions are reduced within and outside of their administrative boundaries through supply chains, which will have beneficial cascading effects across other sectors.

Way Forward

- ♦ Developing countries should scaled up public grants, as well as increased levels of public finance and publicly mobilised private finance flows from developed to developing countries to cope with the issue of GHG rising.

PEPPER IT WITH
Global Warming Potential (GWP), Paris agreement, Intended Nationally Determined Contribution, Glasgow climate pact, Global methane pledge, CoP-26

- ♦ Reducing GHG emissions across the full energy sector requires major transitions, including a substantial reduction in overall fossil fuel use, the deployment of low-emission energy sources, switching to alternative energy carriers, and energy efficiency and conservation.

WHO's Air quality database

News Excerpt

New WHO Data showed that almost entire global population (99 per cent) breathes air that exceeds WHO's air quality limits and threatens health.

Pre-Connect

- • WHO last year revised its air quality guidelines, making them more stringent in an effort to help countries better evaluate the healthiness of their air.
- • Particulate matter, especially PM 2.5, is capable of penetrating deep into the lungs and entering the bloodstream, causing cardiovascular, cerebrovascular (stroke) and respiratory impacts.
- • NO2 is associated with respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions and visits to emergency rooms.

Key Points of report

➢ According to WHO data, More than 6,000 cities in 117 countries are now monitoring air quality but their residents are still breathing unhealthy levels of fine particulate matter and nitrogen dioxide, while people in low and middle-income countries suffer the highest exposure.

➢ The findings have prompted WHO to highlight the importance of curbing fossil fuel use and taking other tangible steps to reduce air pollution levels.

➢ For the first time, ground measurements of annual mean concentrations of nitrogen dioxide (NO2), a common urban pollutant and precursor of particulate matter and ozone has been done.

➢ It also includes measurements of particulate matter with diameters equal or smaller than 10 µm (PM10) or 2.5 µm (PM2.5). Both groups of pollutants originate mainly from human activities related to fossil fuel combustion.

Air pollution in India

✓ As per the Study of Council on Energy, Environment and Water (CEEW), Uttar Pradesh is the largest emitter of PM2.5, mainly due to burning of solid-fuel use in households, and population.

✓ Maharashtra, Gujarat, Odisha, West Bengal, Madhya Pradesh, Bihar, Tamil Nadu, and Rajasthan featured in the list of top polluters in CEEW's study.

✓ States like Himachal Pradesh, Uttarakhand, and the Northeastern States of Arunachal Pradesh, Nagaland and Manipur were among the lowest emitters of PM2.5.

❖ The revised Central Pollution Control Board (CPCB) air quality standards necessitate the the concept of AQI in India.

❖ The revised National Ambient Air Quality Standards (CPCB 2009) are notified for 12 parameters – PM10, PM2.5, NO2, SO2, CO, O3, NH3, Pb, Ni, As, Benzo(a)pyrene, and Benzene.

❖ Although AQI is usually based on criteria pollutants (i.e. PM10, PM2.5, SO2, NO2, CO and O3), a new approach to AQI which considers as many pollutants from the list of notified pollutants as possible is desirable.

❖ However, the selection of parameters primarily depends on AQI objective(s), data availability, averaging period, monitoring frequency, and measurement methods.

Efforts taken by the government

In order to address the issue of air pollution, Government has undertaken many significant steps like-

o Notification of National Ambient Air Quality Standards and sector specific emission and effluent standards for industries;

o Setting up of monitoring network for assessment of ambient air quality;

o Introduction of cleaner gaseous fuels like CNG, LPG etc and ethanol blending;

o Launching of National Air Quality Index (AQI);

o Universalization of BS- IV for vehicles by 2017;

o Leapfrogging from BS-IV to BS-VI standards for vehicles by 1st April, 2020;

o Banning of burning of biomass;

o Promotion of public transport network;

o Pollution Under Control Certificate;

o Issuance of directions under Air (Prevention and Control of Pollution) Act, 1981;

o Installation of on-line continuous (24x7) monitoring devices by 17 highly polluting industrial sectors;

- o Ban on bursting of sound emitting crackers between 10 PM to 6 AM;
- o Notification of graded response action plan for Delhi and NCR identifying source wise actions for various levels of air pollution, etc.

PEPPER IT WITH
SAFAR, National Ambient Air Quality Guidelines (NAAQS), AQI, BS VI Emission Norms, Smog tower, PM 2.5

Way Forward

The air pollution crisis will require innovative, collaborative solutions from public, private, and civil society stakeholders. Institutions, governments, philanthropies, and members of the academe have been fighting the battle for clean air for decades; it is time to tap into the power of a multi-stakeholder framework to hurdle this challenge.

Green Initiatives for Effective Plastic Waste Management

News Excerpt

The Union Ministry of Environment, Forest & Climate Change (MoEFCC) has launched Awareness Mascot 'Prakriti' & Green Initiatives for Effective Plastic Waste Management.

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Pre-Connect

- According to MOEFCC, India is generating about 3.5 million tonnes of plastic waste annually and the per capita plastic waste generation has almost doubled over the last five years.
- Earlier government has introduced 'Extended producer responsibility' for plastic packaging under plastic waste management rules 2022.
- The Central Pollution Control Board (CPCB) had earlier in the year notified producers, shopkeepers, street vendors and the general public about the ban on such items that the government considers as single-use plastic. India will implement a blanket ban on certain single-use plastic items from July 1 this year.

Key highlights

- During the events following green initiatives for plastic waste management were launched-
    - o National Dashboard on Elimination of Single Use Plastic and Plastic Waste Management (MoEFCC) to bring all stakeholders including Central Ministries/ Departments, State/UT Governments at one place and track the progress made for elimination of single use plastic (SUP) and effective management of plastic waste.
    - o Extended Producer Responsibility (EPR) Portal for Plastic Packaging (CPCB) for improving accountability, traceability, transparency and facilitating ease of reporting compliance to EPR Obligations by Producers, Importers and Brand-owners
    - o Mobile App for Single Use Plastics Grievance Redressal (CPCB) to empower citizens to check sale/usage/manufacturing of SUP in their area and tackle the plastic menace.

- o Monitoring module for SUP (CPCB), for local bodies, SPCBs/PCCs and CPCB, to inventorize details of SUP production/ sale & usage in commercial establishments at district level, and on-ground enforcement of ban on SUP.

- o Industrial production of Graphene from Waste Plastic (G B Pant NIHE & NRDC) to promote more industries to come forward to up cycle plastic waste.

PEPPER IT WITH
Swachh Bharat Mission, India Plastics Pact, Go Litter Partnerships Project, Single use plastic

FOR MORE ON PLASTIC WASTE MANAGEMENT REFER KSG CURRENT CONNECT FEB EDITION, PAGE NO-82.

https://ksgindia.in/current-connect/2022/2.%20February%202022.pdf

Blue Blob

News Excerpt

Recently, researchers theorises that a region of cooling water in the North Atlantic Ocean have helped temporarily stall the melting of Arctic Sea ice. This region is also known as blue blob.

Pre-Connect

- The Arctic region is reportedly warming four times faster than the global average. Iceland's glaciers steadily shrank from 1995 to 2010, losing an average of 11 billion tons of ice per year.

- Starting in 2011, however, the speed of Iceland's melting slowed, resulting in about half as much ice loss, or about five billion tons annually. This trend was not seen in nearby, larger glaciers across Greenland and Svalbard.

- The Atlantic Meridional Overturning Circulation (AMOC) is a large system of ocean currents that carry warm water from the tropics northwards into the North Atlantic.

About Blue Blob

- It is a cold patch located south of Iceland and Greenland. The cold patch was most prominent during the winter of 2014-2015 when the sea surface temperature was about 1.4 degrees Celsius colder than normal.

> How does the AMOC work?
> - ❖ The AMOC is a large system of ocean currents, like a conveyor belt, driven by differences in temperature and salt content – the water's density.
> - ❖ As warm water flows northwards it cools and some evaporation occurs, which increases the amount of salt. Low temperature and a high salt content make the water denser, and this dense water sinks deep into the ocean.
> - ❖ The cold, dense water slowly spreads southwards, several kilometres below the surface. Eventually, it gets pulled back to the surface and warms in a process called "upwelling" and the circulation is complete.
> - ❖ This global process makes sure that the world's oceans are continually mixed, and that heat and energy are distributed around the earth.

- The researchers found that cooler waters near the Blue Blob were linked to observations of lower air temperatures over Iceland's glaciers and coincided with a slowing of glacial melting since 2011.

- The Blue Blob is part of the normal sea surface temperature variability in the Arctic. Notably, especially cold winters in 2014 and 2015 led to record cooling, which caused upwelling of cold, deep water, even as ocean temperatures around the region warmed due to climate change.

Page 70

- Before the Blue Blob, a long-term cooling trend in the same region, called the Atlantic Warming Hole, reduced sea surface temperatures by about 0.4 to 0.8 degrees Celsius during the last century and may continue to cool the region in the future.
- A possible explanation for the Warming Hole is that climate change has slowed the Atlantic Meridional Overturning Circulation, an ocean current that brings warm water up from the tropics to the Arctic, thus reducing the amount of heat delivered to the region.

Significance of Arctic

The region plays a vital role in the Earth's climate system and energy balance. As reflective snow and ice diminish, due to Arctic warming or black carbon deposits, solar energy is increasingly absorbed in the ocean and land area.
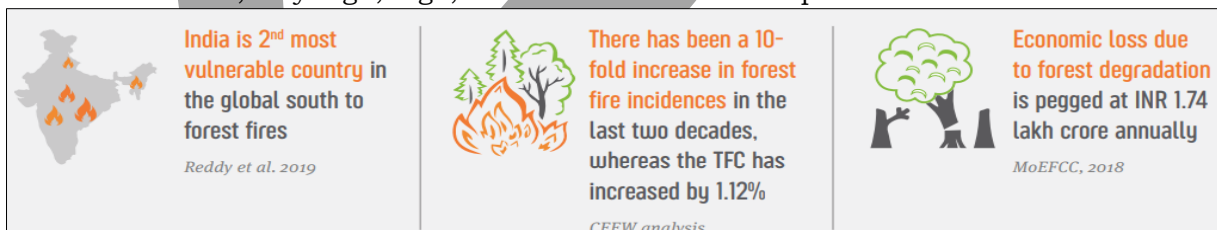
Forest Fire in India

News Excerpt

Recently, the Council on Energy, Environment and Water (CEEW) study has found that Andhra Pradesh, Assam, Chhattisgarh, Odisha and Maharashtra are the most prone to high-intensity forest fire events caused by rapid change in climate.

Pre-Connect

- The Council on Energy, Environment and Water is one of Asia's leading not-for-profit policy research institutions. CEEW uses data, integrated analysis, and strategic outreach to explain – and change – the use, reuse, and misuse of resources.
- According to the Forest survey of India 2019, About 36 per cent of forest cover in India falls under extreme, very high, high, and moderate forest fire– prone zones.

India is 2nd most vulnerable country in the global south to forest fires
Reddy et al. 2019

There has been a 10-fold increase in forest fire incidences in the last two decades, whereas the TFC has increased by 1.12%
CEEW analysis

Economic loss due to forest degradation is pegged at INR 1.74 lakh crore annually
MoEFCC, 2018

Key Points of the Study

- Forest fire incidences have increased ten times over the past two decades. More than 80% of forest fires have been recorded in drought-prone districts over the past two decades.
- The study also highlighted that instance of forest fires in India have risen by over 10 times in the past two decades. In the last month alone, significant forest fires have been reported in states like Uttarakhand, Madhya Pradesh and Rajasthan.
- More than 30 per cent of Indian districts are hotspots for extreme forest fires.
- Onset of the fire season results in an increase in aerosol optical depth.
- Mizoram has had the highest number of forest fire incidences in the last two decades, with more than 95 per cent of its districts being forest fire hotspots, according to the study.
- Larger portion of the NER (northeastern region), including Arunachal Pradesh, Assam, Meghalaya, Mizoram, Nagaland, Manipur, and Tripura, barring Sikkim, are witnessing an increased frequency of forest fire incidences in recent decades, despite the NER being a rain-fed area, it is witnessing more forest fire incidences during increased dry spells across March-May and due to the muddled rainfall distribution pattern.
- The study also found that districts that were earlier flood prone have now become drought prone due to a "swapping trend" as a result of climatic changes. Districts such as

Kandhamal (Odisha), Shoepur (Madhya Pradesh), Udham Singh Nagar (Uttarakhand) and East Godavari (Andhra Pradesh) have now also become fire hotspots.

➢ In the last month alone, significant forest fires have been reported in states such as Uttarakhand, Madhya Pradesh and Rajasthan. The recent fire at Rajasthan's Sariska Tiger Reserve was also considered to have been unseasonal, with high temperatures exacerbating the spread of the fire.

Initiative taken by Government and related issues

✓ From a governance standpoint, forest fires are under the prerogative of the Ministry of Environment, Forest and Climate Change (MoEFCC).

✓ Forest fire management is under the purview of the National Afforestation Programme (NAP) and Forest Fire Prevention and Management Scheme. The National Plan on Forest Fires was launched by the Government of India in 2018 under the flagship National Afforestation Programme.

✓ The NAPFF aims to enable and empower forest fringe communities to reduce forest fire incidences but it still lacks a budgetary allocation for its implementation and is cross-allocated through the Compensatory Afforestation Fund Management and Planning Authority (CAMPA) (FSI 2019).

✓ This plan touches upon a wide range of activities, but financial constraints and operational dynamism remains a challenge.

✓ Currently, Forest Survey of India (FSI) and National Remote Sensing Centre (NRSC) are carrying out near real-time monitoring of forest fires which does not segregate forest fires from other fires such as waste burning and crop burning.

Analytica

➢ As per TERI, Indian forests have the potential to sequester an additional 3 billion tonnes of CO_2 by 2030 and ensure sustained sustenance services for 22 per cent of its dependent population (275 million).

➢ Although the forest cover is increasing at an incremental rate, its rate of degradation is accelerating and the degradation loss will cost India INR 1.74 lakh crore per annum (MoEFCC 2018).

➢ India's forest cover, including its tree cover, has increased by 3 per cent in the last decade (2011–2019) (FSI 2019), there is a need for greater proactivity in managing forests considering the increased threats they face – primarily due to climate change, increase in the incidence of forest fires, deforestation, and forest diversions, among others.

➢ **Impacts**: Forests are subject to the stated disturbances, which adversely affect their health and affect a range of ecosystem and socio-economic services. Traditionally, fire is quite commonly used by forest-dependent populations to manage forests, but what is significantly intensifying incidences of forest fires is climate change.

Way Forward

✦ Forest fires should be acknowledged as a chronic hazard at the core of India's disaster management strategy. Forest fires should be recognised as a disaster type under the NDMA act. The recognition will enhance and strengthen the National Plan on Forest Fires by improving its financial allocation and through the creation of a cadre of trained forest firefighters under the National Disaster Response Force (NDRF) and State Disaster Response Force (SDRF).

✦ Capacity-building initiatives targeted at district administrations and forest-dependent communities can avert the extent of loss and damage due to forest fires. Training on high technology-focused equipment (like drones) and nature-based modules such as creating effective forest fire lines can effectively mitigate the spread of forest fires.

Geological Heritage Sites

News Excerpt

Geological Survey of India (GSI) has identified two geological heritage sites in the Indian Himalayan Region of India.

About the Sites

State	Name of the site	Key Points
Himachal Pradesh	Siwalik Fossil Park,	• The Siwalik Fossil Park displays a rich collection of vertebrate fossils recovered from the Siwalik rocks of the area of Plio-Pleistocene age. • The deposition of Siwalik sediments took place in the narrow linear depression, called the 'fore deep', which started developing in front of the Himalayas since the inception of its uplift in the middle Miocene
Sikkim	Stromatolite bearing Dolomite / Limestone of Buxa Formation	• The Geo-heritage site at Mamley exposes lithounits of Buxa Formation, Daling Group of Proterozoic age. • The dolostones are profusely stromatolitic (Precambrian algal structures). This site provides one of the rare examples of early life in Sikkim Himalaya.

SCIENCE & TECHNOLOGY

NFC Technology for instant payments

News Excerpt

Google Pay has recently launched a new feature in India, 'Tap to pay for UPI', in collaboration with Pine Labs. The feature makes use of Near Field Communication (NFC) technology.

Pre-connect

- UPI (Unified Payments Interface) was the first major step taken by India to achieve a cashless economy was the introduction of Unified Payment Interface (UPI).
- With the help of the new feature, your smartphone can be used as a virtual debit card. You can also receive and send money with the help of UPI.

Background of NFC

➢ In 2004, consumer electronics companies, Nokia, Philips and Sony together formed the NFC Forum, which outlined the architecture for NFC technology to create powerful new consumer-driven products.

About NFC and its functioning

✓ NFC is a short-range wireless connectivity technology that allows NFC-enabled devices to communicate with each other and transfer information quickly and easily with a single touch — whether to pay bills, exchange business cards, download coupons, or share a document.

✓ NFC transmits data through electromagnetic radio fields, to enable communication between two devices.

✓ Both devices must contain NFC chips, as transactions take place within a very short distance.

✓ NFC-enabled devices must be either physically touching or within a few centimeters from each other for data transfer to occur.

✓ Google Pay has been the first among UPI apps to bring the Tap to Pay feature working on POS terminals.

✓ It will allow users with UPI accounts configured on Google Pay to make
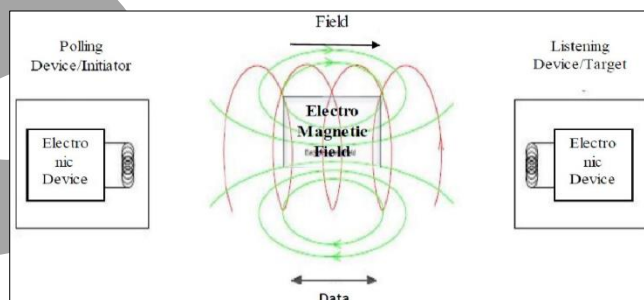
How Does UPI Work?

❖ The user will only have to use a virtual address, known as a Virtual Payment Address (VPA) to carry out any transaction.

❖ UPI has been developed by the National Payments Corporation of India (NPCI) and is regulated by the Reserve Bank of India (RBI). UPI is slowly becoming the most preferred form of digital payment.

❖ The below-mentioned things are required to transfer funds via UPI-
   o A smartphone
   o An active bank account
   o The mobile number must be active and linked to the bank account
   o Internet connection

❖ UPI is slowly becoming the most preferred form of digital payment. The UPI interface is compatible with most banks and many digital wallets, and payment applications are embracing UPI. Some of the apps include Google Tez, Paytm, PhonePe and the like.

payments just by tapping their NFC-enabled Android smartphones on any Pine Labs Android POS terminal.

✓ Once users tap their phones on the POS terminal, it will automatically open the Google pay app with the payment amount pre-filled.

✓ Users can then verify the amount and merchant name and authenticate the payment, using their UPI PIN. They will be notified once the payment is successful.

✓ The process is much faster compared to scanning a QR code or entering the UPI-linked mobile number which has been the conventional way till now.

Analytica

Applications of NFC technology

▪ It is used in contactless banking cards to perform money transactions or to generate contact-less tickets for public transport.

▪ Contactless cards and readers use NFC in several applications from securing networks and buildings to monitoring inventory and sales, preventing auto theft, keeping tabs on library books, and running unmanned toll booths.

▪ NFC is behind the cards that we wave over card readers in subway turnstiles and on buses to check tickets.

▪ It is present in speakers, household appliances, and other electronic devices that we monitor and control through our smartphones. With just a touch, NFC can also set up WiFi and Bluetooth devices in our home.

▪ It also has an application in healthcare, to monitor patient stats through NFC-enabled wristbands. NFC is used in wireless charging too.

How Safe is this technology?

➕ NFC technology is designed for an operation between devices within a few centimetres from each other.

➕ This makes it difficult for attackers to record the communication between the devices compared to other wireless technologies which have a working distance of several metres, according to the NFC forum, a non-profit industry association.

➕ The user of the NFC-enabled device determines by the touch gesture which entity the NFC communication should take place with, making it more difficult for the attacker to get connected.

➕ The security level of the NFC communication is by default higher compared to other wireless communication protocols.

➕ The NFC Forum has also added Peer to Peer communication which is a mechanism to cipher all exchanged data to avoid external interpretation of recorded communication.

➕ Since the receiving device reads your data the instant you send it, NFCs also reduce the chance of human error.

Nipah Virus infection

News Excerpt

Recently, Scientists at Pune's Indian Council of Medical Research – National Institute of Virology were able to detect the presence of IgG antibodies against Nipah virus infection (NiV) in 51 bats that were captured from Karnataka, Kerala, Tamil Nadu and Puducherry.

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Pre-connect

Nipah virus (NiV) was first discovered in 1999 following an outbreak of disease in pigs and people in Malaysia and Singapore.

Nipah virus (NiV) can spread to people from:

- o Direct contact with infected animals, such as bats or pigs, or their body fluids (such as blood, urine or saliva)
- o Consuming food products that have been contaminated by body fluids of infected animals (such as palm sap or fruit contaminated by an infected bat)
- o Close contact with a person infected with NiV or their body fluids (including nasal or respiratory droplets, urine, or blood).

Nipah virus (NiV) is one of the priority pathogens with a pandemic potential. Though the spread is far slower than SARS-CoV-2, case fatality is the biggest concern. The sudden emergence of Nipah in Kerala, during 2018–2019 has been astonishing with respect to its introduction in the unaffected areas.

About Nipah Virus

- The fruit bats of genus Pteropus are identified to be the main reservoir of the Nipah virus causing annual outbreaks in Malaysia, Bangladesh and other countries in South-East Asia including India.

- However, three incidences of NiV infections in humans in Kerala which is far distant from the known "Nipah belt" in consecutive years with no identified intermediate animal host or confirmed mode of entry into human population warrants the heightened need of constant surveillance of NiV in bats, animals and humans.
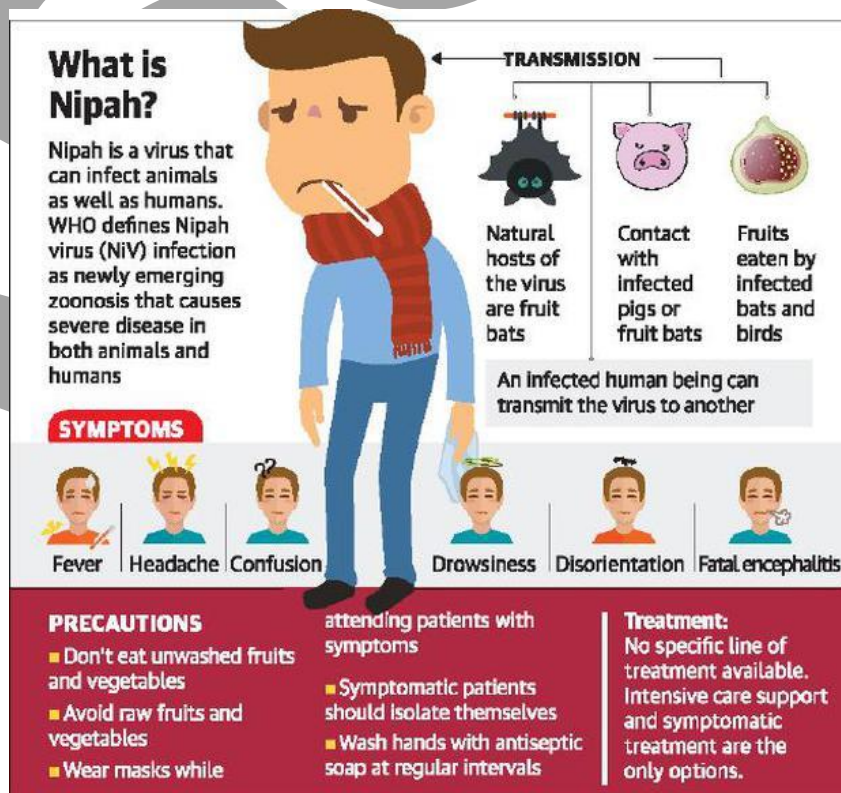
Key points of the study

- ➤ The sequence analyses showed its deviation from the NiV strains from Bangladesh and northeastern region of India.

- ➤ Analysis of NiV N gene sequences from the new hotspots in Kerala also suggested the presence of a new genotype independently evolving in southern India.

> Hence, knowledge of the distribution and movement patterns of bat species that act as the reservoir hosts of Nipah virus was necessary to identify the regions at risk, and possible events of spillover.

> Considering all these factors, a countrywide survey of Nipah virus in Pteropus bats was undertaken. The aim was to determine presence of NiV activity in bat populations in southern states and union territories which are geographically close to the new hotspot of NiV and a state (Odisha) bordering West Bengal in the southeast.

Signs and Symptoms of Nipah Virus

❖ Infection with Nipah virus (NiV) can cause mild to severe disease, including swelling of the brain (encephalitis) and potentially death.

❖ Symptoms typically appear in 4-14 days following exposure to the virus. The illness initially presents as 3-14 days of fever and headache, and often includes signs of respiratory illness, such as cough, sore throat, and difficulty breathing. A phase of brain swelling (encephalitis) may follow, where symptoms can include drowsiness, disorientation, and mental confusion, which can rapidly progress to coma within 24-48 hours.

❖ Symptoms may initially include one or several of the following:

- Fever
- Headache
- Cough
- Sore throat
- Difficulty breathing

Jupiter-Like Protoplanet

News Excerpt

Recently, The Hubble Space Telescope has photographed a Jupiter-like protoplanet forming through a process that researchers have described as "intense and violent. According to NASA, this discovery supports a long-debated theory called "disk instability," which tries to explain how planets similar to Jupiter are formed.

Pre-connect

- Hubble Space Telescope (HST), the first sophisticated optical observatory placed into orbit around Earth. Earth's atmosphere obscures ground-based astronomers' view of celestial objects by absorbing or distorting light rays from them.

- A telescope stationed in outer space is entirely above the atmosphere, however, and receives images of much greater brightness, clarity, and detail than do ground-based telescopes with comparable optics.

- Jovian Planets: The material with which planets are made originate in a circumstellar disc. The giant planets of the outer solar system are often referred to as Jovian planets. There are four Jovian planets, namely, Jupiter, Saturn, Uranus, and Neptune. "Core accretion" is the dominant theory for Jovian planets formation.

About new discovery

> This model is for giant planet formation where a protoplanetary disk becomes dense and cool enough to be unstable to gravitational collapse and thereby resulting in the formation of a gaseous protoplanet.

> A protoplanetary or circumstellar disc is a disc of gas and dust orbiting a newly formed star, out of which planets are hypothesised to form.

About Disk Instability

✓ It has long been debated that planet like Jupiter form through a process called "disk instability", which refers to a model for giant planet formation in which a region of a

circumstellar disc becomes dense and cool enough to be unstable to gravitational collapse, resulting in the formation of a gaseous protoplanet.

✓ Circumstellar discs are discs of dust, gas, asteroids and other objects that rotate around a star. Circumstellar discs around newly formed stars are known as protoplanetary discs.

Which Star Does the Protoplanet Orbit?

▪ The Jupiter-like protoplanet under construction, called AB Aurigae b, is embedded in a protoplanetary disc of dust and gas with distinct spiral structure swirling around a young star estimated to be around two million years old.

▪ This is about the age of our solar system when planet formation was taking place. The current age of the solar system is 4.6 billion years.

What Is Core Accretion?

➕ Core accretion occurs from the collision and coagulation of solid particles into gradually larger bodies until a massive enough planetary embryo is formed to accrete a gaseous envelope.

➕ It is a bottom-up approach where planets embedded in the circumstellar disc grow from small objects, and collide and stick together as they orbit a star.

➕ The objects' sizes can range from dust grains to boulders. Then, the core slowly accumulates gas from the disc.

> ### How Was The Planet Photographed?
> The study authors were able to directly image the newly forming exoplanet AB Aurigae B over a 13-year span using Hubble instruments. They combined data from two Hubble instruments: the Space Telescope Imaging Spectrograph and the Near Infrared Camera and Multi-Object Spectrograph. The scientists compared these data to those from a state-of-the-art planet imaging instrument called SCExAO on Japan's 8.2-metre Subaru Telescope located at the summit of Mauna Kea, Hawaii. With the help of these data, the scientists could distinguish between infant planets and complex disc features unrelated to planets.

Difference Between Core Accretion and Disk Instability

> The disk instability approach, in contrast, is a top-down model. The massive disc around a star cools, and gravity causes the disc to rapidly break up into one or more planet-mass fragments.

> AB Aurigae B is probably about nine times more massive than Jupiter and orbits its host star at a distance of 8.6 billion miles, according to the study. This distance is more than two times the distance between Pluto and the Sun.

> How Did The Researchers Conclude That The Planet Is Forming Through Disk Instability?

> ### About Europa
> ❖ Europa is slightly smaller than Earth's moon and its diameter is about one-quarter that of the Earth. Even though Europa has a very thin oxygen atmosphere, it is considered one of the most promising places in the solar system to find present-day environments that are suitable for life beyond the Earth.
> ❖ It is also believed that underneath Europa's icy surface the amount of water is twice that on Earth. NASA notes that scientists believe Europa's ice shell is 15-25 km thick and is floating on an ocean, which is estimated to be between 60-150 km deep. Interestingly, while its diameter is less than the Earth's, Europa probably contains twice the amount of the water in all of the Earth's oceans.
> ❖ NASA is expected to launch its Europa Clipper in 2024. The module will orbit Jupiter and conduct multiple close flybys to Europa to gather data on the moon's atmosphere, surface and its interior.

> A Jupiter-sized planet would take a very long time to form by core accretion at that distance. This means that the planet is not forming through the core accretion process, but is being formed through the disk instability approach, the researchers concluded.

Importance

The new discovery is strong evidence that some gas giants can form by the disk instability mechanism. The Jovian planets form mostly through the core accretion approach. Boss explained that in the end, gravity is all that counts, as the leftovers of the star-formation process will end up being pulled together by gravity to form planets, one way or the other.

Way Forward

Astronomers can understand more about the history of our solar system by studying the early days of the formation of Jupiter-like planets. According to NASA, the chemical make-up of protoplanetary discs like AB Aurigae will be studied in the future using NASA's James Webb Space Telescope.

Air Navigation Service in India

News Excerpt

Recently, Airports Authority of India (AAI) successfully conducted light trial using GAGAN (GPS Aided GEO Augmented Navigation) based LPV Approach Procedures at Kishangarh Airport, Rajasthan.

Pre-connect

- Airports authority of India would like to place on record its sincere appreciation to ISRO for designing and implementing GAGAN program from 2002 onwards. DGCA was highly proactive in ensuring the operationalization of GAGAN.
- **Directorate General of Civil Aviation (DGCA)**: It is the regulatory body governing the safety aspects of civil aviation in India. With the revision to Section 4A of the Aircraft Act, 1934.
- In September 2020, the DGCA has been formally recognized as a body constituted by the Central Government with the responsibility to carry out safety oversight and regulatory functions in respect of matters specified in the Act or the rules made thereunder.

About GAGAN System

- GAGAN is a system jointly developed by the Airports Authority of India and the Indian Space Research Organisation (ISRO) in collaboration with US defence contractor Raytheon at an estimated cost of Rs 774 crores.
- It provides a very accurate and high-level of satellite signals for precision air navigation over the entire Indian airspace, with the capability of expanding to nearby regions.
- It is capable of providing navigation services for departure, en-route and landing operations to equipped planes.
- GAGAN is a Satellite Based Augmentation System or SBAS, which is a regional network of ground stations and satellites that provide GPS signal corrections, giving a better position accuracy.
- GPS is the most prevalent Global Navigation Satellite System (GNSS) and is owned by the US government. GAGAN is the fourth such SBAS system that has been operationalised after the US' WAAS, European Union's EGNOS an d Japan's MSAS and it is interoperable with the other three.
- The GAGAN system consists of 15 earth-based reference stations, two master control centres, three land uplink stations and three geostationary satellites.

Benefits of GAGAN System

- ✓ GAGAN opens a gateway for all airports to have low visibility approaches. It will bring down diversions, save fuel and boost efficiency.
- ✓ GAGAN can serve smaller airports effectively, and older aircraft have to be upgraded with GAGAN receivers.
- ✓ GAGAN will help airports which are currently devoid of precision approach capability equipment and have higher visibility requirements. It will reduce flight delays, save fuel, and improve flight safety.
- ✓ Aircraft will be able to land at airports not equipped with expensive Instrument Landing Systems, which include many small regional airports.
- ✓ GAGAN's capabilities can be utilised in many other user segments such as intelligent transportation, maritime, highways, railways, surveying and the telecom industry.
- ✓ GAGAN Message Service (GMS) can relay alerts to deep-sea fishermen, farmers, and disaster affected people at the time of natural calamities.

WHAT IS SBAS?

- ▪ A Satellite Based Augmentation System (SBAS) is a primary air navigation system that provides augmented accuracy and integrity to a Global Navigation Satellite Systems (GNSS) navigation signal such as used by the U.S. Global Positioning System (GPS).
- ▪ GNSS alone is considered a supplemental air-navigation system. An SBAS provides improved service availability over a wide area and is a more reliable navigation service than GNSS alone.

National Cyber Security Strategy

News Excerpt

The ministry of electronics and information technology on underlined its first ever cybersecurity policy, asking service providers, intermediaries, data centres, body corporates and government organisations to mandatorily report any breaches or leaks within six hours of them being flagged.

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Pre-Connect

- The new circular, issued by the CERT-In, mandates all service providers, intermediaries, data centres, corporate and government organisations to mandatorily enable logs of all their ICT (Information and Communication Technology) systems and maintain them securely for a rolling period of 180 days and the same shall be maintained within the Indian jurisdiction.

Indian CERT
- ❖ CERT-In (the Indian Computer Emergency Response Team) is a government-mandated information technology (IT) security organization.
- ❖ The purpose of CERT-In is to respond to computer security incidents, report on vulnerabilities and promote effective IT security practices throughout the country.
- ❖ CERT-In was created by the Indian Department of Information Technology in 2004 and operates under the auspices of that department.
- ❖ CERT-In is empowered under Section 70B of the Information Technology Act to collect, analyse and disseminate information on cyber security incidents.
- ❖ According to the provisions of the Information Technology Amendment Act 2008, CERT-In is responsible for overseeing administration of the Act.
- ❖ CERT organizations throughout the world are independent entities, although there may be coordinated activites among groups.

- Data Security Council of India (DSCI), as an industry body has consolidated its perspective on the 2020 national cybersecurity strategy, in consultation with the enterprises from various sectors.

About India's national cyber security strategy
Need:

✓ India's digital economy is growing rapidly, and technology adoption is in every facet of human intervention. According to recent report by McKinsey Global Institute, India is the second-fastest digital adopter among 17 most digital economies of the World.

Facets of National Cyber Security

Large scale Digitization of Public Services · Supply chain security · Critical Information Infrastructure Protection · Digital Payment Security · Sectoral preparedness · State Level Cyber Security · SMB Preparedness · Advanced Technology [5G, wireless, cloud, mobility, IoT, AI/ML, robotics, AR/VR, HPC & Quantum Computing, , hardware /semiconductor, DLT, UAV, SDI & material science]

Secure [The National Cyber Space]

Synergize [Resources including Cooperation & Collaboration] · Strengthen [Structures, People, Processes, Capabilities]

Internet Infrastructure · Standards Development · Cyber Insurance · Brand India · Cyber Diplomacy · Cyber Crime Investigation

Structures, Character Institutions, & Governance · Budget Allocation · Research, Innovation & Technology Development · Capability & Skill Building · Audit & Assurance · Incident/Crisis Management · Data Security & Governance

✓ India's core digital sectors accounted for about $170 billion-or 7 percent of GDP in 2017–18, and this is expected to grow to 8%-10% of our GDP by 2025.

✓ Strategy covers 21 areas, and following are **the key points-**

  o **Large scale digitization of public services**: Digitization efforts of India get global recognition due to innovative thinking, architectural experimentations, and the potential of scale. If security is not embedded in their design, well-thought-through in the deployment, and ensured in their operations, it would impact assured availability of services, and citizens trust in digital platforms and online services.

    o Ensuring thinking of security in the early stages of design all digitization initiatives undertaken in the country

    o Calling for empowered security roles and responsibilities in such projects and initiatives

    o Promoting the culture of security authorization/clearances while deploying the solutions

    o Developing institutional capability for assessment, evaluation, certification, and rating of the core devices used by the projects

    o Advocating extensive assessment of devices, solutions, and architectures suggested, adopted, and implemented by such projects

    o Mandating an advanced level of cybersecurity operations matching the scale and complexity of security challenges

  o **Supply chain security**: Rapid digitization of industry, including critical sectors, social spaces, and personal transactions on the one hand and country's aggressive efforts for Make-in-India on the other, demand a two-pronged approach for supply chain security. One, for procurement and deployment of products manufactured in the increasingly complex global supply chain. Second, for products developed or value-added in India.
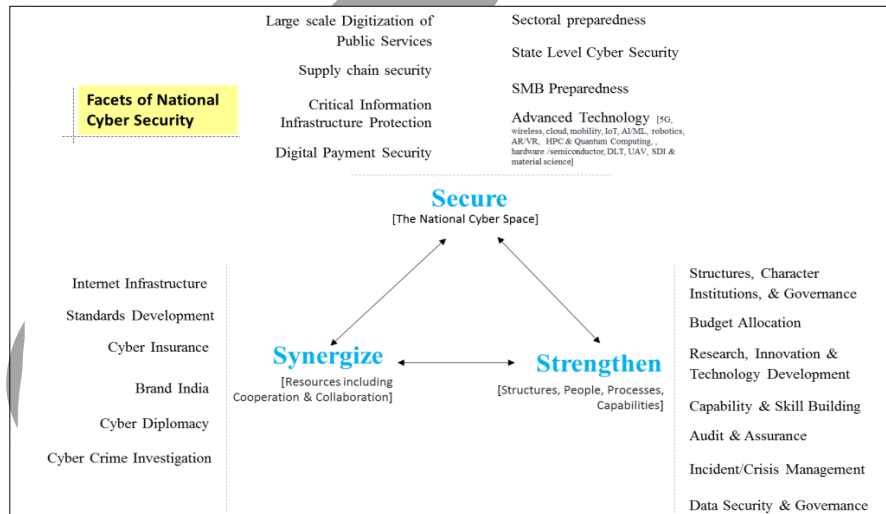
- o **Critical Information Infrastructure Protection**: The increased focus of cyberattacks, systematically planned and executed by non-state as well as state actors, to the target CII sectors causing more substantial or kinetic impact, demand concerted and smart strategies.
- o **Digital Payment**: digitization of payment and financial transaction processing would be the prime driver of the digital economy. Careful and concerted efforts would be needed for securing high paced but innovative and experimental transformation of transaction processing.
- o **Sectoral preparedness:** Digitization is increasingly leading to the verticalization of IT, where every sector is evolving to verticalize technology stack for their requirements. Their digital footprint is increasing, spreading the threat exposures. The sectors may not be ready or fall short of handling security affairs impacting their prospects.

Conclusion

- ▪ As India is on the way of becoming USD 1Tn economy, the Government of India is working towards updating its National Cybersecurity strategy in order to improve its position in the cyber space. While India has come a long way since it launched its policy in 2013, there are many new challenges that have emerged due to technology advancement.
- ▪ Global Cybersecurity Index for 2018 ranks India at 47th place globally, in its assessment covering 5 pillars (legal, technical measures, Organizational measures, capacity building and global collaboration). There is dire need for Government of India to intervene and help the sectors to improve cybersecurity posture of the country.

SECURITY

Indigenisation List

News Excerpt

Recently, the Defence Ministry notifies 3rd positive indigenisation list which includes indigenise weapons and platforms.

About the List

- As part of efforts to boost the domestic defence industry and promote defence exports, in August 2020, the government notified the first negative import list of 101 items and in May this year notified the second one, comprising 108 items, and renamed the third one as **'positive indigenisation list'**. The items on the lists cannot be imported by the Services and should be sourced from within the country.
- Like in the two earlier lists, special focus has been given to import substitution for ammunition in the third list.
- The third list comprises highly complex Systems, Sensors, Weapons and Ammunitions like Light Weight Tanks, Mounted Arty Gun Systems (155mmX 52Cal), Guided Extended Range (GER) Rocket for PINAKA MLRS, Naval Utility Helicopters (NUH), Next Generation Offshore Patrol Vessels (NGOPV), MF STAR (Radar For Ships), Medium Range Anti-Ship Missile (Naval Variant), Advance Light Weight Torpedo (Ship Launch), High Endurance Autonomous Underwater Vehicle, Medium Altitude Long Endurance Unmanned Aerial Vehicle (MALE UAV), Anti-Radiation Missiles, Loitering Munitions.
- Similarly, one of the technologies handed over by the DRDO to the industry is 125 mm Fin Stabilised Armour Piercing Discarding Sabot (FSAPDS) practice ammunition for training the crews of T-72 and T-90 tanks that constitute the bulk of Army's armoured fleet.
- The key attributes of the training ammunition were low-cost, less barrel wear, complete ballistic matching with in-service ammunition, compatible with sighting and fire control systems of T-72 and T-90 tanks, safe for firing at operational temperatures from -10 to +55 degree centigrade and excellent consistency and accuracy.

Self-reliance in Defence

- ➤ The third positive indigenisation list contains 101 equipment and platforms, which the services can procure only from the domestic industry.
- ➤ The list includes naval utility helicopters, light tanks, small Unmanned Aerial Vehicles, anti-ship missiles among others.
- ➤ The Defence Research and Development Organisation (DRDO) handed over 30 Transfer of Technology (ToT) agreements to 25 Indian industries for transfer of 21 technologies developed by 16 DRDO labs across the country.
- ➤ The release of this list shows the fast pace of **self-reliance** in the defence sector**.**
- ➤ One of the big ticket items on the list is naval utility helicopters, the procurement for which was to be processed through the Strategic Partnership route and has been hanging fire for over couple of years now. This is now expected to go to Hindustan Aeronautics Limited (HAL).
- ➤ Other big systems in the list include sensors, weapons and ammunitions, rockets, patrol svessels, anti-ship missile, anti-radiation missile and several others which would fulfill the requirements of the armed forces.

PEPPER IT WITH
PINAKA MLRS, Advance Light Weight Torpedo (Ship Launch), Medium Altitude Long Endurance Unmanned Aerial Vehicle (MALE UAV)

- ➤ This third positive indigenisation list has been prepared after in-depth consultations with all stakeholders, such as Defence Research & Development Organisation (DRDO), Department of Defence Production (DDP), Service Headquarters (SHQs) and the private industry.

India's military spending: SIPRI Report

News Excerpt

India's military spending of $76.6 billion ranked third highest in the world.

Stockholm International Peace Research Institute (SIPRI) Report-

- World military spending continued to grow in 2021, reaching an all-time high of $2.1 trillion despite the economic fallout of the pandemic, according to new data on global military spending published by the Stockholm International Peace Research Institute (SIPRI).
- The five largest spenders in 2021 were the U.S, China, India, the U.K. and Russia, together accounting for 62% of expenditure. The U.S. and China alone accounted for 52%.
- "**India's military spending of $76.6 billion ranked third highest in the world.** This was up by 0.9% from 2020 and by 33% from 2012.

Hostile neighbours

- ➢ India has to spend more on defence to keep its frontiers safe. Geopolitics has turned its back on peace lately. So it has to be prepared for all the happenings or afflictions in future
- ➢ Amid ongoing tensions and border disputes with China and Pakistan that occasionally spill over into armed clashes, India has prioritized the modernization of its armed forces and self-reliance in arms production," the report said.
- ➢ In a drive to strengthen the indigenous arms industry, 64% of capital outlays in the 2021 Indian military budget were earmarked for acquisitions of domestically produced arms.
- ➢ Stating that military spending in Asia and Oceania totalled $586 billion in 2021, the report noted that spending in the region was 3.5% higher than in 2020, continuing an uninterrupted upward trend dating back to at least 1989.
- ➢ The increase in 2021 was due primarily to growth in Chinese and Indian military spending. Together, the two countries accounted for 63% of total military expenditure in the region in 2021.

> **PEPPER IT WITH**
> India's Defence Exports, India's Border Infrastructure

Tour of Duty

News Excerpt

'Tour of Duty' scheme to recruit soldiers only for 3-5 years is being finalised.

Background

- The government of India has proposed a new concept of recruitment for the armed forces calling the youth to come forward **as Agniveers** to serve the motherland by treading the path of **Agnipath.**
- The country's defence establishment is moving towards finalising the radical "Tour of Duty (ToD)" scheme, under which youngsters will be recruited as soldiers only for three to five years in the backdrop of the urgent need to curb the ballooning salary and pension bills that are adversely impacting military modernization.
- The Army currently has around 45,000 officers, excluding the medical stream, and 11.3 lakh other ranks. Recruitment of jawans through large rallies and camps, incidentally, has remained suspended after 2019-2020 to curb the spread of the Covid-19 pandemic.
- Over 50,000 candidates are recruited as soldiers through these rallies every year.
- The ToD scheme, which is likely to be called the "Agnipath" recruitment, is likely to be launched on an experimental basis first.
- But eventually, all soldiers could be recruited under this model. While 25% of them would serve for three years and 25% for five years, the remaining 50% would serve for the full term till they reach the retirement age.

- The cumulative money saved in pay and gratuity pay outs can consequently be used for the much-needed military modernization.

Analytica

➢ The Indian Army in particular is tasked to combat external threats but internal strive as well. Since independence the Indian Army has been in a state of **No War No Peace**.

➢ While this thought is noble and much desired, it is the execution and impact which merits a greater deliberation.

➢ Over the ages with technological development and new vistas opening up, security too has expanded its scope to become a multi-dimensional extremely complex affair with cutting edge technology and involving every major department of the state which has escalated the costs involved greatly.

➢ India can't ignore the prevailing political and socio-economic environment wherein global forces contesting India's resurgence have joined hands and are employing every conceivable tool to weaken India including domestic subversion.

➢ Tour of Duty as seems to be unfolding will offer a golden opportunity to these inimical forces to infiltrate subversive elements on grounds of secularism and reservation to weaken the military.

➢ The Indian military isn't fighting on foreign lands for dominance where victory may not be critical but fighting to safeguard our homeland where there may not be a second chance.

➢ Another aspect to be borne in mind is the terrain where we are likely to be contesting external threats. High Altitude areas of Leh, Uttarakhand, Sikkim and Arunachal Pradesh demand boots on ground and higher force ratios.

Rationale- Tour of Duty

✓ It seems an easy path to generate more employment opportunities for the underprivileged youth. Bring about an egalitarian culture for parity and tolerance nationwide, without any prejudice against women, religion or politics.

✓ Create an economically strong India, with peace and amity, internally and externally. The political leaders have turned their focus mainly on the military, paramilitary and Department of Defence Production.

✓ The 'takeaway' that the political leadership hopes for is not just inculcation of self-discipline and value system of the military by youth, but also vocational training with some technical content, which would help them find employment in the civic 'milieu' in India or abroad.

✓ It will also ameliorate the 'fighting strength' shortfalls that armed forces have been lamenting for a long time. Now the regimental recruitment is from specific catchment areas. This is likely to become 'pan India',

The way ahead

▪ The three-year tenures would need five cycles of induction and five-year tenures would need three cycles to make up the required numbers.

▪ The training duration of 44 weeks for a recruit would remain and hence greater numbers will need to be recruited and trained.

| **PEPPER IT WITH** |
| Border Security Force, Indo-Tibetan Border Police, Indian Coast Guard and Indian Military Academy |

▪ Due to overlapping cycles of training, the centres would need additional infrastructure, training resources and trainers which need time and additional resources. Their costs and time impact need to be worked out too to balance out the overall fiscal gain.

▪ Weakening the core strength of the Indian Army and its ability to fulfil its primary role will not be worth it, even if it leads to fiscal gains.

Solid Fuel Ducted Ramjet (SFDR) Booster

News Excerpt

India successfully tested missile system Solid Fuel Ducted Ramjet (SFDR) booster.

Pre-Connect

- The SFDR-based propulsion enables the missile to intercept aerial threats at very long range at supersonic speeds.
- The air breathing ramjet technology will propel long range air-to-air missiles to engage with targets at supersonic speed and high accuracy.
- The missiles will provide a multi-layered aerial protection to important establishments from hostile attacks.
- Ground booster, separation of ground booster and Nozzle-less-booster performance were found satisfactory. Missile was guided to high altitude to simulate aircraft release conditions and subsequently nozzle-less-booster was ignited.
- SFDR based missile accelerated to achieve ramjet Mach number successfully. The trajectory was tracked by telemetry and radar stations till touchdown. All the mission objectives have been met.
- The success of SFDR propulsion technology is a significant milestone and will pave the way for development of long range air-to-air missiles in the country.

Operation Upalabdh

News Excerpt

Railway Protection Force (RPF) conducts Pan India Drive against touts under Operation Upalabdh.

Pre-Connect

- The month-long drive under Operation Uplabdh has been able to curb the activities of touts substantially and make railway tickets available to the common man.
- The field units of RPF gathered inputs from the field, digital and cyber world, collated, verified and analysed information and started the drive across the nation from 1st March 2022.
- The drive was immensely successful and resulted in arrest of 1459 touts, out of which 341 were authorised IRCTC agents but also indulged in touting of railway tickets.
- The process of blacklisting these IRCTC agents and blocking as many as 366 IRCTC agent IDs and 6751 personal Ids is being undertaken.
- The month long drive under Operation Upalabdh has been able to curb the activities of touts substantially and make railway tickets available to the common man.
- Indian Railways advises the common public not to procure tickets from unauthorised persons as it is not only likely to be forfeited once detected, but may also land the buyer in legal trouble.
- Indian Railways have advised the common public not to procure tickets from unauthorized persons as it is not only likely to be forfeited once detected but may also land the buyer in legal trouble.

BrahMos Missile's Anti-Ship Version
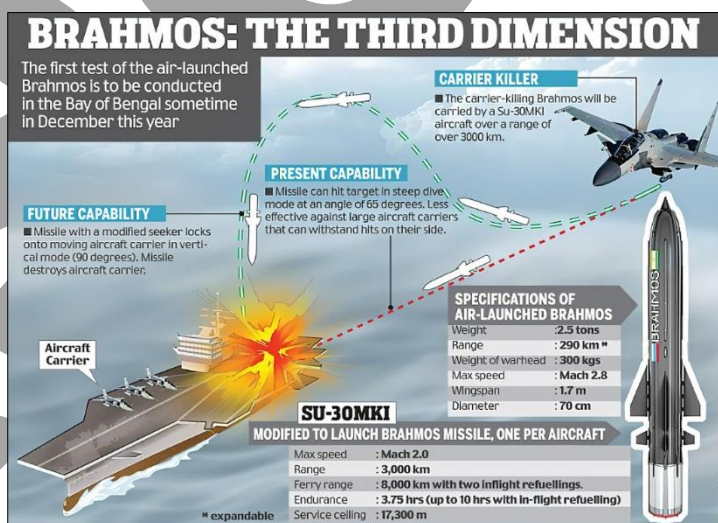
News excerpt

Anti-ship version of BrahMos missile successfully test-fired.

Pre-connect

- BrahMos Aerospace, an India-Russian joint venture, produces supersonic cruise missiles that can be launched from submarines, ships, aircraft, or land platforms.
- BrahMos missile flies at a speed of 2.8 Mach or almost three times the speed of sound. The range of the advanced version of the missile is learnt to have been extended to around 350 km from the original 290 km.

About BrahMos

- BrahMos is a joint venture between India's Defence Research and Development Organisation (DRDO) and Russia's NPO Mashinostroyeniya.
- The missile derives its name from the Brahmaputra and Moskva rivers.
- Beginning with an anti-ship missile, several variants have since been developed and it is now capable of being launched from land, sea, sub-sea and air against surface and sea-based targets and has constantly been improved and upgraded.
- The missile has been long inducted by the Indian armed forces and the Army recently deployed BrahMos along the Line of Actual Control (LAC) in Arunachal Pradesh.

- The range of the BrahMos was originally limited to 290 kms as per obligations of the Missile Technology Control Regime (MTCR) of which Russia was a signatory.
- Following India's entry into the club, plans were announced to extend the range initially to 450 kms and subsequently to 600 kms. BrahMos with extended range upto 450 kms has been tested several times since.

iDEX- Prime & 6th Defence India Start-up Challenge

News Excerpt

During the Def Connect 2.0, Innovations for Defence Excellence (iDEX) Prime and sixth Defence India Start-up Challenge (DISC 6) was launched.

Significance

- The iDEX-Prime aims to support projects, requiring to help ever-growing start-ups in the defence sector.
- The DISC 6 with 38 Problem Statements was also launched. Apart from the three Services and some Defence Public Sector Undertakings (DPSUs) which have participated in e arlier editions, DISC 6 witnesses the participation of newly-formed seven defence

companies, Indian Coast Guard and organisations under Ministry of Home Affairs for the first time.

- The Problem Statements relate to Artificial Intelligence (AI), Advanced Imaging, Sensor Systems, Big Data Analytics and Autonomous Unmanned Systems and Secured Communication among others.

- The winners of DISC 5, Open Challenge (OC 2 and 3) were also felicitated and two sessions with stalwarts of the industry were organised during the event.

- In addition, a static exhibition of an array of start-ups supported by iDEX-Defence Innovation Organisation (iDEX-DIO) was displayed to all the attendees, with the aim to motivate budding entrepreneurs to take the leap.

- Def Connect 2.0 is a symbol of increasing technological prowess of the country and a celebration of the continuous growth of the Indian defense start-up ecosystem. It is indicative to the success of the iDEX initiative which has helped in the development of many new and indigenous technologies.

- The third edition of Innovate4Defence internship (i4D) was also launched inviting applications from students all over India.

- In addition, a DIO e-Brochure and the 'Runway for Innovations' e-Coffee Table Book was launched during DefConnect 2.0.

Sixth Scorpène submarine Vagsheer

News Excerpt

The sixth and last of the French Scorpène-class submarines 'Vagsheer' launched into water at the Mazagon Docks Limited (MDL) in Mumbai.

Pre-connect

- Vagsheer, the sixth submarine of the P75 project of the Indian Navy, is the last of the Scorpene class submarines made under the P75 project and can join the Navy fleet within 12-18 months after sea trials.

- The first of the Project – 75 submarines 'INS Kalvari' was commissioned into the Navy in December 2017.

- The second one 'INS Khanderi' got inducted in 2019, 'INS Karanj' in 2021, and 'INS Vela' in November last year.

- The fifth submarine 'Vagir' (launched in November 2020) is progressing with the Sea Trials and is likely to be delivered this year.

India's submarine power

- The Indian Navy presently has 16 conventional submarines in service, which include 8 Russian Kilos, 4 German HDWs and 4 Scorpenes, and indigenous nuclear ballistic missile submarine 'INS Arihant'.

- A separate tender to build another 6 advanced conventional submarines under Project-75I is in the Request for Proposal (RFP) stage.

- Indian Navy, which has a 30-year submarine-building programme, intends to design and build conventional submarines indigenously after the P-75I.

30-year submarine-building programme

- Parallelly, the tender to build six more advanced conventional submarines under Project-75I is in the Request for Proposal (RFP) stage. The Navy has a 30-year submarine-building programme and after the P-75I, it intends to design and build conventional submarines indigenously.

- With delays in submarine induction, the SSKs - 209s (German HDWs) and EKMs (Russian Kilos), are being put through the Medium Refit Life Certification (MRLC) process, which will give them additional life of 10 to 15 years.

✓ The Navy currently has 16 conventional submarines- eight Russian Kilos, four German HDWs and four Scorpenes, and indigenous nuclear ballistic missile submarine INS Arihant in service.

Colombo Security Conclave

News Excerpt

Colombo Security Conclave in Virtual Conference on Investigation of Terrorism Cases was held recently.

Significance

- The Colombo Security Conclave Virtual Conference on Sharing of experiences in investigation of terrorism cases was organised by the National Investigation Agency of India.
- Panellists and participants from India, Maldives, Mauritius, Sri Lanka and Bangladesh participated in the virtual conference.
- The conference was one of the engagement activities identified in the Colombo Security Conclave's Roadmap for Cooperation and Activities for 2022-23 agreed by member countries at the 5th NSA level Meeting held in Maldives.
- Participants discussed the various challenges related to terrorism in their respective countries and shared experiences on prosecution of terrorism cases, strategies to deal with foreign fighters and countering the misuse of internet and social media.
- Panellists emphasised on the need for closer cooperation and coordination among member and observer countries of the Colombo Security Conclave for effective investigation and prosecution of terrorism and radicalisation related cases.
- Participants agreed to identify specific areas to take forward the cooperation on countering terrorism and radicalisation under the Colombo Security Conclave.

Defence Exercises

1. VARUNA – 2022

Features

- The Bilateral Naval Exercises between the two Navies were initiated in 1993.
- The exercise was christened as 'VARUNA' in 2001 and has become a vital part of India – France strategic bilateral relationship.
- Various units including ships, submarines, maritime patrol aircraft, fighter aircraft and helicopters of the two navies are participating in the exercise.
- These units will endeavour to enhance and hone their operational skills in maritime theatre, augment inter-operability to undertake maritime security operations and demonstrate their commitment to promote peace, security and stability in the region as an integrated force.
- Having grown in scope and complexity over the years, VARUNA series of exercises continue to provide both the navies opportunities to learn from each other's best practices.
- The exercise has been a principal driver for operational level interactions between the two navies and has underscored the shared commitment of both nations to security, safety and freedom of the global maritime commons.

2. NATPOLREX-VIII

Features

- The event is being attended by more than 85 participants from 50 agencies, including 29 observers from 22 friendly foreign countries & International Organisations and two Coast Guard ships from Sri Lanka and Bangladesh.
- The objective of NATPOLREX-VIII is to enhance the preparedness and response capability of all the stakeholders in combating marine spills.

- It aims at validating the procedures and guidelines as contained in the National Oil Spill Disaster Contingency Plan (NOSDCP) at the national and regional levels under the aegis of SACEP MoU to which India is a member state.
- During the exercise, various components of NOSDCP were invoked to validate and improve the contingency plans and evaluate preparedness of the resource agencies as well as stakeholders to meet any marine spill disaster at sea.
- During the exercise, 13 ships and 10 aircraft from ICG, one C-131 aircraft from the Indian Air Force, two ships from SACEP member states viz. Sri Lanka and Bangladesh and one Offshore Supply vessel (OSV) from ONGC, assets from Shipping Corporation of India and tugs from Mormugao Port Trust demonstrated containment cum marine spill recovery by side sweeping arms, deployment of booms and skimmers, streaming of single ship operated containment cum recovery system, firefighting drill, rescue operation, and demonstration of surface and air oil spill dispersant systems.
- The exercise is being coordinated by ICG encompassing assets from resource agencies and stakeholders including Ports, Oil Handling Agencies, Coastal States/Union Territories and other resource agencies.
- The exercise consisted of a two-day programme featuring table-top exercise, pollution response workshop on marine Oil and HNS spill followed by exercise at sea, which was reviewed by Chairman NOSDCP in presence of National and International Observers.

Art & Culture

Festivals

Ugadi

GS CONNECT

- Ugadi or Yugadi is celebrated as the first day of the year by people of Andhra Pradesh, Telangana and Karnataka.
- On this day new Samvatsara, which is cycle of sixty years, starts. All sixty Samvatsara are identified by unique name.
- Ugadi is festively observed in these regions on the first day of the Hindu lunisolar calendar month of Chaitra.
- On the day of Ugadi, people make colourful patterns on the floor called Muggulu and mango leaf decorations on doors called torana.
- Buying and giving gifts such as new clothes, giving charity to the poor, special bath followed by oil treatment, preparing and sharing a special food called pachadi, and visiting Hindu temples are some of the common rituals followed on this day.
- North Indians don't celebrate Ugadi but start nine days Chaitra Navratri Puja on the same day and also eat Neem with Mishri on the very first day of Navratri.

Gudi Padwa

- Gudi Padwa, also spelled as Gudhi Padwa, is a Hindu festival that marks the beginning of a new year for Marathi and Konkani Hindus.
- Gudi Padwa is a regional Hindu festival that is mostly celebrated by the people of Maharashtra and Goa.
- Gudi Padwa is celebrated on the first day of the Chaitra month to mark the beginning of the New Year according to the lunisolar Hindu calendar.

Gudi Padwa History and Rituals

- The word Gudi Padwa is made of two words - Gudi refers to the flag (garlanded with flowers, mango and neem leaves, topped with upturned silver or copper vessel) and padwa or padava or padavo comes from the Sanskrit word pratipada which refers to the first day of a lunar fortnight.

Gudi Padwa Significance

- Gudi Padwa marks the arrival of spring and the reaping of Rabi crops. According to some beliefs, it's the day when the Lord Brahma created time and universe. In some parts of rural Maharashtra, Gudi Padwa festival is linked to Shiva's dance and coming together of the community as they carry the Gudhi Kavads together to a Shiva temple.

Cheti Chand

- Cheti Chand or Jhulelal Jayanti is an auspicious festival that is celebrated and observed by the members of the Sindhi community in India and Pakistan.
- The members of the Sindhi community celebrate New Year on the birth anniversary of Lord Jhulelal.
- It is important to note that the festival of Cheti Chand is observed on the first day of Chaitra or Pratipada Tithi.

Sajibu Cheiraoba

- Sajibu Cheiraoba is an important traditional festival of the Meiteis held in every house on the first day of Sajibu month (April) every year.
- Sajibu and Cheiraoba are two different words implying two different meanings:- "Sajibu" indicating the first season out of six seasons to make a year and "Cheiraoba" indicating the end of the year and beginning of a new year according to Meitei calender.

- Family which is the smallest unit of a society holds the central position in the celebration to bring peace, harmony and prosperity for the family. It touches on all aspects of life with its essence be it the body mind, spiritual, social and emotional desires.
- The women of every house prepare Athelpot containing fine whole rice, raw vegetables of different kinds, fruits and flowers of the new season.
- Athelpot is meant for offering to Lainingthou Sanamahi and Leimarel Ima Sidabi at the altars placed on southwestern corner and middle north corner of the house respectively.

Navreh

- The first day of Chaitra (March-April) month is celebrated across Jammu and Kashmir as Navreh or Kashmiri New Year. It is widely celebrated by the Kashmiri Pandit community where people greet everyone they meet with a warm 'Navreh Mubarak' (Happy New Year)!
- Navreh is derived from the Sanskrit word 'Nava-Varsha', meaning New Year. There is a customary practice of preparing a plate full of unhusked rice with bread, a small bowl of yoghurt, salt, sugar candy, a few walnuts or almonds, a silver coin and Rs 10 note would also do, a pen, a mirror, some flowers (rose, marigold, crocus, or jasmine) and the new Panchanga or Almanac. Also, one has to keep Kashmiri Jantri (a Panchang book which has an account of all the important dates as per Kashmiri tradition).
- Interestingly, all of this is prepared during the night itself as the first thing in the morning is to look at this plate, and then start your day. Kashmiri Pandits observe the same ritual of preparing the plate and looking at it in the morning on Sonth or the Kashmiri spring festival.

Chaitra Sukladi

- Also known as Ugadi and Gudi Padwa, Chaitra Sukladi marks the first day of the New Year according to the traditional Hindu calendar.
- This date is marked every year in April or March by the beginning of the new moon. It is also symbolic for ringing in the beginning of the harvest season.
- This is the first day of the Chitra (spring) month. In northern parts of India this day is celebrated as Chaitra Sukhladi.
- In Andhra and Karnataka it is celebrated as Ugadi: Yuga + aadi means start of new era. In Maharashtra and Goa it is celebrated as Gudi Padwa: Padwa means crop; it marks the end of Rabi crop and time for a new 'Vasant'/spring season.
- Sindhis celebrate the new year as Cheti Chand: Chaitra month is called 'Cheti' in Sindhi; this day is observed as the birthday of Saint Jhulelal. In Kashmir the new year is celebrated as Navreh: the name is derived from Sanskrit 'Nava Varsha' meaning the New Year. In Manipur this day is celebrated as Sajibu Cheiraoba: Sajibu indicates the first of the six seasons and Cheiraoba means declaration of new year.

Archaeology Museum at Elluru, Andhra Pradesh

News Excerpt

The Archaeology and Museums Department of Andhra Pradesh has built a museum in Eluru, Andhra Pradesh.

Key Points

- The Union Ministry of Culture granted ₹3.75 crore under the '**Upgradation of Museums Scheme' under Museums Grant Scheme** for the ₹5-crore project in Eluru town. The museum was built on a 2,000 square-yard campus.
- The Archaeology and Museums Department of Andhra Pradesh has built a museum in Eluru, where nearly 400 artefacts dating back to the early historic period (from 6th Century BC to 4th Century BC) to the 19th Century AD will be displayed.

DELHI: VIJAY NAGAR 9717380832 & **OLDRAJENDER NAGAR** 9811293743 | **JAIPUR**: 8290800441
BENGALURU: KORMANGALA 7619166663 & **CHANDRA LAYOUT** 7619136662 | **BHOPAL:** 7509975361
PATNA: 7463950774 | **INDORE:** 7314977441 | **RANCHI:** 9939982007 | **www.ksgindia.com**

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- Nearly 400 artefacts have been collected from Kurnool, Rudramkota, Nellore, Guntur, Vijayawada, Kakinada, Rajamahendravaram and Eluru,"
- The artefacts include tools, sculptures, manuscripts, copper inscriptions, bronze coins, weapons and oil paintings from the 18 th and 19 th Century AD. In the Buddhism section, the Ayaka pillars and other remnants collected from Vutluru and Pinakadimi in the Godavari region will be displayed.
- "A red-stone mandapa shed found at Kotadibba in Eluru is one of the attractions in the museum. The museum is equipped with digital facilities that will give the visitors a virtual experience.

What is Museum Grant Scheme?

➢ Museums conserve collections of artefacts and other objects of artistic, cultural, historical, or scientific importance and makes them available for public viewing through exhibits that may be permanent or temporary.
➢ The strengthening of the museum movement across the country is thereby an important activity covered under the ambit of the Ministry of Culture.

The objective of the scheme is to provide financial assistance for:

✓ Setting up of new Museums by Central Government, State Governments, Societies, Autonomous bodies, Public Sector Undertakings, Local Bodies and Trusts registered under the Societies Act at the regional, state and district level.
✓ Strengthening & modernization of the existing museums by Central Government, State Governments , Public Sector Undertakings, Societies, Autonomous bodies, Local Bodies and Trusts registered under the Societies Act at the regional, state and district level.
✓ Digitization of art objects in the museums across the country for making their images/catalogues available over the website.

Capacity Building of Museum professionals.

- The museums granted financial assistance under the scheme would be required to send yearly footfall in the museums for 5 years after the completion of the project.
- A Project Monitoring Committee/cell constituted in the Ministry will periodically monitor and review the progress of the scheme for its effective implementation.

Scheme Components

- The Scheme will have 3 components as given below:
- A. Development and Establishment of Museums at the regional, state and District level
- B. Digitization of Museum Collections
- C. Capacity building and training of Museum Professionals

MISCELLANEOUS

Person in News

Sri Shiva Kumaraswami	• Shivakumara Swami was born in the village of Veerapura on April 1, 1907. His interest in religion began in his childhood when he accompanied his parents to religious centers.
	• After completing his elementary education in the village he was born in, he moved to Nagavalli to complete his middle school.
	• Simultaneously, he also became a resident student at the Siddaganga Math for a brief period. In 1930, Shivakumara earned a bachelor's degree in arts from the Central College in Bangalore.
	• He was proficient in English, Kannada, and Sanskrit. He was greatly respected for his philanthropic work.
	• He was a firm believer in two important tenets of the Lingayat religion- education and feeding the hungry.
	• Over the years, he founded 132 educational and training institutions ranging from nurseries to vocational training schools and colleges for arts, science, engineering, and management.
	• Along with modern technology and science subjects, he also established institutions that offer an education in the ancient forms of Sanskrit.
	• The Swami was almost 112 years old when he passed away.
Babu Jagjivan Ram	• Jagjivan Ram, popularly known as Babuji was a national leader, a freedom fighter, a crusader of social justice, a champion of depressed classes, an outstanding Parliamentarian, a true democrat, a distinguished Union Minister, an able administrator and an exceptionally gifted orator.
	• Jagjivan Ram was born in a small village, Chandwa in Shahabad District, now Bhojpur, in Bihar on 5 April, 1908. Babu Jagjivan Ram played a very active and crucial role in the freedom struggle. Inspired by Gandhiji, Babuji courted arrest on 10 December, 1940. After his release, he entrenched himself deeply into the Civil Disobedience Movement and Satyagraha. Babuji was arrested again on 19 August, 1942, for his active participation in the Quit India Movement launched by the Indian National Congress.

Prahladji Patel	• Prahlad ji Patel, who hailed from Becharaji in Gujarat and fought for India's independence from the British rule, and later joined the 'Bhoodan' movement of social reformer Vinoba Bhave. • Prahaladbhai was a Triveni Sangam (confluence of three rivers or qualities) of patriotism, dutifulness and spirit. • Patel remained active even after India got independence from the British rule and participated in the 'Bhoodan' movement and donated 200 bighas of land that he owned. • When Gujarat was formed in 1960, he even contested elections from the Chanasma seat in Patan district and took the entire region on the path of development. • Shri Prahladji Patel helped Sardar Patel in merger of princely states after independence.
Lata Deenanath Mangeshkar Award	• The award was instituted in the memory and honour of legendary singer Lata Mangeshkar who passed away at the age of 92 years in Mumbai earlier this year. • This award will be given every year to only one individual who has made path-breaking, spectacular and exemplary contributions to our nation, its people and our society. • Prime Minister Narendra Modi is the first person to receive the award.
Guru Tegh Bahadur	• Tegh Bahadur was born in Amritsar on April 21, 1621 to Mata Nanki and Guru Hargobind, the sixth Sikh guru, who raised an army against the Mughals and introduced the concept of warrior saints. • He stood up against forcible conversions by the Mughals. • His execution was issued by the Mughals for resisting cruelty towards Kashmiri Pandits. • He is considered a scholar and a poet who made valuable contributions to the Sri Guru Granth Sahib, the holy book of Sikhism.
Alluri Sitarama Raju	• Born on 04 July 1897, in a village called Mogallu near Bhimavaram in Andhra Pradesh, Alluri Sitarama Raju was a sanyasi and a strong believer in justice who raised his voice and waged many a battle against unlawful British policies. • He shifted to Visakhapatnam for his higher studies. By the age of 18, he renounced all worldly pleasures and became a sanyasi.

	- He roamed the hills and forests of the Agency area as a *bala sanyasi* and mingled with the local tribal community. - The tribals, in turn, regarded him as a mystic who would rescue them from their humiliating existence at the hands of the British authorities. - Initially, Sitarama Raju, under the influence of Gandhiji's Non-cooperation movement, inspired the tribals to seek justice in the local panchayat courts and boycott the colonial courts. - In August 1922, he launched what is now known as the Rampa Rebellion against the British. - He has left behind an inspiring legacy of anti-imperialist rebellion. Today, history remembers him as a fearless revolutionary, who, even though a non-tribal, who fought for the rights and freedom of the tribal people. - He was honoured for his valour and fiery spirit with the title, "*Manyam Veerudu*" (Hero of the Jungle).

Concept Clearing Assignment

1. How can the Government of India, ensure that all surveillance and interception activities comply with the principles of legality, proportionality and necessity?

2. Panchayati Raj Institutions (PRIs) are the primary pillar of democratic decentralisation. In light of this statement, evaluate the role of PRIs in India's rural development?

3. The functioning of the Central Bureau of Investigation (CBI) has been controversial so far. Do you think that revamping India's premier investigative agency has become a necessity? Justify your view?

4. What are the challenges associated with the development of de-notified tribes? Also, discuss the role of Nomadic and Semi Nomadic Communities in the empowerment of De-notified tribes.

5. 'The India-Australia Economic Co-operation and Trade Agreement can prove to be an effective instrument to harness the potential that exists in the two economies to fulfil mutual needs', Comment.

6. Discuss the role of Zero Defect & Zero Effect (ZED) culture in the advancement of the Micro, Small and Medium Enterprises (MSME) sector in India.

7. What are the existing Air Quality Standards in India? Do you think there is a need to reassess the existing norms on Air Quality Standards in India? Elucidate.

8. Farmer Producer Organisations are an effective solution to agrarian distress. Comment.

9. Keeping in view India's aspiration for self-reliance in defence, how will the Third Positive Indigenisation List boost India's domestic defence Industry and defence exports?

10. The Government of India has proposed a new concept of recruitment for the armed forces under the 'Tour of Duty' Scheme. Discuss the implications and the challenges associated with it.

11. India's per capita plastic waste generation has almost doubled over the last five years. What are the major challenges posed in countering the issue of plastic waste? Suggest measures.

12. Poverty in India has decreased in the recent decade, but not to the extent that had been targeted. Comment.

13. Throw light on the contributions of Guru Teg Bahadur towards Sikhism in particular and society in general.

14. What is Global Security Initiative? How does it stand in contrast to the QUAD?

15. Discuss the contributions of Alluri Sitarama Raju and his association with the Rampa Rebellion.

PT ORIENTED QUESTIONS

1. With reference to Digital Agriculture, which of the following statements is/are correct?
   1. It can provide the agricultural industry with tools and information to make more informed decisions.
   2. It focuses on Big data.

   Select the correct answer using the codes given below:
   (a) 1 only
   (b) 2 only
   (c) Both 1 and 2
   (d) Neither 1 nor 2

2. Consider the following statements regarding the Noise Pollution:
   1. World Health Organization (WHO) guidelines established a health-protective recommendation for road traffic noise levels of 53 db.
   2. In India, the National Green Tribunal (NGT) is mandated to track noise levels.

   Which of the statements given above is/are correct?
   (a) 1 only
   (b) 2 only
   (c) Both 1 and 2
   (d) Neither 1 nor 2

3. With reference to the Intergovernmental Panel on Climate Change (IPCC), consider the following statements:
   1. It is the United Nations body for assessing the science related to climate change.
   2. It provides regular assessments of the scientific basis of climate change.
   3. It was created in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP).

   Which of the statements given above is/are correct?
   (a) 1 and 2 only
   (b) 3 only
   (c) 2 and 3 only
   (d) 1, 2 and 3

4. Consider the following statements regarding the "Air Pollution in India":
   1. The revised Central Pollution Control Board air quality standards necessitate the concept of the Air Quality Index (AQI) in India.
   2. The revised National Ambient Air Quality Standards are notified for more than 10 parameters.

   Which of the statements given above is/are correct?
   (a) 1 only
   (b) 2 only
   (c) Both 1 and 2
   (d) Neither 1 nor 2

5. Recently, the term "Blue Blob" is often mentioned in the news. It is related to which among the following?
   (a) A region of Luke-warm water in the Australian Sea helped to flourish the Zooxanthellae.
   (b) A region of cooling water in the North Atlantic Ocean has helped temporarily stall the melting of Arctic Sea ice.
   (c) A region of extreme cold in the Himalayan Region helps in the scientific research during summers.
   (d) None of the Above

6. With reference to the Plastic Waste Management, which of the following statements is/are correct?
   1. According to the Union Ministry of Environment, Forest & Climate Change (MoEFCC), India is generating about 3.5 million tonnes of plastic waste annually.
   2. As per MOEFCC, per capita plastic waste generation has almost doubled over the last five years.
   3. Recently, Government has introduced 'Extended producer responsibility for plastic packaging under plastic waste management rules 2022.

   Select the correct answer using the codes given below:

(a) 1 and 2 only
(b) 3 only
(c) 2 and 3 only
(d) 1, 2 and 3

7. Consider the following statements regarding the Atlantic meridional overturning circulation (AMOC):
   1. It is a large system of ocean currents, like a conveyor belt, driven by differences in temperature and salt content.
   2. Very High temperature and a low salt content make the water denser, and this dense water sinks deep into the ocean.
   3. The cold, dense water slowly spreads southwards, several kilometers below the surface.
   Which of the statements given above is/are correct?
   (a) 1 and 3 only
   (b) 3 only
   (c) 2 and 3 only
   (d) 1, 2 and 3

8. With reference to the Near Field Communication (NFC) technology, consider the following statements:
   1. It is a very long-range wireless connectivity technology.
   2. It allows NFC-enabled devices to communicate with the central server only.
   3. It transfers information quickly and easily with a single touch.
   Which of the statements given above is/are correct?
   (a) 1 and 2 only
   (b) 3 only
   (c) 2 and 3 only
   (d) 1, 2 and 3

9. Consider the following statements regarding the United Payment Interface (UPI):
   1. The user will only have to use a virtual address, known as a Virtual Payment Address (VPA).
   2. It has been developed by the National Payments Corporation of India (NPCI).

3. UPI is regulated by the Union Finance Ministry with the aid of the Securities and Exchange Board of India.
   Which of the statements given above is/are correct?
   (a) 1 and 2 only
   (b) 3 only
   (c) 2 and 3 only
   (d) 1, 2 and 3

10. With reference to the Nipah Virus, which of the following statements is/are correct?
    1. It was first discovered in the year 1999.
    2. Its first outbreak occurred in pigs and people in Malaysia and Singapore.
    3. The fruit bats of the genus Pteropus are identified to be the main reservoir of it.
    Select the correct answer using the codes given below:
    (a) 1 and 2 only
    (b) 3 only
    (c) 2 and 3 only
    (d) 1, 2 and 3

11. Consider the following statements regarding the Disk Instability:
    1. It has long been debated that planets like Earth form through a process called disk instability.
    2. It refers to a model for giant planet formation in which a region of a circumstellar disc becomes dense and cool.
    3. It is to be unstable to gravitational collapse, resulting in the formation of a gaseous protoplanet.
    Which of the statements given above is/are correct?
    (a) 1 and 2 only
    (b) 3 only
    (c) 2 and 3 only
    (d) 1, 2 and 3

12. With reference to the CERT-In (the Indian Computer Emergency Response Team), Consider the following statements:

1. It is a government-mandated information technology (IT) security organization.
2. It is empowered under Section 70B of the Information Technology Act to collect, analyse and disseminate information on cyber security incidents.

Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

13. Consider the following statements regarding the Farmer Producer Organization (FPO):
1. The FPOs are registered under either the Companies Act 2013 or State's Cooperative society Act.
2. There must be minimum 100 farmers in plain areas and 300 farmers in the hilly and North East Region to form FPO.

Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

14. Consider the following statements regarding the National Commission for De-notified, Nomadic and Semi-Nomadic Tribes (NCDNT):
1. It was first constituted in 2003.
2. In 2006, the NCDNT was constituted under the chairmanship of Balkrishna Sidram Renke.

Which of the following statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

15. Consider the following statements regarding the Unique Identification Authority of India (UIDAI)?

1. It is a statutory body established in 2014, under UIDAI Act, 2014.
2. It has a two-step process to identify duplicate enrolments.
3. It maintains a data archiving policy for all its databases.

Which of the statements given above is/are correct?
(a) 1 and 2 only
(b) 1 and 3 only
(c) 2 only
(d) 1 only

16. Consider the following statements regarding the Foreign Contribution Regulation Act (FCRA):
1. The FCRA was enacted during the Emergency in 1976.
2. An amendment to FCRA has been enacted only once in 2010.
3. The FCRA requires every person or NGO wishing to receive foreign donations to be registered under the Act.

Which of the following statements given above is/are correct?
(a) 1 and 2 only
(b) 1 and 3 only
(c) 2 only
(d) 1 only

17. The Olga Tellis vs Bombay Municipal Corporation case of 1985 is related to:
(a) Pavement dwellers occupying public spaces and their rights.
(b) Right to live in healthy and clean environment
(c) Conservation of Taj-Mahal and its vicinity
(d) Prohibition of manual scavengers and their rights.

18. The "right to privacy" as fundamental right was established by the Supreme Court in which case?
(a) Lily Thomas v Union of India
(b) Navtej Singh Johar v. Union of India
(c) Justice K.S. Puttaswamy (Retd) vs Union of India
(d) Shayara Bano v. Union of India & Others

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19. Which of the following has recently started the "Global Security Initiative"?
    (a) Quad countries
    (b) China
    (c) European Union
    (d) G20

20. India and Australia both share the international cooperation at which among the following?
    1. Malabar exercise
    2. Quad grouping
    3. G20 grouping
    Select the correct answer using the code given below:
    (a) 1 and 2 only
    (b) 2 and 3 only
    (c) 1 and 3 only
    (d) 1, 2 and 3

21. Consider the following statements regarding the Mahatma Gandhi National Rural Employment Guarantee Act:
    1. Under the act, the wage rates for states are revised monthly in accordance with the changes in the Wholesale Price Index.
    2. The act was enacted during the prime ministership of Rajiv Gandhi.
    Which of the statements given above is/are correct?
    (a) 1 only
    (b) 2 only
    (c) Both 1 and 2
    (d) Neither 1 nor 2

22. Which of the following committees are related to poverty estimation in India?
    1. Y.K. Alagh Committee
    2. Suresh Tendulkar Committee
    3. Ribeiro Committee
    4. Rangarajan Committee
    Select the correct answer using the code given below:
    (a) 1 and 3 only
    (b) 2 and 4 only
    (c) 1, 2 and 4 only
    (d) 1, 2, 3 and 4

23. The Government of India recently announced to establish the first-of-its- kind WHO Global Centre for Traditional Medicine (GCTM) in the state of:
    (a) Madhya Pradesh
    (b) Gujarat
    (c) Uttar Pradesh
    (d) Maharashtra

24. Consider the following statements regarding Solid Fuel Ducted Ramjet (SFDR) booster:
    1. The SFDR-based propulsion enables the missile to intercept aerial threats at very long range at supersonic speeds.
    2. The success of SFDR propulsion technology will pave the way for development of long range air-to-air missiles in the country.
    Which of the statements given above is/are correct?
    (a) 1 only
    (b) 2 only
    (c) Both 1 and 2
    (d) Neither 1 nor 2

25. The Food Price Index is released by which of the following?
    (a) International Fund for Agricultural Development
    (b) Food and Agriculture Organization
    (c) World Food Programme
    (d) United Nations Framework Convention on Climate Change

26. With reference to the Indian economy, demand-pull inflation can be caused/increased by which of the following? (UPSC 2021)
    1. Expansionary policies
    2. Fiscal stimulus
    3. Inflation-indexing wages
    4. Higher purchasing power
    5. Rising interest rates
    Select the correct answer using the code given below:
    (a) 1, 2 and 4 only
    (b) 3, 4 and 5 only
    (c) 1, 2, 3 and 5 only
    (d) 1, 2, 3, 4 and 5

27. What is blue carbon? (UPSC 2021)
    (a) Carbon captured by oceans and coastal ecosystems

(b) Carbon sequestered in forest biomass and agricultural soils
(c) Carbon contained in petroleum and natural gas
(d) Carbon present in atmosphere

28. Which one of the following ancient towns is well-known for its elaborate system of water harvesting and management by building a series of dams and channelizing water into connected reservoirs? (UPSC 2021)
    (a) Dholavira
    (b) Kalibangan
    (c) Rakhigarhi
    (d) Ropar

29. With reference to 'palm oil', consider the following statements: (UPSC 2021)
    1. The palm oil tree is native to Southeast Asia.
    2. The palm oil is a raw material for some industries producing lipstick and perfumes.
    3. The palm oil can be used to produce biodiesel.
    Which of the statements given above are correct?
    (a) 1 and 2 only
    (b) 2 and 3 only
    (c) 1 and 3 only
    (d) 1, 2 and 3

30. Which one of the following factors constitutes the best safeguard of liberty in a liberal democracy? (UPSC 2021)
    (a) A committed judiciary
    (b) Centralization of powers
    (c) Elected government
    (d) Separation of powers

ANSWERS

No.	Ans	No.	Ans	No.	Ans
1.	C	11.	C	21.	D
2.	A	12.	C	22.	C
3.	D	13.	A	23.	B
4.	A	14.	C	24.	C
5.	B	15.	B	25.	B
6.	D	16.	B	26.	A
7.	A	17.	A	27.	A
8.	B	18.	C	28.	A
9.	A	19.	B	29.	B
10.	D	20.	D	30.	D