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Draft national policy on migrant workers

Spurred by the exodus of 10 million migrants (as per government estimates) from big cities during the **Covid-19 lockdown**, NITI Aayog, along with a working subgroup of officials and members of civil society, has prepared a **draft national migrant labour policy**.

A rights-based approach

The draft describes **two approaches to policy design**: **one focussed on cash transfers**, **special quotas**, and **reservations**; the other which "enhances the agency and capability of the community and thereby removes aspects that come in the way of an **individual's own natural ability to thrive**".

The **policy rejects a handout approach**, opting instead for a **rights-based framework**. It seeks "**to remove restrictions on true agency** and **potential of the migrant workers**"; the goal, it says, "should not be to provide temporary or permanent economic or social aids", which is "**a rather limited approach**".

Migration, the draft says, "Should be acknowledged as an **integral part of development**", and "government policies should not hinder but...**seek to facilitate internal migration**". This compares with the approach taken in the Report of the **Working Group on Migration**, released in January 2017 by the then Ministry of Housing and Urban Poverty Alleviation. The report argued that the movement

from agriculture to manufacturing and services was inherently linked to the **success of migration in the country**.

Issues with existing law

The 2017 report argued that **specific protection legislation for migrant workers** was unnecessary. "(Migrant workers) should be integrated with all workers...as part of an **overarching framework** that covers regular and contractual work," it said.

The report discussed the limitations of The **Inter State Migrant Workers Act, 1979**, which was designed to protect labourers from exploitation by contractors by safeguarding their **right to non-discriminatory wages**, travel and displacement allowances, and suitable working conditions.

However, this law — which was **modeled on a 1975 Odisha law** — covered only labourers migrating through a contractor, and left out independent migrants.

The 2017 report questioned this approach, **given the size of the country's unorganised sector**. It called for a comprehensive law for these workers, which would form the **legal basis for architecture of social protection**. This was in line with the recommendations of a 2007 report by the **National Commission for Enterprises** in the Unorganised Sector under the **Ministry of Micro, Small and Medium Enterprises**.

The NITI Aayog's policy draft too, mentions that the **Ministry of Labour and Employment should amend the 1979 Act** for "**effective utilisation to protect migrants**".

Governance nuts and bolts

The **NITI draft lays down institutional mechanisms** to coordinate between Ministries, states, and local departments to implement programmes for migrants. It identifies the **Ministry of Labour and Employment** as the nodal Ministry for implementation of policies, and asks it to create a special unit to help converge the activities of other Ministries. This unit would manage migration resource centres in high migration zones, a national labour Helpline, links of worker households to government schemes, and inter-state migration management bodies.

Migration focal points should be created in various Ministries, the draft suggests. On the **inter-state migration management bodies**, it says that **labour departments of source** and destination states along major migration corridors,

should work together through the migrant worker cells. Labour officers from source states can be deputed to destinations – e.g., Bihar's experiment to have a joint labour commissioner at Bihar Bhawan in New Delhi.

Ways to stem migration

Even as it underlines the **key role of migration in development**, the draft recommends steps to stem migration; **this is an important difference with the 2017 report.** The draft asks source states **to raise minimum wages** to "**bring major shifts in local livelihood of tribals**... (that) may result in stemming migration to some extent".

The **absence of community building organisations (CBO)** and administrative staff in the source states has hindered access to development programmes, pushing tribals towards migration, the draft says. The "**long term plan**" for CBOs and panchayats should be to "**alleviate distress migration policy initiatives**" by aiming "**for a more pro-poor development strategy** in the sending areas…that can strengthen the livelihood base in these areas".

Alongside the **long-term goal**, policies should "**promote the role of panchayats** to aid migrant workers" and integrate urban and rural policies to improve the conditions of migration. Panchayats should maintain a database of migrant workers, **issue** identity cards and pass books, and provide "**migration management and governance**" through training, placement, and **social-security benefit assurance**, the draft says.

The importance of data

Both the 2017 report and the **new draft stress the need for credible data**.

The draft calls for a central database to help employers "**fill the gap between demand and supply**" and ensure "**maximum benefit of social welfare schemes**". It asks the Ministries and the Census office to be consistent with the definitions of migrants and subpopulations, **capture seasonal and circular migrants**, and incorporate migrant-specific variables in existing surveys.

Both documents see **limited merit in Census data** that comes only once a decade. The 2017 report called on the **Registrar General of India** to release migration data no more than a year after the initial tabulation, and to include **sub-district level**, village level, and caste data. **It also asked the National Sample Survey Office** to

include questions related to migration in the periodic labour force survey, and to carry out a separate survey on migration.

Preventing exploitation

The policy draft describes a **lack of administrative capacity to handle issues of exploitation.** State labour departments have little engagement with migration issues, and are in "**halting human trafficking mode**", the draft says. "The local administration, given the usual constraints of manpower, is not in a position to monitor… (This) has become the **breeding ground for middlemen** to thrive on the situation and entrap migrants."

The draft points to the legal support and registrations tracking potential exploitation in Nashik and certain blocks in Odisha; it also flags the **poor supervision of migration trends by anti-trafficking units** in Chhattisgarh and Jharkhand.

Specific recommendations

* The draft asks the **Ministries of Panchayati Raj, Rural Development, and Housing and Urban Affairs** to use **Tribal Affairs migration data** to help create migration resource centres in high migration zones. It asks the Ministry of Skill Development and Entrepreneurship to focus on skill-building at these centres.

* The **Ministry of Education should take measures under the Right to Education Act** to **mainstream migrant children's education**, to map migrant children, and to provide local-language teachers in migrant destinations.

* The **Ministry of Housing and Urban Affairs** should address issues of night shelters, **short-stay homes**, and seasonal accommodation for migrants in cities.

* The **National Legal Services authority (NALSA)** and **Ministry of Labour** should set up grievance handling cells and fast track legal responses for trafficking, minimum wage violations, and workplace abuses and accidents for migrant workers.

ECONOMY

1.1 ESIC, other social security safety nets to cover gig economy workers

With the Covid-19 pandemic increasing the focus on gig economy and its workers, Finance Minister on Monday said that the law on minimum wages would now apply to workers of all categories including those associated with platforms.

Such workers would now be covered by the Employees State Insurance Corporation (ESIC).

EMPLOYEES' STATE INSURANCE

Employees' State Insurance (abbreviated as ESI) is a self-financing social security and health insurance scheme for Indian workers.

The fund is managed by the Employees' State Insurance Corporation (ESIC) according to rules and regulations stipulated in the ESI Act 1948.

ESIC is a Statutory and an Autonomous Body under the Ministry of Labour and Employment, Government of India.

MORE DETAILS

Women will be allowed to work in all categories and also in the night-shifts with adequate protection.

At the same time, compliance burden on employers will be reduced with single registration and licensing, and online returns.

The Labour Ministry defines a gig worker as any person "who performs work or participates in a work arrangement and earns from such activities outside of traditional employer-employee relationship".

SAFETY NET

The Budget for 2021-22 (April-March) also proposes to launch a portal that would collect relevant information on gig economy workers, including those working in building and construction, among others.

This portal will help formulate relevant policies for health, housing, skill, insurance, credit and food schemes for such workers.

Extending safety net of ESIC and other social security to gig economy workers was proposed by the government as a part of the reforms to the three labour codes, passed by the Lok Sabha in September last year.

The safety net, however, came with its own set of limitations as the same set of

reforms to the labour codes allowed firms greater flexibility in hiring and firing workers without any permission from the government.

Currently, neither the central government nor the states have any data on the possible number of gig economy workers in the country.

Industry executives, however, estimate that there could be over 130 million gig economy workers with many more expected to join the freelance work force as formal jobs slowed dry up.

The extension of safety net to gig economy workers was welcomed by platforms such as Urban Company and Snapdeal, who said it will help the sector grow in a sustained manner.

EASING COMPLIANCE BURDEN

Apart from the workers, the budget for 2021-22 has also proposed measures aimed at easing the compliance burden for startups as well as larger companies.

Having decriminalised several procedural and technical compoundable offences under the Companies Act, the government now aims to do the same for the Limited Liability Partnership Act.

Companies which have paid up capital of up to Rs 2 crore and turnover of up to Rs 20 crore, up from Rs 50 lakh and Rs 2 crore, respectively, will be considered under the definition of small companies from the new fiscal, Sitharaman said.

The government has proposed to incentivise the setting up of one-person companies (OPC) by allowing them to grow without any restrictions on paid-up capital and turnover, with an option to convert into other companies at any other time.

The residency limit for an Indian citizen to set up an OPC has also been cut down to 120 days from 182 days, while also allowing non-resident Indians to start OPCs in India.

1.2 Govt. agrees to maintain States' share in the divisible pool of taxes

The government has accepted the Fifteenth Finance Commission's recommendation to maintain the States' share in the divisible pool of taxes to 41%.

This has been done for the five-year period starting 2021-22.

Government gave an 'in-principle' nod to the panel's suggestion to set up a separate non-lapsable fund for defence and internal security modernisation.

15th FINANCE COMMISSION

The Fifteenth Finance Commission (XV-FC or 15-FC) is an Indian Finance

Commission constituted in November 2017 and is to give recommendations for devolution of taxes and other fiscal matters for five fiscal years, commencing 2020-04-01.

The commission's chairman is Nand Kishore Singh, with its full-time members being Ajay Narayan Jha, Ashok Lahiri and Anoop Singh. In addition, the commission also has a part-time member in Ramesh Chand.

Shaktikanta Das served as a member of the commission from November 2017 to December 2018.

ON STATE'S BORROWING

The Fourteenth Finance Commission had raised States' share to 42% of divisible revenues.

The Fifteenth Finance panel had reduced the share to 41% in its interim report for 2020-21, citing the conversion of Jammu, Kashmir and Ladakh into Union Territories.

The Commission's report with the government's action taken report on its suggestions, has recommended additional revenue deficit grants of ?2.94 lakh crore for 17 States over the next five years.

The government has accepted this recommendation as well as the panel's suggestion to enhance State's borrowing ceilings in 2021-22.

The government's acceptance of the 41% vertical share for States recommended by the Commission as a sign of its commitment to fiscal federalism.

ON CEILING LIMIT

Government has allowed a normal ceiling of net borrowing for the States at 4% of Gross State Domestic Product (GSDP) for the year 2021-2022.

A portion of this ceiling will be earmarked to be spent on incremental capital expenditure.

An additional borrowing ceiling of 0.5% of GSDP will also be provided based on meeting specified reforms in the power sector.

States are expected to reach a fiscal deficit of 3% of GSDP by 2023-24, and maintain that level till 2025-26, as per the Commission's report.

The Centre has accepted 'in-principle' this quantum of net borrowing ceilings for the States, as per the action taken report.

While the Commission has suggested the additional ceiling for power sector reforms be offered up to 2024-25, the government has said it will examine recommendations

related to States' fiscal road map separately.

ON FRBM

The Commission has also recommended to overhaul the Fiscal Responsibility and Budget Management law to ensure legislations are in sync with fiscal sustainability frameworks.

ON DEFENCE

The Commission has recommended creating a separate non-lapsable fund for modernisation of defence and internal security, a term of reference the Centre had sought its views on.

To bridge the gap between defence budget allocations and the projected budgetary requirements, the panel has mooted a fund of ?2.38 lakh crore for the coming five-year period.

It has recommended that ?1.54 lakh crore of this fund be transferred from the Consolidated Fund of India, partially using receipts from the disinvestment of defence public sector enterprises and land monetisation.

The government has said the modalities and sources of funding will be examined in due course.

FOR SOUTHERN STATES

The Commission has sought to assuage the fears of southern States about losing some share in tax transfers due to the reliance on the 2011 Census data instead of the 1971 census, which could penalise States that did better on managing demographics.

It has done so by giving a 12.5% weightage for demographic performance in its tax-transfer calculations.

The revenue deficit grants proposed for Andhra Pradesh and Kerala are far higher than the previous Commission's period, while Tamil Nadu has also been earmarked for marginally higher grant on this front.

1.3 'India's weak fiscal position to remain a key credit challenge'

The Union Budget's focus on higher capital expenditure, financial sector reforms and asset sales would help to *stimulate growth and supply broad-based credit support.*

However, *India's weak fiscal position would remain a key credit challenge* compared with its rating peers.

The budget projects a *narrowing of the central government's fiscal deficit* to 6.8% of GDP in fiscal 2022 from an estimated 9.5% in fiscal 2021.

MOODY'S ASSESSMENT:

Moddy previously expected a smaller central government deficit target of about 5.5% of GDP for fiscal 2022 down from around 7.5% of GDP in fiscal 2021.

However, compared with previous budgets, the gap between our forecasts and the government's largely reflects increased transparency on subsidy spending and more credible overall assumptions.

The ratings agency said the widening of the deficit in fiscal 2021 was driven almost entirely by *expenditure to support Indian households* and the economy from the pandemic shock.

Given India's very high debt burden, this gradual pace of consolidation will prevent any material strengthening in the government's fiscal position over the medium term, *unless nominal GDP growth were to pick up sustainably to historically very high rates*.

1.4 For affluent, EPF is not nest egg but goose that lays golden eggs

More than 1.23 lakh "high net worth individuals" (HNIs) deposited more than 62,500 crore into their Employees' Provident Fund (EPF) accounts in 2018-19 alone.

The largest EPF account has a staggering 103 crore balance.

Department of Revenue provided the statistics defending the Budget move to tax the income on employees' PF contributions over 2.5 lakh a year.

RATIONALE BEHIND THE CHANGE

Any tax exemption is provided through taxpayers' money. It was unfair to allow a small group of HNIs to misuse a welfare facility and earn wrongfully tax-free income as assured interest return.

Of an estimated 4.5 crore EPF accounts, the source said about 0.27% members had an average corpus of ?5.92 crore and so were earning over ?50 lakh a year as "tax-free assured interest".

EPF accounts are mandatory for employees earning up to ?15,000 a month in firms with over 20 workers, with 12% of the basic pay and dearness allowance deducted as

employees' contribution and another 12% remitted by the employer.

The government had capped the contributions by employers into employee welfare schemes like the EPF or the National Pension Scheme or a superannuation plan, at ?7.5 lakh a year, in last year's Budget.

However, government as well as private sector employees are allowed to make voluntary contributions over and above the statutory deductions into the general provident fund (GPF) or EPF, respectively.

THE EMPLOYEES' PROVIDENT FUND ORGANISATION

The Employees' Provident Fund Organisation (abbreviated to EPFO), is an organisation tasked to assist the Central Board of Trustees.

Employees' Provident Fund is a statutory body established by the Employees' Provident Fund and Miscellaneous Provisions Act, 1952 and is under the administrative control of the Ministry of Labour and Employment, Government of India.

EPFO assists the Central Board in administering a compulsory contributory Provident Fund Scheme, a Pension Scheme and an Insurance Scheme for the workforce engaged in the organised sector in India.

It is also the nodal agency for implementing Bilateral Social Security Agreements with other countries on a reciprocal basis.

The schemes cover Indian workers as well as International workers (for countries with which bilateral agreements have been signed.

As of now 19 Social Security Agreements are operational). The EPFO's apex decision making body is the Central Board of Trustees (CBT).

On 1 October 2014, the government of India launched Universal Account Number for Employees covered by EPFO to enable PF number portability.

The total assets under management are more than 11[6] lakh crore (US$157.8 billion) as of 2018.

1.5 Retail investors to be able to buy G-Secs directly: RBI

The Reserve Bank of India (RBI) said it would allow retail investors to **open gilt accounts with the central bank to invest** in government securities directly and without the help of intermediaries.

"It is proposed to provide retail investors with online access to the government **securities market both primary and secondary** directly through the Reserve

Bank (Retail Direct)," RBI said ,

GOVERNMENT SECURITIES, OR G-SECS

It is debt instruments issued by the government to borrow money from open market.

The two key categories are treasury bills – short-term instruments which mature in 91 days, 182 days, or 364 days, and dated securities – long-term instruments**, with fixed interest rate** which mature anywhere between 5 years and 40 years.

BROADENING THE INVESTOR BASE

This will broaden the investor base and provide retail investors with enhanced access to **participate in the government securities market**.

This measure together with HTM [hold to maturity] relaxation, will facilitate smooth completion of the government borrowing programme in 2021-22.

The RBI will soon come out **with modalities for opening** of such accounts. The provision would not in any way hinder flow of investors' funds into mutual fund schemes and bank deposits.

The Allowing retail participation in the G-Sec market is a bold step towards the financialisation of a **vast pool of domestic savings** and could be a game-changer.

1.6 Government of India allocates Rs. 16000 crore for Pradhan Mantri Fasal Bima Yojana (PMFBY) for 2021-22

Ministry of Agriculture & Farmers Welfare has allocated Rs 16000 crores for Pradhan Mantri Fasal Bima Yojana (PMFBY)for the fiscal year 2021-22. This is a budgetary increase of around Rs 305 crore as against the previous fiscal year 2020-21,

The scheme extends coverage for the entire cropping cycle from pre-sowing to post-harvest including coverage for losses arising out of prevented sowing and mid-season adversities.

PMFBY

The Pradhan Mantri Fasal Bima Yojana (PMFBY) launched on 18 February 2016 by Prime Minister is an insurance service for farmers for their yields.

It was formulated in line with One Nation–One Scheme theme by replacing earlier two schemes National Agricultural Insurance Scheme (NAIS) and Modified National Agricultural Insurance Scheme (MNAIS) by incorporating their best features and removing

their inherent drawbacks .

It aims to reduce the premium burden on farmers and ensure early settlement of crop assurance claim for the full insured sum.

To provide a comprehensive insurance cover against failure of the crop thus helping in stabilising the income of the farmers.

The Scheme covers all Food & Oilseeds crops and Annual Crops Commercial/Horticultural for which past yield data is available and for which requisite number of Crop Cutting Experiments (CCEs) are being conducted under General Crop Estimation Survey (GCES).

The scheme is implemented by empanelled general insurance companies. Selection of Implementing Agency (IA) is done by the concerned State Government through bidding.

The scheme is compulsory for loanee farmers availing Crop Loan /KCC account for notified crops and voluntary for other others. The scheme is being administered by Ministry of Agriculture.

How Befitted to Farmer

The scheme has made it easier for the farmer to report crop loss within 72 hours of occurrence of any event through the Crop Insurance App, CSC Centre or the nearest agriculture officer. Claim benefit is then provided electronically into the bank accounts of eligible farmer.

Integration of land records with the PMFBY portal, Crop Insurance mobile-app for easy enrollment of farmers and usage of technology such as satellite imagery, remote-sensing technology, drones, artificial intelligence and machine learning to assess crop losses are some of the key features of the scheme.

As of now. out of total farmers enrolled under PMFBY, 84% are small and marginal farmers. Thus, financial assistance is provided to most vulnerable farmers.

Today, PMFBY is globally the largest crop insurance scheme in terms of farmer participation and 3rd largest in terms of premium. Over 5.5 crore farmer applications are received on year-on-year basis.

Issues face by Farmer

The issues being faced by farmers, the major one being change in the insurance company every year, which they feel **makes it difficult to submit claims and grievance r**edressal applications, if any.

More Complex possess face by Farmer, The geographical unit is a panchayat. Insurance companies are invited to tender and once that is accepted, the farmer pays a fixed percentage, the rest being paid by the state. There are well-defined procedures for lodging and adjusting claims.

Once the premiums are collected, a threshold limit is ascribed for the maximum claim in the event of a crop loss. In other words, if the threshold limit is low, the claim a farmer makes would get him a fraction of the loss he incurs,

The crop losses suffered do not tally with the crops that were insured by the private crop insurance companies. This is because the insurance companies just collected the premium amounts from the banks without actually doing a ground assessment to know what crops were under cultivation.

The government's aim is to resolve structural, logistical, and other challenges, and expand the benefit of PMFBY to all farmers for a AatmaNirbharBharat.

1.7 In PM's words for pvt sector, India Inc sees booster shot

A day after Prime Minister emphasised the *crucial role of the private sector in the Indian economy and pitched for privatisation* at a time when there has been a decline in private sector investment, industry leaders welcomed the statement.

IMPORTANCE OF THE PRIVATE SECTOR:

PM's statements pitching the importance of the private sector come in the backdrop of a push towards government spending, which the government expects will *help crowd in private investment.*

The government is working towards creating a *Development Finance Institution* for infrastructure financing, aiming to have a government owned DFI and have space for the private sector also.

Private sector investment in the country has been tapering over the years, while the government's efforts to elicit such expenditure have been largely unsuccessful.

This includes plans to raise Rs 2.1 lakh crore in funds through divestment and strategic sales of government-owned enterprises in 2020-21, of which the centre was only able to raise Rs 19,499.07 crore.

As per CMIE data from October last year, 44 per cent of the new investments in the July-September quarter were by government agencies and the rest were by the private

sector.

Rs 258 billion of investment proposals made by the governments, both central and the states, were the lowest made by them in any quarter in the past 16 years since June 2004, while the private sector investments of Rs 328 billion were also the lowest by them since June 2004.

Also, as per CMIE, cumulative new investment proposals in 2020-21 were estimated at Rs 1.3 trillion, with total not expected to cross Rs 5 trillion, which hasn't been lower than that level since 2004-05.

STEP TO BUILD CONFIDENCE:

Private sector investment has been tapering over the years, while the government's efforts to elicit such expenditure have been largely unsuccessful.

The Prime Minister's speech seems to have *enthused confidence in India Inc* about the nation's growth story.

The private sector contributes as much as *87 percent to India's GDP and almost 60 percent to employment in the country.*

If India has to lift its teeming millions out of poverty, *we need to create a national consensus to ensure that those who create jobs, economic value and a culture of enterprise* are recognised for their contribution.

1.8 'Bad bank' idea: Govt guarantee for ARC paper likely

TO ENSURE THAT the 'bad bank' mechanism proposed in the Budget takes off, the Finance Ministry is planning to provide a guarantee against security receipts to be issued by the **Asset Reconstruction Company (ARC)** to banks against the value of their bad assets being taken over.

ASSET RECONSTRUCTION COMPANY

The ARC, according to government officials, is likely to take over Rs 2-2.5 lakh crore of stressed assets that remain unresolved in around 70 large accounts.

Stressed loan accounts of more than Rs **500** crore each are expected to be transferred to the new entity.

Even though there will be no equity contribution by the government in the proposed ARC, the government will provide guarantee to ensure the success of this structure.

The proposed ARC will provide banks **15 percent cash and 85 percent** security receipts against the value of bad assets that will be taken over from the banks.

The ARC will be set up by state-owned and private sector banks, and there will be no equity contribution from the government.

It will have an Asset Management Company (AMC) to manage and sell bad assets.

PROVISIONS

For the banks it will be a cash neutral kind of exercise, because for the capital they will contribute to the ARC, they will get some portion back as cash and rest as security receipts against transfer of the stressed assets.

For security receipts, the regulator requires some kind of provisioning, for which the banks are asking the government to provide guarantee that the RBI (Reserve Bank of India) requires.

For **the 85 percent SRs portion**, banks need provisioning of around 15 per cent. Banks are seeking sovereign guarantee for that, which we will provide as we go forward. We are going to give a sovereign backing to support the banks.

If the government guarantees the security receipts issued by the ARC, then banks can transfer stressed assets to the proposed entity without having to make additional provisions.

The RBI's 2016 guidelines require banks to make provisions for assets assigned to ARCs.

TRANSFER OF ASSETS

Of the existing ARCs, only 3-4 are adequately capitalised, while more-than-dozen are thinly capitalised, necessitating the need to set up a new structure to resolve stressed assets urgently.

The transfer of stressed assets to the ARC will happen at net book value, which is the value of assets minus provisioning done by banks against these assets.

This structure will reduce the load of stressed assets on the bank balance sheet and look to resolve the bad debt in a market-led way.

With most banks expected to be on board this company, the resolution is expected to be faster.

Since most commercial loans are granted by a group of 8-10 banks, under the existing resolution mechanism some banks would typically oppose the resolution due to differences, which slowed the resolution process. The proposed structure is expected to resolve this.

Deadlock in collegium : CJI may retire without any appointment to SC

With just over a month left in his 14-month tenure as Chief Justice of India, the Justice S A Bobde-led collegium is yet to make its first recommendation of a judge to be appointed to the Supreme Court since he took office in November 2019.

The last time a CJI **retired without a single** appointment to the SC was in 2015 during the tenure of CJI H L Dattu when there was an unprecedented stand-off between the judiciary and the government over the National Judicial Appointments Commission (NJAC).

COLLEGIUM SYSTEM

The **Collegium System is** a system under which appointments/elevation of judges/lawyers to Supreme Court and transfers of judges of High Courts and Apex Court are decided by a forum of the Chief Justice of India and the four senior-most judges of the Supreme Court.'

There is no mention of the Collegium either in the original Constitution of India or in successive amendments.

The Collegiums **System of appointment of judges** was born through "three judges case" which interpreted constitutional articles on October 28, 1998.

The recommendations of the Collegium are binding on the Central Government; if the Collegium sends the names of the judges/lawyers to the government for the second time.

The collegium of the Supreme Court judges is comprises of 5 senior most judges of Suprme Court.

1.9 RBI sets up panel for strengthening UCBs

The Reserve Bank of India has set up of an eight-member expert committee on urban co-operative banks (UCBs) to examine their issues and provide a roadmap for strengthening the sector.

TAKING STOCK

The panel will take stock of regulatory measures taken by the central bank and other authorities in respect of UCBs and assess their impact over last five years to identify key constraints and enablers, if any, in fulfilment of their socio-economic objective.

It will also review the current regulatory and supervisory approach and recommend

suitable measures to strengthen the sector, taking into account recent amendments to the Banking Regulation Act, 1949.

The panel will also suggest effective measures for faster rehabilitation or resolution of UCBs and assess potential for consolidation in the sector.

It will consider the **need for differential regulations and examine** prospects to allow more leeway in permissible activities for UCBs with a view to enhance their resilience.

It will draw up a vision document for a vibrant and resilient urban co-operative banking sector having regards to the Principles of Cooperation as well as depositors' interest and systemic issues.

1.10 PM reaffirms plan to include natural gas under GST regime

Prime Minister said recently the government is committed to bringing natural gas under the ambit of the Goods and Services Tax (GST), to reduce the cost of natural gas and boost its usage across the country.

ADVANTAGES:

The inclusion of petroleum and natural in the GST regime has been a consistent demand of industry, which has noted that the cascading impact of central taxes and different tax regimes across different states was leading to higher prices for end consumers.

Industries that use natural gas as an input, such as power and steel, are currently not able to claim input tax credit (ITC) on central and state taxes paid on natural gas.

India will try to eliminate the cascading effect of different taxes on natural gas across different states.

The inclusion of natural gas under the GST regime would lower its cost and boost usage.

The Centre aims to raise the share of natural gas in India's primary energy mix to 15 per cent in 2030 from 6.2 per cent currently.

The PM also said that the government planned to spend Rs 7.5 lakh crores over five years on creating oil and gas infrastructure.

NATURAL GAS

The first oil deposits in India were discovered in 1889 near the town of Digboi in the

state of Assam.

The natural gas industry in India began in the 1960s with the discovery of gas fields in Assam and Gujarat. Natural gas gained further significance after the discovery of large reserves in the South Basin fields by ONGC in the 1970s.

As of 31 March 2019, India had estimated crude oil reserves of 618.95 million tonnes (MT), increasing by 4.1% from the previous year.

The largest reserves are found in the Western Offshore (Mumbai High, Krishna-Godavari Basin) (40%), and Assam (27%).

The estimated reserves of natural gas in India as of 31 March 2018 was 1,339.57 billion cubic meters (BCM), increasing by 3.87% from the previous year.

The largest reserves of natural gas are located in the Eastern Offshore (38.13%) and the Western Offshore (23.33%).

Merits of Natural Gas

Natural gas is the cleanest-burning hydrocarbon, producing around half the carbon dioxide (CO_2) and just one tenth of the air pollutants of coal when burnt to generate electricity.

It is abundant. If consumption remained at today's levels, there would be enough recoverable gas resources to last around 230 years.

It is versatile. A gas-fired power station takes much less time to start and stop than a coal-fired plant.

This flexibility makes natural gas a good partner to renewable energy sources like solar and wind power, which are only available when the sun shines and the wind blows.

1.11 Cabinet approves PLI plan for telecom

The Union Cabinet recently approved the production-linked incentive scheme for the telecom sector with an outlay of 12,195 crore over five years.

PRODUCTION-LINKED INCENTIVE SCHEME:

The scheme, which aims to make India a global hub for manufacturing telecom equipment, is expected to lead to an incremental production of about 2.4 lakh crore, with exports of about 2 lakh crore over five years and bring in investments of more than ?3,000 crore.

The implementation of PLI scheme in telecom manufacturing will start from April 1,

2021.

Many international players are keen to come to India. India will encourage them and also domestic manufacturers.

Production Linked Incentive Scheme intends to promote manufacture of Telecom and Networking Products in India and proposes a financial incentive to boost domestic manufacturing and attract investments in the target segments of telecom and networking products in order to encourage Make in India.

The scheme will also encourage exports of telecom and networking products 'Made in India'.

Support under the Scheme will be provided to companies and entities engaged in manufacturing of specified telecom and networking products in India.

'IMPORT DEPENDENCE CUT':

The scheme was also likely to generate 40,000 direct and indirect employment opportunities and generate tax revenue of 17,000 crore from telecom equipment manufacturing, including core transmission equipment, 4G/5G Next Generation Radio Access Network and wireless equipment, access and Customer Premises Equipment (CPE), Internet of Things (IoT) access devices, other wireless equipment and enterprise equipment such as switches and routers.

The core 'component' of this scheme is to offset the import of telecom equipment worth more than 50,000 crore.

The approval for the scheme followed the success of PLI-scheme related to mobile and component manufacturing.

Under this, 34,000 crore investment has been made by some of the top mobile companies. The government has planned to bring similar incentives for laptops and tablet manufacturing.

For inclusion of MSMEs in the scheme, the minimum investment threshold has been kept at 10 crore, while for others it is 100 crore. For MSMEs, a 1% higher incentive is also proposed in the first three years.

Once qualified, the investor will be incentivised up to 20 times of minimum investment threshold enabling them to utilise their unused capacity.

With the telecom industry going through a very difficult phase, this move of the government would surely incentivise telecom service providers," who opt for equipment

manufactured locally, thus saving on substantial costs relating to imports.

1.12 Gadkari urges auto firms to raise localisation to 100%

Union Minister of Road Transport and Highways recently asked automobile manufacturers to **increase the localisation of components to 100%**, failing which he said the Centre would consider raising basic customs duty on imports.

INCREASING LOCALISATION:

Union Minister said **the present level of localisation of parts in the Indian auto sector was about 70%** and "at any cost, we need to stop imports of auto components.

Union Minister urged both **vehicle and auto-component manufacturers** to increase localisation of components to the maximum.

MInister said India is fully competent in all the things. He requested automobile manufacturing companies to take it very seriously otherwise for imports of components India will think in the **direction of increasing customs duty on them**.

Society of Indian Automobile Manufacturers **sought government support for localisation** of electronic components, especially semiconductors which are currently facing a global shortage, stating it would need huge investments.

1.13 What rise in bond yield means for investors and govt

Rising yields on government securities or bonds in the United States and India have triggered concern over the **negative impact on other asset classes**, especially stock markets, and even gold.

The yield on 10-year bonds in India moved up from the recent low of 5.76% to 6.20% in line with the rise in US yields, **sending jitters through the stock market**, where the benchmark Sensex fell 2,300 points last week.

With over Rs **70.55 lakh crore of government securities (G-Secs) outstanding** and the government planning to borrow more from the market through G-Secs, the movement of yields will continue to be watched in the coming months.

WHY DO BOND YIELDS RISE?

Bond yield is the **return an investor gets** on that bond or on a particular government security.

The major factors affecting the yield is the **monetary policy of the Reserve Bank**

of India, especially the course of interest rates, the fiscal position of the government and its borrowing programme, global markets, economy, and inflation.

With the pandemic upsetting the calculations, Finance Minister has pegged the fiscal deficit for 2021-22 at 6.8% of GDP (the original target was 3.5%), and **aims to bring it back under 4.5% by 2025-26**.

A fall in interest rates makes bond prices rise, and bond yields fall — and rising interest rates cause bond prices to fall, and bond yields to rise.

In short, **a rise in bond yields means interest rates in the monetary system have fallen**, and the returns for investors (those who invested in bonds and govt securities) have declined.

HOW HAS THE RISE IN YIELD AFFECTED STOCK MARKETS?

The **sudden rise in domestic and global bond yields** recently moderated the enthusiasm of equity market participants around the world.

The "taper tantrum" of 2013 showed the **relationship between bond yields and stock markets** — a sudden rise in bond yields caused markets to slide, as mass bond selling was witnessed.

Bond yields are inversely proportional to equity returns; when bond yields decline, equity markets tend to outperform, and when yields rise, equity market returns tend to falter.

Traditionally, when bond yields go up, **investors start reallocating investments away from equities and into bonds**, as they are much safer.

As bond yields rise, **the opportunity cost of investing in equities goes up**, and equities become less attractive.

Also, a rise in bond yields **raises the cost of capital for companies**, which in turn compresses the valuations of their stocks. That is something that investors see when RBI cuts or raises the repo rate.

A **cut in the repo rate reduces the cost of borrowing for companies**, leading to a rise in share prices, and vice versa.

HOW WILL THE BORROWING PROGRAMME AND ECONOMY BE IMPACTED?

When bond yields rise, **the RBI has to offer higher cut-off price/yield to investors** during auctions.

This means **borrowing costs will increase** at a time when the government plans to

raise Rs 12 lakh crore from the market.

However, RBI is expected to stabilise yields through open market operations and operation twists.

Besides, as government borrowing costs are used as the benchmark for pricing loans to businesses and consumers, any increase in yields will be transmitted to the real economy.

WILL HIGH YIELDS IMPACT THE FLOW OF FOREIGN PORTFOLIO INVESTMENT (FPI) FUNDS?

Yes. **Bond yields play a big role in FPI flow**. Traditionally, when bond yields rise in the US, FPIs move out of Indian equities.

Also, it has been seen that when the bond yield in India goes up, **it results in capital outflows** from equities and into debt.

A higher return on treasury bonds in the US leads investors to move their asset allocation from more risky emerging market equities or debt to the US Treasury, which is the safest investment instrument.

So, a continued rise in yields in developed markets may put more pressure on Indian equity markets, which may witness an outflow of funds. Even a rise in domestic bond yields would see allocation moving from equity to debt.

ARE RISING YIELDS A GLOBAL PHENOMENON?

Yields have already risen across the world, and they are almost certain to rise further in the US, especially if the Biden administration gets its $1.9 trillion package over the line. A slow but steady rise will allow other asset classes to adjust.

A rapid increase in the US yields will likely **spark nerves in the buy-everything aficionados**.

Bond yield in the US, which was at 0.31% in March 2020, touched 1.40% recently. In the UK, 10-year bonds rose 40 basis points in February to touch 0.76% this week.

WHAT SHOULD INVESTORS KEEP IN MIND?

Bond yields move on account of various factors, and investors will have to keep an eye on both domestic and global developments while investing in them.

If inflation and interest rates in the economy are key factors that determine yields, they are in turn affected by various other factors such as economic growth, sovereign rating, money supply, government borrowing, global liquidity and geopolitical

developments.

With the RBI now allowing retail participation in G-Secs, **investors need to be watchful of developments before taking a decision**.

1.14 RBI working paper defends 4% inflation target for India

The **Reserve Bank of India (RBI)** in its **Currency and Finance (RCF) report** for the year 2020-21 has said that the **current inflation target band (4% +/-2%) is appropriate for next 5 years.**

Inflation Targeting:

It is **a central banking policy** that revolves around **adjusting monetary policy to achieve a specified annual rate of inflation.**

The principle of inflation targeting is **based on the belief that long-term economic growth is best achieved by maintaining price stability,** and price stability is achieved by controlling inflation.

Strict inflation targeting is adopted when the central bank is only concerned about keeping inflation as close to a given inflation target as possible, and nothing else.

Flexible inflation targeting is adopted when the central bank is to some extent also concerned about other things, for instance, the stability of interest rates, exchange rates, output and employment.

India's Flexible Inflation Target Framework:

The central bank and the government **agreed in 2015 on a policy framework** that stipulated a primary objective of ensuring price stability while keeping in mind the objective of growth.

The **Flexible Inflation Target (FIT) was adopted in 2016.** This has **put India on par with other nations in terms of flexible inflation targeting.**

The **Reserve Bank of India Act, 1934 was amended to provide a statutory basis** for a FTI framework.

The amended Act **provides for the inflation target to be set** by the Government, in consultation with the RBI, **once every five years.**

The FIT Framework:

India **adopted a flexible inflation targeting mandate of 4 (+/-2) percent** and headline **consumer price inflation** was chosen as a **key indicator.**

Purpose: Inflation targeting is known to bring more stability, predictability, and

transparency in deciding monetary policy.

This is because of the argument that rising prices create uncertainties and adversely affect savings and investments.

Fixed Accountability: The framework made the RBI more accountable to explain to the government if it fails to meet the inflation targets.

The flip side of this is such targets will restrain the RBI from taking any tight or accommodating monetary policy stance.

RBI's Stand (Findings of the RCF Report):

The **trend inflation has fallen from above 9% before FIT to a range of 3.8-4.3 % during FIT,** indicating that **4% is the appropriate level of the inflation target** for the country.

An **inflation rate of 6% is the appropriate upper tolerance limit** for the inflation target.

On the other hand, **a lower bound above 2% can lead to actual inflation frequently dipping below the tolerance band.**

While, **a lower bound below 2% will hamper growth,** indicating that an **inflation rate of 2% is the appropriate lower tolerance bound.**

During the FIT period, **monetary transmission has been full and reasonably swift** across the money market (trading in very short-term debt instruments) but less than complete in the **bond markets.**

While there has been an improvement in transmission to lending and deposit rates of banks, **external benchmarks**across all categories of loans and deposits could improve transmission.

Monetary Policy

It is the macroeconomic policy laid down by the central bank. It involves **management of money supply and interest rate** and is the demand side economic policy used by the government of a country to achieve macroeconomic objectives like inflation, consumption, growth and liquidity.

In India, monetary policy of the Reserve Bank of India is **aimed at managing the quantity of money in order to meet the requirements of different sectors** of the economy and to increase the pace of economic growth.

The RBI implements the monetary policy through **open market operations, bank**

rate policy, reserve system, credit control policy, moral persuasion and through many other instruments.

Accommodative and Tight Monetary Policy

To avoid inflation, most central banks alternate between the accommodative monetary policy and the tight monetary policy in varying degrees to encourage growth while keeping inflation under control.

Accommodative monetary policy is adopted when central banks expand the money supply to boost the economy.

These measures are meant to make money less expensive to borrow and encourage more spending.

A **tight monetary policy** is implemented to contract economic growth.

Converse to accommodative monetary policy, a tight monetary policy involves increasing interest rates to constrain borrowing and to stimulate savings.

Monetary Policy Committee

It is **a statutory and institutionalized framework under the Reserve Bank of India Act, 1934,** for maintaining price stability, while keeping in mind the objective of growth.

The **Governor of RBI is ex-officio Chairman** of the committee.

The MPC **determines the policy interest rate (repo rate)** required to achieve the **inflation target (4%).**

An RBI-appointed committee led by the **then deputy governor Urjit Patel in 2014 recommended** the establishment of the Monetary Policy Committee.

In the conduct of monetary policy in an open economy setting, **foreign exchange reserves** and associated liquidity management are key, there is a need to enhance the RBI's sterilisation capacity to deal with surges in capital flows.

The primary focus of FIT on price stability augurs well for further liberalisation of the capital account and eventual internationalisation of the Indian rupees.

INDIA AND WORLD

2.1 No Indian role in developing ECT in Colombo

Reneging on a 2019 agreement with India and Japan, Sri Lanka has decided to develop the strategic East Container Terminal (ECT) at the Colombo Port on its own.

The Sri Lankan government would instead offer the West Container Terminal to India for possible investments.

It comes amid mounting pressure from Port union workers against any foreign role or investment in the ECT project, where nearly 70% of the transhipment business is linked to India.

EAST CONTAINER TERMINAL

In 2019, Sri Lanka, Japan and India signed an agreement to jointly develop the East Container Terminal at the Colombo Port.

The three countries will jointly build the East Container Terminal at the Port of Colombo.

As per the agreement the Sri Lanka Ports Authority (SLPA) retains 100% ownership of the East Container Terminal (ECT), while the Terminal Operations Company is jointly owned,the SLPA

Sri Lanka will hold a 51% stake in the project and the joint venture partners will retain 49%.

Japan is likely to provide a 40-year soft loan with a 0.1% interest rate, details of India's contribution to the initiative are awaited

IMPORTANCE OF THE PROJECT FOR INDIA

Over 70% of the trans-shipment business at the strategically located ECT is linked to India

The involvement of India and Japan is the project is being seen as a big development aimed at neutralising the growing influence of China, which has poured money into the South Asian island nation under its mammoth Belt and Road Initiative (BRI) infrastructure plan

INDIAN REACTION

Asked about the development, a senior Indian source said: "We would hope that Sri Lanka does not unilaterally decide on this matter, as there is a tripartite agreement on it."

For New Delhi, the strategic ECT project in Colombo has been high on priority.

It has figured in talks at the highest levels, including when External Affairs Minister S. Jaishankar visited in January.

2.2 For New Delhi, the tightrope on Myanmar is back

For India, the return to military rule by Myanmar's Tatmadaw (Army) and the detention of Aung San Suu Kyi and the political leadership of the National League of Democracy (NLD) are a repeat of events 30 years ago.

INDIA'S DILEMMA:

Modi government's reaction is likely to be starkly different to India's strong public criticism of the junta's actions in 1989-90.

India does care about democracy in Myanmar, but that's a luxury it knows it will not be able to afford for the time being.

The only option will be to engage, building on its outreach in recent years via the security and defence establishment.

One important reason for the change is that India's security relationship with the Myanmar military has become extremely close.

It would be difficult to "burn bridges" with the army given their assistance in securing the North East frontiers from insurgent groups.

In a joint visit to Naypyidaw in October 2020, Foreign Secretary Harsh Shringla and Army Chief Gen. Manoj Mukund Naravane made it clear that New Delhi saw both relationships at par.

Another reason for the change is Ms. Suu Kyi herself, whose image as a democracy icon and Nobel peace laureate has been damaged by her time in office, where she failed to push back the military, and even defended the Army's pogrom against Rohingya in Rakhine State in 2015.

CHINA FACTOR:

Officials also say a harsh reaction from India, on the lines of that from the U.S., would only benefit China.

US has threatened action against those responsible for the "coup" unless they revoke the military's takeover.

GROWING RELATION WITH MYANMMAR:

Apart from strategic concerns, India has cultivated several infrastructure and development projects with Myanmar, which it sees as the "gateway to the East" and

ASEAN countries.

These include the India-Myanmar-Thailand trilateral highway and the Kaladan multi-modal transit transport network, as well as a plan for a Special Economic Zone at the Sittwe deep-water port.

India still hopes to help resolve the issue of Rohingya refugees that fled to Bangladesh, while some still live in India, and will want to continue to engage the Myanmar government on that.

2.3 ECT fiasco: Indian envoy meets Gotabaya, Mahinda

In a flurry of meetings a day after Sri Lanka backed out of an agreement with India and Japan to develop the East Container Terminal (ECT) at the Colombo Port, Indian High Commissioner met President Gotabaya Rajapaksa, PM Mahinda R and Foreign Minister.

The thrust of the Indian envoy's message to the Sri Lankan leadership was that Colombo must adhere to its commitments in the tripartite agreement of May 2019.

The agreement was to jointly develop the strategic terminal with the Sri Lanka Ports Authority (SLPA) holding a 51% stake and India and Japan holding 49% together.

EAST CONTAINER TERMINAL

In 2019, Sri Lanka, Japan and India signed an agreement to jointly develop the East Container Terminal at the Colombo Port.

The three countries will jointly build the East Container Terminal at the Port of Colombo.

As per the agreement the Sri Lanka Ports Authority (SLPA) retains 100% ownership of the East Container Terminal (ECT), while the Terminal Operations Company is jointly owned,the SLPA

Sri Lanka will hold a 51% stake in the project and the joint venture partners will retain 49%.

Japan is likely to provide a 40-year soft loan with a 0.1% interest rate, details of India's contribution to the initiative are awaited.

While the ECT, which is in its first stage and awaits upgrade, has a 450-metre-long quay wall and water depth of 18 metres, equipping it to accommodate large vessels, the West Container Terminal (WCT) exists merely as a proposal, with no infrastructure yet.

IMPORTANCE OF THE PROJECT FOR INDIA:

Over 70% of the trans-shipment business at the strategically located ECT is linked to India

The involvement of India and Japan is the project is being seen as a big development aimed at neutralising the growing influence of China, which has poured money into the South Asian island nation under its mammoth Belt and Road Initiative (BRI) infrastructure plan

MIXED SIGNALS

The Indian side conveyed that the signals emanating from Sri Lanka should boost the confidence of potential investors.

President Gotabaya Rajapaksa has pledged to draw foreign direct investments to the country, rather than take loans.

This is the second instance of Sri Lanka reversing an agreement on a large infrastructure project involving Japan, after the government scrapped the $1.5 billion, Japan-funded Light Rail Transit system last year.

The development has sparked alarm in India and Japan, according to diplomatic sources, who said Sri Lanka had neither conveyed its decision, nor offered the alternative proposal to either of the partners.

2.4 'India ready to supply weapon systems to Indian Ocean nations'

India has already seen the negative impact of conflicting claims in some maritime areas of the world.

Recently the Defence Ministry made a strong pitch for collaboration among countries in the Indian Ocean Region (IOR) while offering to supply a range of weapon systems to them and also helping to build capacities of partner countries.

IOR Defence Ministers conclave is being held at the ongoing Aero India attended by Ministers and representatives from 27 countries, some of them virtually.

Defence Ministry pointed at the negative impact of conflicting claims in some maritime areas of the world and said it is important ensure that the maritime expanse of the Indian Ocean is peaceful and is optimally harnessed for the benefit of all nations in the region.

WIDE RANGE

Recently an order of 83 LCA Tejas jets was placed to the Hindustan Aeronautics

Limited (HAL) as a milestone in indigenisation of defence manufacturing capabilities.

India is ready to supply various types of missile systems, Light Combat Aircraft (LCA), helicopters, multi-purpose light transport aircraft, warship and patrol vessels, artillery gun systems, tanks, radars, military vehicles, electronic warfare systems and other weapons systems to the IOR countries.

An initiative has been taken to develop a comprehensive maritime domain awareness picture in the IOR, which has resulted in the signing of technical agreements for sharing of 'White Shipping Information' with many countries.

India had been the first responder during natural disasters and has always been ready to share expertise and capacity with all IOR countries for coordination in humanitarian assistance and disaster relief.

WHITE SHIPPING AGREEMENT:

White Shipping Agreement (WSA) is an information network protocol that allows the navies of two countries to exchange information about ships in their oceanic territories.

Ships would be classified into white (commercial ships), grey (military vessels), and black (illegal vessels).

It facilitates preventing any potential threat from sea from impinging an coastal and offshore security of the country.

WHY IS THE WHITE SHIPPING AGREEMENT IMPORTANT?

As the entire world is connected through the stretches of oceans, it becomes very important to understand that there can be a threat to the security as there can be any sort of possible movement from one location to another. This also gives information regarding the maritime traffic.

Information regarding the identity of the vessels is very important to tackle any potential threat from sea routes. This particularly helps in the development of a proper regional maritime domain awareness.

This will also help in the identification of those vessels which can be illegal as this provides us with the prior information about the destination of the vessel, the route which has been planned for it, etc.

2.5 Ukraine looking at defence purchases from India

Recently, **Ukraine has shown interest to procure some military hardware from**

India in addition to efforts to deepen its presence in the Indian defence market.

It is in sync with Indian **defence sector reforms** and **Atmanirbhar Bharat Abhiyan** which includes making India **self reliant in defence manufacturing.**

Ukraine has signed four agreements worth USD 70 million which includes sale of new weapons as well as maintenance and upgrades of existing ones **(R-27 air-to-air missiles)** in service with the Indian armed forces.

Ukraine also showed its intent to sell India its **AN-178 medium transport aircraft.**

Ukraine is currently upgrading the AN-32 transport fleet of the **Indian Air Force (IAF)** under a deal finalised in 2009.

The Ukraine team also held discussions with the **Defence Research and Development Organisation (DRDO)** and looked at possible collaborations in research and development.

India-Ukraine Relations:

Diplomatic Relations:

Immediately after the breakup of the Soviet Union, the Government of India **recognized the Republic of Ukraine as a sovereign independent country** in December 1991.

The Embassy of India in Kyiv was established in May 1992 and Ukraine opened its Mission in New Delhi in February 1993.

India and Ukraine enjoy warm and friendly relations and cooperate in areas like Education, Mutual Legal Assistance and Outer Space cooperation.

Defence Relations:

Ukraine has been a **source of military technology and equipment** for India since its independence.

Ukraine **manufactures the R-27 air-to-air missiles** which are in use by the IAF on its **SU-30MKI fighters.**

Now, India is also supplying its weapons to Ukraine to enhance defence cooperation between the two countries.

Trade:

India is Ukraine's largest export destination in the Asia-Pacific and the **fifth largest overall export destination.**

Pharmaceuticals account for the majority of Indian exports to Ukraine.

Culture:

There are more than 30 Ukrainian cultural associations/groups spread across the country, engaged in promoting Indian dances.

There are about 18,000 Indian students studying in Ukraine, mainly in the field of medicine. Indian business professionals work predominantly in the fields of pharmaceuticals, IT, engineering, medicine, education, etc.

Challenges:

The **rift between Russia and Ukraine,** which burst out into armed combat when Moscow annexed the Crimean Peninsula from Ukraine in 2014, has created a potential dilemma for India.

Recently, a Russian press release has objected to the overhaul in Ukraine of military equipment built and sold by Russia.

Russia has begun **objecting to customers dealing with Ukraine.**

The potential for trouble with Russia exists because the Indian Air Force (IAF) is currently collaborating with Ukraine to overhaul its fleet of AN-32s.

Ukraine, a country located in eastern Europe. The capital is **Kyiv (Kiev),** located on the **Dnieper River** in north-central Ukraine.

Surrounding Countries and Seas:

Ukraine is bordered by Belarus to the north, Russia to the east, the Sea of Azov and the Black Sea to the south, Moldova and Romania to the southwest, and Hungary, Slovakia, and Poland to the west.

In the far southeast, Ukraine is separated from Russia by the **Kerch Strait,** which

connects the Sea of Azov to the Black Sea.

History:

With the dissolution of the U.S.S.R. (the Soviet Union) in December 1991, Ukraine gained full independence.

The country changed its official name to Ukraine, and it helped to found the Commonwealth of Independent States (CIS), an association of countries that were formerly republics of the Soviet Union.

Recent Issues:

Recently, Ukraine got at **loggerheads with Russia over the occupation of Crimean peninsula** by Russia.

In June 2020, Ukraine became 'Enhanced Opportunity Partners' under the Partnership Interoperability Initiative of **North Atlantic Treaty Organization (NATO)**.

Ukraine is also seeking **European Union** and NATO membership, a move that could obstruct attempts to resolve other tensions with Russia.

2.6 Israel wants India by its side against ICC ruling, Delhi silent

Israel is pushing "good friend" India to take a stand against a ruling last week by the International Criminal Court claiming jurisdiction over Palestinian territories.

Delhi, still navigating its way through the big shifts in West Asia, is reluctant to be drawn in.

INTERNATIONAL CRIMINAL COURT:

The International Criminal Court (ICC or ICCt) is an intergovernmental organization and international tribunal that sits in The Hague, Netherlands.

The ICC is the first and only permanent international court with jurisdiction to prosecute individuals for the international crimes of genocide, crimes against humanity, war crimes, and the crime of aggression.

It is intended to complement existing national judicial systems and it may therefore exercise its jurisdiction only when national courts are unwilling or unable to prosecute criminals.

The ICC lacks universal territorial jurisdiction, and may only investigate and prosecute crimes committed within member states, crimes committed by nationals of member states, or crimes in situations referred to the Court by the United Nations

Security Council.

CONDEMNATION:

Israeli Prime Minister Benjamin Netanyahu wrote to Indian Prime Minister, whom he described recently as a "great friend", asking India to speak out against the decision, and to send a clear message to the ICC "to stop this assault on justice and common sense".

Delhi has not responded to Netanyahu's February 7 communication, which came two days after the ICC ruling.

Instead Delhi has conveyed through diplomatic channels that since India is not a member of the Rome Statute, the founding treaty of the ICC, it would not want to comment or take a position on any of the court's decisions or rulings.

Israel, which is also not a member of the Rome Statute, has condemned the ICC ruling as "outrageous" and said the decision had exposed the court as "a political body".

Israel said the ICC "has no authority to make such a decision" since Israel does not recognise the court's jurisdiction and the Palestinian Authority is not a sovereign state. Netanyahu called the ruling "antisemitism".

VERDICT

The ICC's majority 2-1 decision on February 5 was made on the basis of Palestine's 2015 accession to the Rome Statuteafter its acceptance as a "non-member observer state" of the UN General Assembly in 2012.

The court made it clear that the ruling was not a determination of Palestinian statehood.

The ruling came 14 months after ICC prosecutor said there was "reasonable evidence" that war crimes were being committed in Palestinian territories of West Bank, including East Jerusalem, and the Gaza Strip. Prosecutor named both the Israeli Defence Forces and Hamas as possible perpetrators.

INDIA'S ROLE IN ICC

India, which had participated actively in the Preparatory Committee for the Establishment of the ICC, had however abstained from the motion to adopt the Rome Statute, for several reasons, including jurisdictional issues, fearing that the ICC might exercise its jurisdiction in areas such as Kashmir and the North-East, which it considers "internal issues" that are hands off for international actors.

The spokesperson for the Ministry of External Affairs offered no comment to questions on Netanyahu's appeal to Prime Minister Modi, and the reasons for India not saying anything on the issue.

A diplomatic source said it was "not a break or make issue" in bilateral ties, nonetheless a positive response from Delhi would have been "important".

Israel, which sees India as a "like-minded" nation, expected a positive response from Delhi, especially as the ruling could be a precedent-setter and may come back to bite on Kashmir or other troubled spots.

2.7 India is an important partner in the Indo-Pacific region, says U.S.

Describing India as one of the most important partners of the U.S. in the Indo-Pacific region, the Joe Biden administration recently said it welcomes *India's emergence as a leading global power*.

India is one of the most important partners in the Indo-Pacific region for us. *USA welcomes India's emergence as a leading global power* and its role as a net security provider in the region.

India and USA reaffirmed the strength of the *U.S.-India partnership* and discussed issues of mutual concern, including the situation in Myanmar.

REGIONAL DEVELOPMENTS:

India and US also discussed regional developments, including the *value of U.S.-India cooperation across the Indo-Pacific*.

Both sides look forward to expanded regional cooperation, *including through the Quad*, and to address the challenges related to COVID-19 and climate change.

U.S.-India Comprehensive Global Strategic Partnership is both broad as well as multifaceted.

Both the nations will continue to *engage at the highest levels* to deepen cooperation on many fronts, and are confident that the strong and upward trajectory of the partnership will, in fact, continue.

US welcomes India joining the Security Council in the last month of this year for a two-year term.

The U.S. also remains India's largest and most important trading partner, with the

total bilateral trade increasing to $146 billion in 2019. U.S. companies are a large source of India's foreign direct investment.

INDO-PACIFIC

The Indo-Pacific, sometimes known as the Indo–West Pacific or Indo–Pacific Asia, is a biogeographic region of Earth's seas, comprising the *tropical waters of the Indian Ocean, the western and central Pacific Ocean*, and the seas connecting the two in the general area of Indonesia.

Area covered by the Indo-Pacific biogeographic region.

The earlier term used to be Asia-Pacific, from which India was excluded. This term was prevalent during the cold war time.

The shift to the term 'Indo-Pacific' shows the *salience of India in the new construct*.

Since 2011, the term "Indo-Pacific" has been increasingly used in *geopolitical discourse*.

It also has "symbiotic link" with the *Quadrilateral Security Dialogue*, or "Quad", an informal grouping of like-minded democracies in the region, comprising Australia, Japan, India, and the United States.

The concept may lead to a change in popular "mental maps" of how the world is understood in strategic terms.

The term 'Indo-Pacific' is interpreted differently by different stakeholders.

India considers the region as an inclusive, open, integrated and balanced space. India continuously emphasises on strategic inter-connections, common challenges and opportunities between the Indian Ocean and the Pacific.

The U.S. considers it to be a free and open Indo-Pacific, highlighting the importance of rules or norms of conduct in the region, thus trying to contain the role of China in the region.

The ASEAN countries look at Indo-Pacific as a consociational model, thus bringing in China not only for the sake of giving it some stakeholdership but looking for ways to cooperate with it in the region.

2.8 Assam central to success of Act East policy: S Jaishankar

External Affairs Minister S Jaishankar recently said that the development of Assam is central to the success of the Act East policy.

LOOK EAST POLICY

India's Look East policy is an effort to cultivate extensive economic and strategic relations with the nations of Southeast Asia to bolster its standing as a regional power and a counterweight to the strategic influence of the People's Republic of China.

Initiated in 1991, it marked a strategic shift in India's perspective of the world.

It was developed and enacted during the government of Prime Minister Narsimha Rao (1991–1996) and rigorously pursued by the successive administrations of Atal Bihari Vajpayee (1998–2004) and **Manmohan Singh (2004–2014**).

The success of Look East policy **enthused** the Mandarins of South-Block to develop the policy into more action oriented, project and outcome based policy.

After a couple of decades, **India's Act-East Policy**, which was announced in 2014 by the Prime minister Narendra Modi's administration, became a successor to the Look-East Policy.

EVENT- "ACT EAST POLICY AND INDIA-JAPAN COOPERATION IN NORTH-EAST INDIA WITH A SPECIAL FOCUS ON ASSAM":

EAM said, to make this policy successful, the role of Assam as its springboard **needs to be fully realised.**

He said that the push on the policy would help create connectivity not just to and within Assam, the Northeast, Myanmar and Bangladesh, but to "eventually push all the way by road, by sea, by air to Vietnam, to Japan".

A more connected Assam will be a more energetic Assam, a more contributing Assam, and obviously, a more employed Assam.

To that, there should be a push for stronger cooperation between Assam and international partners, especially Japan.

Japan has long been involved in the expansion of our economic and social infrastructure.

Across our states and cities, Japanese Official Development Assistance has funded roads, rail, urbanization and energy.

Ambassador of Japan said that Assam — and the Northeast — occupied an important place in Japan's vision for a free, open and inclusive **Indo-Pacific (FOIP). That** is why Japan is supporting various connectivity projects in the state.

CM of Assam said despite Japan having been a great trade and investment partner

for India, it was unfortunate that there was no single Japanese company present in Assam or in other Northeastern states.

2.9 Quad meet: India, U.S. call for rule of law in Myanmar

India recently joined Australia, Japan and the United States for a ministerial meeting under the quadrilateral grouping during which key issues, including Myanmar, came up for discussion.

External Affairs Minister and U.S. Secretary of State said the military takeover in Myanmar featured in the talks and participants reiterated democratic values for the region.

India also emphasised in its statement that the meeting expressed **commitment to "upholding rules-based international order"** and "peaceful resolution of disputes".

GLOBAL GOOD:

EAM said our positive agenda underlines our **shared commitment to global good**. Quad members discussed **contemporary challenges, especially impact of COVID-19** and exchanged views on issues across the Indo-Pacific.

The leaders referred to the military crackdown in Myanmar, with the U.S. highlighting "the **urgent need to restore the democratically elected government** in Burma, and the priority of strengthening democratic resilience in the broader region.

Significantly, the U.S. statement referred to Myanmar as Burma, the name that Naypyitaw had stopped using since 1989 after a **brutal crackdown against the democratic movement.**

QUAD:

The quadrilateral security dialogue includes Japan, India, United States and Australia.

All four nations find a common ground of being the democratic nations and common interests of unhindered maritime trade and security.

The idea was first mooted by Japanese Prime Minister in 2007. However, the idea couldn't move ahead with Australia pulling out of it.

SIGNIFICANCE OF THE GROUPING:

Quad is an opportunity for like-minded countries to share notes and collaborate on

projects of mutual interest.

Members share a vision of an open and free Indo-Pacific. Each is involved in development and economic projects as well as in promoting maritime domain awareness and maritime security.

It is one of the many avenues for interaction among India, Australia, Japan and the US and should not be seen in an exclusive context.

2.10 PANGONG DISENGAGEMENT OVER, OTHER FRICTION POINTS

Making significant headway in attempts to resolve the nine-month military standoff along the Line of Actual Control in Ladakh, **Chinese and Indian troops have completed the first phase of disengagement on the north and south banks of Pangong Tso.**

Senior commanders will meet Saturday morning to discuss the pullback of troops from the other friction points in the region.

DISENGAGEMENT PROCESS

The disengagement of artillery, tanks and troops from heights was completed.

"Everything that was agreed upon at the ninth round of talks (on January 24) has been achieved. **At Pangong Tso, status quo ante has been achieved.**

On the north bank, China has pulled its troops east of Finger 8 (which India says marks the LAC) and India is holding its position behind Finger 3 at the Dhan Singh Thapa post.

All temporary structures, erected by China in the (temporary no-patrolling) stretch between, have been levelled," a government official said.

India has vacated the heights at Rechin La and Rezang La on the south bank as per the agreement. In fact, China has shown unexpected alacrity in vacating the positions it held. This has raised hopes of results in the forthcoming meetings on outstanding issues," the official said.

KEY ISSUES TO BE DISCUSSED:

The disengagement process that remained **partial at Hot Springs and Gogra**, apart from the long-standing issue of patrolling rights on the Depsang Plains.

Issue of the CNN (Charding-Ninglung Nallah) area, which includes Demchok, where grazing rights of Indian people have faced opposition from the Chinese in the last three years.

The scheduling of the tenth round of talks means that troops from the **two sides have vacated the heights near Finger 4 on the Pangong Tso north bank, and Indian troops have also vacated the heights of Magar Hill, Gurung Hill, Mukhpari, Rechin La and Rezang La in the Chushul sub-sector.**

INDIA'S SUCCESS

India was able to place tanks at Rechin La and Rezang La which was unthinkable before. This turned the tables on the PLA and brought them to the negotiating table," Lt General Joshi said, underlining that vacating these positions would not put India at a disadvantage.

India occupied (the heights) with a purpose to push the negotiations to disengagement in the north bank.

2.11 INDIA-MALDIVES RELATION

India **and Maldives on Saturday** signed agreements on wide range of domains including fish processing, public broadcasting, sustainable urban development, road infrastructure and housing.

The new agreement in the field of broadcasting is for cooperation between Prasar Bharati and PSM, the official State Media of Maldives .The MoU intends to facilitate collaboration and capacity building in the field of public broadcasting

Foreign ministry also handed over **one lakh additional doses of COVID** vaccine to Mr Shahid and Maldivian Health Minister Ahmed Naseem.

India has **signed a 50 million dollar** Line of Credit agreement in defence sector with the Maldives. The agreement will facilitate capability building in the maritime domain.

Foreign ministry also co-signed the UTF Harbour Project agreement with **Maldives Defence Minister Mariya Didi.** He said that the project agreement will strengthen Maldivian Coast Guard capability and facilitate regional Humanitarian Assistance and Disaster Relief efforts.

India also extended a new line of credit of US dollar 40 million for the development of new sports infrastructure in the Maldives.

Importance of Maldives

Strategically located in the Indian Ocean: Maldives archipelago comprising 1,200 coral islands lies next to key shipping lanes which ensure uninterrupted energy supplies

to countries like China, Japan and India.

China effect: Since China started to send naval ships to Indian Ocean roughly 10 years ago and right up to Gulf of Aden in the name of antipiracy operations, Maldives' significance has steadily grown and now it's at the heart of international geopolitics.

Security in Indian Ocean: the pre-eminent South Asian power and a 'net security provider" the Indian Ocean region, India needs to cooperate with Maldives.

Maldives member of SAARC: It is important for India to have Maldives on board to maintain its leadership in the region. Maldives was the only Saarc country which seemed reluctant to follow India's call for boycott of Saarc summit in Pakistan after the Uri attack.

India and Maldives share ethnic, linguistic, cultural, religious and commercial links: India was among the first to recognise Maldives after its independence in 1965 and later established its mission at Malé in 1972.

Bilateral Trade of modest beginnings: India-Maldives bilateral trade now stands at US$ 290.27 mn with trade balance for India, include agriculture and poultry produce, textiles, sugar, fruits, vegetables, drugs and medicines, spices, rice, wheat flour (Atta), a variety of engineering and industrial products, sand and aggregate, cement etc.

2.12 Iran says talks with IAEA chief 'fruitful'

Iran said recently it had held "fruitful discussions" with UN nuclear watchdog chief in Tehran, ahead of a deadline when it is set to **restrict the agency's inspections unless the United States lifts painful sanctions**.

UN nuclear watchdog chief's visit comes amid stepped-up efforts between U.S. President Joe Biden's administration, European powers and Iran to salvage the 2015 nuclear deal that has been on the brink of collapse since former President Donald Trump withdrew from it.

IMPASSE:

Iran's Foreign Minister signalled that the Islamic republic wants to avoid an "impasse", but also warned it could step further away from its commitments **if Washington does not lift the sanctions**.

Iran and the IAEA held fruitful discussions based on mutual respect, the result of which will be released this evening.

Iran's conservative-dominated Parliament months ago demanded that if the U.S.

does not lift sanctions by this Sunday, **Iran will suspend some IAEA inspections.**

What was the iran nuclear deal?

Iran agreed to rein in its nuclear **programme in a 2015 deal struck** with the US, UK, Russia, China, France and Germany.

Under the Joint **Comprehensive Plan of Action (JCPoA)** Tehran agreed to significantly cut its stores of centrifuges, enriched uranium and heavy-water, all key components for nuclear weapons.

The JCPOA established the Joint Commission, with the negotiating parties all represented, to monitor implementation of the agreement.

In 2019, US had withdrawn from the Iran Nuclear Deal. Post the decision by the US, Iran has taken further steps away from its crumbling nuclear deal with world powers by announcing it is doubling the number of its advanced centrifuges.

By doing so, Iran is trying to increase the pressure on Britain, France and Germany in particular to find some arrangement that will allow them to sell the oil they were buying when Iran was not under sanctions.

That requires some level of US support to waive sanctions against European firms by the United States. So far, the US has no agreed to do that.

WHY DID IRAN AGREE TO THE DEAL?

It had been hit with devastating economic sanctions by the United Nations, United States and the European Union that are estimated to have cost it tens of billions of pounds a year in lost oil export revenues. Billions in overseas assets had also been frozen.

WHY HAS US PULLED OUT OF THE DEAL NOW?

Trump and opponents to the deal say it is flawed because it gives Iran access to billions of dollars but does not address Iran's support for groups the U.S. considers terrorists, like Hamas and Hezbollah.

They note it also doesn't curb Iran's development of ballistic missiles and that the deal phases out by 2030.

They say Iran has lied about its nuclear program in the past.

IMPACT OF ESCALATED TENSION BETWEEN IRAN AND THE US:

Iran can make things difficult for the U.S. in Afghanistan as also in Iraq and Syria.

The U.S.'s ability to **work with Russia in Syria** or with China regarding North Korea will also be impacted.

And sooner or later, questions may be asked in Iran about why it should continue with other restrictions and inspections that it accepted under the JCPOA, which would have far-reaching implications for the global nuclear architecture.

Coming after the rejection of the Trans-Pacific Partnership (TPP), the Paris climate change accord and the North American Free Trade Agreement, President's decision further diminishes U.S. credibility.

IMPLICATIONS FOR INDIA:

Oil and Gas: The impact on world oil prices will be the immediately visible impact of the U.S. decision. Iran is presently **India's third biggest supplier** (after Iraq and Saudi Arabia), and any increase in prices will hit both inflation levels as well as the Indian rupee.

It would impact the development of Chahbahar port.

INSTC: New U.S. sanctions will affect these plans, especially if any of the countries along the route or banking and insurance companies dealing with the INSTC plan also decide to adhere to U.S. restrictions on trade with Iran.

Shanghai Cooperation Organisation: China may consider inducting Iran into the SCO. If the proposal is accepted by the SCO, which is led by China and Russia, India will become a member of a bloc that will be seen as anti-American, and will run counter to some of the government's other initiatives like the Indo-Pacific quadrilateral with the U.S., Australia and Japan.

Rules-based order: By walking out of the JCPOA, the U.S. government has overturned the precept that such international agreements are made by "States" not just with prevailing governments or regimes.

2.13 India, China to push for resolving remaining issues

Disengagement of frontline troops in the Pangong Tso area was a significant step forward for the resolution of issues in other areas in the Western Sector.

India and China, at the 10th Corps Commander talks, agreed to push for a **mutually acceptable solution for the remaining issues**.

JOINT STATEMENT

The two sides agreed to follow the important consensus of their state leaders, continue their communication and dialogue, stabilise and control the situation on the ground, push for a mutually acceptable resolution of the remaining issues in a steady and

orderly manner, so as to jointly **maintain peace and tranquillity in the border areas**.

The Corps Commanders had a candid and in-depth exchange of views on other issues along the Line of Actual Control in the Western Sector, the statement said.

The two sides positively appraised the "smooth completion" of disengagement of frontline troops in the Pangong Lake area and said that it **provided a "good basis" for resolution of other remaining issues**.

The focus of the talks was to **work out a phased disengagement plan for the other friction areas**. These include **Gogra, Hot Springs, Depsang and Demchok**.

PAST

In the previous two rounds, **India sought restoration of the status quo** as it existed before the standoff began in May 2020.

Indian and Chinese troops **scuffled at Pangong Tso in Ladakh on 5/6th May**.

After the first round of talks on 6th June, 2020, **clashes occurred in Galwan Valley (Ladakh)** that claimed 20 Indian soldiers' lives and an unknown number of casualties on the Chinese side.

While faceoffs and standoffs keep occurring on the LAC due to differences in perception on the alignment, there has been no instance of firing on the LAC since 1975.

India and China fought a war in 1962.

2.14 Maldives Parliament debates defence deal with India

A day after Male and New Delhi signed an agreement to jointly **develop the Maldives National Defence Force Coast Guard Harbour**, Maldives's Parliament, 'the People's Majlis', took up an emergency motion, demanding greater transparency on the bilateral pact.

Following the signing of the agreement, External Affairs Minister S. Jaishankar quoted by saying that the agreement will strengthen **Maldivian Coast Guard capability and facilitate regional HADR efforts**. Partners in development, partners in security.

OPPOSITION:

An MP from the Opposition Progressive Party of Maldives submitted an emergency motion in the House, objecting to the signing of the pact, linked **to the "independence and sovereignty" of the Maldives**, without the approval of Parliament.

Maldivian Defence Minister said the project was "vital" to the effective functioning of

the Maldivian Coast Guard.

Given our expansive maritime territory, **the need to enhance local coast guard capabilities** cannot be overstate. explaining why the government is "elated" that the project is "finally under way".

This dockyard and harbour will, in time, afford us the opportunity to protect our maritime interests on our own thereby enhancing our sovereignty.

The harbour development agreement, effectively a defence pact, was signed following a request from the government of Maldives for Indian assistance to **enhance the capability of the Defence Forces**.

Not all in the ruling coalition agree with the government's current foreign policy. Government MP said Male should **avoid seeking assistance on military matters from any big power**.

Whether it is India, China or the U.S., their agreements here are bound to have conflicting interests.

We should not end up in a situation where we have to choose one partner over another, we should not become part of a proxy [geopolitical] war.

Last year, New Delhi welcomed the Maldives's decision to sign a military agreement with the U.S.

2.15 Border tension aside, China India's top trade partner in 2020

China topped India's list of trading partners in 2020 despite high tension between the countries, showed provisional data from the Ministry of Commerce and Industry.

Its position at the top is not just a result of **India's continued dependence on its electrical and nuclear machinery**, but a spurt in shipments of products like iron and steel as well.

CUTTING CHINESE PRESENCE:

Despite a drop from the $85.47 billion traded between India and China from January to December 2019, **total trade between the countries stood at $77.67 billion during the same period in 2020** — a year that saw a deadly clash between Indian and Chinese troops at Galwan Valley.

The skirmish sparked various measures by the government to **cut Chinese**

presence in the country, including a ban of popular apps, termination of major infrastructural contracts and the approval of production-linked incentive schemes to reduce dependence on critical goods from the neighbour.

Electrical machinery and equipment, at $17.82 billion, and nuclear reactors, boilers, machinery and mechanical appliances, at $12.35 billion, continued to top the goods imported from China in 2020 — a sign of continued dependence as India works towards self-reliance in critical sectors.

At the same time, **imports of these goods dropped by nearly 11 percent** in the calendar year.

Meanwhile, **Indian iron and steel saw a 319.14 percent jump in exports to China**, with shipments touching $2.38 billion during January to December 2020. Iron and steel exports to China in 2019 were around $567 million.

WITH US:

India's trade with the US, its top trading partner in 2019, took a hit during the pandemic.

Total trade with the US in 2020, at $75.95 billion, lagged behind China.

India exported goods worth $49.06 billion to the US between January and December 2020, down from $53.82 billion the year before.

However, imports from the country took a bigger hit, dropping to $26.89 billion in 2020 from around $36.28 billion in 2019.

WHAT INDIA EXPORTS TO CHINA?

1. Cotton yarn

2. Iron ore

3. Organic chemicals

4. Mineral fuels

5. Plastic items

6. Fish

7. Salts

8. Electrical machinery

9. Iron and steel

10. Gems & Jewellery

ITEMS OF CHINESE EXPORTS TO INDIA:

The main items to be exported from China to India are electrical machinery and equipment, organic chemicals, nuclear reactors, boilers, machinery, silk, mineral fuels, and oils.

Value added items also dominate Chinese exports to India, like machinery, especially electrical machinery, which forms about 36% of Chinese exports to India.

2.16 India, Pakistan agree to adhere to 2003 ceasefire

In a first joint statement issued by the two sides in years, India and Pakistan recently said they have agreed to a "**strict observance of all agreements, understandings and cease firing along the Line of Control (LoC) and all other sectors**" with effect from the midnight of February 24-25.

The decision was announced after discussions between the Directors General of Military Operations (DGMOs) of both sides over the established hotline.

TOWARDS PEACE:

In the interest of **achieving mutually beneficial and sustainable peace** along the borders, the two DGMOs agreed to address each other's core issues and concerns which have [the] propensity to disturb peace and lead to violence.

It added that they would **use existing mechanisms of hotlines and flag meetings** to resolve any "misunderstandings".

As per the existing mechanism, there is a discussion by officials from the Military Operations directorate every Tuesday but the **DGMOs speak only when one side requests** for a conversation.

However, Army sources reiterated that there would be **"no let-up" in counter-terror operations** as a result of the agreement, adding that the agreement with Pakistan was "an attempt to bring violence levels down.

India desires normal neighbourly relations with Pakistan and has always been committed to addressing issues, if any, in a peaceful bilateral manner.

INTERNATIONAL RELATIONS

3.1 Britain to apply to join Asia-Pacific free trade bloc

Britain will apply to join a massive 11-nation free-trade bloc of Asia-Pacific countries.

Britain will formally request Monday for Britain to join the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), a market representing half a billion people and roughly 13.5% of the global economy.

British Prime Minister Boris Johnson said the potential new partnership would "bring enormous economic benefits for the people of Britain".

Negotiations between the UK and the partnership — which represents 11 Pacific Rim nations including Australia, Canada, Chile, Japan, Mexico and Vietnam — are expected to start this year, the trade department said.

'ENORMOUS OPPORTUNITIES'

Britain said joining the CPTPP would offer "enormous opportunities".

She has touted joining as Britain made agreements with members such as Japan and Canada in the wake of Brexit, with British media reporting that CPTPP nations accounted for around eight percent of UK exports in 2019.

The deal will mean lower tariffs for car manufacturers and whisky producers, as well as "delivering quality jobs and greater prosperity for people here at home".

Membership of the bloc has the potential to deliver new opportunities for UK business across different sectors.

COMPREHENSIVE AND PROGRESSIVE AGREEMENT FOR TRANS-PACIFIC PARTNERSHIP

The Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), also known as TPP11 or TPP-11, is a trade agreement between Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam.

It evolved from the Trans-Pacific Partnership (TPP), which never entered into force due to the withdrawal of the United States.

At the time of its signing, the eleven countries' combined economies represented 13.4 percent of the global gross domestic product (approximately US$13.5 trillion), making the CPTPP the third largest free-trade area in the world by GDP.

The CPTPP was launched in 2019 to remove trade barriers among the 11 nations representing nearly 500 million consumers in the Asia-Pacific region in a bid to counter China's growing economic influence.

The Trans-Pacific Partnership agreement was signed on 4 February 2016, but never entered into force, as Donald Trump withdrew the US from the agreement soon after being

elected.

All original TPP signatories except the US agreed in May 2017 to revive it and reached agreement in January 2018 to conclude the CPTPP.

The formal signing ceremony was held on 8 March 2018 in Santiago, Chile.

The CPTPP incorporates most of the TPP provisions by reference, but suspended 22 provisions the US favored that other countries opposed, and lowered the threshold for enactment so the participation of the US is not required.

The agreement specifies that its provisions enter into effect 60 days after ratification by at least 50% of the signatories (six of the eleven participating countries).

The sixth nation to ratify the deal was Australia on 31 October, and the agreement came into force for the initial six ratifying countries on 30 December 2018.

3.2 U.S. extends New START nuclear treaty with Russia

U.S. President Joe Biden's administration *extended the New START nuclear treaty with Russia by five years,* saying it hoped to prevent an arms race despite rising tensions with Moscow.

One day before the treaty was set to expire, Secretary of State Antony Blinken said the United States was *extending New START by the maximum allowed time of five years.*

DISARMAMENT

President Biden pledged to *keep the American people safe from nuclear threats* by

restoring U.S. leadership on arms control and nonproliferation.

The United States is committed to effective arms control that *enhances stability, transparency and predictability* while reducing the risks of costly, dangerous arms races."

Russian President Vladimir Putin signed off on legislation extending the accord, meaning that the treaty — signed by then-President Barack Obama in 2010 — will run until February 5, 2026.

The last remaining arms reduction pact between the former Cold War rivals, *New START caps to 1,550 the number of nuclear warheads* that can be deployed by Moscow and Washington.

CHINA'S ARSENAL

Former President Donald Trump's administration tore up previous agreements with Moscow and unsuccessfully *sought to expand New START to cover China.*

Mr. Blinken said the U.S. would use the coming five years to *pursue diplomacy that addresses "all" of Russia's nuclear weapons* and to "reduce the dangers from China's modern and growing nuclear arsenal".

3.3 China's New Project in Sri Lanka

Recently, a Chinese company has won a contract to set up **hybrid wind and solar energy projects on three Sri Lankan islands** off the northern Jaffna peninsula **45 km from Rameswaram in Tamil Nadu.**

Asian Development Bank (ADB) will fund the project, which will come up on **Delft, Nainativu and Analativu,** three islands in the **Palk Strait off Jaffna peninsula.**

Islands:

Delft, the largest of the three islands, is the **closest to Rameswaram, Tamil Nadu,** which lies to the island's south west.

Between the two is **Kachchativu**, the tiny island that **India ceded to Sri Lanka in 1974.**

The waters around these islands are an area of contest and **rivalry between Tamil Nadu and Jaffna fishers.**

The matter has been on the bilateral agenda for decades.

India and Sri Lanka agreed to set up a **Joint Working Group (JWG) on Fisheries in 2016** between the Ministry of Agriculture and Farmers Welfare of India and Ministry of

Fisheries and Aquatic Resources Development of Sri Lanka as the mechanism to help find a permanent solution to the fishermen issue.

Sri Lanka's Stand:

It cannot be blamed for this decision, because the **project is backed by the ADB, which has its "own procurement guidelines** that should be followed by the borrower".

India's Concern:

The **project site's proximity to the Indian coastline.**

Chinese presence in the vicinity is not welcomed especially when India already has many unresolved issues with China.

This deal came at a time when **India's confrontation with China in Ladakh** is yet to be resolved.

Recently, the Sri Lankan government cancelled the contract with India and Japan for the **Eastern Container Terminal (ECT).**

The tripartite agreement, signed by India, Sri Lanka and Japan, proposed to develop the ECT, which is located at the newly expanded southern part of the Colombo Port.

For India, the ECT deal was important as around 70% of transhipment that takes place through it is India-linked. The ECT is also considered more strategic than any other in Colombo Port.

India's Stand:

India had lodged a **strong protest** with the Sri Lankan government on the contract to the Chinese company.

In 2018, **India voiced concern over China's USD 300 million housing project** for war-affected areas, accusing the Resettlement Ministry [of the former government] of holding an "opaque" bidding process.

The project was **eventually dropped.**

China's Rising Influence in South Asia

Recent Initiative:

In January 2021 China held its **third multilateral dialogue** virtually **with countries from South Asia** to take forward closer cooperation on fighting **Covid-19 and coordinating their economic agendas,** reflecting a new approach in Beijing's outreach to the region.

Other Initiatives:

According to the American Enterprise Institute's China Global Investment Tracker, **China has committed around 100 billion USD in the economies of Afghanistan, Bangladesh, the Maldives, Pakistan, Nepal and Sri Lanka.**

China is now the largest overseas investor in the Maldives, Pakistan, and Sri Lanka.

Concerns for India:

Security Concerns:

Growing cooperation between Pakistan and China.

Increasing nexus between Nepal and China.

Acceptance to China-Pakistan Economic Corridor by south asian countries.

Leadership Roles in South Asia:

It shows increasing chinese presence in south asia and its acceptance by the countries as a torch bearer for the region which India wants for itself.

Economic Concerns:

Over the past decade, **China has replaced India as the major trading partner of several South Asian countries.**

For instance, the share of India's trade with Maldives was 3.4 times that of China's in 2008. But by 2018, China's total trade with Maldives slightly exceeded that of India.

China's trade with Bangladesh is now about twice that of India. China's trade with Nepal and Sri Lanka still lags India's trade with those countries but the gap has shrunk.

India does not have the economic capacity as China. Thus it should **cooperate with China for the development of these countries** such that fruits of development collectively reach South Asia. Further **India should invest in countries where China falls short** and maintain its good will in South Asia and prevent these nations from slipping off from India's Influence.

Along with strongly condemning the plans for extension of the **China-Pakistan Economic Corridor,** India also **needs to focus more on its traditional and cultural ties** to improve relations with its neighbours.

3.4 Sri Lanka considering India's grant instead of China project

In an apparent bid to displace a Chinese company that had won the contract to install renewable energy systems in three small islands off Jaffna Peninsula in northern Sri Lanka, **India has offered a grant of $12 million to execute it,** Colombo-based media

reported.

HYBRID RENEWABLE ENERGY SYSTEMS

Sri Lanka's Minister of Power has recently said that the government would consider India's proposal, and that he would present a Cabinet paper on the matter soon.

Newspaper reports quoted him as saying that receiving a grant "is an advantage" that would ease the burden on the Treasury, as opposed to an Asian Development Bank (ADB) loan, as per the original project proposal, that would have to be repaid.

The development comes less than a month after the Cabinet cleared a project to install hybrid renewable energy systems in Nainativu, Delft or Neduntheevu, and Analaitivu, located in the Palk Bay, some 50 km off Tamil Nadu.

The Cabinet decisions taken recently included a proposal to award the contract to Sinosoar-Etechwin Joint Venture in China, with funding from the ADB.

'SECURITY THREATS':

Meanwhile, a group of northern Tamil political parties have voiced opposition to Chinese involvement in the project, citing "security threats" to Tamil people and India.

Tamil people are not opposed to China but given that India has known security concerns in this regard, and also because the project is to come up very close to Tamil Nadu, we oppose Chinese involvement.

The people **of Tamil Nadu have been** lending unconditional support to the Tamil cause, so their security, as well as that of India, is very important to us.

It remains to be seen if India's proposal gets official clearance, but India's swift offer comes in the wake of being ejected — along with Japan — out of the East Container Terminal (ECT) development project at the Colombo Port, following another Cabinet decision taken recently this year.

3.5 Transatlantic Alliance Is The Foundation On Which US, European Security, Prosperity Are Built: Biden

The **USA President Joe Biden** in his first address to the annual **Munich Security Conference** declared that the **'transatlantic alliance is back'** and **stressed the need to defend democracy around the world.**

The USA President **intended to improve the strained relationship between the USA and other European allies.**

The **Munich Security Conference** is **an annual conference on international security policy** that has taken place in Munich, Bavaria (Germany) since 1963.

The Transatlantic Alliance has been the **cornerstone of the post-World War II world order.**

It is a real-world expression of West – of a sense that **both sides of Atlantic are in it together.**

It is the foundation on which the collective security and shared prosperity of the USA and Europe are built.

However, this historic, long-established friendship between the world's two largest economies has become strained in recent years.

Transatlantic Trade and Investment Partnership (T-TIP):

T-TIP is an ambitious, comprehensive, and high-standard **trade and investment agreement being negotiated between the United States and the European Union (EU).**

The TTIP negotiations were launched in 2013 and ended without conclusion at the end of 2016.

T-TIP will be a cutting edge agreement aimed at providing greater **compatibility and transparency** in trade and investment regulation, while maintaining high levels of health, safety, and environmental protection.

Reason for Strained Relations:

The Donald Trump (former) administration flaunted its foreign policy through an **"America First"** lens.

The former American president **not only attacked the North Atlantic Treaty Organization (NATO) –** the fundamental structure of transatlantic alliance but also **withdrew from virtually all multinational agreements** recently **championed by the European Union (EU)**, such as the **Iran nuclear deal** and the **Paris climate agreement.**

The USA and the EU appear to be **at odds with each other currently regarding their China interests,** particularly on the economic and trade front.

Significance of the Latest Declaration:

A boost to **multilateralism.**

Concerned with maintaining its global strategic primacy, the **USA was once equivocal about European defence** and strategic autonomy. But as **power has shifted eastward,** subsequent **USA governments have been keen to devote as much**

attention, money, and military muscle as possible **to the Indo-Pacific.**

The Alliance **can lead to development of an EU-USA carbon border adjustment mechanism,** and can **help in averting most catastrophic impacts of climate change.**

On **Iran,** Europeans can anticipate **renewed negotiations on a revamped nuclear deal** aimed at de-escalating tensions across the region.

Germany's Merkel spoke about the **need of a transatlantic policy towards Russia.**

North Atlantic Treaty Organization

Establishment: North Atlantic Treaty Organization (NATO) was **established by the North Atlantic Treaty (also called the Washington Treaty)** of 4th April, 1949, by the United States, Canada, and several Western European nations to provide collective security against the Soviet Union.

NATO provides a **unique transatlantic link** for political and security cooperation.

Headquarters: Brussels, Belgium.

Functioning:

NATO is a **political and military alliance** whose primary goals are the collective defence of its members and the maintenance of a democratic peace in the North Atlantic area.

NATO has an **integrated military command structure** but very few forces or assets are exclusively its own.

Most forces remain under full national command and control until member countries agree to undertake NATO-related tasks.

All 30 allies have an equal say, the Alliance's decisions must be unanimous and consensual, and its members must respect the basic values that underpin the Alliance, namely democracy, individual liberty and the rule of law.

Members: As of 2020, there are **30 member states,** with **North Macedonia (2020) becoming the latest member** to join the Alliance.

Member Countries: Albania, Belgium, Bulgaria, Canada, Croatia, the Czech Republic, Denmark, Estonia, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Turkey, the United Kingdom, Montenegro, North Macedonia and the United States.

3.6 Facebook to end Australia news blackout

Facebook said recently **it would lift a contentious ban on Australian news and pay local media companies for content**, after a last-gasp deal on pending landmark legislation.

Australia's Treasurer announced a **face-saving compromise that will see Google and Facebook plunge tens of millions of dollars** into the struggling local news sector.

In return the U.S. digital firms will, for now, **avoid being subjected to mandatory payments** that could cost them vastly more and create what they see as an alarming global precedent.

Just hours after the compromise was unveiled, Facebook announced its first proposed deal with an Australian media company, Seven West, and was said to be **pursuing commercial deals with other local news organisations**.

The company is expected to **use the content to launch a dedicated news product** in Australia later this year.

CORE ISSUE BETWEEN TECH GIANTS AND REGULATORS:

While links to news may not be direct advertising money-spinners for Facebook or Google, **both see the presence of news as an important aspect** of audience engagement with their products.

Google and Facebook are two of the largest and most profitable companies in history – and **each holds far more bargaining power than any news publisher**. The news media bargaining code sets out to undo this imbalance.

The fight in Australia is in fact, centred on how much control these companies would be able to retain on their payout process — operational aspects such as deciding the quantum of payments for news feed sources, and having to reveal changes in their algorithm.

DEBATE IN INDIA:

According to a FICCI-EY report for 2020, there are 300 million users of online news sites, portals and aggregators in the country — **making up approximately 46% of Internet users and 77% of smartphone users** in India at the end of 2019.

With 282 million unique visitors, **India is the second largest online news** consuming nation after China.

In India, digital advertising spends in 2019 grew 24% year-on-year to Rs 27,900

crore and are expected to grow to Rs 51,340 crore by 2022.

A substantial discussion on the impact of intermediary platforms on the health of news media outlets is yet to begin in any meaningful way.

ISSUES IN AUSTRALIA:

Google has threatened to remove its search engine from the country, and Facebook has said it could block Australian users from posting or sharing news links if proposed norms on royalty payments are rolled out.

Royalty payment: A royalty is a legally-binding payment made to an individual, for the ongoing use of his or her originally-created assets, including copyrighted works, franchises, and natural resources.

The argument made by the global tech companies is that: The Australian media industry is already benefiting from traffic being routed to them by each of the digital platforms.

The new rules proposed by the Australian authorities would expose them to **unmanageable levels of financial and operational risk**.

Hefty fines proposed by authorities are being seen as an added disincentive.

The fundamental difference in the approach taken by the French and Australian authorities on the issue is that France specifically linked payments to copyright, without putting a forcing device into the agreements like in Australia.

3.7 'Propose bilateral green deal to U.S.'

CEO of Council on Energy Environment and Water (CEEW) says India needs to proactively **negotiate a bilateral climate agreement with the U.S**.

CEO suggests that **hill States such as Uttarakhand be given a concrete plan** to transition from reliance on large hydropower plants for energy.

U.S. RE-ENTERING THE PARIS CLIMATE AGREEMENT:

This is an opportunity for India to be **proactive and propose a bilateral deal**, where the U.S. and India can work more closely on climate change.

The focus should be on what can be achieved in the near-term. There will be pressure on India to give a plan on **when it will achieve Net Zero** (when a country's carbon dioxide emissions are balanced by the amount locked back in).

However, India must have an agreement on say the **use of hydrogen, and form a**

Green Hydrogen Alliance.

The U.S. will predictably try to **nudge, cajole other countries into raising ambition** (in the form of greater emission targets, for example) but India shouldn't be swayed by emotion.

India can use this opportunity **to ask the U.S. to raise ambition**, given that it has been out of the agreement for four years. We can ask for **concrete targets, finance, and technology**.

UPCOMING UNITED NATIONS CONFERENCE OF PARTIES (COP26) IN GLASGOW, SCOTLAND:

COP 26 will be a very significant event though probably not as much as the conference in Paris (in 2015). The reason for its importance is because it's coming in a year after the pandemic began.

It will reveal if the world's recovery has been a green one and [if] we are building a world that is better.

COP26 will likely be about the **mechanisms, especially financial ones**, to operationalise plans.

FUTURE FOR HYDROPOWER?

It was only two years ago that **large hydropower projects (above 25 MW)** started to be considered as renewable energy.

India should be going back to the earlier definition where only the **smaller hydropower plants were considered renewable energy**.

In future, India has to think **if hydropower can compete with solar-plus-storage** and it's very much possible that the latter will be cheaper than a new hydropower plant.

On the other hand, **even smaller hydropower plants are in fragile ecosystems** and will still be a challenge.

The per-unit cost of solar power falling. However, we are nowhere close to an inflection point of **solar power becoming a much bigger component of our energy mix**.

There are three additional drivers: **financial, technological and new markets**. India can still shave off a few paise from improving financial contracts and the implementing of them.

The **solar rooftop market is relatively untapped**. There are also solar irrigation

pumps, urban microgrids, etc. These are niche markets not being exploited at all.

We must be able to offer our market as a test bed for new batteries and storage technologies, like we are doing with vaccines.

We've developed one vaccine here but we are the factory for the other vaccine, and that makes us relevant to the global market.

NATIONAL

4.1 Centre likely to postpone Census to 2022

The Central government is on track to push the 2021 Census to 2022 on account of the country's continuing preoccupation with the COVID-19 pandemic.

Measures taken to deal with the pandemic and now the massive vaccination programme under way across the country are the reasons behind the postponement.

NPR update:

The Census exercise was to be conducted in two phases —

House Listing and Housing Census from April to September 2020 and;

Population Enumeration from February 9 to February 28, 2021.

CONTROVERSY SURROUNDING THE NPR

Thousands of people had protested against the Centre's decision to update the NPR, which is considered the basis for the preparation of a National Register of Citizens (NRC) that could potentially exclude millions of people born in India.

The entire process of NPR had become controversial after Parliament approved the Citizenship (Amendment) Act in December 2019 that sought to give citizenship to persecuted minorities from Bangladesh, Afghanistan and Pakistan who entered India on or before December 31, 2014.

However, the rules required for implementing the CAA have not been framed so far — more than a year after the passage of this key legislation.

Diplomatic sources believe that strong opposition from Bangladesh is one of the factors that led to the CAA remaining on hold.

4.2 Medical board on abortion 'unfeasible'

A panel of doctors to decide on termination of pregnancy beyond 24 weeks as proposed in the Medical Termination of Pregnancy (MTP) Amendment Bill, 2020, is "unfeasible" as 82% of these posts are lying vacant in the country, finds a new study.

The data is based on the Ministry of Health and Family Welfare's Rural Health

Survey, which provides details of vacancies filled at secondary healthcare centres. Similar data for urban areas were unavailable.

THE BILL:

The MTP Bill was passed in the Lok Sabha in March 2020, and is likely to be brought before the Rajya Sabha during the Budget Session.

The Bill proposes several amendments, including the constitution of a medical Board in every State and Union Territory. The Board will decide on pregnancies beyond 24 weeks in cases of foetal abnormalities.

Each Board will have a gynaecologist, a radiologist or sonologist, a paediatrician, and other members prescribed by the governments.

REPORT ANALYSIS

The report analysed district-wise availability of specialists, including surgeons, obstetricians and gynaecologists, physicians and paediatricians.

It found that for each of the years between 2015 and 2019, the shortfall in these posts hovered between 71% and 81.8%.

For 2019, for a total of 21,296 vacancies in the country, only 3,880 were filled, that is, there was a shortfall of 81.8%.

The shortfall was starker in the northeast where Sikkim, Mizoram and Manipur had a total absence of obstetricians and gynaecologists, and a near total absence of paediatricians.

Arunachal Pradesh and Meghalaya had a 100% shortage of paediatricians.

4.3 Centre set to allow steel from recycled scrap to be used in road, bridge projects

In what could be a jolt to major steel makers of India, the Centre is set to allow steel made from recycled scrap to be used in construction of roads and bridges.

This will liberate the construction sector from the compulsion of having to use steel made only by the top few iron and steel companies in the country.

HIKE

Steel industry in general and the top few premium steel makers in India in particular have hiked the price of steel by at least 50 per cent in the past six months.

The move is expected to give a clear cost-advantage to the Centre's various road

projects.

The decision will make thousands of suppliers of recycled steel and smaller players in the sector eligible to vie for the business so long as their steel meets the required technical standard set by the ministry for roads and bridges.

A steel industry body last month wrote to Prime Minister Narendra Modi, defending the hike in prices and citing reasons behind it.

Citing the pandemic, the industry body wrote that a global shortage of steel had triggered the rise in prices and that the price of iron ore had also soared.

QUALITY CONTROL

There will also be a requirement to set a stringent inspection regime for quality control at the ground level, officials said.

About 40 per cent of the expenditure in road projects goes into procuring steel and cement.

Ministry sources said an estimated 10,000 suppliers in India will potentially be eligible to bid for contracts to supply steel after the move, introducing competition and also enhancing the size of the sector.

Over 60 per cent of the domestic steel demand is generated from construction sectors like real estate and roads.

The road sector the world over has been toying with a number of alternative technologies and materials that can replace steel.

Composite and reinforced fibre bars claim tensile strength five to six times that of steel.

Gadkari, who had been criticising the increase in steel prices for the past two months, recently publicly warned steel makers about its impact on road projects.

4.4 Auto sector welcomes vehicle scrappage policy

Leading players in the automotive sector have welcomed the Centre's announcement on the voluntary vehicle scrappage policy to phase out old and unfit vehicles.

While tabling the Union Budget for 2021-22, Finance Minister said the policy would help in encouraging fuel-efficient, environment-friendly vehicles, thereby reducing vehicular pollution and the oil import bill.

WHAT DOES THE POLICY AIM TO ACHIEVE?

The idea is to phase out cars and commercial vehicles which are older than 20 or 15 years, respectively.

This is being done in a bid to reduce urban pollution levels and galvanise automotive sales, which continue to suffer during India's post-COVID recovery phase.

This means that any private vehicle that's older than 20 years will have to undergo a fitness test.

A fitness test, according to the Finance Minister, will be conducted at automated fitness centres, which will determine whether the vehicle in question is qualified to run on roads, or headed for the scrap heap.

Vehicles would undergo fitness tests after 20 years in automated fitness centres in the case of personal vehicles (PV), and after 15 years in the case of commercial vehicles (CV).

ARE THERE ANY OTHER COSTS INVOLVED?

Yes. The government has proposed a Green Tax, which requires you to pay 10-25 percent of your road tax every time you renew your fitness certificate.

This means that, in addition to the fee you're required to shell out for the test, you have to pay a considerable sum, which differs from city to city, based on their pollution levels.

In the Delhi-NCR region, for example, the Green Tax, if implemented, would require the customer to pay 50 percent of the road tax, upon renewal of registration.

EXPERT OPINIONS

Kenichi Ayukawa, president, Society of Indian Automobile Manufacturers (SIAM), "the vehicle scrappage scheme has a good intent and the auto industry would be keen to work with the government on suggestions for maximising benefits to environment and society."

Federation of Automobile Dealers Associations president Vinkesh Gulati said, "If we take 1990 as the base year, there are approximately 37 lakh CVs and 52 lakh PVs eligible for voluntarily scrappage. "As an estimate, 10% of CVs and 5% of PVs may still be plying on the road."

Vipin Sondhi, MD & CEO, Ashok Leyland Ltd., said the policy is good for the environment and for setting in motion a circular economy. "However, we await further

details of the policy as the industry had requested an incentive-based scrappage policy for it to be effective, Mr. Sondhi said.

4.5 Centre to amalgamate market laws into single code

The Centre on Monday announced setting up of a Single Security Market Code by consolidating the provisions of SEBI Act, 1992, Depositories Act, 1996, Securities Contracts (Regulation) Act, 1956 and Government Securities Act, 2007.

This was announced by Union Minister for Finance and Corporate Affairs Nirmala Sitharaman, while presenting the Union Budget 2021-22 in Parliament.

ENHANCING EASE OF DOING BUSINESS

According to analysts, this move will improve ease of doing business in the country's financial markets, cut down compliances, reduce cost and do away with friction between various stakeholders.

In order to instil confidence among participants in the corporate bond market during times of stress and to generally enhance secondary market liquidity, the Budget has proposed to create a permanent institutional framework.

The proposed body would purchase investment grade debt securities both in stressed and normal times and help in the development of the bond market.

It will clearly help to deepen the corporate bond market which continues to face liquidity challenges.

This will be fairly positive for debt mutual funds particularly credit funds which had witnessed significant outflows last year due to poor liquidity in certain corporate papers.

This will also help to reduce the volatility in secondary market yields of relatively lower rated bonds in the AA and A category.

OTHER STEPS

The government also announced establishing a system of regulated gold exchanges in the country.

For this purpose, SEBI will be notified as the regulator.

The Warehousing Development and Regulatory Authority will be strengthened to set up a commodity market ecosystem with arrangements including vaulting, assaying and logistics in addition to warehousing.

To provide protection to investors, the Finance Minister has proposed to introduce an investor charter as a right of all financial investors across all financial products.

A significant change, the impact of which would be felt across industries, is the proposed introduction of the securities market code.

Also an important proposal, on expected lines, has been the introduction of certain dispute resolution mechanisms – reduction of the limitation period to 3 years should help in bringing certainty to taxpayers.

4.6 Granted Rs 8,000 crore, govt looks at 8 new cities

The 15th Finance Commission has recommended a grant of Rs 8,000 crore to incubate eight new cities, according to the Ministry of Housing and Urban Affairs (MoHUA).

OUTGROWTH TOWNS:

The Finance Commission has given a new window and new thinking. The way the nation is growing, unless we have planned cities, it will all be outgrowth cities. And outgrowth is an inefficient use of the city.

2011 Census had categorised 31.2 percent of India as urban, but only 26 percent of that as statutory towns.

This gap of 5 percent of urbanised India – populated by roughly 6 crore people – is living in either census towns or in outgrowth towns.

Census towns are towns of over 5,000 people, with a density of more than 400 per sq km, and more than 75 percent of non-farm, male labourers.

These towns are still under the panchayat systems, and not municipalities. Outgrowth towns are in the periphery of big cities, also governed by panchayats.

Increased overall funding for ULBs:

For cities with more than a million people, roughly Rs 38,000 crore will be distributed based on performance of improvements in air quality, drinking water, sanitation, and solid waste management.

For cities with less than 1 million people, roughly Rs 83,000 crore will be distributed in a similar manner.

The Finance Commission has also allotted Rs 450 crore to a "shared municipal services" fund where the ministry will help smaller urban bodies with their back-end work such as database maintenance.

The ministry made 86 clusters of the smallest urban local bodies (ULBs) which they

can help service from afar.

The Commission's overall funds for ULB saw a 78 percent increase over last year – from Rs 87,000 crore to Rs 1.6 lakh crore. Of this, a little over Rs 1.2 lakh crore has been allocated directly to ULBs.

Cities will receive funding only when their annual accounts are put in public domain.

Also, if a state's GDP increases, then the city's property tax should increase by a similar proportion, Mishra said.

Even as a state's GDP is increasing, the urban local bodies are becoming that much weaker. So this condition has been added.

In the budget for MoHUA, the Pradhan Mantri Awas Yojna (PMAY), to provide housing for all, was allocated Rs 8,000 crore in 2020-21, but spent Rs 21,000 crore.

Continuing the same trend, the allocation in this year's Budget is Rs 8,000 crore, leading industry experts to deduce that the mission will again have to resort to extra-budgetary resources to finance the bulk of the mission.

NEW SCHEMES:

In her Budget speech, Finance Minister Nirmala Sitharaman had announced a new bus scheme and emphasis on MetroLite and MetroNeo systems in cities.

The bus augmentation will focus on cities with a population of over 5 lakh and the state capitals.

With a focus on Metros in Tier-II cities such as Gorakhpur, Jammu, Srinagar, Bhiwadi, and Darihera, the goal is to extend India's Metro lines to 1,000 km, from a current estimate of 700 km.

4.7 Jal Jeevan Mission to help revive urban waterbodies

The urban water supply mission announced in the Budget on Monday will include rejuvenation of waterbodies and 20% of supply from reused water, the Housing and Urban Affairs Ministry.

In a statement, the Ministry said there was an estimated gap of 2.68 crore urban household tap connections that the Jal Jeevan Mission (Urban) (JJMU) would seek to bridge in all 4,378 statutory towns.

The Mission would also aim to bridge the gap of 2.64 crore sewer connections in the 500 cities under the existing Atal Mission for Rejuvenation and Urban Transformation

(AMRUT).

JAL JEEVAN MISSION

Jal Jeevan Mission, is envisioned to provide safe and adequate drinking water through individual household tap connections by 2024 to all households in rural India.

The programme will also implement source sustainability measures as mandatory elements, such as recharge and reuse through grey water management, water conservation, rain water harvesting.

The Jal Jeevan Mission will be based on a community approach to water and will include extensive Information, Education and communication as a key component of the mission.

JJM looks to create a jan andolan for water, thereby making it everyone's priority.

The mission would include rejuvenation of water bodies to boost the sustainable freshwater supply and creation of green spaces.

JJM (U) will promote circular economy of water through development of city water balance plan for each city focusing on recycle/reuse of treated sewage, rejuvenation of water bodies and water conservation.

The Ministry said 20% of the water demand would be met with reused water. The total expenditure on the mission would be 2.87 lakh crore over five years.

CHEAPER TECHNOLOGIES:

The Ministry said the MetroNeo and MetroLite technologies, which are cheaper than conventional Metros, mentioned in the Budget were already being considered by it.

Apart from the Budget announcements, the Ministry said there had been an increase in the funds to urban local bodies as per the 15th Finance Commission's report.

There had been a 78% increase, from ₹87,143 crore in the 14th Finance Commission period to ₹1,55,628 crore in the 15th Finance Commission's period.

It said the Finance Commission had allocated ₹8,000 crore for incubation of eight new cities and that the selection of the cities would be done through a competition for States, for which guidelines would be prepared by it.

ATAL MISSION FOR REJUVENATION AND URBAN TRANSFORMATION (AMRUT)

AMRUT was launched by PM in June 2015 with the focus to establish infrastructure that could ensure adequate robust sewage networks and water supply for urban transformation by implementing urban revival projects.

Rajasthan was the first state in the country to submit State Annual Action Plan under Atal Mission for Rejuvenation and Urban Transformation (AMRUT).

The scheme Housing for All by 2022 and Atal Mission for Rejuvenation and Urban Transformation (AMRUT) were launched on the same day.

The scheme is dependent with public–private partnership (PPP) model.

If required, various other schemes like Swachh Bharat Mission, Housing for All 2022, along with the local state schemes like that related to water supply and sewerage and other infrastructure related schemes can be linked to AMRUT.

4.8 Awareness campaign planned to dispel 'rumours' on NPR, Census

The Union Home Ministry has informed a parliamentary panel that "right kind of messaging will be done to tackle the miscommunication and rumours around NPR and Census".

The first phase of house listing and housing census and the National Population Register (NPR) was to be rolled out in some States on April 1 last year but was postponed indefinitely due to COVID-19.

National Register of Citizens

The National Register of Citizens (NRC) is a register of all Indian citizens whose creation is mandated by the 2003 amendment of the Citizenship Act, 1955.

Its purpose is to document all the legal citizens of India so that the illegal immigrants can be identified and deported.

It has been implemented for the state of Assam starting in 2013–2014. The Government of India plans to implement it for the rest of the country in 2021.

CENSUS OF INDIA:

The decennial Census of India has been conducted 15 times, as of 2011. While it has been undertaken every 10 years, beginning in 1872 under British Viceroy Lord Mayo, the first complete census was taken in 1881.

Post-1949, it has been conducted by the Registrar General and Census Commissioner of India under the Ministry of Home Affairs, Government of India.

All the censuses since 1951 were conducted under the 1948 Census of India Act.

The last census was held in 2011, whilst the next will be held in 2021. Historically, there has been a long time between the collection of data and dissemination of data.

NATIONAL SOCIAL REGISTRY

The National Social Registry will either be a single, searchable Aadhaar-seeded database, or "a cluster of multiple databases" that use Aadhaar numbers to integrate religion, caste, income, property, education, Civil status, or marital status, employment, disability and family-tree data of each single citizen. it'll automatically update itself in real-time.

DISPELLING FEAR

A 360- degree approach for communicating the right and clear message on the NPR has been planned to be followed.

All kinds of media, i.e. social media, AV, digital, outdoor, print and word of mouth publicity tools are part of the planned media strategy.

Right kind of messaging will be done to tackle the miscommunication and rumours around NPR and Census 2021.

The "demographic and other particulars of each family and individual were to be updated/collected during the exercise of update of NPR" and "no document is to be collected during this exercise".

As per the provisions contained in Section 15 of the Census Act, 1948, all individual level information collected in Census are confidential.

In Census, only aggregated data are released at various administrative levels. Questionnaires for Census along with that of NPR have been tested at Pre-test conducted successfully across the country.

It has been clarified at various levels in Government time and again that till now no decision has been taken to create National Register of Indian citizen.

4.9 GOBARDHAN activities

Agriculture Ministry, Petroleum Ministry, Animal Husbandry Ministry, Jal Shakti Ministry and Ministry of State for Jal Shakti jointly launched a unified web portal for monitoring the progress of **GOBARDHAN activities** across the nation.

Gobardhan is an **important component of Swachh Bharat Mission Phase-2** for **organic solid waste management**.

At the **rural level**, earlier there was no way of proper disposal of cattle dung waste, but after the introduction of Gobardhan programme, **people will be able to provide proper disposal of dung and achieve the goal of ODF Plus**.

Gobardhan **pilot project** will prove to be an important and useful step in cleanliness. Through this farmers will be able to **get wealth from waste in a true sense**.

Apart from making the country ODF Plus, through the important scheme of Gobardhan, **India will get ethanol, bio-diesel and compressed bio-fuel in the coming years**.

The launch of **unified portal of Gobardhan will further strengthen the rural economy** through a **convergent approach for various Biogas projects** models and initiatives.

4.10 Chauri Chaura Centenary Celebrations

Prime Minister of India will inaugurate the **Chauri Chaura Centenary Celebrations at Chauri Chaura, Gorakhpur, Uttar Pradesh**, on 4th February 2021.

The day marks **100 years of the 'Chauri Chaura' incident**, a landmark event in the country's fight for independence.

DATE: 4 February 1922

PLACE: Chauri Chaura in the Gorakhpur district of the United Province (modern Uttar Pradesh) in British India

In this, a large group of protesters participating in the Non-cooperation movement, clashed with police who opened fire.

In retaliation the demonstrators attacked and set fire to a police station, killing all of its occupants.

The incident led to the death of three civilians and 22 policemen.

Mahatma Gandhi, who was strictly against violence, halted the non-co-operation movement on the national level on 12 February 1922, as a direct result of this incident.

4.11 HAL gets contract for 83 LCAs in 48,000 cr. Deal

At the 13th edition of Aero India in Bengaluru, Hindustan Aeronautics Limited (HAL) was awarded the contract to manufacture 83 Light Combat Aircraft (LCA) Tejas for the Indian Air Force (IAF).

HAL Tejas:

The HAL Tejas is an Indian single-engine, fourth-generation, multirole light fighter designed by the Aeronautical Development Agency (ADA) in collaboration with Aircraft

Research and Design Centre (ARDC) of Hindustan Aeronautics Limited (HAL) for the Indian Air Force and Indian Navy.

It came from the Light Combat Aircraft (LCA) programme, which began in the 1980s to replace India's ageing MiG-21 fighters.

In 2003, the LCA was officially named "Tejas".

Tejas has a tail-less compound delta-wing configuration with a single vertical stabilizer. This provides better high-alpha performance characteristics than conventional wing designs.

It integrates technologies such as relaxed static stability, fly-by-wire flight control system, multi-mode radar, integrated digital avionics system and composite material structures.

It is the smallest and lightest in its class of contemporary supersonic combat aircraft.

The Tejas is the second supersonic fighter developed by Hindustan Aeronautics Limited (HAL) after the HAL HF-24 Marut.

Production of the Tejas Mark 1 for the Indian Air Force (IAF) began in 2016, at which time the naval version was undergoing flight tests for Indian Navy (IN).

The first Tejas IAF unit, No. 45 Squadron IAF Flying Daggers was formed on 1 July 2016 with two aircraft.

The Minister of State for Defence, Subhash Bhamre, reported to parliament that the indigenous content of the Tejas was 59.7% by value and 75.5% by number of line replaceable units in 2016.

INDIA MOTIVES:

India has long witnessed unfortunate attempts to employ force to change the status quo along our unresolved border and India is vigilant and prepared to counter and defeat any misadventure and defend people and territorial integrity at all costs. India's resolve towards this is shown by our growing defence capabilities"

India plans to spend $130 bn on military modernisation in the next 7-8 years.

India faced threats and challenges emanating from multiple fronts and it was a victim of state-sponsored terrorism, which was now a global threat.

DELIVERIES IN 8 YEARS:

This contract is the biggest Make in India defence contract till date.

The contract includes 73 LCA Tejas Mk-1A fighter aircraft and 10 LCA Tejas Mk-1 trainer aircraft at a cost of 45,696 crore along with design and development of infrastructure sanctions worth 1,202 crore.

The deliveries of all 83 aircraft shall be completed in eight years from now.

Globally we are facing unprecedented levels of 'uncertainty, volatility and interconnected threats'. In this regard he pitched for greater regional coordination.

As part of efforts to boost defence exports, HAL displayed an 'Atmanirbhar formation' consisting of its platforms — LCA trainer, HTT-40 trainer, Intermediate Jet Trainer, Advanced Hawk Mk-132 and Civil Dornier Do-228.

4.12 'Aero components sector to double to 60,000 cr. by 2024'

The aero components sector in the country is set to double from 30,000 crore today to 60,000 crore by 2024.

Government is endeavouring to bring down defence imports by at least $2 billion by 2022.

AEROSPACE SECTOR

GOI have signed 128 Memorandums of Understanding (MoU), 19 Transfer of Technology (ToT), four handing overs, 18 product launches and 32 major announcements, totalling a grand figure of 201 feats.

Further, of the 45 Micro, Small and Medium Enterprises (MSME) participating in Aero India, 21 have bagged orders worth 203 crore. **This is a major achievement.**

Between 2016 and 2019, 138 proposals worth over $37 billion for domestic manufacturing had been approved by the government in order to boost domestic defence manufacturing.

The **India has a great potential to emerge as a global and regional Maintenance, Repair and Overhaul** (MRO) hub, given the cost competitiveness of its manpower resources, the availability of abundant, specialist capabilities and geographical advantages.

The aerospace sector has an important role to play, if India has to reach the targets of domestic **defence production of $25 billion** and exports of $5 billion by 2025.

4.13 An 84-year-old on a mission to conserve rare mango varieties

84-year-old Beluru Subbanna Heggade (B.V. Subba Rao) has collected more than *100 appe midi varieties of mango*, which were on the verge of extinction.

He has preserved these mangoes, used for pickling as whole fruit, by growing them on his premises in Belur of Sagar taluk in Shivamogga district.

PREMIUM VARIETIES:

His collection includes some 10 rare and premium varieties such as *Dombesara Jeerige, Genasinakudi jeerege, Cheene thota jeerege, Baagi jeerige, Barige jeerige*. They have a distinct taste and aroma. Also, they have a shelf life ranging from three to five years.

The Indian Institute of Horticultural Research honoured Mr. Heggade for his conservation efforts at its ongoing national horticultural fair in Hessarghatta on Wednesday.

In all, *the Institute now has about 200 appe midi varieties of mango*. Of them, four to five varieties have premium characteristics and are ideal for exporting.

4.14 17 major OTT players adopt self-regulatory toolkit

The government is soon expected to come out with regulations for OTT platforms.

The Internet and Mobile Association of India (IAMAI) recently said 17 platforms, including Netflix, Disney+ Hotstar and Amazon Prime Video, have adopted a 'toolkit' for effective implementation of the self-regulation code introduced last year.

The industry body added that it will set up an 'IAMAI Secretariat for the Code', comprising representatives from the signatories to the Code, as well as the IAMAI, for its implementation.

The toolkit amplifies all the critical points that were addressed in the Code signed last year and aims to address feedback received from the Ministry of Information and Broadcasting, particularly on strengthening the grievance redressal mechanism.

INDIAN LAWS WHICH REGULATED THESE ONLINE CONTENTS BEFORE THIS AMENDMENT:

While there are no specific laws that are enacted to regulate the content available online, there are a collective of multiple different articles and sections from different acts that regulate the content available online.

Article 19(1) of the Indian Constitution, gives everybody the Freedom of Speech but

right under Article 19(2) of the Indian Constitution, such freedom can be taken away by imposing reasonable restrictions in case such a content is against the wellbeing of the State, leads to hamper in the public order, international relations or aims towards inciting any crime.

The Indian Penal Code, serves to punish anybody who has been indulged in the selling or distribution of work of literature which is obscene (Section 293). Has the intention of outraging religious sentiments which is intentional and done maliciously (Section 295 A). Any act of publishing defamatory content (Section 499) and of anyone who insults any woman's modesty (Section 354).

The Indecent Representation of Women (Prevention) Act, 1986 acts towards making sure that there is complete prohibition of indecent representation of women in advertisements, books, movies, painting etc.

The POCSO (Protection of Children from Sexual Offences) Act makes it an offence to sell and distribute child pornography

Sections 67A, 67B and 67C if the Information Technology Act, 2000 provide for penalty as well imprisonment to be imposed on anybody who has transmitted or published any kind of obscene material, any sexually explicit material including those where children are depicted in sexual acts. The Central Government is also provided with the powers to issue directives to block certain information to be in public access, under Section 69A of this Act.

Though not an Act, many of the OTT platforms signed a self-regulatory Code, the 'Code of Best Practices for Online Curated Content Providers' which was released by the Internet and Mobile Association of India (IAMAI). This code works towards a framework of open disclosure.

4.15 Tholpavakkoothu

Tholpavakkoothu is a traditional temple art in **Kerala** having its roots in Palakkad and neighbouring regions.

It used to be performed in the Bhadrakali temples of Palakkad, telling tales from the Ramayana. It is also known as Nizhalkkoothu and Olakkoothu.

Tholpavakoothu or shadow puppetry is a temple art form which is prevalent in the Bhagavathy temples (mother Goddess) in Palakkad district and nearby regions in Kerala.

Tholppava (Thol means leather, **Pava** means puppet) are moved with the help of strings, and their shadows are depicted on a screen with the help of a row of oil lamps in the background.

The story of Tholppavakoothu performance is from the Indian epic, Ramayana.

In the olden days it was performed elaborately over a period of forty-one days. The narrative used for the performance is a mixture of prose and poetry called **Adalpattu**.

Tholppavas are made of the skin of deer and the puppet forms are made by making small holes in the leather that is then attached vertically to a bamboo stick.

Accompanying instruments include Ezhupara, Chenda and Maddalam. The artists have to undergo several years of rigorous training to master this art form. The puppetry is staged on a special structure in temple premises called Koothumadam.

4.16 Aadi Mahotsavsees a Major Increase in Footfall As Delhiites are Enjoying Rich Tribal Craft, Culture & Cuisine

The last two days of the National Tribal festival "Aadi Mahotsav" have seen a major increase in footfall as Delhiites are doing their best to enjoy rich tribal craft, culture and cuisine.

Celebrating the spirit of tribal ways of life, the Aadi Mahotsav showcases and has on display and for sale a vast range of tribal handlooms, handicrafts, artefacts and natural produce.

AADI MAHOTSAV

The Aadi Mahotsav, a nine-day tribal festival and the Centre's first official function in Ladakh after the government decided to make it a Union Territory, to start in Leh on the evening of 17th August, 2019.

This is the first time that the Aadi Mahotsav is being held in Ladakh as in earlier times, the Tribal Ministry never got a response from the J&K administration.

Aadi Mahotsav is a national tribal festival and a joint initiative of Ministry of Tribal Affairs, Government of India & Tribal Cooperative Marketing Development Federation of India **(TRIFED).**

Tribal artists have also been enthralling the audiences with their colourful performances.

Other than this, a focus has also been to expose the urban Delhi audiences to

earthy tribal cuisine at Aadi **Vyanjan**.

A crowd of people at a concertDescription automatically generated with low confidence

Aadi Mahotsav is a mini-India; more than 1000 From paintings be it in the Warli style or Pattachitras;

   a. Dokra jewellery to bead necklaces from the Wancho and Konyak tribes of the North-East;

   b. from famous Toda embroidery of the South to Eri silks from Assam;

   c. from colourful puppets and children's toys to traditional weaves such as Dongria shawls,

   d. Kota Doria from Rajasthan; from iron craft from Bastar to bamboo craft and cane furniture;

   e. pottery such as blue pottery and Longpi pottery from Manipur, the festival is a feast for the senses.

4.17 Challenge for Food Corporation of India: Rising stocks, cost, & push to procure

The Food Corporation of India's (FCI) "economic cost" of wheat sold through the public distribution system (PDS) is budgeted to go up to Rs 29.94 per kg and that of rice to Rs 42.94 per kg in 2021-22, from their corresponding current levels of Rs 27.40 and Rs 39.99 per kg.

ECONOMIC COST

Under the National Food Security Act (NFSA) of 2013, 81.35 crore persons, accounting for over 67% of the country's population, are entitled to receive 5 kg of PDS wheat or rice per month at Rs 2 and Rs 3 per kg, respectively.

At the projected economic cost of Rs 29.94/kg for wheat and Rs 42.94/kg for rice, the corresponding per-kg PDS consumer subsidy in the coming fiscal would work out to Rs 27.94 and Rs 39.94, respectively.

The economic cost is what the FCI incurs in procuring, transporting, storing and distributing every kg of wheat or rice.

Under NFSA, enacted during the previous United Progressive Alliance regime, the Rs 2-3/kg PDS issue prices for wheat and rice were valid for up to three years from the date

of commencement **of the law on July 5, 2013.**

The NDA government has not raised these rates so, even as the Finance Ministry's latest Economic Survey has pointed to the need to consider a revision in the Central issue prices of PDS grain "to reduce the bulging food subsidy bill".

DISTRESS PLUS PROTEST

At Rs 42.94 for rice and Rs 29.94 for wheat, FCI faces higher cost for PDS and Covid distress schemes.

Add to it the political pressure to procure given the protests over the farm laws. The subsidy bill is set to balloon.

Meanwhile, rice and wheat stocks in the Central pool remain at way above necessary levels, despite the NDA government implementing special schemes for alleviating the widespread economic distress resulting from the Covid-19-induced lockdown.

As against 65.91 million tonnes (mt) of grain offtake from public godowns in 2018-19 and 62.19 mt in 2019-20, the NDA government has allocated a total quantity of 94.37 mt in the current fiscal.

The **Pradhan Mantri Garib Kalyan Anna Yojana** scheme involved providing an extra 5 kg grain per month, free of cost, to NFSA beneficiaries (for eight months from April-November 2020) and 8 crore returning migrant labourers (for two months from May-June).

The continued buildup of public stocks is largely due to procurement.

Government agencies had, as on February 11, bought 63.63 mt of paddy during the ongoing 2020-21 kharif marketing season (October-September), 16.1 per cent more than the 54.80 mt in the corresponding period of 2019-20.

The political pressure from the farmer protests may force similar stepped-up purchases of wheat, too, in the ensuing rabi marketing season from April.

4.18 Fossils of 'Dickinsonia' found at Bhimbetka

Researchers have discovered three fossils of the earliest known living animal — the 550-million-year-**old 'Dickinsonia' —** on the roof of the **Bhimbetka** Rock Shelters, about 40 km from Bhopal.

NEW FINDING

One can identify the fossils from the white leaf-like patches with a central vertebra (central midrib) and connecting veins. While one fossil is 17 inches long, the other two are

much smaller.

The new discoveries, published in a journal, **Gondwana Research**, can be seen right at the beginning of the 'Auditorium Cave', the first of such caves at Bhimbetka, a UNESCO heritage site, located about 3.5 metres above the ground.

Geological Survey **of India's Bhopal told** that they were the only such fossils available in the country, and were similar to those seen in south Australia.

This is further proof of the **similar paleoenvironments and** confirms assembly of Gondwanaland by the 550 Ma (mega annum), but not reconstructions adjusted for true polar wander.

BHIMBETKA ROCK SHELTERS

The **Bhimbetka rock** shelters are an archaeological site in central India that spans the prehistoric Paleolithic and Mesolithic periods, as well as the historic period.

It exhibits the earliest traces of human life in India and evidence of Stone Age starting at the site in **Acheulian** times.

It is located in the Raisen District in the Indian state of Madhya Pradesh about 45 kilometres (28 mi) south-east of Bhopal.

It is a UNESCO World Heritage Site that consists of seven hills and over 750 rock shelters distributed over 10 km (6.2 mi).

At least some of the shelters were inhabited more than 100,000 years ago. The rock shelters and caves provide evidence of a "**rare glimpse" into** human settlement and cultural evolution from hunter-gatherers, to agriculture, and expressions of prehistoric spirituality.

Some of the Bhimbetka rock shelters feature prehistoric cave paintings and the earliest are about 10,000 years old (c. 8,000 BCE), corresponding to the Indian Mesolithic.

These cave paintings show themes such as animals, early evidence of dance and hunting.

The Bhimbetka site has the oldest-known rock art in India, as well as is one of the largest prehistoric complexes.

4.19 Assam uses combs for voter literacy

The Goalpara district administration has been distributing combs and other utilitarian items of daily use, such as sanitary pads, with SVEEP messages printed on

them.

SVEEP expands to Systematic Voters' Education and Electoral Participation, the flagship programme of the Election Commission of India for promoting voter literacy in the country.

SYSTEMATIC VOTERS' EDUCATION AND ELECTORAL PARTICIPATION:

Systematic **Voters' Education** and Electoral Participation program, better known as SVEEP, is the flagship program of the Election Commission of India for voter education, spreading voter awareness and promoting voter literacy in India.

Since 2009, Election Commission has been working towards preparing India's electors and equipping them with basic knowledge related to the electoral process.

SVEEP's primary goal is to build a truly participative democracy in India by encouraging all eligible citizens to vote and make an informed decision during the elections.

The programme is based on multiple general as well as targeted interventions which are designed according to the socio-economic, cultural and demographic profile of the state as well as the history of electoral participation in previous rounds of elections and learning thereof.

'LOW VOTER TURNOUT':

The district election office is particularly ramping up SVEEP activities in areas with polling stations that have recorded low overall and low female voter turnout in the 2016 Assembly and 2019 Lok Sabha elections.

The four Assembly constituencies in Goalpara — Dudhnai, Goalpara East, Goalpara West and Jaleswar — averaged a voter turnout of 90.83% in the 2016 State polls but the turnout at some polling booths was less than 10% of the average of a constituency.

4.20 PM hands over Arjun Mk-1A tank to Army

Prime Minister recently handed over the indigenous main battle tank Arjun Mk-1A to the Army.

Chief of the Army Staff General received the model of the tank, designed and developed by Chennai-based Combat Vehicles Research & Development Establishment (CVRDE), a unit of the Defence Research & Development Organisation (DRDO).

AATMANIRBHAR

A tank made in Tamil Nadu will be used in our northern borders to keep the nation safe. This showcases India's united spirit — **Bharat's Ekta Darshan**.

India will continue working to make our armed forces one of the most modern forces in the world.

The focus on making India **aatmanirbhar** (self-reliant) in the defence sector is moving with full speed.

One of the two defence corridors is in Tamil Nadu. The corridor has already received investment commitments of over ?8,100 crore.

Setting up of Tamil **Nadu Defence Industrial** Corridor would catalyse indigenous production of defence and aerospace related items, thereby reducing our reliance on imports and promoting export of these items to other countries.

This will lead to generation of direct & indirect employment opportunities and growth of private domestic manufacturers including Micro, Small and Medium Enterprises (MSMEs) and start-ups.

Tamil Nadu is already the leading automobile manufacturing hub of India.

Arjun Mk-1A:

The Arjun Mk-1A has superior firepower, high mobility, excellent protection and crew comfort, with 14 major upgrades from Arjun Mk-1, according to the CVRDE.

The Arjun Main Battle Tank project was initiated by DRDO in 1972 with the Combat Vehicles Research and Development Establishment (CVRDE) as its lead laboratory.

The objective was to create a "state-of-the-art tank with superior fire power, high mobility, and excellent protection".

During the development, the CVRDE achieved breakthroughs in the engine, transmission, hydropneumatic suspension, hull and turret as well as the gun control system.

Mass production began in 1996 at the Indian Ordnance Factory's production facility in Avadi, Tamil Nadu.

The indent for 118 of these tanks would be placed shortly with the Heavy Vehicle **Factory (HVF) at Avadi near Chennai.**

The Army is expected to soon approach the Defence Acquisition Council (DAC) for approval after which it would place the indent for 118 tanks at a cost of ?8,956.59 crore.

Issues with Arjun Mk-1 ammunition, spares and repairs have also been resolved, and the DRDO has set up an Arjun hub in Jaisalmer for spares and support.

4.21 National Coal Index

Recently, the **Ministry of Coal** has started **commercial auction of coal mines** on **a revenue share basis** using the **National Coal Index (NCI).**

NCI was **rolled out in June 2020.**

It is a price index which **reflects the change of price level of coal in a particular month relative to the fixed base year.**

The base year for the NCI is **Financial Year 2017-18.**

Compilation:

Prices of coal from all the sales channels of coal, including import, as existing today are taken into account for compiling the NCI.

The **amount of revenue share** per tonne of coal produced from auctioned blocks would be arrived at using the NCI by means of defined formula.

Sub-Indices: NCI is composed of a set of **five** sub-indices:

Three for **Non Coking Coal** and two for **Coking Coal.**

The three sub-indices for Non Coking Coal are combined to arrive at the Index for Non Coking Coal and the two sub-indices for Coking Coal are combined to arrive at the Index for Coking Coal.

Thus, **indices are separate for Non Coking and Coking Coal.**

As per the grade of coal pertaining to a mine, the appropriate sub-index is used to arrive at the revenue share.

Coal

Coal is the most abundant fossil fuel which **holds 55% of India's energy need.**

Based on the **uses,** coal is divided into **two types:**

Coking Coal:

This type of coal when subjected to high temperature carbonisation i.e. heating in the absence of air to a temperature above 600 degree Celsius, **forms a solid porous residue called coke.**

Coke is fed into a blast furnace along with iron ore and limestone to produce steel in steel plants.

Coking coal is desired to be of **low ash percentage.**

Use:

Mainly used in steel making and metallurgical industries.

Also used for hard coke manufacturing.

Non Coking Coal:

These are coals without coking properties.

Use:

This is the coal used in thermal power plants to generate electricity, so it is also known as **steam coal or thermal coal.**

Also used for cement, fertilizer, glass, ceramic, paper, chemical and brick manufacturing, and for other heating purposes.

Coal is **also classified into four ranks: anthracite, bituminous, subbituminous, and lignite.** The ranking **depends on the types and amounts of carbon the coal contains** and **on the amount of heat energy** the coal can produce.

4.22 Saksham Portal and Seaweed Mission: TIFAC

The **Technology Information, Forecasting and Assessment Council (TIFAC)** has launched **two new initiatives – SAKSHAM** (Shramik Shakti Manch) Job Portal and a **Seaweed Mission.**

TIFAC is **an autonomous organization** set up in 1988 under the **Department of Science & Technology** to look ahead in the technology domain, **assess the technology trajectories, and support innovation** by networked actions in select areas of national importance. It will facilitate **creation of 10 lakh blue collar jobs.**

SAKSHAM Portal It is a dynamic portal for jobs/mapping the skills of Shramiks (workers) vis-a-vis requirements of Micro, Small and Medium Enterprises **(MSMEs)** and other industries all across the country. It is **an all India Portal.**

Features:

High Technology Enabled: The portal with the demand and supply data uses algorithm and **Artificial Intelligence (AI)** tools, for geo spatial information on demand and availability of *Shramiks*, and also provides analysis on skill training programmes of *Shramiks.*

Automatic Updation: The data/information pertaining to the *Shramiks* and the

industries (especially MSME) are being updated automatically through various whatsapp and other links.

Advantages:

For Workers: This would **empower Shramiks by projecting their candidature directly to the MSMEs** & other employers and would also **address aspects related to their skill proficiency levels.**

It will **minimise migration of** *Shramiks* **–** provide job opportunity in proximate MSMEs.

For Industry: This would also **eliminate the dependence of industry on the middlemen**/labour contractor for their manpower requirements.

Other Related Initiatives:

ShramShakti Portal (Ministry of Tribal Affairs).

ASEEM Portal (Ministry of Skill Development and Entrepreneurship).

NMIS Dashboard (National Disaster Management Authority).

Seaweeds Mission:

Out of the global seaweed production of 32 million tons fresh weight valued around 12 billion US dollars, China produces 57%, Indonesia 28% followed by South Korea, whereas **India is having a mere share of 0.01-0.02%.**

Despite several advantages, commercial seaweeds cultivation has not taken place in the country at an appropriate scale, as being practiced in South-East Asian countries.

About the Mission:

It has been **launched for commercial farming of seaweeds** and its processing for value addition towards boosting the national economy.

It **envisages following activities:**

Establishing model demonstration farms over one hectare for cultivation of economically important seaweeds in nearshore and onshore along the Indian coast.

Establishment of seaweed nurseries for supplying seed material for large scale farming of economically important seaweeds in the country.

Establishment and **demonstration of processing technologies/recipes for edible seaweeds** in line with consumer acceptability or cultural food habits.

An activity on **seaweed cluster development** including value chain development, supply chain development, collection of data on environmental, economic and social

impacts of seaweed projects in the country.

Advantages: By an estimate, if seaweed cultivation is done in 10 million hectares or 5% of the **Exclusive Economic Zone (EEZ)** area of India, it can

Provide **employment** to 50 million people.

Set up a **new seaweed industry.**

Contribute to **national Gross Domestic Product (GDP).**

Enhance **ocean productivity.**

Abate algal blooms.

Sequester millions of tons **CO2**.

Could **produce bioethanol** of 6.6 billion litres.

Seaweeds

They are the **primitive, marine non-flowering marine algae without root, stem and leaves,** play a major role in marine ecosystems.

Large seaweeds form dense underwater forests known as **kelp forests,** which act as underwater nurseries for fish, snails and sea urchins.

Some **species of seaweeds** viz. Gelidiella acerosa, Gracilaria edulis, Gracilaria crassa, Gracilaria verrucosa, Sargassum spp. and Turbinaria spp.

Location:

Seaweeds, found **mostly in the intertidal region,** in shallow and deep waters of the sea and also in **estuaries and backwaters.**

The southern **Gulf of Mannar's** rocky intertidal and lower intertidal regions have rich populations of several seaweed species.

Ecological Importance:

Bioindicator: When waste from agriculture, industries, aquaculture and households are let into the ocean, it causes nutrient imbalance leading to algal blooming, the sign of marine chemical damage. Seaweeds **absorb the excess nutrients** and balance out the ecosystem.

Iron Sequestrator: These aquatic organisms heavily rely on iron for photosynthesis. When the quantity of this mineral exceeds healthy levels and becomes dangerous to marine life, seaweeds trap it and prevent damage. Similarly, most heavy metals found in marine ecosystems are trapped and removed by seaweeds.

Oxygen and Nutrient Supplier: On their part, the seaweeds derive nutrition

through photosynthesis of sunlight and nutrients present in seawater. They release oxygen through every part of their bodies. They also supply organic nutrients to other marine life forms.

Role in Climate Mitigation:

Seaweed has a significant role in mitigating climate change. By afforesting 9% of the ocean with seaweed, it is possible to sequester 53 billion tons of carbon dioxide annually. Hence, there is a proposal termed as 'ocean afforestation' for farming seaweed to remove carbon.

Other Utilities:

They can be used as **fertilizers** and to **increase aquaculture production.**

When livestock is fed with seaweed, **methane emission from cattle may be reduced** substantially.

They can be buried in beach dunes to **combat beach erosion.**

It is **used as an ingredient** in preparing toothpaste, cosmetics and paints.

4.23 Lateral Entry Into the Administrative Services

Recently, the **Union Public Service Commission (UPSC)** has issued an advertisement to recruit 30 persons at the Joint Secretary and Director level in the Central administration through **Lateral Entry.**

The term lateral entry relates to the **appointment of specialists,** mainly those **from the private sector,** in government organisations.

Government is looking for **outstanding individuals, with expertise** in revenue, financial services, economic affairs, agriculture, cooperation and farmers' welfare, road transport and highway, shipping, environment, forests and climate change, and new and renewable energy, civil aviation and commerce.

Advantages of Lateral Entry:

Addresses Complexity:

People with expertise and specialist domain knowledge are required to navigate the complex needs of present day administrative challenges.

Meets Personnel Requirement:

Lateral entry will help in **addressing the problem of shortage of IAS officers** at the Centre.

Organisation Culture:

It will **help in bringing the values of economy, efficiency and effectiveness in the Government sector.**

It will help in building a **culture of performance** within the Government sector.

Participatory Governance:

In the present times, governance is becoming more participatory and a multi actor endeavour, thus **lateral entry provides stakeholders such as the private sector and non-profits** an opportunity to participate in the governance process.

Issues Involved:

Need for Transparent Process:

The key to the success of this scheme would lie in **selecting the right people** in a manner which is manifestly transparent.

Difference in Organisational Values:

The value systems between the government and the private sector are quite different.

It is important to ensure that the people who come in are able to have the **skills to adjust to a totally different system of functioning.** This is because the government imposes its own limitations.

Profit Motive vs Public Service:

Private sector approach is **profit oriented.** On the other hand, the motive of **Government is public service.** This is also a fundamental transition that a private sector person has to make while working in government.

Internal Resistance:

Lateral entry is likely to face strong resistance from in service Civil Servants and their associations. It **may also demotivate existing officials.**

Issue of Conflict of Interest:

The movement from the private sector raises issues of potential conflict of interest. Thus, a **stringent code of conduct for entrants** is required.

Narrow Scope:

Lateral entry at only top level policy making positions may have **little impact on field level implementation,** given the multiple links in the chain of command from the Union Government to a rural village.

Lateral entry is **not a panacea for the ills of governance.** However, it opens a small window to get the **best from the American and British system** and puts **pressure on the system to reform and perform.**

For lateral entry to deliver and more importantly win the confidence of the most oppressed sections of society, it **must be fair, transparent, and egalitarian.** Agencies such as UPSC can play a role based on a selection process approved by Parliament.

4.24 NCLAT suspends Gymkhana's board, halts new membership

The National Company Law Appellate Tribunal **(NCLAT)** recently ordered the appointment of a Central government-nominated administrator to manage the affairs of the Delhi Gymkhana Club after prima facie finding several irregularities.

The tribunal also ordered the suspension of the General Committee of the 107-year-old club, along with a halt on acceptance of new membership till further orders.

NATIONAL COMPANY LAW APPELLATE TRIBUNAL

The National Company Law Appellate Tribunal (NCLAT) is a tribunal which was formed by the Central Government of India under Section 410 of the Companies Act, 2013.

The tribunal is responsible for hearing appeals from the orders of National Company Law Tribunal**(s) (NCLT),** starting on 1 June 2016.

The tribunal also hears appeals from orders issued by the Insolvency and Bankruptcy Board of India under Section 202 and Section 211 of IBC.

It also hears appeals from any direction issued, decision made, or order passed by the Competition Commission of India **(CCI).**

PERPETRATING APARTHEID

The Club was granted government land on perpetual lease primarily for sports related activity. The club is spread across 27 acres of land near the Prime Minister's residence.

In a strongly-worded judgment, the tribunal said the club has been "**converted into a recreational club for a chosen few with doors** virtually shut for an aspirant belonging to the common stock".

Under the garb of distinctive character of the club which is a relic of the Imperial past, the doors for membership are virtually **limited to people having blue blood thereby perpetrating apartheid.**

This is shattering the most cherished Constitutional goal of securing **social justice and equality of status and opportunity.**

The tribunal opined that there was a "prima facie case demonstrating that the affairs of the club are being conducted in a manner **prejudicial to public interest".**

It is abundantly clear that misuse of the club meant for pastime and sports activities and denying access of membership even after accepting the enhanced membership fee… involved public interest.

PUBLIC INTEREST

The **Ministry of Corporate Affairs** had claimed that new applicants seeking membership, and having paid registration fee, are on a waiting list for more than 37 years in the non-government category and more than 15 years in the government category.

The Ministry said the club virtually barred entry of people who applied for membership as the children of permanent members managed to sneak in as green card holders and finally as UCP (use of club premises) holders.

The Ministry further alleged that the money taken from the waitlisted applicants was being utilised by the club by persons coming through various channels, a practice which it claimed was unfair and prejudicial to public interest.

It stressed that **barely 3% of** the total expenditure was being incurred by the club towards sports activity and over 60% was being spent on maintaining the recreational club.

The club argued that it was entitled to decide membership issue in accordance with the Articles of Association and its action cannot be called into question by the government on the grounds of being prejudicial to public interest.

It pleaded that the land was allotted to the club after its **incorporation in July 1913 for sports and pastimes** along with other objectives, which have neither been altered nor is the club pursuing any other objective.

4.25 Ministry of Earth Sciences invites stakeholders' suggestions on the Draft Blue Economy Policy for India

The Ministry of Earth Sciences (MoES) has rolled out the Draft Blue Economy policy for India in the public domain inviting suggestions and inputs from various stakeholders including industry, NGOs, academia, and citizens.

DRAFT POLICY:

The draft blue economy policy document outlines the vision and strategy that can be adopted by the Government of India to utilize the plethora of oceanic resources available in the country.

The policy document has been disseminated for pubic consultation on several outreach platforms including websites and social media handles of MoES and its institutes.

The policy document aims to enhance contribution of the blue economy to India's GDP, improve lives of coastal communities, preserve marine biodiversity, and maintain the national security of marine areas and resources.

The MoES prepared the draft blue economy policy framework in line with the Government of India's Vision of New India by 2030.

It highlighted blue economy as one of the ten core dimensions for national growth. The draft policy framework emphasizes policies across several key sectors to achieve holistic growth of India's economy.

The document recognizes the following seven thematic areas.

National accounting framework for the blue economy and ocean governance.

Coastal marine spatial planning and tourism.

Marine fisheries, aquaculture, and fish processing.

Manufacturing, emerging industries, trade, technology, services, and skill development.

Logistics, infrastructure and shipping, including trans-shipments.

Coastal and deep-sea mining and offshore energy.

Security, strategic dimensions, and international engagement.

BLUE ECONOMY

India's blue economy is understood as a subset of the national economy comprising an entire ocean resources system and human-made economic infrastructure in marine, maritime, and onshore coastal zones within the country's legal jurisdiction.

It aids the production of goods and services that have clear linkages with economic growth, environmental sustainability, and national security.

The blue economy is a vast socio-economic opportunity for coastal nations like India to utilize ocean resources for societal benefit responsibly.

INDIA'S RICH COASTLINE

With a coastline of nearly 7.5 thousand kilometers, India has a unique maritime position.

Nine of its 29 states are coastal, and the nation's geography includes 1,382 islands. There are nearly 199 ports, including 12 major ports that handle approximately 1,400 million tons of cargo each year.

Moreover, India's Exclusive Economic Zone of over 2 million square kilometers has a bounty of living and non-living resources with significant recoverable resources such as crude oil and natural gas.

Also, the coastal economy sustains over 4 million fisherfolk and coastal communities. With these vast maritime interests, the blue economy occupies a vital potential position in India's economic growth.

It could well be the next multiplier of GDP and well-being, provided sustainability and socio-economic welfare are kept center-stage.

Therefore, India's draft blue economy policy is envisaged as a crucial framework towards unlocking country's potential for economic growth and welfare.

SUSTAINABLE DEVELOPMENT GOALS:

The United Nations Member States, including India, adopted 17 sustainable development goals (SDGs), also known as the Global Goals, in 2015 as a universal call to take action to end poverty, protect the planet, and ensure that all people enjoy peace and prosperity by 2030.

SDG 14 seeks to conserve and sustainably use the oceans, seas and marine resources for sustainable development.

Several countries have undertaken initiatives to harness their blue economy.

For instance, Australia, Brazil, United Kingdom, United States, Russia, and Norway have developed dedicated national ocean policies with measurable outcomes and budgetary provisions.

Canada and Australia have enacted legislation and established hierarchal institutions at federal and state levels to ensure progress and monitoring of their blue economy targets.

With a draft blue economy policy framework of its own, India is now all set to harness the vast potential of its ocean resources.

4.26 Biometric authentication to benefit farmers: Centre

In a bid to cut out the middleman and ensure greater transparency in the procurement of farm produce, **the Centre is encouraging the States to deploy biometric authentication of farmers.**

The practice, already adopted in Uttar Pradesh and set to be rolled out in Madhya Pradesh, Chhattisgarh and Odisha this year, **will aid in tracking the end-use beneficiary**.

ONLINE PAYMENTS:

The initiative comes at a time when farmers are agitating for a legal guarantee that all their crops will be procured at a minimum support price (MSP) and demanding the repeal of three farm reform laws.

In States such as Punjab and Haryana, where the agitation has been the strongest, **middlemen who act as commission agents or arhitiyas are a key part of the procurement process** at these mandis.

The Centre had already taken steps to **roll out online payments to farmers** who sell their produce to the government.

A. It had directed the State governments of Haryana and Punjab to *ensure* **payments in e-mode from the upcoming season**, and was expecting all the States to follow suit this year.

B. There should not be any intermediaries, farmers should not be given cheques to be encashed. The money should go directly into the farmers' accounts.

TRANSPAPRENCY AND GOVERNANCE:

The next step was the biometric authentication scheme that Uttar Pradesh had already rolled out.

The entire process of procurement has to be made faster.

Once you have data of farmers available and once they are bio-authenticated, the entire details are digitally available to the procurement machinery, the kind of crop he is cultivating, the kind of landholding he has, all the details are available.

This initiative reduced the need for extensive paperwork, **prevented leakages and speeded up process of procurement**, with payment settlement being completed within 72 hours.

The other advantage is that the farmer gets a receipt for his goods, showing the

quantity and the MSP price, so nobody can cheat the farmer.

4.27 COVID DIPLOMACY PITCH BY PM: VISA FOR MEDICS , AIR AMBULANCE

Prime Minister of India applauded the "spirit of collaboration" among South Asian and Indian Ocean island countries as "**a valuable takeaway from this pandemic".**

Prime Minister suggested recently the creation of a regional platform for **collating and studying data on the effectiveness of the Covid-19 vaccines, a special visa scheme for doctors and nurses** to travel within the region during health emergencies, and a regional air ambulance agreement for medical contingencies.

A workshop on 'Covid-19 Management: Experience, Good Practices and Way Forward' is being attended by health leaders, experts and officials of Afghanistan, Bangladesh, Bhutan, Maldives, Mauritius, Nepal, Pakistan, Seychelles, Sri Lanka and India.

All countries, including Pakistan, supported the PM's proposals. They sought a **structured discussion for regional cooperation** on these proposals to take them forward.

Prime Minister said: "Today, the hopes of our region and the world are focused on **rapid deployment of vaccines. In this too, we must maintain the same cooperative and collaborative spirit.**

PRIME MINISTER STATEMENTS

When Covid-19 hit the world last year, many experts voiced special *concern* **about our densely populated region.** But, from the very beginning, we all met this challenge with a coordinated response.

In March last year, we were the first to come together for **recognising the threat and committing to fight it together**. Many other regions and groups followed our early example.

We created the **Covid-19 Emergency Response Fund** to meet the immediate costs of fighting the pandemic. We shared our resources — medicines, PPEs, and testing equipment.

And, above all, we shared the **most valuable commodity, knowledge**, through collaborative training of our health workers.

Through webinars, online courses and IT portals, we shared experiences and

learned from each other's best practices in **testing, infection control and medical waste management.**

We developed our own best practices based on what worked best for us. **Each one of us contributed immensely** to this pooling of knowledge and experience.

This spirit of collaboration is a valuable takeaway from this pandemic. Through our openness and determination, we have managed to **achieve one of the lowest fatality rates in the world.**

PM asked if South Asia can consider **creating a special visa scheme for our doctors and nurses**, so that they can travel quickly within our region during health emergencies, on the request of the receiving country?"

He also asked if-

A. Civil Aviation ministries can **coordinate a regional air ambulance agreement** for medical contingencies?

B. the region can create a regional platform for collating, compiling and studying data about the effectiveness of Covid-19 vaccines among our populations?

C. the region can create a **regional network for promoting technology**-assisted epidemiology, for preventing future pandemics?

SHARING EXPERIENCES:

The Prime Minister also suggested that the countries **share successful public health policies** and schemes.

From India, **Ayushman Bharat and Jan Arogya schemes** may be useful case-studies for our friends in the region.

Such collaboration can become the pathway for **greater regional cooperation** among us in other areas too.

After all, we share so many common challenges – **climate change, natural disasters, poverty, illiteracy, and social and gender imbalances**. But we also share the power of centuries-old cultural and people-to-people linkages.

If we focus on all that unites us, our region can overcome not only the present pandemic, but our other challenges too.

If the 21st Century is to be the Asian Century, **it cannot be without greater integration** among South Asian and Indian Ocean island countries.

The spirit of regional solidarity that South Asia has shown during the pandemic

has proven that such integration is possible.

All the countries agreed that there was a need for such **cooperation on regional basis** to fight such pandemics.

4.28 MODI LAUNCHES CONNECTIVITY PROJECTS IN ASSAM

Prime Minister recently launched multiple initiatives in Assam, including the **Mahabahu-Brahmaputra inland waterway project** and the foundation stone of two bridges across the Brahmaputra.

PM also laid the foundation stone for **two medical colleges and launched the Asom Mala**, a major road network project.

BRAHMAPUTRA RIVER:

The Brahmaputra is a **confluence of brotherhood and togetherness**. For years, this sacred river has connected people.

PM referred to the lines of Bharat Ratna Bhupen Hazarika's song — 'Mahabahu Brahmaputra Mahamilanar Tirtha, Koto Yug Dhori Aahise Prakashi Samanyar Tirtha' (The mighty Brahmaptura is on a timeless pilgrimage, assimilating, integration and unifying people of diverse cultures) — to **highlight the role of the river in the life in Assam.**

But it is also true that for long, work that should have been done to **increase connectivity on the Brahmaputra,** has not been done,"

That is why **connectivity has always remained a challenge,** not just in Assam but in the Northeast, too. But now India is steadfastly working in that direction.

MAHABAHU-BRAHMAPUTRA INITIATIVE:

To mark the Rs 3,200 crore Mahabahu-Brahmaputra initiative — aimed at improving water transport connectivity — **PM inaugurated three Ro-pax vessel operations** between Neemati Ghat (Jorhat) and Majuli island, North Guwahati and South Guwahati as well as Dhubri and Hatsingimari.

PM also laid the foundation stone of **Inland Water Transport (IWT) Terminal at Jogighopa** and various tourist jetties on the Brahmaputra and launched two portals for ease-of-doing-business.

The Ro-Pax service between Majuli and Jorhat would reduce travel time of 11 hours to one hour, while the North and South Guwahati travel time will reduce from three hours to 30 minutes, and to reach Dhubri from Hatisingmari, it will now take three hours, instead of eight.

The PM also laid the foundation stone for a **19-km-long four-lane bridge over the Brahmaputra** — which will be India's longest bridge over a river — that connects Dhubri in Assam and Phulbari in Meghalaya, to be constructed at the cost of Rs 5,000 crore.

A bhumi pujan, or ground-breaking ceremony, was also performed for a **6.8-km-long two-lane bridge that would connect Kamalabari in Majuli**, the world's largest river island to Neematighat in Jorhat.

OTHER PROJECTS:

The Majuli-Jorhat bridge is a bridge of "convenience and possibilities" Majuli residents already have its first helipad, now they will also have a road.

The 8-km-long bridge connecting Kalibari (in Majuli) with Jorhat will be a lifeline for thousands of families."

The Prime Minister said that while the distance between Meghalaya and Assam was about 250 km by road, **the Dhubri-Phulbari bridge will reduce it to "just 19-20 km."**

According to a release from the Chief Minister's Office, the **bridge will reduce travel time from six hours to 20 minutes.**

The government also said it will **improve connectivity to South Assam's Barak Valley** and reduce distance between the other Northeastern states of Meghalaya, Manipur, Mizoram and Assam.

The projects like **Bhupen-Hazarika Setu, the Bogibeel Bridge or Saraighat Bridge**, all have made life easier in Assam.

It has not just **strengthened the internal security of the country**, but protected the brave soldiers of our nation.

4.29 Software Defined Radio (SDR) for Indian Army under Aatmanirbhar Bharat Abhiyaan

To arm the soldiers with advantages offered by technology and equip him to fight a war in the Net–Centric battle space, **present radios are to be replaced soon by indigenously developed Software Defined Radio (SDR).**

SDR will have **enhanced data transmission capability, enhanced voice clarity and data transmission accuracy in spectrally noisy environments**, support multiple waveforms, greater system security and better communication survivability in clear and secure mode to meet the operational requirements of the Indian Army.

COMMUNICATION ESSENCE:

Communication is vital and critical to all military operations. The Combat Net Radio (CNR) is the mainstay of communications for the Indian Army in the battlefield.

The contemporary CNR equipment in the Indian Army supports voice communication only and has limited or no data transmission capability.

Indian Army is in the process to revamp its communication systems by procuring Very/Ultra High Frequency (V/UHF)Manpack SDRs under Make-II category.

After successful evaluation of vendor responses, Project Sanction Order (PSO) has now been issued to 18 Indian vendors to start prototype development.

The contract will be placed with one of the firms post successful development of prototype as per provisions of Buy (Indian-IDDM) category of DAP 2020.

Development of V/UHF Manpack SDR under Make-II will be a game changer for Indian Army.

It is in sync with the "Aatmanirbhar Bharat" policy of the Government which will lead to "Self Reliance" in advanced communication systems.

4.30 Govt. looks at easing e-visa restrictions

"The deliberations are on with the Ministry of Home Affairs and the Health Ministry regarding e-visa relaxations but would tread cautiously considering the new Covid-19 strain" – Union Ministry of Tourism.

The government is going all out to promote domestic tourism to fill the gap in the tourism sector.

The Ministry of Tourism, as part of its ongoing engagement with industry and its stakeholders, supported the Association of Domestic Tour Operators (ADTOI) for their annual convention at Kevadia, from February 12 to 14. The convention is the first major physical event being organised by the industry post-lockdown.

CONDITIONS:

The visa relaxations will be on the sidelines of the annual convention of domestic tour operators in Gujarat's Kevadia recently.

If the success of the vaccination is established abroad and **when there is confidence that the numbers of cases are decreasing.**

Centre is taking a very cautious approach in reopening the e-visa facility especially to US, UK and Europe which were worst hit by the pandemic.

"The final decision will depend on a lot of factors, **including bilateral arrangements with other countries**," he said, adding that the discussions on easing visa restrictions for international travellers was definitely on and the air bubble arrangement may soon be expanded. **There may be a reciprocal visa arrangement with some "safer" countries.**

4.31 Development knows no religion, says PM at launch of Kerala projects

The Prime Minister said **development and good governance do not know caste, gender, religion or language. "Development is for everyone. This is the essence of Sabka Saath, Sabka Vikas, Sabka Vishwas".**

PROJECTS:

The PM inaugurated the 2000-MW Pugalur (Tamil Nadu)-Thrissur high voltage direct current (HVDC) system through video conference. This is the first power transmission project in the country in which VSC **converter technology has been used.**

A. The system will facilitate the transfer of a large quantum of power to the state.

B. The HVDC equipment used in this project has been made in India. This will make our Atmanirbhar Bharat movement stronger," he said.

Prime Minister Modi also launched the 50-MW **Kasaragod Solar Project** and a water treatment plant in Thiruvananthapuram, with a capacity of 75-million litres per day.

4.32 India successfully test fires Helina, Dhruvastra anti-tank guided missiles

Recently, India has successfully test-fired indigenously-developed **anti-tank guided missile systems 'Helina' and 'Dhruvastra'** in the Pokhran range, Thar desert (Rajasthan).

The **Helina (the Army version)** and **Dhruvastra (Indian Airforce version)** are **helicopter-launched versions** of third-generation anti-tank guided missiles **(the Nag missile system).**

The missile system has all-weather day-and-night capability and can defeat battle tanks with conventional armor and explosive reactive armor.

Indigenous:

The missile systems have been designed and developed indigenously by the **Defence Research and Development Organisation (DRDO)**.

Operations:

The 'Helina' and 'Dhruvastra' can engage targets both in direct hit mode as well

as **top attack mode.**

Top Attack Mode: The missile is required to climb sharply after launch and travel at a certain altitude, then plunge on top of the target.

Direct Attack Mode: The missile travels at a lower altitude, directly striking the target.

Nag Missile

Nag is a third-generation, fire-and-forget, anti-tank guided missile developed by DRDO to support both mechanized infantry and airborne forces of the Indian Army.

It is an all-weather condition with day and night capabilities and with a minimum range of 500m and a maximum range of 4 km.

Nag can be launched from land and air-based platforms. The land version is currently available for integration on the Nag missile carrier (NAMICA).

DRDO has developed nag Missiles under the **Integrated Guided Missile Development Program.**

IGMDP (Integrated Guided Missile Development Program)

It was conceived by Dr. A.P.J. Abdul Kalam to enable India to attain self-sufficiency in the field of missile technology. It was approved by the Government of India in 1983 and completed in March 2012.

The **five missiles (P-A-T-N-A)** developed under this program are:

Prithvi: Short-range surface to surface ballistic missile.

Agni: Ballistic missiles with different ranges, i.e., Agni (I, II, III, IV, V).

Trishul: Short-range low-level surface to air missile.

Nag: 3rd generation anti-tank missile.

Akash: Medium range surface to air missile.

4.33 Why does India need conclusive land titling?

Recently, as many States have failed to send in their feedback on a **Model Bill on Conclusive Land Titling**, the Centre has warned that their agreement would be presumed. The Bill was **prepared by the NITI Aayog.**

Land Titling:

It is the generic term used to describe the **programs implemented by the government** to enable individuals and government **to efficiently trade in rights in land**

and property.

Recently, the **Supreme Court** held that a **citizen's right to own private property is a human right.**

Current System in India/Presumptive Land Titling:

India currently follows a system of presumptive land titling. It means that **land records are maintained, with information on possession, which is determined through details of past transactions.**

Ownership:

It is established on the **basis of current possession.**

Registration:

Registration of land is actually a registration of transactions, such as sale **deeds, records of inheritance, mortgage and lease.**

Holding registration papers **does not actually involve the government or the legal framework** guaranteeing the ownership title of the land.

Conclusive Land Titling:

Under a conclusive land titling system, **land records designate actual ownership.**

Ownership:

The title is **granted by the government**, which takes the responsibility for accuracy.

Dispute Settlement:

Once a title is granted, any other **claimant will have to settle disputes with the government**, not the title holder.

Compensation:

The **government may provide compensation to claimants in case of disputes**, but the title holder is not in any danger of losing ownership.

Need and Benefits of Conclusive Land Titling:

Reduce Litigations:

The conclusive system will **drastically lower litigation related to land.**

According to a 2007 **World Bank** study on 'Land Policies for growth and poverty reduction', **land-related disputes** accounted for **two-thirds of all pending court** cases in India.

A **NITI Aayog** study on strengthening arbitration estimated that **disputes on land**

or real estate take an average time of 20 years in the courts to be resolved.

Reduced Risk:

Once conclusive titling is in place, investors who want to purchase land for business activities will be able to do so **without facing the constant risk that their ownership may be questioned** and their entire investment may go to waste.

Right now, because land titles are based on transactions, people have to keep the entire chain of transaction records, and a dispute on any link in that chain **causes ambiguity in ownership.**

Reduction in Black Marketing:

Ambiguity in ownership also results in a **black market for land transactions**, which deprives the government of **taxes.**

Speeding up Development:

Land disputes and unclear titling also create **hurdles for infrastructure development and housing construction**, leading to costly delays and inefficiency. In cities, urban local bodies depend on property taxes that can be levied properly only if there is clear ownership data available.

Long-running court cases currently create hurdles for investment in many sectors of the economy.

Facilitation of Easy Credit:

In rural areas, the need is even more acute. Access to **agricultural credit** is **dependent on the ability to use land as collateral.**

Without being able to prove their ownership of land and access formal credit from banks, **small and marginal farmers are often left at the mercy of unscrupulous moneylenders**, entrenching themselves in a mountain of debt.

Model Bill on Conclusive Land Titling:

Power to State Governments:

It will provide state governments **power to order for establishment, administration and management** of a system of title registration of immovable properties.

Land Authorities:

Land Authorities to be set up by each State government, which will appoint a **Title Registration Officer (TRO)** to prepare and publish a draft list of land titles based on existing records and documents.

This will be considered a valid notice to all potential claimants interested in the property, who will have to file their claims or objections within a set period of time.

If disputing claims are received, the TRO will verify all the relevant documents and refer the case to a **Land Dispute Resolution Officer (LDRO)** for resolution.

However, **disputes** which are already **pending in courts cannot be resolved in this way.**

Having considered and resolved all the disputed claims, **the Land Authority will publish a Record of Titles.**

Land Titling Appellate Tribunals:

Over a three-year period, these titles and the **decisions of the TRO and the LDRO can be challenged before Land Titling Appellate Tribunals**, which will be set up under the law.

After a **three-year period**, entries in the Record of Titles will be considered conclusive proof of ownership.

Special Bench of High Court:

A special bench of High court shall be designated **to deal with appeals against the orders passed by the Land Titling Appellate Tribunal.**

Challenge:

The biggest challenge is that land **records have not been updated** for decades, especially in rural and semi-urban areas.

Land records are often in the name of the grandparents of the current owner, with **no proof of inheritance.**

Unless they are based on updated records, **conclusive land titles could create even more problems.**

Comprehensive **village-level surveys with community involvement** are a necessary precursor to the land titling process. Relying on current records or even satellite imagery will not provide the same accuracy as actual, **on-the-ground, local surveys.**

It is imperative that the country has **an integrated system or repository of land record for urban and rural areas** which comprehensively covers agricultural, infrastructure, residential and industrial land.

4.34 New freight plan: Loaded trucks will take the train

HOW WILL trucks loaded with goods reach their destinations hundreds of

kilometres away three times faster than before? They will take the train.

That's the new business model **designed by the Dedicated Freight Corridor Corporation of India Limited (DFCCIL)**for one of its newly opened stretches in the western region with a projected annual earning close to Rs 100 crore.

RORO SERVICE:

The "Roll-On-Roll-off (RORO)" service will be started between Palanpur in Gujarat and Rewari in Haryana, a distance of 636 km, to transport a wide range of goods unloaded in ports to markets in north India, especially the National Capital Region.

Approximately 2,500-3,000 trucks ply between Rewari and Palanpur, riding on the traffic between the three Gujarat ports, the hinterland and the northern regions of Rewari, Hisar, Agra, Ghaziabad, Haridwar, Dehradun, Chandigarh, Ludhiana etc.

DFCCIL, a Railways PSU, has floated a Request for Proposal for private players to bid for sole rights to market this service – 900 trips, each carrying 45 loaded trucks on specially designed wagons.

The bids will be opened next month for the **year-long contract** that can be extended by another year.

MATH MAY BE IN DFC FAVOUR:

The RORO model has not really taken off as a viable offering for the Railways.

But the **Dedicated Freight Corridor ecosystem**, with its own tracks and no passenger trains or red tape, may be a different story, officials believe.

And once it is a success, **it may be replicated on other stretches of the corridor** — "wherever there is viability".

On road, the distance between Palanpur and Rewari is around 720 km with at least 13 major toll points costing around Rs 5,000 in all per truck.

By train, the distance is reduced by around 84 km with no barriers, at an average speed of 75 km per hour.

Besides, officials said, **the distance of 36 hours by road will be reduced to a 10-hour ride** coupled with assured, predictable transit for truck owners, along with less wear and tear of the trucks.

The approximate calculations by the DFC expect the cost to the customer per trip will work out to be a few thousands of rupees cheaper.

The other benefit, they said, is that 40,500 trucks travelling over 636 km one way

on trains every year is a "huge gain" **in terms of emissions and decongestion of roads**.

Various stretches of the critical infrastructure project have started getting commissioned, with Prime Minister last month inaugurating two stretches, including the **300-km Rewari-Madar section**, for which this new plan has been worked out.

4.35 Railways stung by IT 'breaches'

There were many instances of cyber attacks during the ongoing pandemic across the Railway network.

The Ministry of Railways has roped in the **Centre for Development of Advanced Computing (C-DAC)** to educate its officials on Internet ethics, cyber hygiene and best practices in the use of IT equipment, including mobile phones.

This is a part of its **National Cyber Security Strategy**.

INTERNET ETHICS:

The Railway Board said a number of incidents had come to notice regarding **breaches in various IT applications** as electronic working has got further proliferated.

The Board said in the note the pandemic had introduced a greater reliance on electronic modes of communication in official working.

Hence, it was necessary that all officials took responsibility and followed adequate procedures when using IT infrastructure for **ensuring confidentiality, privacy** etc in dealing with official information.

This can be achieved to a great extent by following **Internet ethics, cyber hygiene** and following best practices on the use of IT equipment like desktops, laptops, mobile devices etc.

While many officials are aware of these and other related practices, there are still a number of officials who are unaware of the same.

A majority of them were applications related. Incidents occurred due to "**improper handling of the IT assets by the personnel**".

The IT Wing of the Computerisation & Information System Directorate sends out periodic alerts on cybersecurity vulnerabilities and threats to the staff directly handling IT-based systems.

One of the major IT functions is the **Passenger Reservation System (PRS).**

PERIODIC ALERTS

In January 2019 alone, 6.61 crore passengers booked from 10,394 PRS terminals in 3,440 locations and the IRCTC website resulting in a revenue of ?3,962.27 crore.

While 9.38 lakh passengers made bookings on January 10, 2019, 671 bookings were made per second nine days later.

The PRS involves passengers **disclosing their identities along with proof of address**, mobile phone number and netbanking/card payment details.

The Railways also uses its IT infrastructure for **Unreserved Ticketing System** which served 2.11 crore passengers in January 2019 earning ?58.83 crore each day.

E-payment is provided as part of the **Freight Operations Information System (FOIS)** leading to ?8,666.6 crore of revenue in January 2019.

NEED FOR A CYBERSECURITY POLICY:

Before 2013, India did not have a cybersecurity policy. The need for it was felt during the **NSA spying issue that surfaced in 2013**.

Information empowers people and there is a need to create a distinction between information that can run freely between systems and those that need to be secured.

This could be personal information, banking and financial details, security information which when passed onto the wrong hands can put the country's safety in jeopardy.

This Policy has been drafted in consultation with all the stakeholders.

In order to **digitise the economy and promote more digital transactions**, the government must be able to generate trust in people in the Information and Communications Technology systems that govern financial transactions.

A strong integrated and coherent policy on cybersecurity is also needed to curb the menace of cyber terrorism.

NATIONAL CYBER SECURITY POLICY MISSION:

To protect information and information infrastructure in cyberspace.

To build **secure and resilient cyberspace** for citizens, businesses and Government.

To build capabilities to prevent and respond to cyber threats.

To **reduce vulnerabilities and minimize damage** from cyber incidents through a combination of institutional structures, people, processes, technology and cooperation.

4.36 Govt. to monitor OTT content

For the first time, the government, under the ambit of the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021, has brought in **detailed guidelines for digital content on both digital media and Over The Top (OTT) platforms**, while giving itself overriding powers.

EMERGENCY POWERS:

The new rules lay down a **three-tier grievance redressal mechanism**.

However, over and above this framework, the government has equipped itself with **"emergency" powers** to block public access of any information.

The rules state, "in case of emergency nature" the Secretary, Ministry of Information and Broadcasting, may "if he is satisfied that it is necessary or expedient and justifiable" **give orders to block access**.

Such orders can be released "**without giving an opportunity of hearing**" to the publishing platform.

The first level of the grievance redressal system will be at the level of each OTT provider. Each complaint will have to be **addressed within 15 days**.

If the complaint is not satisfactorily addressed, then the complainant can scale it up to a self-regulatory body collectively established by the OTTs.

This body will be **headed by a retired judge of the Supreme Court**, a High Court, or an independent eminent person from the field of media, broadcasting, entertainment, child rights, human rights or other relevant fields.

OVERSIGHT MECHANISM:

This self-regulatory body also has "**censuring" powers** in case of any incriminating content.

At the third tier, the government has equipped itself with overriding powers in the form of "**oversight mechanism**".

An inter-ministerial committee will perform this function and it will largely have the same powers as the collective self regulatory body of the OTTs.

Both Ministers also clarified that **no new law has been framed**. And the government already has power to step in, in case of an emergency under the existing law.

There have been **widespread concerns about digital content**, especially on OTT

platforms, with 50 Parliament questions on the issues recently.

| POLITICAL ISSUES, HUMAN RIGHTS AND GOVERNANCE |

5.1 A bullet through an island's heart

A megacity plan for the sustainable and holistic development of the 680 sq km, fragile Little Andaman Island in the Andaman and Nicobar group.

The plan has raised the alarm among conservationists.

'SUSTAINABLE DEVELOPMENT OF LITTLE ANDAMAN ISLAND – VISION DOCUMENT'

This is the NITI Aayog's proposal to leverage the strategic location and natural features of the island.

The document aims at building a new greenfield coastal city there, that will be developed as a free trade zone and will compete with Singapore and Hong Kong.

There will be 'underwater' resorts, casinos, golf courses, convention centres, plug-and-play office complexes, a drone port with fully automated drone delivery system, nature cure institutes and more.

An international airport capable of handling all types of aircraft will be central to this development vision.

The only jetty on the island will be expanded and a marina will be developed next to the tourist entertainment district.

A 100 km greenfield ring road will be constructed parallel to the coastline from east to west and will be supplemented with a mass rapid transit network with stations at regular intervals.

The nature resort complex proposed at West Bay on the western coast is to have theme resorts, floating/underwater resorts, beach hotels, and high-end residential villas.

It is today a secluded and difficult to reach part, one of the most important nesting sites of the globally endangered Giant Leatherback sea turtle

Giant Leatherback sea turtle is being studied by the Dakshin Foundation, the Andaman and Nicobar Environment Team and the island administration's Forest Department.

3 ZONES:

The proposal is pivoted along three development anchors and zones.

Zone 1 – spread over 102 sq km along the east coast of Little Andaman — will be

the financial district and medi city and will include an aerocity, and a tourism and hospital district.

Zone 2 – Spread over 85 sq km of pristine forest- the leisure zone, will have a film city, a residential district and a tourism SEZ.

Zone 3 -on 52 sq km of pristine forest — will be a nature zone, further categorised into three districts: an exclusive forest resort, a nature healing district and a nature retreat, all on the western coast.

'BLOCKS' TO DEVELOPMENT:

Factors that could prevent Little Andaman from becoming the new Singapore and these include-

lack of good connectivity with Indian mainland and global cities,

a fragile biodiversity and natural ecosystems and;

the "presence of indigenous tribes and concerns for their welfare" and;

certain Supreme Court notifications that pose an impediment to development

95% of Little Andaman is covered in forest, a large part of it the pristine evergreen type;

some 640 sq km of the island is Reserve Forest under the Indian Forest Act, and;

nearly 450 sq km is protected as the Onge Tribal Reserve.

IRRITANTS IN THE DOCUMENT:

The vision needs 240 sq km (35%) of this land.

It is planning to de-reserve 32% of the reserved forest and de-notify 138 sq km or 31% of the tribal reserve.

And if the tribals become an impediment, the vision suggests that they "can be relocated to other parts of the island".

The document uses inappropriate photographs plagiarised from the Internet.

Vision talks of conservation of national park/wildlife sanctuary on Little Andaman when none exist here and it has no mention of the geological vulnerability of the place, which was amongst the worst-affected in the earthquake-tsunami combination in 2004.

The plan has no financial details, no budgeting, or inventorisation of forests and ecological wealth and no details of any impact assessment.

FOREST DEPT.'S CONCERNS:

Experts have raised serious concerns about this vision on grounds of-

a. ecological fragility, indigenous rights and vulnerability to earthquakes and tsunamis.

b. large diversion of forest land would cause obvious environmental loss leading to irreversible damage (more than 2 million trees stand in the forest land sought for these projects).

c. habitats of various wild animals including endangered sea turtles would be affected.

The impact could not even be assessed because there was no environment impact assessment report and neither were there any detailed site layout plans for the proposed diversion.

The vision that seeks to alter the nature of an ancient island bigger than Chennai and Mumbai in area.

A meeting will be held to initiate the denotification of the Onge tribal reserve on Little Andaman.

5.2 '3-language policy is not applicable to Central govt. offices'

The Union Ministry of Home Affairs has said the three-language policy is not applicable to offices of the Union government.

The Ministry gave this response to a question filed under the Right to Information (RTI) Act on the recent CRPF event at Bhadravati in Shivamogga district, where the plaques unveiled to mark the foundation stone-laying ceremony were only in English and Hindi.

THREE-LANGUAGE FORMULA

It was first incorporated in the National Education Policy 1968 by the Indira Gandhi government.

In Hindi-speaking states: English, Hindi, and a modern Indian language.

Non-Hindi speaking states: English, Hindi, and one Indian language.

The three-language formula sought to serve three functions namely, accommodating group identity, affirming national unity, and increasing administrative efficiency.

In 1968, the three-language formula was implemented across the country, barring Tamil Nadu that adopted a two-language policy.

CRITICISM

Kannada activists and Opposition leaders, including former Chief Minister H.D. Kumaraswamy and Siddaramaiah, said Kannada was ignored at the programme.

Hundreds of people took to social media to criticise the Centre.

Union Home Ministry has defended its stand citing the rules- "as per the provision of the Official Language Act, 1963, and the Official Language Rules, 1976, the provision of bilingual policy is applicable in the offices of the Central government.

The only solution to this problem could be amendments to the Articles from 343 to 351 of the Constitution which declare Hindi as the official language.

5.3 Citing shortage of officers in J&K, Govt introduces Bill to merge its cadre with AGMUT

THE GOVERNMENT introduced a Bill in the Rajya Sabha to merge the IAS, IPS and IFS cadre of Jammu and Kashmir with that of Arunachal Pradesh, Goa, Mizoram and Union Territories (AGMUT) cadre.

The cadres had been merged last month through an Ordinance.

The move has allowed officers posted in these states and union territories to work in Jammu and Kashmir and vice versa.

REASONS BEHIND THE CHANGE

The government had to merge the two cadres in view of paucity of officers in the newly created union territory of Jammu and Kashmir.

The J&K Reorganisation (Amendment) Bill, 2021 seeks to amend the J&K Reorganisation Act, 2019 which had then made provision for retention of the J&K cadre for existing officers and stated that new officers posted there would henceforth come from the UT cadre.

There is a huge deficiency of officers of All India Services in the union territory of Jammu and Kashmir.

The developmental schemes, centrally sponsored schemes and other allied activities suffer due to non-availability of All India Officers in the existing cadres of Jammu and Kashmir.

There is a requirement of merging Arunachal Pradesh, Goa, Mizoram, union territories cadre so that the officers in this cadre can be posted in the union territory of Jammu and Kashmir to meet out any deficiency to some extent.

It said the Bill is being brought "in order to provide uniformity in the governance of all the union territories and to further enhance efficiency in their administration.

Apart from paucity of officers, the reason for merging the cadres is also entrenched interests of officers of the J&K cadre and their "political links".

5.4 Centre ready to introduce Bill defining Delhi govt., L-G powers

The Ministry of Home Affairs (MHA) is all set to introduce a legislation in the Budget session of the Parliament to amend a 1991 Act pertaining to the powers and functions of the Delhi government and the Lieutenant Governor.

The proposed legislation received Union Cabinet's approval.

The Bill is likely to clearly define the powers of the L-G and the Delhi government on the lines of the Supreme Court judgment of February 2019. It is likely to give more teeth to the L-G's office.

A Supreme Court Bench had other than the question of services given a unanimous verdict on the role of the two authorities.

The services plea has been referred to a larger Bench of the SC and the hearing is yet to conclude.

LEGAL CONTROVERSY BETWEEN LG & DELHI GOVERNMENT:

Due to the co-existence of Article 239 and 239AA, there is a jurisdictional conflict between the government of NCT and the Union Government and its representative, the Lieutenant Governor.

According to the Union government, New Delhi being a Union Territory Article 239 empowers the Lieutenant Governor to act independently of his Council of Ministers.

However, the state government of Delhi held that the Article 239AA of the Constitution bestows special status to Delhi of having its own legislatively elected government.

This creates a tussle around the administrative powers of the LG and state government of NCT of Delhi.

2019 VERDICT

In the February 14, 2019 verdict, the court upheld as "legal" the MHA's May 21 and July 23, 2015 notification authorising the L-G to exercise powers in relation to services and directing the Anti-Corruption Branch (ACB) police not to take cognisance of offences

against Central government officials.

The apex court confirmed the Delhi High Court's finding that the ACB's jurisdiction is confined to Delhi officials and statutory bodies and does not extend to Central government officials.

Last year, the MHA notified rules for the newly created Union Territory of J&K.

It said that in case of difference of opinion between the L-G and a Minister when no agreement could be reached even after a month, the "decision of the Lieutenant Governor shall be deemed to have been accepted by the Council of Ministers."

The Government of National Capital Territory of Delhi (Amendment) Bill, 2021 is among the 20 Bills proposed to be introduced in this Parliament session.

The Bill was listed in the monsoon session last year but it could not be taken up as it had not received the Union Cabinet's approval then.

It is reported that according to changes proposed in the new Act, the L-G could act in his discretion in any matter that is beyond the purview of the powers of the Delhi Assembly in matters related to the All India (Civil) Services and the ACB.

5.5 Veil of privacy can be lifted for legitimate state interest: Centre response in Delhi HC

Government told the Delhi High Court that though the right to privacy has been held to be a "**sacred fundamental right**" and is being "respected" by the government, the **"veil of privacy**" can be lifted for certain "legitimate state interest".

The government said lawful interception, monitoring or decryption of any messages or information stored in any computer resources is done by authorised agencies after due approval in each case by the competent authority.

The government was responding to a petition seeking permanent halting of the Centre's surveillance projects, Centralized Monitoring System (CMS), Network Traffic Analysis (NETRA) and National Intelligence Grid (NATGRID).

The petitioners have contended that these enable government authorities to intercept, store, analyses and retain telephone and internet communications data **in bulk in violation of the fundamental right to privacy**.

OVERSIGHT AUTHORITY

It seeks oversight authority for authorising and reviewing interception and monitoring orders or warrants issued under the Telegraph Act, 1885 and the IT Act, 2000.

PIL has argued that the three systems allow the government a 360 degree surveillance of all citizens, including judges.

GOVERNMENT STAND

The government recently said the interest of sovereignty or integrity of India, defence of the country, security of the State, friendly relations with foreign states or public order fall under "legitimate state interest".

The grave threats to the country from terrorism, radicalization, cross-border terrorism, cybercrime, organized crime, drug cartels cannot be understated or ignored and a strong and robust mechanism for timely and speedy collection of actionable intelligence including digital intelligence is imperative to counter threats to the national security. This is undeniably legitimate State interest.

The government said there is no blanket permission to any agency for interception or monitoring or decryption, because its violate Article 21 of constitution.

Every proposal received from authorized law enforcement agencies for interception and monitoring, are scrutinized by the dedicated unit of the Ministry of Home Affairs.

It said existing safeguards of oversight by the **high level committee chaired by the Cabinet Secretary** at Central level and by the Chief Secretary at the state level are adequate.

5.6 Whopping 900% rise in rejection of crop insurance claims

The number of farmers' crop insurance claims that were rejected by insurance companies under the Centre's flagship Pradhan Mantri Fasal Bima Yojana (PMFBY) multiplied 10 times in just two years.

In 2017-18, the number of rejected claims was 92,869. In the next year, 2018-19, the figure more than doubled to 2.04 lakh. By 2019-20, it was 9.28 lakh, a whopping 900% increase.

Note

Under **the PMFBY, there** was **actually no need** to file crop loss claims in case of widespread natural calamities such as drought or flood, as claims were calculated on the basis of shortfall in yield of the whole unit.

At the end of the season, prevented sowing and midseason adversity claims were settled on the basis of an area approach for which yield data and crop damage **reports**

were provided by the State governments concerned.

When it came to risks impacting like risks of hailstorms, landslips, inundation, cloud burst, or natural fire. Such losses were **calculated on the basis** of crop loss assessment at individual insured farm levels.

If the Farmers claims informed to the insurance company and the State government, their claims were assessed by a joint committee with representatives from the State government and the insurance company.

The farmer claims **can reject by** the companies on various grounds.

5.7 Privacy concerns over Haryana's ID scheme

Haryana government unique identity card scheme — **Parivar Pehchan Patra (PPP)** asks the district education officer to collect required information to avail benefits of the social security schemes of the state government.

It further says that it is **mandatory** for all families to register themselves on the PPP portal.

the objectives of this massive data collection exercise and what the government intends to do with this and whether the PPP was going to be accepted as an official identification document in the future in the State.

RENEWED PUSH

PPP scheme was formally launched in July 2019 to achieve Haryana government's vision for "**paperless" and "faceless"** delivery of schemes, services and benefits offered by the government.

It is trying to **make it mandatory** for all those who are likely to avail benefits of government schemes such as below poverty line families, social security benefit recipients etc.

The efforts of government to train district officials and residents are being made aware of the scheme through print and audio visual campaigns and face-to-face interactions.

The group discussions are being held with key stakeholders such as members of residents' welfare associations in the urban areas and other local representatives in urban as well as rural areas.

FAMILIES ENROLLED

The estimated 65 lakh only residential families of Haryana, and around 48 lakh have voluntarily can enrolled for PPP and provided the data on '**self-declaration mode'.**

The family ID or PPP, **an eight-digit alpha numeric ID**, is provided to those who are residents of Haryana.

The required period for residency has been reduced to five years from 15 years as of January 2021.

SERVICES DELIVERED

As of now, over 110 services and schemes being delivered to citizens via the **Saral platform** have been linked to the PPP scheme.

These services and schemes such as **social security pensions ration cards and birth, death, caste and income certificates etc**. And the government has plans to gradually extend the PPP to all government schemes, services, benefits and subsidies.

The PPP may **also be linked with land records to property** records in the government database of lands and properties to prevent fraudulent transactions and clarify ownership.

As a first step, it has been announced that from April 1, "anywhere" registration of property transactions is being attempted **the first in the country.**

BREACH OF PRIVACY

A lot of data is being sought, well above and beyond what is required to deliver education and related services.

The demand for Aadhaar numbers evidently, virtually mandatory is in **violation of the Supreme Court guidelines e**specially if no State benefits or subsidies are being sought by the residents.

He also expressed **concern** over reports of plans to cross-link this database with other databases, saying that if the PPP becomes a precondition to getting birth or death certificates, etc. then there is no choice in the matter and it was an offer you **can't refuse.**

In the **absence of privacy laws in India**, or any indication of data protection Standard Operating Procedures being followed for this exercise, there will be potential abuse of this data.

COUNTER POINT

The office of PS, CRID, however, said that the data in PPP would be used **only for planning purposes and for delivery of government schemes**, subsidies, benefits and

services and not for any private purpose.

Only data that is legitimately sought for implementation of government schemes, subsidies, benefits or services is put together and not any other private data.

It also dismissed apprehensions that the State government might profile people on the basis of this data and use it for election campaigns and strategy as "**baseless".**

Section 5 of the draft data protection bill deals with purpose limitation and states that the "personal data shall be processed only for purposes that are clear, specific and lawful.

Section 7 of the Aadhaar Act, 2016 and if the purpose for which Aadhaar authentication is intended to be used is either backed by law made by parliament or is in the State interest.

5.8 Sub-categorisation of OBCs explained: What a Commission has found so far

Recently, the **Centre has extended the tenure of the Rohini Commission** until 31st July, 2021 to submit its report on **Sub-categorisation of Other Backward Classes (OBCs).**

The **Rohini Commission was constituted in October 2017** under **Article 340 of the Constitution.** At that time, it was given 12 weeks to submit its report, but has been given several extensions since, the latest one being the 10th.

Article 340 deals with the appointment of a commission to investigate the conditions of backward classes.

Need for Committee for Sub-categorisation of OBCs:

Ensuring Equality:

It had been constituted to complete the task of **sub-categorising 5000-odd castes in the central OBC.**

OBCs are granted 27% reservation in jobs and education under the central government.

The need for sub-categorisation arises out of the perception that **only a few affluent communities among the over 2,600 included in the Central List of OBCs** have secured a major part of this 27% reservation.

Sub-categorisation would **ensure more equitable distribution of opportunities** in central government jobs and educational institutions.

Recommended by NCBC:

In 2015, the **National Commission for Backward Classes (NCBC)** had recommended that OBCs should be **categorised into extremely backward classes, more backward classes and backward classes.**

The benefits of the **reservation** in OBCs are being cornered mostly by the dominant OBC groups over the years so there is a need to recognise sub-quotas for the extremely backward classes within the OBCs.

NCBC has the authority to **examine complaints and welfare measures regarding socially and educationally backward classes.**

Commission's Terms of Reference (ToR):

Examining Inequality: To examine the extent of inequitable distribution of benefits of reservation among the castes or communities included in the broad category of OBCs with reference to such classes included in the Central List.

Determining Parameters: To work out the mechanism, criteria, norms and parameters in a scientific approach for sub-categorisation within such OBCs.

Classification: To take up the exercise of identifying the respective castes or communities or sub-castes or synonyms in the Central List of OBCs and classifying them into their respective sub-categories.

Eliminating Errors: To study the various entries in the Central List of OBCs and recommend correction of any repetitions, ambiguities, inconsistencies and errors of spelling or transcription.

Challenges Before the Commision:

Data Deficiency:

Absence of data for the population of various communities to compare with their representation in jobs and admissions.

Delaying of Survey:

It was decided in **Census 2021**, data of OBCs will also be collected, but no consensus has been reached regarding enumeration of OBCs in the Census.

Findings of the Commision Until Now:

In 2018, the Commission **analysed the data of 1.3 lakh central jobs** given under OBC quota over the preceding five years.

It **also analysed OBC admissions to central higher education**

institutions, including universities, IITs, NITs, IIMs and AIIMS, over the preceding three years. The **findings** were:

97% of all jobs and educational seats have gone to just 25% of all sub-castes classified as OBCs.

24.95% of these jobs and seats have gone to just 10 OBC communities.

983 OBC communities (37% of the total) have zero representation in jobs and educational institutions.

994 OBC sub-castes have a total representation of only 2.68% in recruitment and admissions.

In **mid- 2019,** the Commission informed that it is **ready with the draft report** (on sub-categorisation). It is widely understood that the report could have huge political consequences and face a judicial review so it's **still not released.**

OBC Recruitment in the Central Government Jobs (as per the Report submitted by the Department of Personnel and Training to NCBC in 2020):

From the data of **42 ministries/departments,** OBC representation in Central government jobs was found out to be:

16.51 % in Group-A central government services.

13.38 % in Group-B central government services.

21.25 % in Group-C (excluding safai karamcharis).

17.72 % in Group-C (safai karamcharis).

Regarding NFS:

NCBC also found out that a **number of posts reserved for OBCs were being filled by people of general category** as OBC candidates were declared **"NFS" (None Found Suitable).**

Revision of Creamy Layer:

Even the **revision of the income limit for the creamy layer for the OBCs** is under consideration.

Note

Recently, the **Supreme Court of India** has reopened a similar legal debate on **sub-categorisation of Scheduled Castes and Scheduled Tribes for reservations**, what is commonly referred to as **"quota within quota" for SCs and STs.**

5.9 Kuruba community to urge the state government of Karnataka

A massive rally was organised by the **Kuruba community** to urge the state government of **Karnataka to recommend the Centre inclusion of the community in the Scheduled Tribe (ST) list.**

From Independence, the **community enjoyed the ST status.** In **1977,** Justice **LG Havanur,** who headed the backward class commission, **moved the Kurubas to the 'most backward classes' category** from ST list.

However, the Commission brought in an **area restriction** stating that those living in **Bidar, Yadgir, Kalaburagi and Madikeri** with Kuruba synonyms can continue to avail the ST benefits.

Kurubas:

The Kurubas of Karnataka are **a traditional sheep rearing community.**

Presently, the Kurubas constitute **9.3% of the state's population** and come under the **backward classes category.**

Kurubas are the **fourth largest caste** in Karnataka after the **Lingayats, Vokkaligas and Muslims.**

Kurubas in other states are known by different names – as **Dhangars in Maharashtra, Rabaris or Raikas in Gujarat, Dewasis in Rajasthan and Gadarias in Haryana.**

Related Developments:

Demands by Lingayat Community: Three years earlier, the **Lingayat community demanded a separate minority religion tag** in Karnataka.

The **Lingayat sub-sect Panchamasali** has also **demanded its inclusion in the 2A category of backward classes –**which currently provides 15% reservations to backward castes.

J**ustice HN Nagamohan Das Commission:**

The Justice **HN Nagamohan Das Commission** was constituted to look into **increasing the existing reservation for SCs from 15% to 17% and for the STs from 3% to 7%** by not exceeding the overall **50% reservation quota** as mandated by the **Supreme Court's order of 1992.**

If Kurubas are to be **declared ST** as per their demand, the **quota for STs will have to be proportionally increased.**

Challenge:

The larger issue is that **the State has already hit the apex court set 50% cap on reservation** and any hike poses a challenge.

Present Reservation Quota in Karnataka:

Adhering to the Supreme Court's 1992 order, Karnataka has capped the reservation to 50% **where 32% has been earmarked for backward classes,** including Muslims, Christians and Jains, **15% for SCs and 3% for STs.**

This reservation quota has been **further pared into categories:** Category 1 (4%), Category 2A (15%), Category 2B (4%), Category 3A (4%), Category 3B (5%), SC (15%) and ST (3%).

Scheduled Tribe

Article 366 (25) of the Constitution refers to **Scheduled Tribes** as those communities, who are **scheduled in accordance with Article 342 of the Constitution.**

Article 342 says that only those communities who have been declared as such by the President through an initial public notification or through a subsequent amending Act of Parliament will be considered to be Scheduled Tribes.

The **list of Scheduled Tribes is State/UT specific** and a community declared as a Scheduled Tribe in a State need not be so in another State.

Essential Characteristics:

The **Constitution is silent about the criteria for specification of a community as a Scheduled Tribe.** However, following are the traits that distinguish Scheduled Tribe communities from other communities.

Primitiveness,

Geographical isolation,

Shyness, and

Social, educational and economic backwardness.

Particularly Vulnerable Tribal Groups:

There are certain Scheduled Tribes, 75 in number known as Particularly Vulnerable Tribal Groups (PVTGs), who are characterised by;

Pre-agriculture level of technology,

Stagnant or declining population,

Extremely low literacy, and

Subsistence level of economy.

5.10 Rajya Sabha passes Bill extending protection to illegal constructions

The Rajya Sabha recently passed the **National Capital Territory of Delhi Laws (Special Provisions) Second (Amendment) Bill, 2021**.

Housing and Urban Affairs Minister had introduced the Bill

The Bill extended the protections from punitive action for certain kinds of unauthorised constructions by three years.

The Bill **replaced an ordinance** brought by the government in December 2020.

The **existing protections from sealing and demolition of illegal constructions, including unauthorised colonies**, were set to end on December 31.

It is a matter of fact which is undisputable that **Indian cities are virtually turning into slums and worst is that their boundaries are increasing with every passing day**.

Delhi Laws (Special Provisions) Act, 2006 had been enacted by Parliament to protect certain forms of encroachment and unauthorised development from punitive action, namely, demolition, sealing, displacement, etc

The Ordinance amended this **to provide that the unauthorised colonies will be identified** for regularisation in accordance with the National Capital Territory of Delhi (Recognition of Property Rights of Residents in Unauthorised Colonies) Act, 2019 and the National Capital Territory of Delhi (Recognition of Property Rights of Residents in Unauthorised Colonies) Regulations, 2019.

The unauthorised colonies that existed as on June 1, 2014 and had witnessed 50 percent development as on January 1, 2015 will be eligible for regularisation.

5.11 RS passes ports Bill despite opposition

The Rajya Sabha passed the Major Ports Authority Bill, 2020 with 84 votes in favour and 44 against.

Union Minister of State for Ports, Shipping and Waterways said the Bill aimed to make the ports world class and give the port authorities power to make their own decisions. He denied the Opposition's charge that it would lead to privatisation.

OBJECTIVES:

Decentralise decision making and infuse professionalism in governance of major ports.

Impart faster and transparent decision making benefiting the stakeholders and better project execution capability.

Reorient the governance model in central ports to landlord port model in line with the successful global practice.

FEATURES:

The bill seeks to provide for regulation, operation and planning of major ports in the country and provide greater autonomy to these ports.

It seeks to replace the Major Port Trusts Act, 1963. The legislation provides for the creation of a Board of Major Port Authority for each major port.

These Boards will replace the existing Port Trusts.

5.12 'Governance and lawmaking should be left to legislature'

Law Minister recently told the Lok Sabha that just as independence of the judiciary is a part of the basic structure of the Constitution, the principle of separation of powers is also a part of that basic structure.

He asserted that governance and lawmaking should be left to the elected members of the legislature.

Separation of powers is the division of the legislative, executive, and judicial functions of government.

It minimises the possibility of arbitrary excesses by the government, since the sanction of all three branches is required for the making, executing, and administering of laws.

The constitutional demarcation precludes the concentration of excessive power by any branch of the Government.

In India, a separation of functions rather than of powers is followed. Unlike in the US, in India, the concept of separation of powers is not adhered to strictly.

However**, a system of checks and balances** have been put in place in such a manner that the judiciary has the power to strike down any unconstitutional laws passed by the legislature.

Today, most of the constitutional systems do not have a strict separation of powers between the various organs in the classical sense because it is impractical.

ENSURING ACCOUNTABILITY

In his reply to a debate on the Arbitration and Conciliation (Amendment) Act, 2021, which was passed by the Lok Sabha, Minister also urged the judiciary to exercise its discretion in accepting public interest litigations.

The Law Minister said that there was a "**rush to file PILs on almost every issue**" nowadays.

He appealed to the judiciary to look at "genuine" issues such as compensation, working conditions of the working classes, and so on.

The **amendment to the Arbitration Act** proposes to empower courts to stay arbitration awards if they have been obtained through fraud or corrupt means.

Responding to the queries raised by several members on the need to amend the Arbitration Act retrospectively, and to be brought in the form of an ordinance, the Law Minister said it was necessary to ensure that some parties did not try to take advantage of an arbitral award that may have been obtained through fraud or corrupt means.

"**If an award [that] is given against** the Union government or a State government is given by fraud and an investor wants to enforce it, is it fair that thousands of crores of taxpayers' money be given away?

5.13 'Sedition law can't be used to quell disquiet: court

Delhi Court observed that **Charges of sedition** "cannot be invoked to quieten the disquiet under the pretence of muzzling the miscreants.

The youth was arrested for posting a fake video on Facebook about the Delhi police on the farmers' agitation. It granted bail to a 21-year-old labourer.

Sedition, which falls under **Section 124A of the Indian Penal Code**, is defined as any action that brings or attempts to bring hatred or contempt towards the government of India and has been illegal in India since 1870.

History

Sedition laws were enacted in 17th century England when lawmakers believed that only good opinions of the government should survive, as bad opinions were detrimental to the government and monarchy.

This sentiment (and law) was borrowed and inserted into the **Section 124A of IPC in 1870**, by the British.

British used Sedition law to convict and sentence freedom fighters. It was first used to prosecute **Bal Gangadhar Tilak in 1897.**

Invocation

Additional Sessions Judge remarked that in the absence of any exhortation, call, incitement or instigation to create disorder or disturbance of public peace by resort to violence, the sedition law cannot be invoked against anyone.

The law of sedition is a powerful tool in the hands of the State to maintain peace and order in society.

However, it cannot be invoked to quieten the disquiet under the pretence of muzzling the miscreants.

5.14 No role in Tamil Nadu govt.'s quota decisions, Centre tells SC

The Centre has told the Supreme Court that it has no role in the choices made by the Tamil Nadu government with regard to the provision of reservation for specific castes or communities in State government jobs and admissions.

The Centre was responding to a petition challenging the constitutionality of the Tamil Nadu Backward Classes, SC & ST(Reservation of Seats in Educational Institutions and of Appointments or Posts in the Services under the State) Act of 1993, which provides 69% reservation in the State.

The petitioner contended that the Tamil Nadu Legislature acted "outside its competence".

TN has identified and classified socially and educationally backward classes (SEBCs), that too far in excess of the 50% limit on quota laid down by a nine-judge Bench of the SC in its judgment in the Indira Sawhney case.

The Centre, however, decided to adopt a hands-off approach on the issue.

CENTRAL GOVERNMENT STAND

The Central govt said that the inclusion or exclusion of any caste/community in the State List of SEBCs is the subject matter of the State government, and the Government of India has no role in the matter.

It referred to the Constitution (One hundred and second Amendment) Act of 2018, which details the difference in the procedure for inclusion or exclusion of castes and communities in the State List for SEBCs and the Central List.

The power to identify and specify SEBCs lies with Parliament only with reference to

the Central List.

The State governments may have separate State Lists of SEBCs for providing reservation for recruitment to State services or admissions in State government educational institutions.

The castes or communities included in such State Lists may differ from those included in the Central List.

Under the newly-inserted Article 342A of the Constitution (One hundred and second Amendment) Act of 2018, the President notifies the SEBCs in a State after consultation with the Governor.

On the other hand, the Parliament includes or excludes SEBCs from the Central List.

TAMIL NADU'S POINT OF VIEW:

T.N. has objected to the tagging of this case with that of the Maharashtra reservation law or similar laws of any other State.

Senior advocate appearing for Tamil Nadu, said the State's case should be heard separately.

India is an amalgam of States with varied population, size, history, culture and social fabric.

The circumstances and facts prevailing in Tamil Nadu are not the same or similar to any other State.

Factual variations contributing to the grant of reservation need to be reckoned with differently for different States while deciding the question on its validity.

CONSTITUTIONAL PROVISIONS GOVERNING RESERVATION IN INDIA:

Part XVI deals with reservation of SC and ST in Central and State legislatures.

Article 15(4) and 16(4) of the Constitution enabled the State and Central Governments to reserve seats in government services for the members of the SC and ST.

The Constitution was amended by the **Constitution (77th Amendment) Act, 1995** and a new clause (4A) was inserted in Article 16 to enable the government to provide reservation in promotion.

Later, clause (4A) was modified by the **Constitution (85th Amendment) Act, 2001** to provide consequential seniority to SC and ST candidates promoted by giving reservation.

Constitutional **81st Amendment Act, 2000** inserted Article 16 (4 B) which enables the state to fill the unfilled vacancies of a year which are reserved for SCs/STs in the succeeding year, thereby nullifying the ceiling of fifty percent reservation on total number of vacancies of that year.

Article 330 and 332 provides for specific representation through reservation of seats for SCs and STs in the Parliament and in the State Legislative Assemblies respectively.

Article 243D provides reservation of seats for SCs and STs in every Panchayat.

Article 233T provides reservation of seats for SCs and STs in every Municipality.

Article 335 of the constitution says that the claims of STs and STs shall be taken into consideration constituently with the maintenance of efficacy of the administration.

In the **Indra Sawhney Case of 1992**, the Supreme Court while upholding the 27 percent quota for backward classes,struck down the government notification reserving 10% government jobs for economically backward classes among the higher castes. Supreme Court in the same case also upheld the principle that the combined reservation beneficiaries should not exceed 50 percent of India's population.

5.15 Month-long drive launched to register construction workers

The Delhi government recently launched a month-long drive for **registering construction workers with the board**meant for their welfare, Deputy Chief Minister said.

This comes six months after the government attempted a similar initiative that was marred by software glitches.

REGISTRATION:

Deputy Chief Minister said out of the estimated 10 lakh construction workers in Delhi, **2.12 lakh are currently in the government's "registration network"**.

Out of the 2.12 lakh, 29,000 workers need to renew their annual membership with the construction workers welfare board.

SMSes have been sent to them. In case of around 50,000 workers, registration process is underway. The rest remain outside the net of the board.

The board runs a number of welfare schemes funded by the cess collected from building projects under the Building and Other Construction Workers Welfare Cess Act, 1996.

The Delhi High Court has been hearing a PIL on the dip in the number of registered workers and issuing necessary directions since last year.

AWARENESS CAMPAIGN:

As part of the drive, at 262 labour chowks, **an awareness campaign will be carried out to apprise workers** about the benefits of registering with the board, while 45 camps will be set up for carrying out registrations and renewals.

The camps will run between 9 am to 5 pm every Monday to Friday during this period.

"Mobile units would be deployed in the districts to travel between different construction sites and **register construction workers at the construction site itself** so that workers don't have to forego their daily wage.

5.16 Vice President calls for ending low representation to women in Parliament and legislatures

The Vice President, Shri M. Venkaiah Naidu called for **ending low representation to women in Parliament and legislatures** and called upon all political parties to reach a consensus on providing reservation to them.

Releasing a postal stampbrought out in memory of **late Smt. Eashwari Bai, educationist, social reformer and a former MLA**, the Vice President paid rich tributes to her.

SmtEashwari Bai's **contributions to the political and social spheres** are truly laudable and left a deep imprint on the public mind.

VP ON EMPOWERMENT OF WOMEN:

He said that Smt. Eashwari Bai had been the **voice of the people as an opposition leader**. She constantly advocated the **cause of Children, NGOs, Teachers, Agricultural labourers, and the Scheduled Castes and the Scheduled Tribes**.

Shri Naidu said that although the **17th Lok Sabha has the highest number of 78 women** members, they account only for 14% of the total number.

Pointing out that reservations for women in the local bodies have **politically empowered lakhs of women in the country**, he said introducing reservation for women in Parliament and legislatures needs urgent attention and consensus of all political parties.

Expressing his anguish over the increasing disruptions instead of meaningful discussions and debates in legislatures and Parliament, Shri Naidu called upon all parliamentarians and other public representatives **to raise the standards of debate in every forum**.

Observing that the mantra for a healthy democracy is to discuss, debate and decide and not disrupt, the Vice President said that frequent disruption of Parliament and legislatures was tantamount to disrespecting the people's mandate. "**Agree to disagree and be tolerant** of the mandate of the people.

EFFECTIVE FUNCTIONING:

Shri Naidu emphasized that it is the responsibility of both the ruling and opposition parties to **ensure the effective functioning of our legislatures**.

The Vice President also urged all political parties to adopt a **consensual approach on matters of national importance**like the country's security, eliminating corruption and ensuring social justice.

He said that there should be consensus on reforms to **accelerate development, eliminate delays, diversions and dilutions in delivery of schemes** and reaching out benefits to the needy.

Similarly, all political parties must speak in one voice on **empowering people**, promoting transparency and accountability in the system.

The Vice President also urged all political parties to **evolve a code of conduct** for their members, particularly public representatives.

VP appealed to the people to **elect their representatives on the basis of 4Cs— Character, Conduct, Calibre and Capacity**.

Uunfortunately, another set of 4Cs—cash, caste, criminality and community—**is trying to hold politics hostage to its vicious interests** and needs to be completely eliminated for India's democracy to flourish and become a role model for other nations.

Shri Naidu opined that for a **healthy democracy**, the Government and opposition should respect each other.

He also appealed to the **youth to enter politics with a missionary zeal** to serve the needy and poor in the society.

5.17 Puducherry: Cabinet gives nod for President's Rule

The Union Cabinet recently approved a proposal by the Home Ministry to dissolve

the Puducherry Assembly and **impose President's Rule in the Union Territory**.

The decision came days after the Congress-led government in the Union Territory lost power during a **vote of confidence**.

PRESIDENT's RULE:

President's rule is the **suspension of state government** and imposition of direct Union government rule in a state.

Under Article 356 of the Constitution of India, in the event that a state government is **unable to function according to Constitutional provisions**, the Union government can take direct control of the state machinery.

Subsequently, **executive authority is exercised** through the centrally appointed governor, who has the authority to appoint other administrators to assist them.

The administrators are usually **nonpartisan retired civil servants**.

Chhattisgarh and Telangana are the only states where the President's rule has not been imposed so far.

Ground for PRESIDENT's RULE:

Article 356 of the Constitution of India is "based on Section 93 of the government of India act 1935" the failure of the constitutional machinery on two ground:

If the President receives a report from the state's Governor or otherwise is convinced or satisfied that the state's **situation is such that the state** government cannot carry on the governance according to the provisions of the Constitution**.**

President's Rule can be imposed if any state fails to comply with all directions given by the Union on matters it is empowered to

VOTE OF NO CONFIDENCE:

A motion of no confidence, or a vote of no confidence, or no confidence motion, is a statement or vote about whether a person in a position of responsibility (government, managerial, etc.) is **no longer deemed fit to hold that position**, perhaps because they are inadequate in some aspect, are failing to carry out obligations, or are making decisions that other members feel as being detrimental.

As a parliamentary motion, it demonstrates to the head of state that the elected parliament **no longer has confidence in (one or more members of) the appointed government**.

NORM:

MARCH 2021

Government said the decision was taken as **no party came forward to stake claim to form the government**following the resignation of Chief Minister V. Narayanasamy.

Subsequently, Lieutenant-Governor **recommended President's Rule**.

After the President's assent, the Assembly will get dissolved… Further steps for administrative work will be taken soon.

5.18 Rajasthan budgets for universal health; Right to Health soon

In the backdrop of the Covid-19 pandemic, Rajasthan Chief Minister recently announced a **Universal Health Coverage with an allocation of Rs 3,500 crore** in the upcoming financial year as part of measures to **reinforce health infrastructure in the state** as well as to ensure that healthcare is more accessible to its citizens.

CM also announced the '**Rajasthan Model of Public Health' (RMPH)**, wherein a Right to Health Bill will be brought, and that the state will take measures towards Preventive Care, Primary Care and Curative Care as envisioned by the World Health Organisation (WHO).

DETAILS:

As part of the RMPH, and under the Universal Health Coverage plan, **every family will get a Rs 5 lakh health cover**.

Those covered under Ayushman Bharat – Mahatma Gandhi Rajasthan Swasthya Bima Yojana (AB-MGRSBY) as well as contract workers, and small and marginal farmers will be eligible for free, while others can avail this scheme through **50 percent cost of insurance premium (about Rs 850/year) at government and private hospitals** for cashless treatment of up to Rs 5 lakh per year.

As for the Right to Health Bill – details of which are still being finalised – officials said it sought **to guarantee quality healthcare to all citizens**, without any "catastrophic" out of pocket financial burden on them.

As per one of the drafts, the state hopes to ensure that **no person is forced to pay any kind of fee or charge** which may prevent the person from seeking complete medical care.

OTHER MEASURES:

Other measures include **ensuring primary healthcare services within three kilometres or 30 minutes** walking distance to each citizen, primary care within 12

kilometres, and so on.

The Bill also lays emphasis on **rights of patients, especially their consent**, and of service providers.

Consent is expected to be made a "prerequisite" for any healthcare proposed for a person, and providers may have to keep patient records up to two years, and provide them to a patient upon request.

The government also plans to **introduce a mechanism for grievance redressal** within the healthcare services at every block and district level, hoping to adopt a congenial approach through Swasthya Jan Sunwai.

The Bill may also include **enhancing per capita budget to about Rs 3,000 annually**. However, the government has not made any budgetary allocation for the Bill.

As part of reinforcing the state's health infrastructure, CMt also announced **nursing colleges at 25 district headquarters** – with the other eight already having one – while Public Health Colleges are to be established in all seven divisional headquarters.

The CM also announced an **increase in number of free tests** under Mukhyamantri Nishulk Jaanch Yojna (MNJY).

The CM said that going by the Covid-19 experience, the state will set up an **Institute of Tropical Medicine and Virology in Jaipur** while an Institute of Cardiology will also be set up in the city at a cost of Rs 50 crore.

Among other things, the CM also announced the constitution of a **Hospital Management Cadre**.

SCIENCE AND TECHNOLOGY

6.1 Garbage-to-power plant in veggie market gets PM's pat

Prime Minister made a mention of the garbage-to-power plant being commissioned inside the Dr. B.R. Ambedkar Agriculture Market in Bowenpally.

Vegetable and fruit waste is used to generate power to the extent of 500 units a day and 30 kilos of green manure at the plant.

This is being done by making use of 10 tonnes of left over market waste.

The power generated is being used to light up the market and also run the canteen in the premises enabling the market committee to make substantial savings in power bills.

"This is the power of innovation, it was nice to learn about it. This is the journey of

turning garbage into gold," the Prime Minister remarked.

INVENTION

The CSIR-Indian Institute of Chemical Technology (IICT) has designed and patented the high rate biomethanation technology-based Anaerobic Gas lift Reactor (AGR) for this ?3 crore project funded by the Department of Biotechnology and the Telengana government's Agriculture Marketing Department.
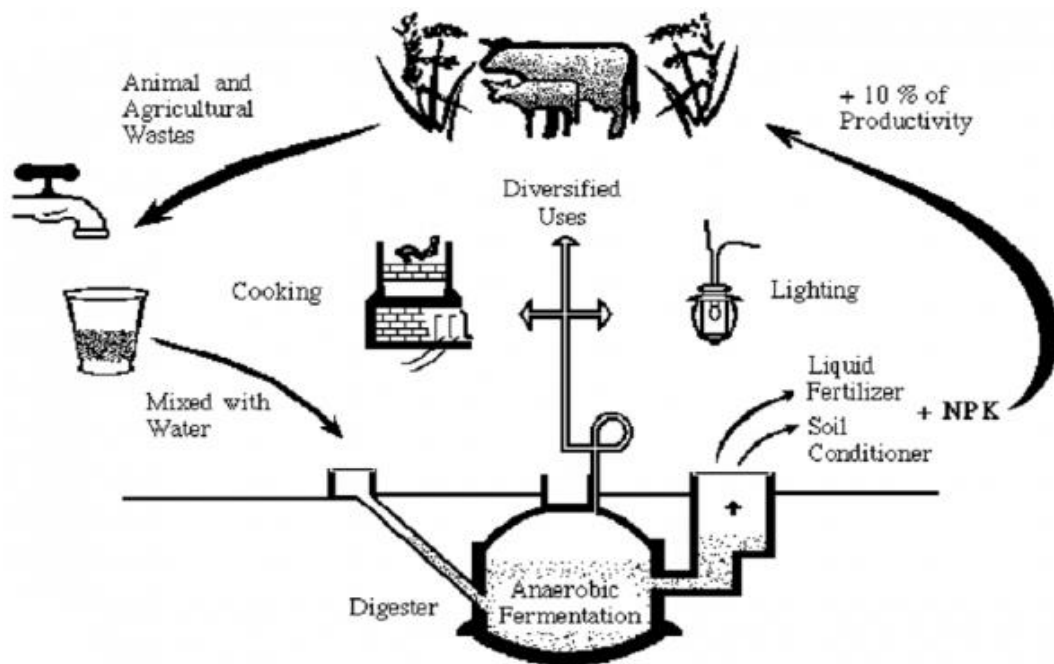
Biomethanation Technology

Gasification of biomass produces a mixture of gas (mainly carbon monoxide, CO_2 and hydrogen) called synthesis gas, or singes, by thermal degradation without combustion.

Syngas can be used for heat or electricity production by thermochemical processes.

This project aims at developing an alternative way to bio-upgrade syngas into biogas (mainly methane), via anaerobic fermentation.

A few strains of archaea are able of carboxydotrophic methanogenesis, some potentially present in industrial wastewater-treating anaerobic granules.

An industrial granular sludge was first characterized for its carboxydotrophic methanogenesis potential using batch tests under various conditions.

Then those granules were inoculated into a 30 liters gas-lift reactor and supplied with a gas mixture containing carbon monoxide, to study the production of methane and others metabolites, at different gas feeding and recirculation rates.

Carbon monoxide being a poorly soluble gas, a challenge was to reach an adequate gas-to-liquid mass transfer, without exceeding the toxicity level.

6.2 'Collection of DNA samples will lead to misuse'

DNA Technology (Use and Application) Regulation Bill, 2019 allows investigating agencies to collect DNA samples from "suspects".

Retired SC Justice Madan Lokur has observed in a written submission to the Parliamentary Standing Committee on Science and Technology that it will give investigating agencies "unbridled power that is easily capable of misuse and abuse" and amount to a "threat to the life, liberty, dignity and privacy of a person".

USE OF DNA:

DNA testing is currently being done on an extremely limited scale in India, with approximately 30-40 DNA experts in 15-18 laboratories undertaking fewer than 3,000 cases a year.

The standards of the laboratories are not monitored or regulated. The Bill aims to introduce the regulation of the entire process from collection to storage.

The preamble to the Bill says that it aims to provide for "the regulation of use and application of Deoxyribonucleic Acid [DNA] technology for the purposes of establishing the identity of certain categories of persons, including the victims, offenders, suspects, undertrials, missing persons and unknown deceased persons".

JUSTICE LOKUR'S OBSERVATION

Justice Lokur has questioned the need to collect DNA of a "suspect". In his submission, he argued that in a blind crime or a crime involving a large number of persons (such as a riot), everybody is a suspect without any real basis.

This would mean that thousands of persons could be subjected to DNA profiling on a mere suspicion.

Such an unbridled power is easily capable of misuse and abuse by targeting innocents, against whom there is not a shred of evidence.

Such an unbridled police power ought not to be conferred on anybody or any agency as it would amount to a threat to the life, liberty, dignity and privacy of a person.

OBSERVATION OF OTHER MEMBERS

Many members of the committee, too, had expressed concern over including

"suspects" in this list, flagging that it could lead to misuse and targeting certain categories of people.

Bill would lead to the targeting of Muslims, Dalits and Adivasis.

The committee has said while taking on board these concerns, it has gone with the majority view of retaining the preamble.

COMMITTEE OBSERVATIONS

Its report, however, notes that these fears are not entirely unfounded and have to be addressed by the government and by Parliament as well.

At the same time, the committee observed that it does not negate the need for such legislation, especially when DNA technology was in use.

Its use in recent months has exposed a false encounter in which innocents were killed contradicting initial claims made that they were militants," the report said.

It pointed to the encounter at Shopian in Kashmir last September, where the Army had killed three men claiming to be unidentified terrorists.

The DNA sample from the three dead men matched with their families, confirming it to be a fake encounter.

6.3 Square Kilometre Array Telescope – what largest telescope will do?

Recently, the **Square Kilometre Array Observatory (SKAO)** Council held its inaugural meeting and approved the establishment of the **world's largest radio telescope.**

The new venture is being deemed as important following the collapse of one of the most prolific radio telescopes in the world, the **Arecibo in Puerto Rico,** in December last year.

SKAO is a new **intergovernmental organisation dedicated to radio astronomy** and is **headquartered in the UK.**

At the moment, organisations from ten countries are a part of the SKAO.

These include **Australia, Canada, China, India, Italy, New Zealand, South Africa, Sweden, the Netherlands and the UK.**

Radio Telescopes:

Radio telescope, **astronomical instrument** consisting of a **radio receiver and an antenna system** that is used to detect radio-frequency radiation between wavelengths of about **10 metres (30 megahertz [MHz]) and 1 mm (300 gigahertz [GHz])** emitted by

extraterrestrial sources, such as **stars, galaxies, and quasars.**

Unlike optical telescopes, **radio telescopes can detect invisible gas** and, therefore, they can **reveal areas of space that may be obscured by cosmic dust.**

Cosmic dust consists of tiny particles of solid material floating around in the space between the stars.

Since the first radio signals were detected in the 1930s, astronomers have used radio telescopes to detect **radio waves** emitted by different objects in the universe and explore it.

According to the **National Aeronautics and Space Administration (NASA)**, the field of **radio astronomy evolved after World War II** and became one of the most important tools for making astronomical observations.

The Arecibo Telescope:

The Arecibo telescope in Puerto Rico, which was **the second-largest single-dish radio telescope** in the world, collapsed in December 2020.

China's **Sky Eye** is the world's largest single-dish radio telescope.

The telescope **was built in 1963.**

Because of its powerful radar, scientists employed it to **observe planets, asteroids and the ionosphere, making several discoveries** over the decades, including **finding prebiotic molecules in distant galaxies, the first exoplanets, and the first-millisecond pulsar.**

Square Kilometer Array (SKA) Telescope:

Location:

The telescope, proposed to be the largest radio telescope in the world, will be **located in Africa and Australia.**

Development:

The development of SKA will use the results of various surveys undertaken using another powerful telescope called the **Australian Square Kilometre Array Pathfinder (ASKAP).**

ASKAP is developed and operated by the Australia's science agency **Commonwealth Scientific and Industrial Research Organisation (CSIRO).**

This telescope, which has been fully operational since February 2019 **mapped over three million galaxies** in a record 300 hours during its first all-sky survey conducted late

last year.

ASKAP surveys are **designed to map the structure and evolution of the Universe,** which it does by observing galaxies and the hydrogen gas that they contain.

Maintenance:

Its operation, maintenance and construction will be overseen by **SKAO.**

Cost and Completion:

The completion is expected to take nearly a decade at a cost of over **1.8 billion pounds.**

Significance:

Some of the questions that scientists hope to address using this telescope:

The **beginning of the universe.**

How and when the first stars were born.

The **life-cycle of a galaxy.**

Exploring the possibility of **detecting technologically-active civilisations elsewhere** in our galaxy.

Understanding where **gravitational waves** come from.

Function:

As per NASA, the telescope will accomplish its scientific goals by **measuring neutral hydrogen over cosmic time,** accurately **timing the signals from pulsars in the Milky Way,** and **detecting millions of galaxies out to high redshifts.**

6.4 Hydrogen – the clean fuel for future

Recently, researchers at the **Indian Institute of Technology, Delhi (IIT-D)** have come up with a way to **generate clean fuel hydrogen from water at a low-cost.**

It is a significant step towards efforts across the globe that are being made to look for cleaner and greener energy sources.

Hydrogen gas is a viable choice as **a renewable substitute for fossil fuels,** and can help **mitigate emissions to reduce pollution.**

The researchers at IIT-D have successfully split water by a process known as **Sulphur-Iodine (SI) thermochemical hydrogen cycle (SI Cycle)** to **generate low-cost,** clean hydrogen fuel for industrial consumption.

Generally in **SI Cycle, the separation of Hydrogen from oxygen requires a high**

amount of heat (generally from non-renewable sources such as coal, oil and natural gas). This makes the large-scale production of hydrogen gas economically non viable and non environment friendly.

The main achievement has been **designing a suitable catalyst** for the energy intensive, corrosive step of sulphuric acid conversion to sulphur-dioxide and oxygen.

Sulfur-Iodine Cycle

Process:

The sulfur–iodine cycle **(SI cycle)** is a three-step **thermochemical cycle** used to produce hydrogen. In this cycle, all the chemicals are recycled. The SI process requires an efficient source of heat.

Heat enters the cycle in high-temperature endothermic chemical reactions in the initial process and heat exits the cycle in the low-temperature exothermic reaction in the final stage of obtaining hydrogen gas.

Three-Step Thermochemical Cycle:

Step 1: Iodide (I2) is reacted with Sulphur dioxide (SO2) to produce Hydriodic acid (HI) and Sulphuric acid (H2SO4).

I2 + SO2 + 2 H2O → 2 HI + H2SO4

Step 2: The water, SO2 and residual H2SO4 is separated from the oxygen byproduct by condensation so as to obtain Hydriodic acid (HI).

2 H2SO4 → 2 SO2 + 2 H2O + O2

Step 3: It is the Hydriodic acid (HI) from which Hydrogen gas (H2) is obtained.

2 HI → I2 + H2
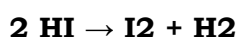
The difference between the heat entering and leaving the cycle exits the cycle in the form of the heat of combustion of the hydrogen produced.

Major **challenges** of the sulfur–iodine cycle are to **reduce the surplus of water** and iodine and find separation **processes that consume less energy** than distillation.

Traditionally development of the SI cycle has been pursued by several countries for hydrogen production with the **Generation IV nuclear reactors.**

Significance of the Discovery

Enhancing Hydrogen Fuel Cell Technology:

Enabling availability of of low cost hydrogen through this discovery will enhance and improve the application of **Hydrogen fuel cell technology** which offers the

advantages of a clean and reliable alternative energy source to applications such as – electric vehicles, primary and backup power for a variety of commercial, industrial, and residential buildings; and more futuristic-sounding applications like air taxis.

A hydrogen fuel cell is an electrochemical power generator that combines hydrogen and oxygen to produce electricity, with water and heat as by-products.

Help Adhering Emission Targets:

It could help India to adhere to its commitment in the **Paris Climate Agreement** and its **Intended Nationally Determined Contribution (INDC) Targets** and ensure that its mobility in the future is with zero emissions.

Complements FAME India Scheme:

It will complement the implementation of the **FAME India Scheme** launched with the objective to support hybrid/electric vehicles market development and manufacturing ecosystem.

Advantages of Hydrogen as Fuel:

Environment Friendly:

The advantage of using hydrogen as an energy carrier is that when it combines with oxygen **the only byproducts are water and heat.**

No greenhouse gasses or other particulates are produced by the use of hydrogen fuel cells.

Non Toxic:

Hydrogen is a non-toxic substance that is rare for a fuel source. It is environmentally friendly and does not cause any harm or destruction to human health.

Highly Efficient:

Hydrogen is an efficient energy type since it has the ability to convey a lot of energy for every pound of fuel compared to diesel or gas.

Ideal Spaceship Fuel:

Hydrogen energy's efficiency and power make it an ideal fuel source for spaceships. Its power is so high that it's able to quickly rocket spaceships to exploration missions.

Disadvantages of Hydrogen as fuel

Compared to gas, hydrogen lacks smell, which makes any **leak detection almost impossible.**

Hydrogen is a highly flammable and volatile substance, its potential dangers make

its **transportation and storage very challenging.**

6.5 MPS II (Hunter Syndrome)

Two brothers suffering from **Mucopolysaccharidosis II or MPS II (Hunter Syndrome, Attenuated Type)** have approached the Delhi High Court seeking direction to the Centre and AIIMS to provide them free treatment.

MPS II is a rare disease that is passed on in families.

MPS II mostly **affects boys** and their bodies **cannot break down a kind of sugar** that **builds bones, skin, tendons and other tissues.**

Cause: It is **caused by changes (mutations) of the** *IDS* **gene** that regulates the production of the iduronate 2-sulfatase (I2S) enzyme.

This enzyme is **needed to break-down complex sugars,** known as **glycosaminoglycans (GAGs),** produced in the body.

Impact: Lack of I2S enzyme activity **leads to the accumulation of GAGs within cells,** specifically inside the **lysosomes.**

Lysosomes are compartments in the cell that **digest and recycle different types of molecules.**

Conditions that cause molecules to build up inside the lysosomes, including MPS II, are called **lysosomal storage disorders.**

The accumulation of GAGs increases the size of the lysosomes, which is why **many tissues and organs are enlarged in this disorder.**

Symptoms: It is characterized by **distinctive facial features, a large head, enlargement of the liver and spleen (hepatosplenomegaly),** hearing loss, etc.

Inheritance:

MPS II is inherited in an X-linked recessive pattern, which means that this condition occurs almost exclusively in males. **Females are generally unaffected carriers of this condition.**

In a family with more than one affected individual, the mother of the affected males must be a carrier. When a carrier female has a child, there is a 25% (1 in 4) chance that she will have an affected son.

Rare Diseases

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

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

Though rare diseases are of low prevalence and individually rare, collectively they **affect a considerable proportion of the population.**

80% of rare diseases are genetic in origin and hence disproportionately impact children.

Recently, the Delhi High Court has directed the Centre to **finalise the National Health Policy for Rare Diseases of 2020** by March 2021 and **make operational provision of crowdfunding** envisaged under the law for treatment of high-cost rare diseases.

6.6 Bengaluru scientists develop a new marigold variety

New variety of marigold developed by the Hessarghatta-based Indian Institute of Horticultural Research (IIHR) will fetch money even if they get spoilt as it can be used for extraction of crude carotene, which is mainly used in the pharmaceutical sector.

Generally, flowers lose their value if they get spoilt either due to rain or delay in harvest.

CAROTENE

All marigolds have a carotene content of up to 1.4%.

Arka Shubha variety of marigold has a carotene content of 2.8%, which is the highest content from a plant source.

These flowers can be sold for **ornamental purpose** too. Farmers consider this variety purely for extraction of carotene.

There is always a **high demand for carotene in the pharma sector**. Presently, India imports most of its carotene from China and other countries.

It is better to take up the carotene extraction venture through farmers' groups as a large area is needed for marigold cultivation. This also provides scope for exports.

The **Arka Shubha variety is of use in the poultry sector as well.**

Its petals could be used as feed to get quality yolk, she said. It is used as feed for sheep too.

6.7 India to formulate policy to develop new battery tech for EVs

India will work out a policy to institutionalise research and development on the next

generation of battery technologies for electric vehicles, like metal-ion, metal air, hydrogen fuel cell, etc, to replace lithium-ion batteries and reduce India's dependence on other countries for its import within this decade.

INTEGRATED APPRAOCH:

Union Minister for Road Transport & Highways recently said that an integrated approach, with all key arms of the government working in tandem, to develop the next generation technology will require a policy and work on that has started.

The challenge that we currently face as a nation is the control on strategic reserves on lithium.

It is hence imperative for us to look for alternative technologies, like metal-ion and metal-air, using metals such as aluminium, zinc, iron-ore etc.

Minister said that work on these areas has been happening in silos. "We will now work in an integrated and concerted manner bringing together the best technologies.

India will also focus on economic viability and will need a policy in this regard and for it we have decided to take an integrated approach.

Most of us have come to realise that for lithium supply we are going to be dependent on one or two countries in the future. That can actually create some strategic issue with the country.

China is currently the leader in supplying lithium-ion batteries to the world, and India's EV industry is heavily dependent on import of the batteries.

China also has stakes in strategic reserves of lithium mines in other countries. The move to boost R&D on battery technology is significant in this context.

The various agencies made presentations on their projects and roadmap on battery technologies like lithium-ion, metal-ion, sodium sulphur, hydrogen, iron sulphur, polymer electrolyte membrane cell system, zinc gel, etc.

DRDO in its presentation showed how technology transfer has resulted in manufacture of 400 batteries of 120 MW by some institutes, and added that mass production could reduce its prices.

NITI Aayog said it has collaborated with four IITs including Guwahati and Delhi for research in aluminium-ion battery.

CEO Amitabh Kant said that India should concentrate on lithium-ion alternative batteries and mining sector companies should explore opportunities abroad for acquiring

assets in this regard.

6.8 Excessive alcohol can cause irreversible changes to DNA'

A study by the National Institute of Mental Health and Neuro Sciences (**NIMHANS**) in Bengaluru has debunked the assumption that damage to health from excessive consumption of alcohol can be reversed if one stops drinking.

IRREVERSIBLE DAMAGE:

Excessive alcohol consumption can cause irreversible changes to the **DNA** and these can persist even when alcohol is no longer consumed, revealed a study conducted by a team of researchers at NIMHANS.

The study has been published online in the American Journal of Medical Genetics.

Although we inherit genes from our parents, their expression is regulated in a unique manner in each person, and may be influenced by their lifestyle.

Exposure to alcohol affects the pattern of gene expression, and may explain some of the systemic complications.

We find that the chemical changes in the DNA associated with excessive alcohol consumption may not be reversed.

Researchers analysed the DNA chemistry of individuals who had been drinking on an average **of 10 drinks/day**.

The effects of alcohol were more pronounced in those who had started drinking at an early age.

This suggests that starting to drink early may physically alter many genes, including those of the brain.

6.9 A puppet master with a chip in the brain

When tradition meets modernity, the result can sometimes be amazing. A puppet with robotic movements may not sound very charming but in a melding of traditional art and cutting edge technology, a shadow leather puppet in Kerala's famous temple art **Tholpavakkoothu** is being animated by a robot.

FIRST ROBOTIC LEATHER PUPPET

For the first time, the famous shadow leather puppets will tell stories of the epic Ramayana with the help of robots.

People from Harishree Kannan Tholpavakkoothu Kala Kendra, Koonathara, are set to animate their leather puppets using robotics with help from Inker Robotics.

The first robotic leather puppet was installed at the **Palakkad District Heritage Museum,** which was inaugurated by Minister for Museums Kadannappally Ramachandran recently.

Although there is a wide variety of art and cultural symbols showcasing the rich cultural heritage of Palakkad at the museum, the shadow leather puppets installed have been a big draw with visitors with their robotic movements.

The most difficult part of Tholpavakkoothu is the limb movements of the puppets. These are now being controlled through robotics.

6.10 Hydrogen as the future energy

Minister of Petroleum and Natural Gas & Steel signed the **Statement of Intent between IndianOil Corp. Ltd. and M/s Greenstat Hydrogen India Pvt. Ltd**., a subsidiary of Greenstat Norway for setting up of Centre of Excellence on Hydrogen.
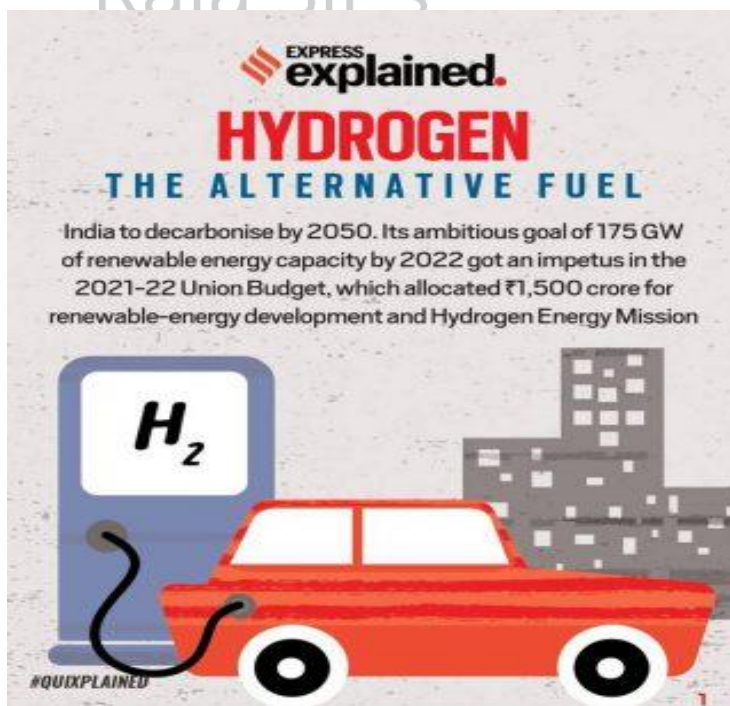
This association aims to develop a **Center of Excellence on Hydrogen (CoE-H)** including CCUS and Fuel Cells by IndianOil and M/s Greenstat for clean energy in cooperation with Indo-Norwegian Hydrogen Cluster companies/organizations.

CENTER OF EXCELLENCE ON HYDROGEN (COE-H)

The CoE-H will **facilitate transfer and sharing of technology**, know-how and experience through the green Hydrogen value chain and other relevant technologies including hydrogen storage and fuel cells.

The CoE-H will be a vehicle for **promoting R&D projects in Green and Blue Hydrogen** between Norwegian and Indian R&D institutions/universities.

Working closely with Industry and Governments on both sides, CoE-H will be levering its intellectual strengths in **developing cost-efficient and scalable and sustainable technological** solutions.

The CoE will also **pilot fuel cell research**. The institute will also act as a think-tank towards developing codes and standards for best industrial practices, safety, product protocols and regulations in the area of hydrogen and fuel cells.

The partnership between IndianOil and Greenstat will actively assist partners/stakeholders to develop business models based upon feasibility studies besides facilitating consultancies to industry, **utilities and regulators on hydrogen storage, hydrogen production, refueling stations, fuel cells and CCUS technologies.**

HYDROGEN- FUTURE ENERGY

Government of India is giving to exploration of new and emerging forms of energy.

India is the third-largest energy consumer with growing energy demand, making it the place to be, for any energy entrepreneur in any part of the globe.

Prime Minister had highlighted the **importance of niche renewable technologies** like hydrogen in the renewable energy mix. Pursuant to that, launch of the National Hydrogen Energy Mission was announced in the budget 2021-22.

The National Hydrogen Energy Mission aims to lay down the Government of India's vision, intent and direction for hydrogen energy, strategies and approaches for realizing the vision.
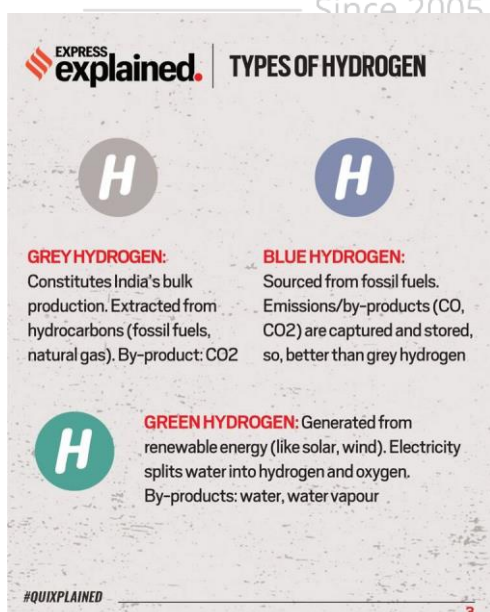
A pilot project for **blending hydrogen with compressed natural gas** for use as transportation fuel is running at Rajghat Bus depot in Delhi.

Under this pilot, 50 buses in Delhi are plying on blended Hydrogen in Compressed Natural Gas and result are extremely encouraging.

Express explained. | TYPES OF HYDROGEN

GREY HYDROGEN: Constitutes India's bulk production. Extracted from hydrocarbons (fossil fuels, natural gas). By-product: CO_2

BLUE HYDROGEN: Sourced from fossil fuels. Emissions/by-products (CO, CO_2) are captured and stored, so better than grey hydrogen

GREEN HYDROGEN: Generated from renewable energy (like solar, wind). Electricity splits water into hydrogen and oxygen. By-products: water, water vapour

#QUIXPLAINED

3

6.11 NASA's Perseverance rover lands on Mars: Will search for signs of life, to collect rock samples

NASA's Perseverance rover has successfully landed on Mars, and it is the most advanced rover that the US space agency has sent to the red planet till date.

NASA confirmed the successful touchdown in mission control at its Jet Propulsion Laboratory (JPL) in Southern California.

PERSEVERANCE

The Perseverance rover is first in this journey and different and from any other Mars mission because this one will try and collect Mars sample, which would later be brought back to Earth.

Getting these samples back to Earth won't happen before 2031, and NASA is collaborating with its various centres and the European Space Agency (ESA) in order for this mission to succeed.

The rover is focused on **astrobiology**, or the study of life throughout the universe.

Perseverance is the **size of a car**, 203-day journey and is about the size of a car, and weighs 2,263-pound (1,026-kilogram). **It is the largest one that NASA has sent to the planet till date.**

The rover has seven primary science instruments. It also has the most cameras ever sent to Mars, and has a "complex sample caching system", according to NASA.

Mastcam-Z is a pair of zoomable science cameras on Perseverance's head. These can create high-resolution, colour 3D panoramas of the Martian landscape, according to NASA.

The **rover also has an 'Ingenuity Mars Helicopter' on its belly**, which will "attempt the first powered, controlled flight on another planet.

PERSEVERANCES IS SEARCHING FOR SIGNS OF LIFE

The Mars rover is not just collecting sample rocks to bring back to Earth, but it is also the **first rover actively looking for sciences of microbial life on the planet.**

The rover landed at the Jezero crater, believed to be an ancient lakebed and river delta. (According to NASA's press statement, scientists have determined that 3.5 billion years ago, Jezero crater had its own river delta and was filled with water. Hence, this area could be vital in the search for signs of ancient microbial life.)

It will undergo several weeks of testing from NASA's Mission control and after that it

will explore the Jezero Crater on Mars, where it landed.

Another instrument on Perseverance will **try and manufacture oxygen out of the thin air. This one is called Mars Oxygen In-Situ Resource Utilization Experiment or MOXIE.** (This is crucial because the planet's atmosphere is mostly carbon dioxide and future human missions will need

6.12 Scientist from IIT Kanpur develops washable adhesive and related products

Scientists have developed a **sticky mat which takes away dust from a contacting surface**, ensuring a clean, hygienic, healthy, and refreshing atmosphere at our home, offices, hospitals, and laboratories as also smooth functioning of many expensive equipments.

The mat is a **low-cost one and remains washable and usable** over many cycles.

MAKE IN INDIA INITIATIVE:

Prof Animangsu Ghatak from the Department of Chemical Engineering IIT Kanpur, who developed the mat with the **support of Department of Science & Technology, Government of India under Make in India initiative**, took inspiration from adhesive pad present at the feet of wall climbing animals, like house lizards.

The adhesive associated makes use of nanoscopic pyramidal bumps on its surface to attract dust particles towards it, thereby cleaning the sole of our shoes when we step on it.

When the adhesive gets completely covered with particulate matter, it is washed in a way that we wash our clothes.

At this, the surface gets back its **ability to stick and remains usable** through hundreds of such cycles.

USAGE:

The scientists have used a **bottom-up approach of preparation of nano- to micro-patterned surface on elastomer over a large area**, control of geometry of surface patterns by simple methods, washability, and reusability of the adhesive over many cycles for the development of this mat.

It has been validated, and an Indian patent application has been filed for the sticky mat. It is simple to prepare, easy to wash, environmentally benign, cost-effective, and can

be a replacement for materials imported for the same purpose.

The closest substitute is the **3M sticky pad** that is not washable or reusable.

This mat can be used in ICU of Hospitals, clean rooms, facilities housing sophisticated equipment as a component of air filters.

The technology is important wherever cleanliness and hygiene is desired. The product is in **7 – 8 level of technology**readiness level and is yet to be commercialised. A pilot plant is being built to make the material in a scale larger.

6.13 Genetically Modified Organisms as Imported Food Crops

The **Food Safety and Standards Authority of India (FSSAI)** in a recent order has set 1% threshold for **Genetically Modified Organisms (GMO)** in food crops imported into India.

Earlier in August 2020, FSSAI had issued the order that 24 food crops the country imports would need a **'non-GM-origin-cum-GM-free certificate'** issued by a competent authority.

Genetically Modified Organisms (GMOs):

These are **living organisms whose genetic material has been artificially manipulated** in a laboratory through **genetic engineering.**

This creates combinations of plant, animal, bacteria, and virus genes that do not occur in nature or through traditional crossbreeding methods.

Genetically Modified Crops:

Conventional plant breeding involves crossing of species of the same genus to provide the offspring with the desired traits of both parents.

Genus is a class of items such as a group of animals or plants with similar traits, qualities or features.

Bt cotton is the only Genetically Modified (GM) crop that is allowed in India. It has alien genes from the soil bacterium *Bacillus thuringiensis (Bt)* that allows the crop to develop a protein toxic to the common pest **pink bollworm.**

Herbicide Tolerant Bt (Ht Bt) cotton, on the other hand is derived with the insertion of an additional gene, from another soil bacterium, which allows the plant to resist the common herbicide glyphosate.

In **Bt brinjal**, a gene allows the plant to resist attacks of fruit and shoot borers.

In **DMH-11 mustard**, genetic modification allows cross-pollination in a crop that self-pollinates in nature.

Legal Position of GM crops in India:

In India, the **Genetic Engineering Appraisal Committee (GEAC)** is the apex body that allows for commercial release of GM crops.

Use of the unapproved GM variant can attract a jail term of 5 years and fine of Rs. 1 lakh under the **Environment Protection Act, 1986.**

Regulation of Imported Crops:

The task of regulating GMO levels in **imported consumables** was **initially with the Genetic Engineering Appraisal Committee (GEAC).**

Its role was diluted with the enactment of the **Food Safety and Standards Act, 2006** and **FSSAI was asked to take over approvals of imported goods.**

SOCIAL ISSUES AND DEVELOPMENT

7.1 Allocation Of Rs 24,435 crore Hike in WCD budget, Mission Poshan 2.0 launched

The Ministry of Women and Child Development has received a 16 per cent increase in its budget allocation this year with a sum of Rs 24,435 crore announced Monday.

Finance Minister further announced that supplementary nutrition schemes were being merged with the Poshan Abhiyan to launch Mission Poshan 2.0.

NATIONAL NUTRITION MISSION

Government is implementing several schemes and programs under the Umbrella Integrated Child Development Services Scheme as direct targeted interventions to address the problem of malnutrition in the country.

All these schemes address one or other aspects related to nutrition and have the potential to improve nutritional outcomes in the country.

POSHAN Abhiyaan (National Nutrition Mission) is a flagship programme of the Ministry of Women and Child Development (MWCD), Government of India, which ensures convergence with various programmes i.e., Anganwadi Services, Pradhan Mantri Matru Vandana Yojana (PMMVY), Scheme for Adolescent Girls (SAG) of MWCD Janani Suraksha Yojana (JSY), National Health Mission (NHM), Swachh-Bharat Mission, Public Distribution System (PDS), Department Food & Public Distribution, Mahatma Gandhi National Rural

Employment Guarantee Scheme (MGNREGS) and Ministry of Drinking Water & Sanitation.

The goals of NNM are to achieve improvement in nutritional status of Children from 0-6 years, Adolescent Girls, Pregnant Women and Lactating Mothers in a time bound manner during the next three years beginning 2017-18.

MISSION POSHAN 2.0

Out of the allocation for the ministry this year, the highest amount has been allocated to Mission Poshan 2.0 and Saksham Anganwadi scheme — Rs 20,105 crore.

Poshan 2.0 now combines the Integrated Child Development Services (ICDS), Anganwadi services, Poshan Abhiyan, Scheme For Adolescent Girls and National Creche Scheme.

The allocation for social services sector, which includes nutrition and social security and welfare, has been increased from Rs 2,411.80 crore in 2020-21 to Rs 3,575.96 crore.

Schemes like Beti Bachao Beti Padhao, One Stop Centres, Swadhar Greh, Child Protection, Pradhan Mantri Matru Vandana Yojana, Scheme for Adolescent Girls and Ujjawala have not been allocated anything in this budget.

The budget of the ministry's autonomous bodies — National Institute of Public Cooperation and Child Development, Central Adoption Resource Agency, National Commission for Protection of Child Rights, National Commission for Women and Central Social Welfare Board — have been increased.

ENHANCING NUTRITIONAL CONTENT

The budget for Mission for Protection and Empowerment of Women has been drastically reduced from Rs 726 crore to Rs 48 crore.

The launch of Mission Poshan 2.0 by merging the supplementary nutrition programme and Poshan Abhiyan is a great step to strengthen the country's public health as the mission intends to enhance the nutritional content delivery and the outreach.

NFHS-5 data shows the significance of nutrition more than ever before as the nutrition indicators have not fared well.

We recognise that malnutrition is a complex condition that can involve multiple factors.

Therefore, to reduce multiple forms of malnutrition, more nutrition specific and nutrition sensitive interventions should be targeted.

7.2 Marriage age: SC to study plea to transfer HC cases to itself

The Supreme Court decided to examine a plea to transfer to itself cases pending in the Delhi and Rajasthan High Courts to declare a "uniform minimum age" for marriage.

A Bench led by Chief Justice of India Sharad A. Bode issued notice to the government on the plea by advocate Ashwini Kumar Upadhyay, who argued that it was filed to "secure gender justice, gender equality, and dignity of women".

Various laws state that the minimum age to get married should be 18 for women and 21 for men.

"Petitioner is compelled to approach this court as more PILs may be filed seeking 'Uniform Minimum Age of Marriage for Men and Women'.

Therefore, to avoid multiplicity of the litigations, the Court may be pleased to transfer these PILs and decide them collectively.

It sought a direction to the Union government to remove the anomalies in the minimum age of marriage and make it 'gender-neutral, religion-neutral and uniform for all citizens'.

WHAT'S THE CHILD MARRIAGE RATE? HOW BIG OF AN ISSUE IS CHILD MARRIAGE?

27% of girls in India are married before their 18th birthday and 7% are married before the age of 15. 4% of boys were married off before their 18th birthday.

India has the highest absolute number of women married or in a union before the age of 18 in the world – 15,648,000.

Child marriage is more prevalent in rural areas than in urban areas and, in general, rates of child marriage are highest in the central and western parts of India.

For instance, child marriage rates in districts of Rajasthan and Bihar range from 47% to 51%.

ARE THERE COUNTRY-SPECIFIC DRIVERS OF CHILD MARRIAGE IN THIS COUNTRY?

Child marriage is driven by gender inequality and the belief that girls are somehow inferior to boys.

In India, child marriage is also driven by:

Harmful traditional practices: Patriarchal social norms consider that married women and girls belong to their husband's family and women are generally seen as an

economic burden. Girls are expected to be adaptable, docile, hardworking and talented wives. Customary laws based on religion are a major barrier in ending child marriage in India.

Control over girls' sexuality: Until a daughter is married, her chastity is considered to be a marker of her father's honour. This motivates men to marry off their daughters early. Social pressure to marry at puberty can be enormous within certain castes. Some girls are promised in marriage before they are born in order to "secure" their future. Once they reach puberty, gauna or "send-off" ceremonies take place and they are sent to their husband's home to commence the married life.

Poverty: Child marriage is more common among poorer households, with many families marrying off their daughters to reduce their perceived economic burden. Girls are often married off at a young age because less dowry is expected for younger brides.

Level of education: Women with no education are six times more likely to get married than those with ten years education or more. Many families consider girls to be paraya dhan (someone else's wealth). This means that a girl's productive capacities benefit her marital family, and educating daughters is therefore seen as less of a priority than educating sons, who are responsible for taking care of their biological parents in old age. Further, given a lack of jobs and employment opportunities, there is a low value for education especially in rural areas where distance and low quality of education are active barriers to girls' education beyond middle school.

Household labour: Girls are often married off at puberty when they are deemed most "productive" and can take care of children and conduct housework. The labour of young brides is central to some rural economies.

Violence against girls: Some girls are married off due to lack of safety and fear of violence against women and girls in public spaces, with many cases of being reported every day. However, a 2014 study found that child brides in India are at greater risk of sexual and physical violence within their marital home.

Poor law enforcement: There are persisting legal loopholes that fuel impunity for child marriage. There is also low awareness of the law and barriers to access justice for women and girls.

WHAT HAS THIS COUNTRY COMMITTED TO?

India has committed to eliminate child, early and forced marriage by 2030 in line

with target 5.3 of the Sustainable Development Goals.

The government did not provide an update on progress towards this target during its Voluntary National Review at the 2017 High Level Political Forum.

India acceded to the Convention on the Rights of the Child in 1992, which sets a minimum age of marriage of 18, and ratified the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) in 1993, which obligates states to ensure free and full consent to marriage.

During its 2017 Universal Periodic Review, India agreed to consider recommendations to improve enforcement of legal provisions against child marriage.

India is also a member of the South Asian Initiative to End Violence Against Children (SAIEVAC), which adopted a regional action plan to end child marriage from 2015 – 2018.

Representatives of the South Asia Association for Regional Cooperation (SAARC), including India, asserted the Kathmandu Call to Action to End Child Marriage in Asia in 2014. As part of its commitment, India will ensure access to legal remedies for child brides and establish a uniform minimum legal age of marriage of 18. However as of 2020, the legal age for boys remains at 21 years.

In 2019, at the Nairobi Summit on ICPD25, India committed to address all forms of violence against all women and girls, but without mention of child marriage.

WHAT IS THE GOVERNMENT DOING TO ADDRESS THIS AT THE NATIONAL LEVEL?

A National Action Plan to prevent child marriages was drafted by the Ministry of Women and Child Development in 2013, but it was shelved with the change of government in 2014. Key components included law enforcement, changing mind-sets and social norms, empowering adolescents, quality education and sharing knowledge.

India is a focus country of the UNICEF-UNFPA Global Programme to Accelerate Action to End Child Marriage, a multi-donor, multi-stakeholder programme working across 12 countries over four years. In 2018, the Global Programme reached almost 2.3 million girls through adolescent groups, which enabled their participation in and access to health information and life skills training.

Due to its decentralised governance structure, in recent years there has been more initiatives at the state level with the development of action plans. Whilst some states have

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taken limited action, Rajasthan, one of the states with the highest prevalence of child marriage, launched a Strategy and Action Plan for the Prevention of Child Marriage in March 2017 and a large-scale advocacy campaign.

In 2018, Jharkhand state developed a state action plan to end child marriage and Bihar state launched a Strategy and Action Plan for the Prevention of Child Marriage. As part of it, 101 public servants were trained as Child Marriage Prohibition Officers, and task forces were set up to increase awareness and reporting of cases of child marriage.

West Bengal also has a state plan of action for children, which includes child marriage. Other states, including Gujarat and Odisha, consolidated child protection schemes in 2018.

Previous governmental schemes have included cash incentives (such as the Dhan Laxmi scheme and the Apni beti apna dhun programme), adolescents' empowerment programmes (Kishori Shakti Yojana) and awareness-raising to encourage behaviour change related to child marriage.

WHAT IS THE MINIMUM LEGAL FRAMEWORK AROUND MARRIAGE?

According to the Prohibition of Child Marriage Act 2006 the minimum legal age of marriage in India is 18 years for girls with no exceptions. For boys, the legal age of marriage is 21.

There have been a number of court cases in recent years where petitioners have argued that the provisions of the Prohibition of Child Marriage Act do not apply to Muslims as marriages between Muslims are governed by Muslim Personal Law under the Muslim Personal Law (Shariat) Application Act, 1937.

In 2017, the Supreme Court of India indicated that the Prohibition of Child Marriage Act 2006 has priority over personal laws.

7.3 Working on umbrella scheme to address issues of transgender community: Govt

The government is working on an umbrella scheme to address issues of access to health, education, welfare, skill upgradation, shelter, and economic support and livelihood for the transgender community.

Government had enacted the Transgender Persons (Protection of Rights) Act, 2019 for the welfare of the community.

TRANSGENDER PERSONS (PROTECTION OF RIGHTS) ACT, 2019:

The Transgender Persons (Protection of Rights) Act, 2019 is an act of the Parliament of India with the objective to provide for protection of rights of transgender people, their welfare, and other related matters.

The Bill defines a transperson as someone whose gender does not match the one assigned at birth.

It prohibits discrimination against them in employment, education, housing, healthcare and other services.

The Bill allows self perception of gender identity. But it mandates that each person would have to be recognised as 'transgender' on the basis of a certificate of identity issued by a district magistrate.

CRITICISM BY ACTIVISTS

1) The Bill states that transgender persons will have the right to "self-perceived" gender identity.

Activists- Change of gender identity in documents cannot be done without a certification by the District Magistrate after proof of a sex reassignment surgery is provided.

2) The Bill enforces a minor's right of residence compelling any transperson below 18 to cohabit with their natal family.

Activists- Families are often a source of gruesome violence against the trans community leading them to separate from the natal family.

3) The Bill criminalises begging.

Activists- It does not offer reservations for employment and education.

4) The Bill strongly focuses on transwomen and hijras.

Activists- There is little emphasis on the intersex, gender queer and even transmen.

Note:

Act deals with the issue of grant of identity certificates and lays down a streamlined procedure for it, besides making provisions for non-discrimination, equal opportunities in employment, schemes on education, social security and accessible healthcare for the community.

National portal, launched by the ministry in November last year, enabled the transgender community to apply for identity certificates from the District Magistrate

concerned, and the portal has received 259 applications so far.

Government has constituted a National Council for Transgender Persons – a platform for the representatives of the community — to act as an apex body to address the community's concerns.

The Council is headed by the Minister of Social justice and Empowerment and draws participation from the Ministry of Health and Family Welfare, Home Affairs, Housing and Urban Affairs, Education, Rural Development, Labour and Employment, Legal Affairs, Niti Aayog, etc.

Government has provided for one-time assistance of Rs 1,500 for each member of the community through the NCBCFDC during the pandemic, and 5,711 people have benefited from direct transfers.

Ration kits were distributed through the district administration and medical camps were also organised in eight states which were attended by 1,005 people.

7.4 Maternal welfare scheme beneficiaries cross 1.75 crore

The government's maternity benefit scheme, or Pradhan Mantri Matru Vandana Yojana, has crossed 1.75 crore eligible women till financial year 2020, the Centre informed Parliament.

A total sum of ?5,931.95 crore was paid to 1.75 crore eligible beneficiaries between financial year 2018 and 2020.

Apart from that, ?2,063.70 crore was disbursed in the current fiscal to 65.12 lakh women, Minister for Women and Child Development Smriti Irani informed the Rajya Sabha.

PRADHAN MANTRI MATRI VANDANA YOJANA:

Pradhan Mantri Matri Vandana Yojana (PMMVY) is a maternity benefit program run by the government of India.

It was introduced in 2017 and is implemented by the Ministry of Women and Child Development.

It is a conditional cash transfer scheme for pregnant and lactating women of 19 years of age or above for the first live birth.

It provides a partial wage compensation to women for wage-loss during childbirth and childcare and to provide conditions for safe delivery and good nutrition and feeding

practices.

In 2013, the scheme was brought under the National Food Security Act, 2013 to implement the provision of cash maternity benefit of ?6,000 (US$84) stated in the Act.

Presently, the scheme is implemented on a pilot basis in 53 selected districts and proposals are under consideration to scale it up to 200 additional 'high burden districts' in 2015–16.

The eligible beneficiaries would receive the incentive given under the Janani Suraksha Yojana (JSY) for Institutional delivery and the incentive received under JSY would be accounted towards maternity benefits so that on an average a woman gets ?6,000 (US$84).

The scheme, rechristened Maternity benefits programme is set to cover the entire nation.

Prime Minister, in his 2017 New Year's Eve speech, announced that the scheme will be scaled up to cover 650 districts of the country.

The announcement assumes significance as India accounts for 17% of all maternal deaths in the world.

The country's maternal mortality ratio is pegged at 113 per 100,000 live births, whereas infant mortality is estimated at 32 per 1,000 live births.

Among the primary causes of high maternal and infant mortality are poor nutrition and inadequate medical care during pregnancy and childbirth.

BENEFITS

Disaggregated data on how many of these were unique beneficiaries, and how many were those receiving different instalments of the scheme was not provided.

According to the government's initial estimate, it aimed to reach 51.7 lakh women per year through the scheme.

Under PMMVY, pregnant women and lactating mothers receive ?5,000 on the birth of their first child in three instalments, after fulfilling certain conditionalities.

The direct benefit cash transfer is to help expectant mothers meet enhanced nutritional requirements as well as to partially compensate them for wage loss during their pregnancy.

7.5 Men access mental health helpline more

The 'Kiran' Helpline service was set up by the Social Justice and Empowerment

Ministry.Seventy per cent of callers to a mental health rehabilitation helpline launched, in September 2020 by the Social Justice and Empowerment (SJE) Ministry,mwere men according to an internal report of the Ministry accessed by About 32% of those who reached out were students.

The Kiran helpline (1800-599-0019) of the Department of Empowerment of Persons with Disabilities (DEPwD) of the Ministry was launched on September 7 by SJE Minister

The majority of callers (75.5%) were in the age group of 15 to 40 years, while 18.1% were older, in the 41 to 60 age group,

The callers, the report said, 65.9% had "milder nature of distress", while 26.5% were "moderately distressed" and 7.6% were "severely distressed". The report said 32.3% of the callers were students, 15.2% were self-employed, 27.1% were employed, 23.3% were unemployed, 1.4% were home-makers and 0.7% did not reveal the information.

While most of the callers (78.2%) sought help for themselves, others reached out for their parents, siblings, spouse and others.

Most of the calls were from the North zone (40.32%), followed by West (27.08%), South (16.99%), East (11.28%) and North East (4.33%), the report said.

Speaking to The Hindu on condition of anonymity, a clinical psychologist of the DEPwD working on the helpline said most of the calls had been from "young adults".

The 24/7 helpline offers early screening, psychological first-aid, psychological support, distress management, mental well-being, psychological crisis management services and referrals to mental health experts and is operated by 81 front-line professionals, apart from volunteer psychiatrists, clinical and rehabilitation psychologists, the Ministry report said.

Issues/Challenge

High Public Health Burden: An estimated **150 million people** across India are in need of mental health care interventions, according to India's latest National Mental Health Survey 2015-16.

Lack of Resources:

Low proportion of mental health workforce in India (per 100,000 population) include psychiatrists (0.3), nurses (0.12), psychologists (0.07) and social workers (0.07).

Low financial resource allocation of just over a percent of GDP on healthcare has created impediments in public access to affordable mental healthcare.

Loss to Economy: due to delayed or non treatment of mentally ill persons there is loss in terms of human capital and an overall loss to the economy in the form of lost man-days, plus the poor is stressed as most of mental healthcare is in urban areas and are unavailable in primary healthcare centres in rural areas, this increases out of pocket expenditure.

Demographic Dividend: According to WHO, the burden of mental disorders is maximal in young adults, As most of the population is young (India has more than 50% of its population below the age of 25) so it requires a special focus in mental health of youth by the government to reap the benefits arising out of the demographic dividend in India.

Post-Treatment gap: There is need for proper rehabilitation of the mentally ill persons post his/her treatment which is currently not present.

Poor awareness about the symptoms of mental illness, **social stigma** and **abandonment** of mentally ill especially old and destitute leads to social isolation and reluctance on part of family members to seek treatment for the patient has resulted in a massive **treatment gap**, which further worsens the present mental illness of a person.

Rise in Severity: Mental health problems, tend to increase during economic downturns, therefore special attention is needed during times of economic distress.

Prone to abuse: Mentally ill patients are vulnerable to and usually suffer from physical abuse, sexual abuse, wrongful confinement, even at homes and mental healthcare facilities which is a cause of concern and a gross human right violation.

Constitutional Provision

The Supreme Court has held healthcare to be a fundamental right under Article 21 of the Constitution.

Mental health care Act 2017

Right to make an Advance Directive: Patient can state on how to be treated or not to be treated for the illness during a mental health situation.

Right to appoint a Nominated Representative : A person shall have the right to appoint a nominated representative to take on his/her behalf, all health related decisions

Right to access mental health care

Right to free & quality services

Right to get free medicines

Right to community living

Right to protection from cruel, inhuman and degrading treatment

Right to live in an environment, safe and hygienic, having basic amenities

Right to legal aid

No Electroconvulsive Therapy (ECT) without anesthesia

Attempt to commit suicide not an offence: This act brought changes in Section 309 of the Indian Penal Code (which criminalized attempted suicide). Now, a person who attempts to commit suicide will be presumed to be **"suffering from severe stress"** and shall not be subjected to any investigation or prosecution.

The act envisages the establishment of **Central Mental Health Authority and State Mental Health Authority**.

India and mental Health

In India, the prevalence estimates vary between 5.82 to 7.3%. In terms of absolute number suffering from mental illnesses, the prevalence estimate throws up a huge number of about 7 crore persons.

The median number of psychiatrists in India is only 0.2 per 100,000 population compared to a global median of 1.2 per 100,000 population.

The figures for psychologists, social workers and nurses working for mental health is 0.03, 0.03 and 0.05 per 100,000 population compared to a global median of 0.60, 0.40 and 2.00 per 100,000 population, respectively.

Treatment

70 MN Approximate number of people suffering from mental illnesses in India and 3000 Number of psychiatrists in India with 11500 Estimated requirement of psychiatrists,500: Number of clinical psychologists in India.

17250: Estimated requirement of clinical psychologists with 400 Number of psychiatric social workers and 23000: Estimated requirement of psychiatric social workers in India.

NMHP was launched in 1982 with very comprehensive objectives which stand true even today. National Health Policy 2002 recognised and incorporated the objectives and strategies of NMHP. WHO Mental Health Atlas 2011 states that the government's expenditure on mental health in was only 0.06% of the total health budget. The country has only 0.301 psychiatrists per 100,000 people. Treatment at the hospitals too leaves

much to be desired.

7.6 Beggars learning vocational skills for life with dignity

A new scheme launched here for the rehabilitation of beggars through vocational training has enabled them to lead a life with dignity.

Beggars are being equipped with the necessary life skills at a special training centre established in Jaipur by the Rajasthan Skill and Livelihoods Development Corporation (RSLDC).

'Willing participants'

Over 40 beggars hailing from Uttarakhand, West Bengal, Uttar Pradesh and Odisha, who came to Jaipur in search of livelihood but ended up on footpaths, have been provided with shelter, where they are learning yoga, meditation, sports and computer operations.

In addition to skill development, psychological counselling and emotional support is also being given during the residential training.

The first group of beggars is being trained in the catering skills. Others will be trained later for a variety of occupations, such as that of an electrician, plumber, guard or beautician.

Constitutional provision

The **preamble** of the Constitution of India mandates to ensure equality of status and of opportunity and Justice, social, economic and political to all its citizens.

The article 14 provides for quality of all before law, article 16 provides for equality of opportunity in matters of public employment,

The article 21 provides the right to protection of life and article 23 provides for the right against exploitation, all of which being fundamental rights bestowed by the Constitution to all citizens of the country.

Also the United Nations Convention against Transnational organized Crime identifies forced begging as a form of exploitation through trafficking in human beings.

THE BEGGARS (EMPOWERMENT, SKILL DEVELOPMENT AND REHABILITATION) BILL, 2014.

It extends to the whole of India. Whoever employs or uses any person for the purposes of begging or causes any person to beg shall be punishable with imprisonment for a term not less than three years which may extend to ten years, or with fine, or with

both;

Whoever, having the actual charge of, or control over a child, abets the commission of the offence punishable under sub-section *(1)*, shall be punishable with imprisonment for a term not less than three years which may extend to ten years, or with fine or with both.

The Competent Court, may increase punishment or penalty on trial under subsection *(1)* on finding aggravating circumstances or heinous offences, depending on the nature of the crime,

Any person convicted of human rights violations or an offence under Indian Penal Code of 1860 or other laws that involve as human right violation trafficking of human body parts, rape, Molestation, Sexual Harassment and torture.

Any person found begging shall be detained by the police and before mankind such a detention, the officer—in-charge of the concerned police jurisdiction shall satisfy himself as to the *bona fide* of the detained beggar.

The appropriate Government shall have **mandatory** establish and maintain, in every district, either by itself or through voluntary or non-Governmental organisations a Receiving Vocational Shelter, for persons detained under Section 4 with the exception of children and differently abled persons, with the following provisions.

The appropriate Government may establish and maintain, in every district, either by itself or through voluntary or non-governmental organizations, Children Shelters, which shall be registered as such, for all children with the exception of those with physical or mental disability, detained under Section 4, with the following provisions.

The Central Government, in consultation with the State Government, shall establish a Beggar's Welfare Fund for the purpose of skill development, vocation training, medical facilities and Education among others in such manner as may be prescribed.

What are the causes of beggary in India?

Unremunerative agriculture, poverty, unemployment and disruption of joint family and of caste control are the major **causes** of increase of **beggary in India**. **India** neglects 600,000 of her blind, 250,000 of her deaf and dumb, 100,000 of her insane and 1,000,000 of her lepers.

The main causes of begging that force the people to adopt the heinous activity i.e. begging, are prevalence of poverty, illiteracy, by inheritance of caste, handicapped, diseases, oldness, death of parent, etc., out of them, poverty is a single factor.

Beggary is a problem in India

Poverty is real in India but not begging. Begging in India has become a big racket in the country. For many, begging is just like any other profession. They go out to earn money, not by working, but by begging.

The 1931 census mentioned just 16% women beggars. The figure shot up to 49% in 2001.There are 10 million street children many among who beg for livelihood.

The country in total has over four lakh beggars, with the highest 81,000 beggars in West Bengal, while Lakshadweep merely has two vagrants. At least 4,13,670 beggars reside in India, which consists of 2,21,673 males and 1,91,997 females.

Is Beggary is crime in India or not?

India has no federal law on begging and destitution. About 20 states had adopted the Bombay Prevention of Begging Act, 1959, which carries a penalty of detention of three to 10 years in so-called beggar homes.

It's estimated that there are around 500,000 **beggars** in **India** half a million people! And, this is despite the fact that begging is a crime in most states in **India (State subject under schedule 7).**

It is felt there is a need for a framework that creates positive responsibilities on the State and provides for a more effective protection of the rights of the destitute and people into begging, guaranteed under the Constitution.

7.7 Centre objects to plea against Special Marriage Act

The Centre has objected to a petition seeking to discontinue with the provision of inviting objection from public while applying for marriage registration under the **Special Marriage Act (SMA).**

According to the Ministry of Law and Justice , the intention behind the provision in SMA was to "**keep adequate safeguards to the interest of various parties involved"**.

SPECIAL MARRIAGE ACT, 1954:

An **Act of the Parliament of India** with provision for **civil marriage** (or "registered marriage") for people of India and all Indian nationals in foreign countries, irrespective of the religion or faith followed by either party.

The Act originated from a piece of legislation proposed during the late 19th century. Marriages solemnized under Special Marriage Act are not governed by personal laws.

The **Special Marriage Act, 1954 replaced the old Act III, 1872.** The new enactment had three major objectives-

to provide a special form of marriage in certain cases,

to provide for registration of certain marriages and,

to provide for divorce.

GESTATION PERIOD

All marriages done under the SMA requires publication of the names **of the couple for inviting objections from public for 30 days**.

Within this period, anyone can object to the marriage on the ground that it **would contravene one or more of the conditions specified in section 4 of the SMA.**

Some of the conditions include neither party has a spouse living; either of them is of unsound mind, incapable of giving a valid consent; and the man has completed twenty-one years and the woman eighteen years.

The provision was **challenged by an inter-faith couple** on the ground that the 30 days gestation period was not warranted as the same objective can be mitigated on the basis of certificates issued by government hospitals and on the basis of undertaking by them.

STATEMENT FROM THE LAW MINISTRY

If any person raises objection to the said marriage within a period of **30 days, the marriage officer shall not solemnise the marriage until he has enquired into the matter of objection**.

It may not be possible to verify the credibility of such person if at least thirty days period is not given.

The procedure laid down in this Act for registration of marriage is fair and reasonable.

Advocate, who had appeared for the couple, argued that the question with regard to whether either party has a living spouse can arise in other religious marriage also, but they are exempted from 30 days' notice period.

SMA SECTIONS:

The petition has sought to quash section 6 and 7 of SMA, which mandates publication of the public notice, on the ground that it is unreasonable and arbitrary.

The 30-day period offers an opportunity to kin of the couple to discourage an inter-

caste or inter-religion marriage.

7.8 HC allows minor to end pregnancy

The Kerala High Court recently allowed the medical termination of a young rape survivor's pregnancy that had crossed the legally permissible period for the procedure.

Justice P.V. Asha permitted the medical termination of pregnancy (MTP) on a petition by the mother of a 16-year-old girl.

Her pregnancy had crossed 28 weeks, the oldest to be cleared by the Kerala High Court.

HIGH RISK

The court had permitted medical termination of pregnancy for seven girls in six months.

The accused in the case is also a minor and has been sent to a care home for children in conflict with the law.

The police have booked a case under the Protection of Children from Sexual Offences (POCSO) Act.

A medical board reported that the foetus faced high risk of poor neurological development and the mental and physical development of the foetus was likely to be "very bad."

The panel suggested termination of pregnancy considering the possible adverse psychological impact on the girl and the anomalies in the foetus.

The board noted that there was the possibility of the child being born alive. However, the survivor and her guardian were not willing for resuscitation.

The Kerala State Legal Services Authority, which took forward the petition, will offer legal support to the girl and try to get her compensation under the victim compensation scheme.

Compensation would be granted based on the recommendation of the POCSO court.

CONDITIONS FOR TERMINATION OF PREGNANCY:

If the pregnancy has not exceeded 12 weeks, only one doctor needs to be satisfied that the conditions have been fulfilled.

If the pregnancy has exceeded 12 weeks and is below 20 weeks (now amended to 24 weeks), two doctors need to be satisfied that the conditions have been fulfilled.

The gestation period does not matter if a doctor feels that an immediate abortion must be conducted to save the life of the patient.

The doctor who determines if it is necessary to perform an abortion and performs it needs to be a 'registered medical practitioner' under the law.

7.9 Inter-marriages can reduce caste tensions, says court

The Supreme Court said in a recent judgment that the **educated youngsters** are showing the way forward to reduce caste and community tensions in India by tying the knot in inter-marriages.

Educated younger boys and girls are choosing their life partners, which, in turn, is a departure from the earlier norms of society where caste and community play a major role.

JUSTICE KAUL QUOTED FROM B.R. AMBEDKAR'S ANNIHILATION OF CASTE

I am convinced that the real remedy is **intermarriage**.

Fusion of blood can alone create the feeling of being kith and kin, and unless this feeling of kinship, of being kindred, becomes paramount, the separatist feeling — the feeling of being aliens — created by caste will not vanish.

Currently there are more and more cases challenging religious conversion laws enacted by several States reach the Supreme Court.

Justice Kaul observed in the judgment recently that "consent of the family or community or clan is not necessary once the two adult individuals agree to enter into wedlock and that their consent has to be piously given primacy".

7.10 SC and ST applicants are half as likely to get selected for a Ph.D. programme at IITs

Recently, data collected from a series of **Right to Information (RTI)** applications pertaining to five older **Indian Institutes of Technology (IITs),** has indicated that the **acceptance rate is skewed against students from the Scheduled Caste (SC), Scheduled Tribe (ST), and Other Backward Classes (OBC) communities.**

SC and ST applicants are half as likely to get selected for a Ph.D. programme at IITs **as aspirants from the General Category (GC)** are.

Data from the RTI Applications:

Acceptance Rate:

It refers to the **number of students selected for every 100 students who applied.**

It stood at **4%** for students from **General Category (GC).**

It falls to **2.7% for OBC** students and further down to just **2.16% for SCs and 2.2% for STs.**

This finding **comes against the backdrop of the Education Ministry's data** submitted to Parliament in 2020 showing the failure of the IITs to fill Ph.D. seats as per reservation.

The government's **reservation** policy **mandates** allocation of **15% seats for students from the SCs, 7.5% from STs** and **27% from OBCs.**

Significance:

The **IITs have often cited the lack of applicants from the marginalised communities** for the situation. However, **the RTI data reveals quite the opposite.**

The **percentage of GC students** among those admitted was **always higher** than their percentage among those applied. However, the **converse was true for SC, ST and OBC candidates.**

Education Ministry's Data:

Of the total admissions made by all **IITs** from **2015 to 2019,** only **9.1%** went to **SC** and **2.1%** to **ST.**

Only **23.2%** seats went to applicants from the **OBCs.** Remaining **65.6%,** or roughly two-thirds of all the seats, went to General Category applicants.

Reasons for Falling Rate:

Given by IITs:

Eligibility Issue:

Some institutions **could not even fill all the seats in the general category** since they **did not get enough eligible candidates.**

Economic Causes:

Students of the required calibre **tend to take up industry jobs rather than join for a PhD** which has extra uncertainties and lower income levels during PhD and in some areas even post PhD.

It is possible that the **family background and economic level** may have an impact on such candidates applying for a PhD.

Argument of 'Merit':

There has been long-standing **opposition among IIT administrators and faculty to reservations,** which they see as a form of **unjust government intervention** in their meritocratic institutions.

The **recent report** of an Education Ministry-constituted committee **recommended the abolition of reservation in faculty recruitment.**

The committee based its recommendations primarily on arguments **claiming the need for IITs to maintain their academic excellence and the lack of candidates from the reserved categories** who fulfil the qualification criteria.

A More Systematic Problem:

The problem is also of practice and **access to quality school education,** leading to **poor base.**

Advantages of following the Reservation Policy:

An Example to Other Institutions:

The IITs are and should continue to be institutions of national importance. But they **also have social functions.**

They should set an example to other institutions by **creating opportunities for and encourage the underprivileged communities to excel** in research and innovation.

Bridging Inequalities:

Affirmative action and caste-based reservation can **help bridge inequalities in society,** enable the underprivileged to have access to quality education, promote diversity, and, more importantly, remove obstacles to equality and correct the past wrongs.

Policy intervention has to begin sooner, in the early school years, to attempt to equalise opportunities in education.

In addition, negative attitudes, perceptions and stereotypes about the ability of students belonging to the SC/ST groups are a major hurdle. Policy should recognise how such perceptions hold back individuals and groups, and seriously attempt to think of ways to alter these.

Diversity issues can also be addressed through outreach campaigns.

7.11 New nodal agency to tackle fraud, pesky SMSes & calls

An official release from the Ministry of Telecommunications said that he central

government will set up a digital intelligence unit (DIU) as a nodal agency to deal with complaints of unsolicited commercial communication (UCC) and cases of financial fraud, especially in the digital payments space.

At a high level meeting presided by Telecom Minister, the Ministry decided that apart from the DIU at the nodal level**, a Telecom Analytics for Fraud Management and Consumer Protection (TAFCOP)** will also be set up at all the 22 license service area level.

FUNCTION OF DIU

The main function of DIU will be to coordinate with various LEAs (law enforcement agencies), financial institutions and telecom service providers in investigating any fraudulent activity involving telecom resources.

The issue of UCC has been a major area of concern for the Telecom Ministry as well as the Telecom Regulatory Authority of India (Trai).

TRAI has from time to time fined telecom operators for not following its directives on stopping UCC.

NEED TOUGH MEASURES

In November last year, the telecom sector regulator told the Delhi High Court that it had imposed fines of up to Rs 30 crore on telecom companies such as state-run **Bharat Sanchar Nigam** Limited, and private telecom companies such as Vodafone Idea and Reliance Jio Infocomm for not putting enough measures to control UCC, which occurred over their networks between April and June 2020.

All telecom service providers have been asked to ensure strict compliance of the directives issues with respect to UCC.

In case of any violation, it was proposed to impose financial penalty against the tele-marketers including disconnection of resources in case of repetitive violations.

A web and mobile application as well as a SMS-based system shall be developed for effective redressal of complaints.

RISE IN FRAUD CASES

Apart from UCC, the rise in fraudulent digital transactions was also discussed in the meeting.

The Reserve Bank of India (RBI) had, in its annual report for 2018-19, said frauds related to misuse of credit and debit cards, cloning of identities, spam amounted to Rs 220 crore in the year, and was slated to rise unless proper mitigation measures were taken.

Special strategies, including blocking of telecom operations in regions, such as Jamtara and Mewat, which are infamous for running digital fraud transaction centres, shall also be taken, the Ministry said.

In August last year, Haryana's Faridabad police arrested five people from Jamtara for being involved in a racket involving e-SIM frauds.

Those arrested had then told the police that by swapping e-SIM of Apple's iPhones, funds were transferred into wallets provided by **PhonePe, OlaMoney, Paytm** Payments Bank and Airtel Payments Bank, which were then again routed into other bank accounts all over the country before being taken out.

7.12 Indians concerned about privacy: CJI

Chief Justice of India Sharad A. Bobde recently said Indians have "grave apprehensions" about privacy from Facebook and WhatsApp.

CJI ADDRESSING LAWYERS:

People have grave apprehensions about loss of privacy.

You may be a two or three trillion company, but people value their privacy more.

People think that if A sends a WhatsApp message to B and B to C, the circuit of messages is revealed to Facebook.

It is our duty to protect people's privacy.

COMPANIES' DENIAL:

Lawyers vehemently denied this as "misinformation".

Solicitor General for the government, stated, "This is an apprehension of the nation. Privacy is part of our fundamental rights. They [WhatsApp and Facebook] cannot compromise our privacy. They cannot differentiate."

NEW POLICY

The hearing concerned the new privacy policy introduced by WhatsApp recently.

The allegation is that it scraps users' 'opt-out policy'. The user would have to, according to the policy, compulsorily consent to share their data with Facebook and its group, the petitioners have alleged.

The policy deadline was February 8 initially, but it was extended to May 15.

WHATSAPP CLAIM

Lawyer representing Whatsapp denied allegations that WhatsApp was treating

Europeans and Indians differently.

Europe has a special law [General Data Protection Regulations], India doesn't. As soon as India has the special law, we will follow.

We will follow the law of Parliament," he submitted. The new privacy policy was applicable to the rest of the world except Europe.

Lawyer said the General Data Protection Regulations was followed by probably 20 countries in the world. Allegations of differential treatment being accorded to Indians were unfounded.

COUNTER-ARGUMENT

Lawyers challenging the **new privacy policy**, said they were not on whether WhatsApp was encrypting messages or not. "We are on the point of sharing of meta data for profit.

There is a different set of rules for Europeans and different for Indians. Even the government has taken serious note and issued notices to the companies. They urged the court to ensure that no data is leaked.

At present, in the absence of a dedicated data protection regulation, the usage and transfer of personal data of users is regulated by the Information Technology (IT) Rules, 2011, under the IT Act, 2000.

However, given the growing pace of the digital economy, the Act has shortcomings with respect to how personal and sensitive data is defined, and provisions that can be easily overridden by companies using a contract.

7.13 Trifed's Village and Digital Connect – Establishing a Connect with Tribal People

Over the past year , under the aegis of the Ministry of Tribal Affairs, TRIFED has implemented several initiatives to help improve the livelihoods of the beleaguered tribals who had been severely impacted due to the pandemic.

To ensure that these initiatives reach the tribals and they benefit from the existing schemes and initiatives, TRIFED's regional officials across the country will be going to identified villages with a significant tribal population across the country and will set up base there till 31st March, 2021.

Being present on the ground level will help TRIFED's officials oversee the

implementation of these programmes and ensure the empowerment of the tribal brethren.

Adapting Go Vocal for Local, into Go Vocal for Local Go Tribal – Mera Van Mera Dhan Mera Udyam, several of these pathbreaking initiatives, other than the existing programmes, have emerged as a panacea for the tribals.

INITIATIVES TAKEN:

These initiatives include programmes like Van Dhan tribal start-ups and Schemes like Mechanism for Marketing of Minor Forest Produce (MFP) through Minimum Support Price (MSP) & Development of Value Chain for MFP', that provides MSP to gatherers of forest produces and introducing value addition and marketing through tribal groups and clusters which has found widespread acceptance across the country.

An all-encompassing digitisation drive had also been launched to not only promote tribal commerce but also map and link its village-based tribal producers and artisans to national and international markets by setting up state of art e- platforms benchmarked to international standards.

TRIFED has digitized all the information related to the forest dwellers associated with the VanDhan Yojana, village haats and their warehouses into a VanDhan MIS portal.

This digitization effort wherein all tribal clusters are identified and mapped using GIS technology will be capitalized upon during this phase of Village connect.

TRIFED officials will ensure that all the tribal producersand clusters have been mapped to these digital systems and will receive all the benefits available in convergence with other Ministries and agencies in villages will be connected to this portal.

Moreover, TRIFED has also launched a marketplace for tribal producers – forest dwellers and artisans, to facilitate the purchase of MFPs, handicrafts and handlooms online.

Gradually 5 lakh tribal producers across the country and sourcing their natural produce, handcrafted goods are being onboarded on the marketplace.

With the presence of the TRIFED officials on ground, it is expected that tribal artisans will be adequately informed and helped so that they can find greater access to larger markets and thereby improve their incomes.

It is expected that this phase of TRIFED's village and digital connect will aid immensely in the successful implementation of all planned initiatives in the next year and effecta complete transformation of the tribal ecosystem across the country.

7.14 Cabinet approves Amendments to the Juvenile Justice (Care and Protection of Children) Act, 2015

The Union Cabinet, chaired by the Prime Minister, has approved the proposal of the Ministry of Women and Child Development to amend the Juvenile Justice (Care and Protection of Children) Act, 2015 to introduce measures for strengthening Child Protection set-up to ensure best interest of children.

PROVISIONS:

The amendments include authorizing District Magistrate including Additional District Magistrate to issue adoption orders under Section 61 of the JJ Act, in order to ensure speedy disposal of cases and enhance accountability.

The District Magistrates have been further empowered under the Act, to ensure its smooth implementation, as well as garner synergized efforts in favour of children in distress conditions.

Defining eligibility parameters for appointment of CWC members, and categorizing previously undefined offences as 'serious offence' are some of the other aspects of the proposal.

Several difficulties faced in implementation of various provisions of the Act have also been addressed.

JUVENILE JUSTICE (CARE AND PROTECTION OF CHILDREN) ACT, 2015:

Juvenile Justice (Care and Protection of Children) Act, 2015 is an act passed by Parliament of India amidst intense controversy, debate and protest on many of its provisions by Child Rights fraternity.

It replaced the Indian juvenile delinquency law, Juvenile Justice (Care and Protection of Children) Act, 2000, and allows for juveniles in conflict with Law in the age group of 16–18, involved in Heinous Offences, to be tried as adults.

The Act also sought to create a universally accessible adoption law for India, overtaking the Hindu Adoptions and Maintenance Act (1956) (applicable to Hindus, Buddhists, Jains, and Sikhs) and the Guardians and Wards Act (1890) (applicable to Muslims), though not replacing them. The Act came into force from 15 January 2016.

To streamline adoption procedures for orphan, abandoned and surrendered children, the existing Central Adoption Resource Authority (CARA) has been given the

status of a statutory body to enable it to perform its function more effectively.

A separate chapter on Adoption provides detailed provisions relating to adoption and punishments for non compliance.

Processes have been streamlined with timelines for both in-country and inter-country adoption including declaring a child legally free for adoption.

7.15 Indradhanush 3.0 to fill gap in immunisation

The States and Union Territories (UTs) have rolled out the Intensified Mission Indradhanush (IMI) 3.0 scheme to cover children and pregnant women who missed routine immunisation during the COVID-19 pandemic.

Health Ministry said that more than 29,000 children and 5,000 pregnant women were covered on the first day.

ROUTINE IMMUNISATION:

Various States and UTs have started implementation of the Intensified Mission Indradhanush 3.0, a campaign aimed to **reach those children and pregnant women** who have been missed out or been left out of the Routine Immunisation Programme.

This is aimed to **accelerate the full immunisation of children and pregnant women** through a mission mode intervention.

The first phase has been rolled out from February 22 for 15 days.

The campaign is scheduled to have **two rounds of immunisation lasting 15 days** (excluding routine immunisation and holidays).

It is being conducted in 250 pre-identified districts/urban areas across 29 States/UTs.

REMOTE AREAS:

Beneficiaries from migration areas and remote areas would be targeted as they may have missed their vaccine doses during the pandemic.

As per the guidelines released for IMI 3.0, the districts have been classified to reflect 313 low risk, 152 medium risk and 250 high risk districts.

The Ministry said **adherence to COVID-appropriate behaviour** (CAB) during immunisation activities has been strongly emphasised.

The States have been asked to **follow a "staggered approach"** to avoid crowding at

the session sites and even plan break-up sessions if a staggered approach is not effective.

The sessions have also been planned in such a way that not more than 10 beneficiaries are present at the session site at one given point in time.

IMMUNIZATION IN INDIA:

Immunization Programme in India was introduced in 1978 as '**Expanded Programme of Immunization**' (EPI) by the Ministry of Health and Family Welfare, Government of India.

In 1985, the programme was modified as '**Universal Immunization Programme**' (UIP) to be implemented in phased manner to cover all districts in the country by 1989-90 with the one of largest health programme in the world.

Despite being operational for many years, UIP has been able to **fully immunize only 65%** children in the first year of their life.

Through UIP, **Government of India is providing vaccination free of cost** against vaccine preventable diseases include diphtheria, pertussis, tetanus, polio, measles, severe form of childhood tuberculosis, hepatitis B, meningitis and pneumonia (Hemophilus influenza type B infections), Japanese encephalitis (JE) in JE endemic districts with introduction **of newer vaccines** such as rotavirus vaccine, IPV, adult JE vaccine, pneumococcal conjugate vaccine (PCV) and measles-rubella (MR) vaccine in UIP/national immunization programme.

MISSION INDRADHANUSH:

To strengthen and re-energize the programme and achieve full immunization coverage for all children and pregnant women at a rapid pace, the Government of India launched "Mission Indradhanush" in December 2014.

The ultimate goal of Mission Indradhanush is to **ensure full immunization with all available vaccines for children up to two years of age and pregnant women**.

The Government has **identified 201 high focus districts across 28 states** in the country that have the highest number of partially immunized and unimmunized children.

Earlier the increase in full immunization coverage was 1% per year which has increased to 6.7% per year through the first two phases of Mission Indradhanush.

Four phases of Mission Indradhanush have been conducted till August 2017 and more than 2.53 crore children and 68 lakh pregnant women have been vaccinated.

INTENSIFIED MISSION INDRADHANUSH (IMI):

To **further intensify the immunization programme**, Prime Minister Shri Narendra Modi launched the Intensified Mission Indradhanush (IMI) on October 8, 2017.

Through this programme, Government of India aims to **reach each and every child up to two years of age** and all those pregnant women who have been left uncovered under the routine immunisation programme/UIP.

The focus of special drive was to **improve immunisation coverage in select districts and cities** to ensure full immunisation to more than 90% by December 2018.

Under IMI, four consecutive immunization rounds were conducted for 7 days in 173 districts (121 districts and 17 cities in 16 states and 52 districts in 8 northeastern states) every month between October 2017 and January 2018.

Intensified Mission Indradhanush has covered **low performing areas in the selected districts** (high priority districts) and urban areas.

Special attention was given to **unserved/low coverage pockets in sub-centre and urban slums** with migratory population.

The focus was also on the urban settlements and cities identified under National Urban Health Mission (NUHM).

INTENSIFIED MISSION INDRADHANUSH (IMI) 2.0:

To boost the routine immunization coverage in the country, Government of India has introduced Intensified Mission Indradhanush 2.0 to **ensure reaching the unreached with all available vaccines and accelerate the coverage of children and pregnant women** in the identified districts and blocks from December 2019-March 2020.

The IMI 2.0 aims to **achieve targets of full immunization coverage in 272 districts in 27 States** and at block level (652 blocks) in Uttar Pradesh and Bihar among hard-to-reach and tribal populations.

With the launch of Intensified Mission Indradhanush 2.0, India has the opportunity to achieve **further reductions in deaths** among children under five years of age, and achieve the Sustainable Development Goal of ending preventable child deaths by 2030.

Several ministries, including the Ministry of Women and Child Development, Panchayati Raj, Ministry of Urban Development, Ministry of Youth Affairs and others have come together to make the mission a resounding success and support the central government in ensuring the benefits of vaccines reach the last mile.

THE SALIENT FEATURES OF IMI 2.0 ARE:

Conduction of four rounds of immunization activity over 7 working days excluding the RI days, Sundays and holidays.

Enhanced immunization session with flexible timing, mobile session and mobilization by other departments.

Enhanced focus on left outs, dropouts, and resistant families and hard to reach areas.

Focus on urban, underserved population and tribal areas.

Inter-ministerial and inter-departmental coordination.

Enhance political, administrative and financial commitment, through advocacy.

IMI 2.0 drive is being conducted in the selected districts and urban cities between Dec 2019 – March 2020

7.16 Former NCBC chief: Without caste census, OBC sub-categorisation not scientific

Questioning the idea of sub-categorisation of the Other Backward Classes (OBCs), former chairman of the National Commission for Backward Classes (NCBC) Justice Vangala Eswaraiah says **without a caste census, this exercise could perpetuate injustice**.

He terms the **sub-categorisation**, which is likely to be proposed by the Commission headed by Justice G Rohini, as **"un-scientific, atrocious and illegal".**

CASTE CENSUS:

Justice Eswaraiah says if the government wants to sub-categorise the OBCs in order to give them justice, it should either **publicise the data of Socio Economic and Caste Census** (SECC)-2011 or it should **conduct a caste census**.

This comes days after current NCBC Chairman said the **panel was in favour of dividing the OBCs into four sub-categories**, in line with what the Justice G Rohini Commission, which was constituted to examine the sub-categorisation of the OBCs, is likely to propose.

WHY THE NEED FOR SUB-CATEGORIES?

OBCs are granted 27 percent reservation in jobs and education under the central government.

The debate about the sub-categorisation of OBCs arose out of the perception that **only a few affluent communities** among the over 2,600 included in the central list of OBCs have secured a major part of this reservation.

The argument for this sub-categorisation is that it would **ensure "equitable distribution" of representation** among all OBC communities.

UNSCIENTIFIC, UNCONSTITUTIONAL AND ILLEGAL:

Justice Eswaraiah, a former Chief Justice of Andhra Pradesh High Court, was appointed chairman of the NCBC in 2013 by the UPA government and held the post till 2016.

Justice says that without the SECC data, **it will not be possible to scientifically sub-categorise or take up the revision of the caste and communities** to exclude existing castes or include other deserving castes."

Government has conducted SECC-2011 after spending thousands of crores but hasn't published it and **only publish it selectively?** To sub-categorize the castes and communities the publication of SECC is a must.

He says what the Justice Rohini Commission is doing is all "unscientific, unconstitutional and illegal".

With this sub-categorisation, "some justice will be done, but it will not be complete justice.

Injustice will perpetuate, continue and there will be hue and cry among the backward classes.

It is not scientific and it is atrocious and it is illegal thing. Its an eyewash.

7.17 Tribals seek forest rights, officials cite core are a rule

THOUSANDS OF tribals living in villages located in the core areas of **Sitanadi Udanti Tiger Reserve** are demanding that their **Community Forest Resource rights be recognised**.

Despite the Congress-led Chhattisgarh government's promise of recognition of community resource rights, **these villagers are facing bureaucratic hurdles**, largely based on interpretation of law.

Recently, residents of one of the villages, Bahigaon asked for a special gram sabha to facilitate the recognition of Community Forest Resource rights provided under

the **Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006**.

WHAT THE LAW SAYS ABOUT THE RIGHTS?

Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, has been enacted to recognize and vest **the miner forest product** rights and occupation of forest land in forest dwelling Scheduled Tribes and other traditional forest dwellers.

SECTION 3 (1) (i) of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 gives right to **protect, regenerate or conserve or manage any community forest resource** which the tribals have been traditionally protecting and conserving for sustainable use.

For recognition of Community Forest Resource rights, **traditional boundary of a tribal village is recognised**,empowering the gram sabha of the village to take decisions on protection, regeneration, conservation and management of the forest and its produce.

GRIEVANCE:

A zila panchayat member said, "The district authorities are telling us that our **rights can't be recognised as we are in the core areas**. The forest officials say the rights do not apply in the core areas, which is against the Act."

Residents of more than 10 villages are trying to get their resource rights on the forest around them from authorities of the tiger reserve and district authorities of Dhamtari and Gariaband.

Local officials said the **villagers' community rights** should be discussed only when they move out of the core areas.

In the core areas, **even grazing is not allowed**. The villages want the resource rights so that they can **get roads and other amenities** that can't be built inside the core area.

DELAY:

The fact has come to light that in Critical Wildlife Habitat/Tiger Reserve, due to some reasons, **recognition of Forest Rights are getting delayed**.

According to the Act's Section 4(1), notwithstanding anything contained in any other law for the time being in force, and subject to the provisions of this Act, **the Central Government hereby recognises and vests forest rights under Section 3(1) of the same**

Act.

Giving community resource rights there seems difficult as the management of such areas need to be done by skilled people.

The Act states that **rights of tribals be recognised** in any type of forested area.

Officials think they can **manage the forests better than the tribals** who have spent generations inside the forest. **It shows lack of trust**, but tribals are involved and employed by department for the upkeep of the forests.

7.18 Same Sex Marriage

Recently, the Central Government opposed **same-sex marriage** in Delhi High Court stating that a marriage in India can be recognised only if it is between a "biological man" and a "biological woman" capable of producing children.

Petitions, seeking recognition of same sex marriages under the **Hindu Marriage Act (HMA), 1955** and the **Special Marriage Act (SMA), 1954**, were filed in 2020.

Centre's Response/Argument:

Supreme Court's Order:

In reading down the provision of **Section 377 of the Indian Penal Code (IPC)**, the **Supreme Court** only **decriminalised a particular human behaviour** but neither intended to, nor did in fact, legitimise the human conduct in question.

Societal Morality:

There exists a **"legitimate State interest"** in limiting the recognition of marriage to persons of opposite sex. The considerations of **"societal morality"** are relevant in considering the validity of a law and it is for the Legislature to enforce such societal morality and public acceptance based upon Indian ethos.

Not in Consonance with Existing Laws:

The fundamental right under **Article 21** is subject to the procedure established by law and it **cannot be expanded to include the fundamental right for same sex marriage** to be recognised under the laws which in fact mandate the contrary.

Article 21 of the constitution guarantees the right to life. This right cannot be taken away except through a law which is substantively and procedurally fair, just and reasonable.

Any interference with the existing marriage laws would cause complete havoc with

the delicate balance of personal laws in the country.

Sanctity of Marriage:

Living together as partners or in a relationship with a same-sex individual is "not comparable" with the "Indian family unit concept" of a husband, wife and children, arguing that the institution of marriage has a "sanctity".

Legality of same-sex marriages in India:

The **right to marry is not expressly recognized either as a fundamental or constitutional right under the Indian Constitution.**

Though marriage is regulated through **various statutory enactments**, its recognition as a fundamental right has only **developed through judicial decisions of India's Supreme Court.**

Such declaration of law is binding on all courts throughout India under **Article 141** of the Constitution.

Important Supreme Court Decisions:

Marriage as a Fundamental Right *(Shafin Jahan v. Asokan K.M. and others 2018):*

While referring to **Article 16** of **Universal Declaration of Human Rights** and the Puttaswamy case, the SC held that the **right to marry a person of one's choice is integral to Article 21** of the Constitution.

Article 16 (2) in the Indian constitution provides that there cannot be any discrimination on grounds only of religion, race, caste, sex, descent, place of birth, residence or any of them.

The **right to marry** is intrinsic to the liberty which the Constitution guarantees as a fundamental right, is the **ability of each individual to take decisions** on matters central to the pursuit of happiness. Matters of belief and faith, including whether to believe are at the core of constitutional liberty.

LGBTQ Community Entitled to all Constitutional Rights *(Navjet Singh Johar and others v. Union of India 2018):*

The SC held that members of the **LGBTQ community** "are entitled, as all other citizens, to the full range of constitutional rights including the liberties protected by the Constitution" and are entitled to equal citizenship and "equal protection of law".

The LGTBQ community **needs an anti-discrimination law that empowers them to build productive lives and relationships**irrespective of gender identity or sexual

orientation and place the onus to change on state and society and not the individual.

Once members of the LGBTQ community "are entitled to the **full range of constitutional rights**", it is beyond doubt that the fundamental **right to marry a person of one's own choice has to be conferred on same sex couples** intending to marry. More than two dozen countries have legalized same-sex marriage.

ENVIRONMENT

8.1 Experts point to climate change impact

A deluge that resulted from a glacial melt on Nanda Devi flooded Rishiganga river in Uttarakhand and washed away at least two hydroelectric power projects — the 13.2 MW Rishiganga hydroelectric power project and the Tapovan project on Dhauliganga river, a tributary of the Alakananda.

The India Meteorological Department (said that no rain is forecast) and the Central Water Commission, also failed to predict the flooding from the glacial burst, arrases the question mark on his (both) works.

Environmental experts attributed the Nanda Devi glacial melt to global warming. Glacier retreat and permafrost thaw are projected to decrease the stability of the mountain slopes and increase the number and area of glacier lakes, according to the latest assessment reports of the UN Intergovernmental Panel on Climate Change.

CLIMATE CHANGE

Climate change is a long-term **change** in the average weather patterns that have come to **define** Earth's local, regional and **global** climates. These **changes** have a broad range of observed effects that are synonymous with the term.

Climate change has driven erratic weather patterns like increased snowfall and rainfall, and warmer winters had led to the melting of a lot of snow.

The thermal profile of ice, it was increasing. Earlier the temperature of ice ranged from -6 to -20 degree Celsius; it is now -2 making it more susceptible to melting.

Deference between Climate variability and Climate change:

Climate variability includes all the variations in the climate that last longer than individual weather events, whereas the term climate change only refers to those variations that persist for a longer period of time, typically decades or more.

In the time since the industrial revolution, the climate has increasingly been affected by human activities that are causing global warming and climate change.

The largest driver of warming is the emission of greenhouse gases, of which more than 90% are carbon dioxide (CO_2) and methane.

Fossil fuel burning (coal, oil, and gas) for energy consumption is the main source of these emissions, with additional contributions from agriculture, deforestation, and industrial processes.

Human impacts of Climate Change:

Human impacts include under nutrition

hunger from reduced crop yields,

declining fish stocks,

increases in vector-borne diseases,

flooding, natural disaster

potentially severe economic impacts,

increased global economic inequality

more people living in uninhabitable climate zones

The increased migration.

Effects such as these have led the World Health.

The rising sea levels.

The rising ocean temperatures,

The Rising in ocean acidification

Mitigation of climate change:

The forestation and tree plantation.

The reducing greenhouse gas emissions, and removing them from the atmosphere;

The methods include the development and deployment of low-carbon energy sources.

Renewable Energy wind and solar,

a phase-out of coal, enhanced energy efficiency,

The reforestation and forest preservation.

Adaptation consists of adjusting to actual or expected climate,

The improved coastline protection, better disaster management,

The development of more resistant crops.

Adaptation alone cannot avert the risk of Climate change its most be effective implementation. Etc

Paris climate change **agreement** signed in 2015, **India** has committed to cut GHG (Green House Gas) emissions intensity of its GDP by 33-35 per cent, increase non-fossil fuel power capacity to 40 per cent from 28 per cent in 2015, add carbon sink of 2.5-3 billion tonne CO2 per annum by increasing the forest cover.

The Environment Minister said that we have achieved 21% of its emissions intensity reduction target as a proportion of its GDP in line with its pledge to a 33-35% reduction by 2030.

India was the only major G20 country that was on track towards keeping to its nationally determined commitments to halt runaway global warming.

8.2 Flash flood disasters in Uttarakhand

Recently, a **glacial break** in the **Tapovan-Reni area of Chamoli District of Uttarakhand** led to massive **Flash Flood** in **Dhauli Ganga** and **Alaknanda Rivers,** damaging houses and the nearby **Rishiganga power project.**

In **June 2013,** flash floods in Uttarakhand wiped out settlements and took lives.

Cause of Flash Flood in Uttarakhand:

It occurred in river Rishi Ganga due to the falling of a portion of **Nanda Devi glacier** in the river which **exponentially increased the volume of water.**

Rishiganga meets Dhauli Ganga near Raini. So Dhauli Ganga also got flooded.

Major Power Projects Affected:

Rishi Ganga Power Project:

It is a privately owned 130MW project.

Tapovan Vishnugad Hydropower Project on the Dhauliganga:

It was a 520 MW run-of-rive**r hydroelectric project** being constructed on **Dhauliganga River.**

Several **other projects on the Alaknanda and Bhagirathi river basins** in northwestern Uttarakhand have also been impacted by the flood.

Flash Floods:

These are **sudden surges in water levels** generally during or following an **intense spell of rain.**

These are **highly localised** events of **short duration** with a very high peak and usually have less than six hours between the occurrence of the rainfall and peak flood.

The flood situation **worsens in the presence of choked drainage lines or encroachments** obstructing the natural flow of water.

Causes:

It may be caused by heavy rain associated with a severe **thunderstorm, hurricane, tropical storm, or meltwater from ice or snow flowing over ice sheets or snowfields.**

Flash Floods can also occur due to **Dam or Levee Breaks, and/or Mudslides (Debris Flow).**

In areas on or near **volcanoes**, flash floods have also occurred after eruptions, when glaciers have been melted by the intense heat.

The intensity of the rainfall, the location and distribution of the rainfall, the land use and topography, vegetation types and growth/density, soil type, and soil water-content all determine just how quickly the Flash Flooding may occur, and influence where it may occur.

Glaciers

Glaciers are a bulk of ice moving under its weight. It forms in areas where the amassing of snow goes beyond its ablation over many years.

They are generally seen in the snow-fields.

This largest freshwater basin covers around 10% of the land surface of the Earth.

According to the topography and the location of the glacier, it can be categorized as **Mountain Glacier (Alpine Glaciers) or Continental Glacier (Ice Sheets).**

The Continental Glacier moves outward in all directions whereas the Mountain Glacier moves from a higher to a lower altitude.

Glaciers and Floods:

Glacial Lakes:

Retreating glaciers, like several in the **Himalayas**, usually result in the formation of lakes at their tips, called **proglacial lakes,** often bound only by sediments and boulders.

Flood:

If the **boundaries of these lakes are breached, it can lead to large amounts of water rushing down to nearby streams** and rivers, gathering momentum on the way by picking up sediments, rocks and other material, and **resulting in flooding downstream.**

Impact of Climate Change:

Climate change has driven erratic weather patterns like increased snowfall and rainfall, warmer winters has led to the melting of a lot of snow.

According to the latest assessment reports of the UN Intergovernmental Panel on Climate Change, glacier retreat and permafrost thaw are projected to decrease the stability of mountain slopes and increase the number and area of glacier lakes.

8.3 Pong Dam Lake Wildlife Sanctuary in Himachal Pradesh

Over a lakh migratory water birds arrived at the **Pong Dam Lake Wildlife Sanctuary in Himachal Pradesh** in winter 2020-21.

Location: Kangra District, Himachal Pradesh.

Formation:

In 1975, Pong dam was **built across the Beas River.** It is also called the **Pong reservoir** or the **Maharana Pratap Sagar.**

In **1983,** the **entire reservoir was declared as a Wildlife Sanctuary** by the Himachal Pradesh government.

In **1994,** the Government of India declared it a **"Wetland of National Importance".**

Pong Dam Lake was **declared as Ramsar Site in November 2002.**

Destination for Migratory Birds:

The sanctuary plays host to around 220 species of birds belonging to 54 families. Migratory birds from all over Hindukush Himalayas and also as far as Siberia come here during winter.

Rivers:

The lake is **fed by Beas River and its numerous perennial tributaries** such as Gaj, Neogal, Binwa, Uhl, Bangana, and Baner.

The lake **harbours around 22 species of fish,** including rare fish like sal and gad. The adequate water level of the lake makes it an ideal destination to indulge in water sports.

Vegetation:

The sanctuary area is covered with **tropical and subtropical forests,** which shelters a great number of Indian Wildlife animals.

Flora:

Eucalyptus, acacia, jamun, shisham, mango, mulberry, ficus, kachnar, amla and prunus.

Fauna:

Barking deer, sambar, wild boars, nilgai, leopards and oriental small-clawed otters.

Avian-Fauna:

Black-headed gulls, Red necked grebes, plovers, terns, ducks, water-fowl egrets, and more.

8.4 Sadiya earthquake in history

Recently, scientists have found the **first geological evidence of an earthquake on the border of Assam and Arunachal Pradesh,** documented as the **Sadiya earthquake in history.** This finding could contribute to a seismic hazard map of the eastern Himalaya, which can facilitate construction and planning in the region.

This site is near the **Tuting-Tidding Suture Zone-** a major part of the Eastern Himalaya, where the Himalaya takes a sharp southward bend and connects with the Indo-Burma Range.

Scientists from **Wadia Institute of Himalayan Geology (WIHG)** carried out a mega trench excavation at **Himebasti village, Arunachal Pradesh** where the most recent event records the imprints of the **1697 Sadiya earthquake** and analysed it with modern geological techniques.

WIHG is an **autonomous institute** under the Department of Science and Technology (DST), Government of India.

Scientists found large tree trunks embedded in the **youngest flood deposits at the exit of the Subansiri River** (Sadiya town is located roughly 145 km southeast of Subansiri river), suggesting the **post-seismic aggradation of the river** following an array of **aftershocks** till six months.

Aggradation is the term used in geology for the increase in land elevation due to deposition of sediment.

Aftershocks are earthquakes that follow the largest shock of an earthquake sequence. They are smaller than the mainshock and within 1-2 rupture lengths distance

from the mainshock.

Significance:

Studying the past earthquakes help to **determine the seismic potential** of the region. This helps in mapping the earthquake hazard of the region and enables syncing the development activities accordingly.

Arunachal Pradesh, being near the **Indo-China Border**, and sometimes centre of dispute regarding its ownership, is strategically important.

A number of development initiatives like constructing roads, bridges and hydropower projects are being undertaken, therefore there is an urgent need for understanding the pattern of seismicity in this region.

Seismic Hazard Map of India:

India is one of the highly earthquake affected countries **because of the presence of tectonically active young fold mountains, Himalayas.**

India has been divided into **four seismic zones (II, III, IV, and V)** based on scientific inputs relating to seismicity, earthquakes occurred in the past and tectonic setup of the region.

Previously, earthquake zones were divided into five zones with respect to the severity of the earthquakes but the **Bureau of Indian Standards (BIS)** grouped the country into four seismic zones by unifying the first two zones.

BIS is the official agency for publishing the seismic hazard maps and codes.

Seismic Zone II:

Area with minor damage earthquakes corresponding to intensities V to VI of MM scale (MM-Modified Mercalli Intensity scale).

Seismic Zone III:

Moderate damage corresponding to intensity VII of MM scale.

Seismic Zone IV:

Major damage corresponding to intensity VII and higher of MM scale.

Seismic Zone V:

Area determined by pro seismically of certain major fault systems and is seismically the most active region.

Earthquake zone V is the most vulnerable to earthquakes, where historically some of the country's most powerful shocks have occurred.

Earthquakes with magnitudes in excess of 7.0 have occured in these areas, and have had intensities **higher than IX.**

Seismic Waves, Richter Scale and Mercalli scale:

Seismic waves are the vibrations from earthquakes that travel through the Earth and are recorded on instruments called **seismographs.**

Seismographs record a zigzag trace that shows the varying amplitude of ground oscillations beneath the instrument.

The earthquake events are scaled either according to the magnitude or intensity of the shock.

The magnitude scale is known as the **Richter scale.** The magnitude relates to the energy released during the earthquake which is expressed in absolute numbers, 0-10.

The intensity scale or **Mercalli scale** takes into account the visible damage caused by the event. The range of intensity scale is from 1-12.

8.5 Mission Innovation 2.0

Recently, the Union Minister of Science & Technology addressed the **Mission Innovation (MI)** to mark the beginning of phase-2 of the mission or Mission Innovation 2.0.

India played a leadership role in MI Steering Committee and is a member of the Analysis and Joint Research and Business & Investor Engagement sub-groups.

Mission Innovation:

Formation:

Mission Innovation was **announced on 30th November 2015,** on the sidelines of the **Paris Climate Agreement** to undertake ambitious measures to combat **climate change.**

Membership:

It is a global initiative of **24 countries and the European Union** to accelerate global clean energy innovation.

Principle:

Commitment by all members to seek to **double their clean energy innovation investments over five years** in selected priority areas.

Each **member according to its own priorities, policies, processes, and laws independently determines the best use of its funding** and defines its own Research &

Development priorities and path to reach the doubling goal.

In many cases, MI members prioritise parts of their whole energy innovation budget within their baseline.

Objectives:

Enhance the **public sector investment** to a substantial level.

Increased **private sector engagement** and investment.

Increase **international collaboration.**

Raising awareness of the transformational potential of innovation.

Innovation Challenges (IC):

Innovation challenges are a **major part of the mission innovation** that is aimed at leveraging research, development, and demonstration (RD&D) in technology areas that could ultimately result in **effective ways to reduce greenhouse gas emissions, increasing energy security, and creating new opportunities for clean economic growth.**

There are **8 innovation challenges** under the mission innovation:

IC1 – **smart grids,** IC2 – **Off-grid access to electricity,** IC3 – **Carbon capture**, IC4 – **Sustainable biofuels**, IC5 – **Converting sunlight**, IC6 – **Clean energy materials**, IC7 – **Affordable cooling and heating of buildings**, IC8 – **Renewable and clean hydrogen.**

The first phase has shown that work done under ICs have mobilized in a relatively short period, relying on members' leadership and voluntary efforts to advance IC objectives.

These resources have dramatically accelerated the availability of the advanced technologies that will define a future global energy mix which is clean, affordable, and reliable.

Mission Innovation 2.0:

To achieve the shared goal of accelerating innovation, all the members have agreed to develop a **second phase (2.0)**that includes:

An **enhanced Innovation Platform** building on current activities to strengthen the global clean energy innovation ecosystem and to accelerate learning.

New public-private innovation alliances – Missions – built around ambitious and inspirational goals backed by voluntary commitments that can lead to tipping points in the cost, scale, availability, and attractiveness of clean energy solutions.

Indian Initiatives Aligned with the Mission:

Clean Energy International Incubation Centre:

To support the start-up innovation ecosystem, the **Clean Energy International Incubation Centre** established by the Department of Biotechnology, India under a Public Private Partnership model has played a crucial role.

Increased Solar Capacity:

India has **increased solar installed capacity** by 13 times and expanded its non-fossil fuel-based power generation to 134 Gigawatts, about 35% of total power generation.

The **National Solar Mission** (a part of the **National Action Plan on Climate Change**) helped India to increase its solar capacity.

India has embarked on an **ambitious target of having 450 Gigawatts of renewable energy by 2030.**

Biofuels:

India is also working to considerably increase the proportion of the **biofuel blend in petrol and diesel:**

Ethanol Blending Programme (EBP): It aims at **blending ethanol with petrol,** thereby bringing it under the category of biofuels and saving millions of dollars by cutting fuel imports.

The **2018 Biofuel Policy** has the objective of reaching 20% ethanol-blending and 5% biodiesel-blending by the year 2030.

Five Centres of excellence in Bioenergy supported by Department of Biotechnology in India are **working on both fundamental and translational research for advanced bio-fuels like biobutanol, biohydrogen and biojet fuels.**

Ujjwala Yojana:

Pradhan Mantri Ujjwala Yojana (PMUY) which is the **world's most extensive clean cooking fuel programme** was launched in **2016** and is implemented by the Ministry of Petroleum and Natural Gas through its Oil Marketing Companies.

Through PMUY, initially, 5 crores below poverty line (BPL) households were targeted for providing deposit free LPG connections to BPL households by 31st March, 2019. This target has been achieved.

India has released around **150 million connections so far.**

Avoided Emission Framework for a sustainable future:

India and Sweden under a partnership have developed an Avoided Emission Framework for a sustainable future.

Under this partnership, **eight companies have been selected to demonstrate an initial 100 million tons of potential CO2 emission reduction by 2030.**

8.6 The world smallest reptile and how it compares to other reptiles.

A **chameleon discovered in the island country** of Madagascar by scientists from Germany and Madagascar may be the world's smallest adult reptile.

The chameleon species **Brookesia micra** was thought to be the smallest. The average length of adults of this species is 16 mm (29 mm with tail), while the smallest adult male has been recorded at 15.3 mm

The male has a length (snout to vent) of 13.5 mm and a total length of 21.6 mm when the tail is included. a six-inch ruler (150 mm) would accommodate almost seven of these males in a row, tails outstretched. The female is slightly longer at 28.9 mm.

Reptiles come in a wide size range. The longest, the reticulated python, at 6.25 m is almost as long as 289 Brookesia nanas.

The gharial is more than 200 Brookesia nanas long, while the king cobra can measure up to nearly 180 Brookesia nanas.

The smaller size, the gecko Sphaerodactylus ariasae of the Caribbean is almost as small as the Brookesia micra, or about 20-25% longer than the Brookesia nana.

The gopher tortoise is equivalent to 12 Brookesia nanas, and the veiled chameleon to about 18 specimens of the newly reported Madagascar species.

Brookesia micra is a species of chameleons from the islet of Nosy Hara in Antsiranana, Madagascar.

It was the smallest known chameleon and among the smallest reptiles, until the discovery in 2021 of the even-smaller B. nana.

Madagascar is home to tiny lizards

Madagascar is home to **tiny lizards:and also** the smallest species of snakes. One possible reason for such small species is the so-called "island effect" that causes species on small islands to get smaller.

The new **chameleon occurs in a rainforest.** "These forests are quite well connected (for the time being) with others across northern Madagascar, and so this tiny new

chameleon violates the pattern of the smallest species being found on small islands.

Distribution and habitat:

The Brookesia micra, together with three other species, were found in north Madagascar sometime between 2003 and 2007.

This species was discovered on a small, uninhabited island in the Nosy Hara archipelago off the coast of Madagascar.

They typically reside in leaf litter during the day, and climb up into tree branches as high as 10 cm (3.9 in) at night to sleep.

The micra lives in an area subject to illegal logging, which may make the species "sensitive to habitat destruction.

8.7 Ladakh will get India's first geothermal power project

India's first geothermal power project to tap the potential of natural geysers dotting the Puga area, 170 km east of Leh and not far from the China border, in **Changthang plain**.

The first phase, ONGC will drill upto 500 metres to tap the steam and hot sulphur water **spewing out** of the geysers for running a power plant with a capacity of one MW (megawatt).

In the second phase, deeper drilling will be done to explore the potential of the thermal reservoir.

A commercial scale power plant will be set up in the third phase.

Ladakh L-G R K Mathur reckons the area can support a power generation capacity of 250 MW.

The project will be completed in four phases.

A tripartite Memorandum of Understanding (MoU) to establish and implement the first phase was signed on 6th February, 2021 between ONGC Energy; **LAHDC, Leh and** the Power Department of UT Ladakh

This geothermal project **is known as Geothermal** Field Development Project.

It will be commission by the end of 2022.

It has also been **requested to ONGC** to speed up the project and scale up to 200 MW capacity for appreciable gain.

This project will provide continuous power supply and also the hot water from

springs can be used for building hot swimming pools for the tourist and can be used for space-heating.

Puga Village of Ladakh

In **the Puga Village,** scientists have discovered a potential of more than 100 mw of geothermal energies.

It lies in the south-eastern part of Ladakh.

The village is a part of the **Himalayan geothermal belt.**

The region has shown the evidence of geothermal activity in various form including the mud pools, hot springs, sulphur deposits and borax deposits.

The talk of the potential geothermal project in **the Puja Village** has been into news since 2008.

The region has the potential to produce about 40% of the energy requirements.

Geothermal energy is clean energy which is available 24 hours a day, 365 days a year. Geothermal power plants have average availabilities of 90% or higher, compared with about 75% of the coal plants.

8.8 Govt. looks for new agency to do pollution source study

Last year, Deputy Chief Minister of Delhi had taken a decision to cancel a study, which was being done by the University of Washington in St. Louis for the Delhi government at a cost of ₹1.2 crore.

The government had **paid over ₹50 lakh to the university but decided to cancel the study as a government-appointed committee had raised red flags about the study**.

In a bid to study and combat pollution sources in Delhi, Chief Minister recently held a meeting with researchers of IIT Kanpur, IIT Delhi, and TERI.

It was decided that the Delhi government will work with teams of researchers and launch '**Real-time Source Apportionment'** project in Delhi, along with setting up an advanced monitoring system of real-time pollution sources.

This technology will also **clarify the factors responsible for the spike in air pollution at a particular spot**.

It will also help to study the **real-time effect of vehicles, dust, and smoke from factories.**

IIT Kanpur has submitted a proposal for a study that will cost about ₹11 crore. An

expert panel is examining the proposal.

Delhi government has initiated an electric vehicles policy and is also running a 'Switch Delhi' campaign to encourage citizens of Delhi to switch from polluting fuel-run cars to EVs.

8.9 On fastest highway, wildlife gets safe passage with bridges, passes

On India's fastest highway — the under-construction Nagpur-Mumbai Super Communication Expressway, which is designed for a top speed of 150 kmph — the focus is on co-existence, with five "wildlife bridges" and a network of underpasses being built.

The 701-km-long and 120-m-broad highway, which will be partly commissioned this May, cuts across three sanctuaries— Tansa (Thane), Katepurna (Akola-Washim border) and Karanja-Sohol (Washim) — and 35 wildlife focus areas (WFAs) – 16 in Vidharbha, 16 in the North Western Ghats, 3 in Marathwada — stretched over 118 km across the route. And there is a lot more at stake than a roadkill.

COEXISTENCE

A high-speed corridor cutting across wildlife habitat can severely restrict the movement of animals, altering their behaviour and dispersal patterns.

Mindful of this, the Maharashtra State Road Development Corporation (MSRDC), that is building the highway, joined forces with the Wildlife Institute of India (WII) to engineer safe wildlife crossings.

The idea is to give native animals a way to get across the road without endangering themselves.

The good thing about this highway is that it is the first one where wildlife mitigation has been considered, even as it does not cut across any of the protected areas of a forest.

While animal underpasses are not new, the five "wildlife bridges" — three overpasses in the wildlife focus areas of the project in Vidarbha and two in the highlands of Aurangabad — are the first of their kind in India.

This stretch of the highway is located in the middle of a functional corridor between the Bor Tiger Reserve and the Umred-Karhandla Wildlife Sanctuary.

Besides tigers, the area is also home to the nilgai, sambar, chinkara, wild boar, Indian hare, porcupine, striped hyena and golden jackal.

"Fragmentation of such patches can lead to destruction of habitat, and also affect the animal density and movement," the WII had said in a report which advocated the

overpass to avoid a man-animal conflict.

The wildlife bridge will also be covered with native flora. The art is to make it look as natural as possible. An animal should be happy to use the crossing.

8.10 Lahaul-Spiti residents want hydro projects in the region scrapped

In the wake of the Uttarakhand avalanche, there is increased anxiety among the people in the Lahaul-Spiti district of Himachal Pradesh who have been up in arms against the hydropower projects proposed in this tribal region.

Among the projects proposed in Lahul-Spiti are Tandi (104 Mega Watt), Rashil (102 MW), Bardang (126 MW), Miyar (90 MW) and Jispa (300 MW).

CONCERNS

Noted environmentalist Kulbhushan Upmanyu said various independent studies published over the last two decades had pointed out vulnerabilities of construction of hydro power projects in Himalayan region.

There exists growing risks of lake formations and glacial lake outbursts but it was a matter of concern that the findings of these studies had not been converted into policy.

The state government should consider the fragile ecology of the tribal belt of Himachal and accordingly prepare a plan for sustainable development rather than focusing on monetary benefits from hydro power projects.

The government should rethink its strategy on exploiting hydro power potential in the state and take corrective measures accordingly.

The governments so far had not learnt lessons from Kedarnath tragedy and it was the reason that the projects were being constructed in Uttarakhand.

Ravi Chopra Committee had earlier pointed out the role of hydropower in exacerbating the impact of the Kedarnath flash floods.

In the joint statement, the 13 NGOs and civil rights groups stated that lack of concern for the environment was the reason that the dam building agenda continues unabated and unabashed in the Himalayas.

In Himachal, hydro power projects worth 10,000 MW have already been built by changing land use that have gobbled forests, farms, caused landslides, soil erosion and impacted the river ecosystems at an enormous scale.

According to the State Disaster Management Authority, most of Himachal's

hydropower projects in operation or under construction fall in areas highly vulnerable to various hazards like landslides and floods.

In fact, the Avay Shukla Committee report which was submitted to HP High Court has recommended a moratorium on new hydropower projects in the state for this reason. But the state government has ignored the report completely.

Most of the planned projects that were yet to come up in Himachal were in the climate vulnerable and ecologically fragile regions of Kinnaur and Lahaul Spiti.

These were located in the upper Satluj valley and Lahaul on Chandrabhaga river, also known as Chenab, where tribal communities were resisting these projects.

These are also geologically unstable terrains prone to earthquakes and avalanches.

A study by researchers from the University of Potsdam, Germany that analysed 273 hydropower projects in the Himalayas in India, Nepal and Bhutan found that about 25% of them were likely to face severe damage from quake-triggered landslides.

8.11 High diversity of birds, many rarely seen in Delhi, in Mangar area: Study

The Mangar landscape of the Aravallis in Faridabad has a "high diversity" of bird species, with 219 species in a 17.13 sq km area, reflecting its "high conservation value", reveals a study of the birds by the Centre for Ecology Development And Research (CEDAR).

The study, which is the result of a year-long field survey and compilation of e-bird data.

It covers the Mangar landscape, which includes Mangar Bani — a sacred grove in Faridabad with an area of 2.66 sq km — and its surrounding forests.

According to the study, the 219 species found in the Mangar landscape include 130 resident species, 53 winter migrants, 12 summer migrants, and 16 passage migrants.

Among the species found, several are "rare" in Delhi, including the common rosefinch, black breasted weaver, and red munia.

Five "nationally endangered raptor species", including king vulture and Egyptian vulture, as well as six bird species that have been showing a "national-level decline", including the yellow crowned woodpecker and short-toed Snake Eagle, were also found to be "thriving" in the Mangar landscape, states the study.

The biggest takeaway from the report is the species richness in the Mangar area. Another important takeaway is regarding the kind of species that were found.

There are several dry forest specialists. Most of these are not very frequently seen in other dry forests in NCR.

Based on the study, the researchers have concluded that "conservation of Mangar Bani, along with the surrounding forests, contributes immensely to NCR's avifaunal biodiversity".

8.12 Birds use massive magnetic maps to migrate — and some could cover the whole world

Every year, billions of songbirds migrate thousands of miles between Europe and Africa — and then repeat that same journey again, year after year, to nest in exactly the same place that they chose on their first great journey.

The remarkable navigational precision displayed by these tiny birds — as they travel alone over stormy seas, across vast deserts, and through extremes in weather and temperature — has been one of the enduring mysteries of behavioural biology.

Birds buffeted by winds so much that they're significantly displaced from their migratory route are able to realign their course if they've already performed one migration.

This has suggested that birds' navigational abilities, some of which is built around a sense of compass direction, includes a mechanism for finding their way back home from parts of the world they've never before visited.

New study of Eurasian reed warblers has found that this remarkable ability involves a "magnetic map" that works like our human system of coordinates.

Surprisingly, the study found that these birds understand the magnetic field of places thousands of miles into territory they've never before visited — suggesting some birds could possess a "**global GPS** system" that can tell them how to get home from anywhere on Earth.

MIND MAPS

It's long been known that adult birds develop some sort of navigational map to help them migrate.

How they do this has remained controversial. Several cues have been proposed as guides for migratory birds — including odours, infra-sound, and even variations in gravity.

However, a gathering body of evidence has indicated that the Earth's magnetic field is one of the likeliest solutions to this mystery.

It has been suggested that different parameters of the Earth's magnetic field could form a grid, which birds follow, of north-south and east-west lines.

That's because magnetic intensity (the strength of the magnetic field) and magnetic inclination (the angle formed between the magnetic field lines and the surface of the Earth, also called the "dip" angle) both run approximately north to south.

Magnetic declination – the difference between the direction to the magnetic north pole and the geographical **north pole** — provides the east-west axis.

Despite largely agreeing that certain birds navigate via the Earth's magnetic field, scientists haven't worked out precisely what sensory apparatus they use to detect it – or whether multiple systems are used to detect different parameters of the field.

Other animals, like turtles, can also sense the magnetic field, but the same uncertainties apply.

Regardless, if birds have learned that magnetic intensity increases as they go north, they should be able to detect their position on the north-south axis wherever they happen to be.

Similarly, if they experience a declination value that is greater than anything they've previously experienced, they should know they're further east.

On this basis, the theory is that they can calculate their position on the grid and correct their orientation.

This would mean that birds essentially navigate using a system similar to our Cartesian coordinates – the basis of **modern GPS navigation**.

If this coordinates theory is accurate, it would mean that birds should be able to use their knowledge of magnetic field parameters to estimate their location anywhere on Earth – through the extrapolation or extension of their navigational rules.

To date, however, there has been no clear evidence that birds can use the magnetic field in this way.

8.13 Leatherback nesting sites could be overrun by Andamans development project

Proposals for tourism and port development in the Andaman and Nicobar (A&N) Islands have conservationists worried over the fate of some of the most important nesting populations of the Giant Leatherback turtle in this part of the Indian Ocean.

GIANT LEATHERBACK TURTLE

The largest of the seven species of sea turtles on the planet and also the most long-ranging, Leatherbacks are found in all oceans except the Arctic and the Antarctic.

Within the Indian Ocean, they nest only in Indonesia, Sri Lanka and **the Andaman and Nicobar Islands** and are also listed in Schedule I of India's Wildlife Protection Act, 1972, according it the highest legal protection.

Surveys conducted in the A&N Islands over the past three decades have shown that the populations here could be among the most important colonies of the Leatherback globally.

There is concern now, however, that at least three key nesting beaches — two on Little Andaman Island and one on Great Nicobar Island — are under threat due to mega "development" plans announced in recent months.

These include **NITI Aayog's** ambitious tourism vision for Little Andaman and the proposal for a mega-shipment port at Galathea Bay on Great Nicobar Island.

LITTLE ANDAMAN IN FOCUS

The **Little Andaman plan**, which proposes phased growth of tourism on this virtually untouched island, has sought the de-reservation of over 200 sq km of pristine rainforest and also of about 140 sq km of the Onge Tribal Reserve.

Two sites where key components of the tourism plan are to be implemented are both Leatherback nesting sites — South Bay along the southern coast of the island and West Bay along its western coast.

South Bay is proposed to be part of the "Leisure Zone" where a film city, a residential district and a tourism special economic zone are to come up.

West Bay is to be part of West Bay Nature Retreat with theme resorts, underwater resorts, beach hotels and high-end residential villas.

The roughly 7-km-long beach at West Bay has been the site of ongoing marine turtle research projects.

Set up post-2004 by the Andaman and Nicobar Environment Team (**ANET), Dakshin** Foundation, the Indian Institute of Science and the A&N Forest Department to monitor how turtle populations have responded after the devastating earthquake and tsunami, it has thrown up new information on turtles and their behaviour.

Not only are the numbers of females nesting here significant, satellite telemetry has

revealed hitherto unknown migration patterns.

Satellite-tagged female turtles have been tracked swimming up to 13,000 km after nesting on West Bay, towards the western coast of Australia and southwest towards the eastern coast of Africa.

One of the tagged turtles travelled to Madagascar, covering 12,328 km in 395 days while another travelled 13,237 km in 266 days to the Mozambique coast.

WANING PROTECTION

For the Leatherback, perhaps even more important is Great Nicobar Island, the southernmost of the A&N group.

Large numbers have been recorded nesting here — mainly on the long and wide beaches at the mouth of the Dagmar and Alexandria rivers on the west coast and at the mouth of the **Galathea river** along its south eastern coast.

Galathea Bay was, in fact, proposed as a wildlife sanctuary in 1997 for the protection of turtles and was also the site of a long-term monitoring programme.

The monitoring was stopped after the tsunami devastation of 2004, but it provided the first systematic evidence of numbers and importance of these beaches.

A&N ISLANDS

The A&N Islands are prominent in **the National Marine Turtle Action** Plan released recently by the Ministry of Environment, Forest and Climate Change.

The plan notes that "India has identified all its important sea turtle nesting habitats as 'Important Coastal and Marine Biodiversity Areas' and included them in the Coastal Regulation **Zone (CRZ) – 1".**

South Bay and West Bay on Little Andaman and Galathea on Great Nicobar, along with other nesting beaches in the islands, find a specific mention here as "Important Marine Turtle Habitats in India" and the largest Leatherback nesting grounds in India.

The plan identifies coastal development, including construction of ports, jetties, resorts and industries, as major threats to turtle populations.

It also asks for assessments of the environmental impact of marine and coastal development that may affect marine turtle populations and their habitats.

Developments in the A&N Islands indicate, however, that even as the action plan was being finalised, decisions were being made in violation of its basic concerns and premises.

Not only has the mega-tourism plan in Little Andaman been pushed in spite of serious objections by the A&N Forest Department, a major decision was also made recently on the Galathea Bay Wildlife Sanctuary.

The Standing Committee of the National Board for Wildlife, at its 60th meeting on January 5 under the chairmanship of the Environment Minister, agreed to its denotification for the "construction as well as operational phases of the International **Shipment Project".**

The A&N Port Management Board had in 2019 floated an expression of interest for the container transhipment terminal here, along with that of a free trade warehousing zone, and the Prime Minister announced in August 2020 that a transhipment project would come up here on an investment of ?10,000 crore.

The scale of the project and the investment proposed indicate it could signal the end of a crucial Giant Leatherback nesting site.

8.14 Healthy rivers: How DNA tool can help keep tabs on freshwater quality

Canada is the country which is described as a water-rich nation, and it is, with seven per cent of the world's renewable freshwater supply. However, freshwater sources are far from endless.

Many of Canada's 25 watersheds are under threat from pollution, habitat degradation, water overuse and invasive species.

For example, more than half of Canada's population lives within the Great Lakes watershed, Ottawa basin and St. Lawrence basin, which face multiple threats that degrade water quality and undermine the ability of freshwater ecosystems to keep functioning?

DATA DEFICIENCIES

Rivers are full of all kinds of small creatures that are highly sensitive to environmental threats.

The worms fly larvae and snails — collectively called macroinvertebrates — that live in the sediment at the bottom of a river (the "benthos") can serve as biological monitors for water quality.

The presence of biological monitor species that are less tolerant of poor water quality is suggestive of a healthy river.

But it can be challenging to sample and identify these macroinvertebrates. Even

when there is some data on them, the quality of the data may not be good enough to determine the health of the watershed.

To date, 64 per cent of sub-watersheds in Canada lack data on these species.

Gathering data on these species is challenging: Many watersheds are remote and difficult to access, and the cost of flying to them limits the amount of data that can be collected.

Experts partnered with local community groups to collect river samples so that we could understand river health by identifying macroinvertebrates from their DNA.

DNA PROFILING

DNA technologies have revolutionised the amount of data we can generate from a single river sample.

For example, one technique called "environmental DNA metabarcoding," or eDNA for short, involves taking samples of soil or water and searching for fragments of DNA specific to certain species.

This method eliminates the time-consuming process of sorting individual samples and enables us to identify the different species present in a river system.

Experts taught this technique to people involved in a community-based monitoring network called CABIN to create a new biomonitoring project**: STREAM** (Sequencing the Rivers for Environmental Assessment and Monitoring).

Since 2019, STREAM scientists have trained more than 100 community members who have gone on to collect almost 1,000 samples across 10 watersheds.

We're close to our goal of 1,500 samples in 15 watersheds in Canada. Yet we're already beginning to see how the STREAM project is filling in the blanks for freshwater health across Canada.

STREAM CASE STUDIES

Not only has the **STREAM** project provided data on the health of the Great Lakes and Ottawa River watersheds — and the threats to them — it has enabled communities to ask questions about their aquatic ecosystems.

STREAM has been able to assess changes in **macroinvertebrate** communities after the completion of a wetland restoration project.

Although this project is ongoing, early results show the wetlands already have a high variety of **macroinvertebrates**, with 178 species identified.

A quarter of these species are indicators of good wetland health, meaning water quality in the area is likely improving.

DNA results from 2019 indicated that the host sludge worms had not spread beyond the known whirling disease zone.

STREAM provides a unique opportunity to bring benefits to both people and the environment.

Through using DNA-based technology, it is possible to determine changes in water quality at local, sub-watershed and watershed levels.

For continued monitoring of the **Bow River for** example, the rapid result turnaround provided by STREAM means any indications of sludge worm dispersion can be dealt with by closing angling access to the area to prevent potential spread.

STREAM empowers local communities to lead freshwater research and equips people to address their own environmental questions — and it can easily be applied to other countries as a means to monitor freshwater systems.

8.15 Massive coal use in Mumbai's industrial clusters worsening city's air quality: CSE study

Mumbai is gradually losing its coastal city trait of enjoying clean air through the year and the massive use of coal by its industries could be a major culprit, found a new study by Centre for Science and Environment (CSE), a Delhi-based non-profit.

The factories in the Mumbai Metropolitan Region (MMR) burn two million tonnes coal every year, the report released recently said.

Out of the 13 industrial areas bordering Mumbai, CSE has done an in-depth assessment of four: Trans-Thane Creek (TTC), **Taloja, Ambernath and Dombivali.** They cover about 70 per cent of the industries operating in MMR.

The study has analysed and estimated the air pollution load from various industrial sectors.

An indicative ambient air quality monitoring for particulate matter was also conducted to calculate exposure of locals to the pollutants.

TTC a hotspot:

TTC was the most polluting, contributing about 44 per cent of the total load from the studied areas. It was followed by Taloja Industrial Area with a contribution of about 26 per cent.

CSE attributed the high pollution levels to rampant use of solid, dirty fuels like coal and agro-based fuels, and furnace oil.

TTC has the highest consumption of coal- and agro-based fuels, accounting for nearly 60 per cent of the coal and 70 per cent of agro-residues consumed in the areas studied.

Mumbai is a coastal region and so, is not expected to have very high levels of pollution. But with **rapid industrial and infrastructural development**, air quality of the region has started deteriorating.

The city needs to wake up and take corrective actions, to avoid turning into a pollution pressure-cooker like Delhi.

The chemical sector, which uses about 3.1 million tonnes of fuels every year, was found to be a major polluter. It contributed close 72 per cent of the total load in the region, the study said.

Medium and small enterprises (MSME) were found to be bigger contributors to air pollution, observed the study.

Dombivali residents were the most exposed to pollution, as analysed by CSE's indicative monitoring of particulate matter (PM). Poor road infrastructure and high, uncontrolled pollution from surrounding industries could be the reasons for the high PM content.

Patalganga industrial area in Navi Mumbai (near Panvel) had the least exposure.

Against the backdrop of the challenges outlined for the industrial sector, CSE has developed a comprehensive action plan for the MMR.

The shift in industries from conventional polluting fuel (coal, furnace oil, etc) to cleaner and non-polluting fuel (PNG, electricity) should be expedited.

Policy to incentivise use of clean fuel introduced. Cleaner fuels like biomass and natural gas need to be less expensive. Removal of VAT on natural gas and inclusion of natural gas under GST would be positive steps

Volatile organic compounds (VOC) in the ambient air should be continuously

monitored in areas where chemical industries are predominant

Air toxics emissions inventory and control plan should be developed Identify and monitor toxics and assess health risk through exposure modeling

Sector-specific pollution assessment study for chemical industries should be developed

A unique strategy of cross-regional inspection as already devised and implemented by the **Maharashtra Pollution Control Board (MPCB) in Taloja** can be replicated in other regions. Inspection of industries should be done by MPCB officers drawn from other regions.

Mechanism for penalties for the MSME sector for not instaling and using air pollution control devices should be created

Infrastructure should be well maintained and need assessments for development of roads and drainage lines conducted

Subsidies for purchase of air pollution control devices (APCD), particularly for small- and medium-scale units should be provided

The possibility of a common solvent recovery plant in chemical clusters and common steam generation units for industrial sectors cluster can be explored

Non-attainment criteria for cities within which industries are located should be modified

Policy-level intervention is needed for upcoming industrial areas to ensure presence of adequate buffer zones along the periphery of the industrial areas, so as to clearly demarcate the boundaries of residential and industrial areas.

8.16 Leopard population tracking gets new approach

Wildlife specialists have for long faced challenges estimating the density of leopards in areas where some of the spotted cats are melanistic or black.

Experts from three organisations, one of them Assam-based **Aaranyak**, have come up with a system that helps in properly estimating the leopard population in areas sustaining a mix of rosette and **melanistic** individuals.

Leopard Status

The Indian leopard is one of the big cats occurring on the Indian subcontinent, apart from the Asiatic lion, Bengal tiger, snow leopard and clouded leopard.

Listed on a par with Tigers under **Schedule 1** of the Wildlife Protection Act (WPA), 1972.

Listed in Appendix I of CITES.

Listed as **Vulnerable** on the IUCN Red List.

Rosettes

Rosettes are jagged black circular marks on the tawny coat of a leopard. Like the tiger's stripes, the rosettes of each leopard are unique in shape and size, making the species identifiable individually.

But **melanistic leopards —** commonly called black leopards or black panthers or ghongs (Assamese) — have been difficult to estimate as their rosettes are invisible.

The Spatial Mark-Resight (SMR) models applied by the scientists of **Aaranyak, Panthera** and World Wide Fund for Nature-India have provided a way of counting the melanistic leopards too. The new model has been written about in the Animal Conservation journal.

U.S.-based Panthera is the only organisation in the world devoted exclusively to the conservation of the world's 40 wild cat species and their ecosystems. **Melanism** has been documented in 14 of these species, including the leopard.

When a **population has only rosette leopard,** estimating their population size becomes easy because all the individuals can be identified.

Unlike rosette leopards, a black leopard can often not be reliably identified individually, although special cases exist.

Therefore it is **difficult to completely** estimate population sizes of leopards, a metric that is very critical for their conservation.

'Acute Problem'

This problem is acute in the tropical and subtropical moist forests of South and Southeast Asia where the frequency of melanistic leopards is high and leopards also face the greatest threat.

No precise estimates of leopard population could thus be done in protected areas and non-protected areas in India except on some occasions.

Expert at the Aaranyak's tiger research and conservation division, said the team used three years of camera trapping data between 2017 and 2019 obtained from Manas National Park to establish the SMR approach.

The population density of **leopards in Manas** is 3.37 per 100 sq km. In the study, about 22.6% images of the leopards were of the melanistic kind.

In the SMR models, they borrow the capture history of the rosette leopards and apply the information on the melanistic leopards to estimate the entire population size of leopards.

This is a significant analytical development that can help assess the population of leopards across a great part of the species range from where population estimates are scant.

The SMR method is expected to make it easier to assess the population status of leopards for informed conservation measures by applying the conventional camera trapping field method.

It can also be widely applied for other species that exhibit similar colour variation in nature.

8.17 Hyderabad wins global 'Tree City' status

Hyderabad has won a green contest among cities in India, and emerged one of the *'Tree Cities of the World'*.

That title has been bestowed by the Arbor Day Foundation and the Food and Agriculture Organization (FAO).

CONSERVATION:

Hyderabad has been selected for its commitment to **growing and maintaining urban forestry.**

With the recognition, the city joins 120 others from 23 countries, including the U.S., the U.K., Canada, and Australia.

The Municipal Administration and Urban Development Department cited the **State government's Haritha Haram programme and its Urban Forest Parks plan.**

The city was evaluated on five metrics: 'Establish Responsibility', 'Set the Rules', 'Know What You Have', 'Allocate the Resources', and 'Celebrate the Achievements'.

City leaders must delegate responsibility for the care of trees to a staff member, a city department, or a **group of citizens called a Tree Board.**

Hyderabad city is demonstrating leadership in management of its urban trees and is serving as **part of the solution to many of the global issues** we face today.

8.18 Sun shines at night in remote Nagaland village bordering Myanmar

Mon District Administration in collaboration with Global Himalayan Expedition (GHE) completed the electrification of **Shinnyu village under** Mon district in **Nagaland** using solar power.

GHE is a social impact initiative that has been working on sustainable development for remote communities since 2013. Partnering the local administration, it has set up solar energy projects in more than 100 remote villages in **Ladakh and 21 villages in the Garo Hills of Meghalaya**.

Shinnyu:

Shinnyu was set up in **1977 and recognised** by the State government in 2002 but it has virtually remained cut off in the absence of proper road infrastructure.

The Power Department tried to electrify the village in 2013-14 but the project was abandoned due to logistical problems.

Global Himalayan Expedition (GHE):

Global Himalayan Expedition (GHE) engages travelers and businesses to build resilient communities through sustainable development and climate positive travel.

Global Himalayan Expedition (GHE) is one of the **world's first organizations** using tourism and technology to bring solar energy to remote communities.

Global Himalayan Expedition conducts "Impact Expeditions" to remote Himalayan villages and uses a portion of the expedition fee to fund the capital cost of the hardware, transportation, installation and training of village-scale solar micro-grids.

Global Himalayan Expedition (GHE) works **towards providing clean energy** access through solar power to remote communities and has also won the **United Nation Global Climate Action Award 2020**.

'**GO ELECTRIC' CAMPAIGN'**

Union Minister for Road Transport & Highways launched the "Go Electric" Campaign to spread awareness on the **benefits of e-mobility** and EV Charging Infrastructure as well as electric cooking in India.

The electric fuel is a major alternative for fossil fuels which have an import bill of **Rs. 8 lakh Crore ,**When its compared to conventional fuels the electric fuel has low cost, reduced emissions and it is also indigenous developed product .

Significance:

Go Electric Campaign is an important initiative that would help in reducing the import dependence of our country in the coming years and would be an important step towards a cleaner and greener future.

The campaign is aimed at creating awareness at **PAN-India** level and is expected to boost the confidence of Electric Vehicle manufacturers.

The industry displaying different electric vehicles including e-buses, e-cars, 3-wheelers, and 2-wheelers apart from available charging options such as Fast Chargers and Slow Chargers.

Nodal Agency:

To implement the '**Go Electric' campaign at National and State level,** Bureau of Energy Efficiency (BEE) will extend technical support to the **State Designated Agencies (SDAs).**

As a Central Nodal Agency, BEE will provide content and details to State Designated Agencies and other partners to ensure uniformity of information.

Promotion under campaign:

Bureau of Energy Efficiency (BEE), under the aegis of the Ministry of Power has been mandated to undertake an awareness drive for promoting Public Charging, e-mobility & its ecosystem.

To implement the 'Go Electric' campaign at National and State level, BEE will extend technical support to the **State Designated Agencies (SDAs).**

8.19 CARBON WATCH

Chandigarh became the first state or Union Territory in India to launch **Carbon Watch**, a mobile application to assess the carbon footprint of an individual.

Although the app Carbon Watch can be accessed by everyone, it has specific options for the residents of Chandigarh to compile a detail study.

The application Carbon Watch can be downloaded through a QR code in Android supported smart cell phones.

As a person downloads the Carbon Watch application, they will need to fill details in four parts- Water, Energy, Waste Generation and Transport (Vehicular movement).

With the mentioned information, the mobile application will automatically calculate the carbon footprint of the individual. The application will also provide

information such as the national and world average of the emission, and the individual's level of emission generation.

The mobile application will suggest methods to reduce the carbon footprints. The application will suggest ways as per the information furnished by the individuals.

Why should we measure ambient particulate matter?

The Chandigarh **has recorded a high concentration** of PM 10- (particulate matters with **diameter of 10 microns or**less) and PM2.5 (particulate matters less than 2.5 microns)-form of air pollution, which is considered most serious.

The both **PM10 and PM2.5** is largely associated with the potential damaging effects they can have on the human body. WHO believes particles are affecting more people worldwide than any other pollutant.

the damaging health effects from PM10 and PM2.5 the WHO recommend the following exposure limits:

Carbon footprint

A **carbon footprint** is the total amount of greenhouse gases (including **carbon** dioxide and methane) that are generated by our actions.

Driving from the grocery store burns a certain amount of fuel, and fossil fuels are the primary sources of greenhouses gases. But that grocery store is powered by electricity, and its employees probably drove to work, so the store has its own **carbon footprint**.

India emits about 3 gigatonnes (GT) CO2 eq of greenhouse gases each year; about two and a half tons per person, which is half the world average. The country emits 7% of global emissions.

8.20 INCOIS to go for aerial mapping of ocean floor

The Indian National Centre for Ocean Information Services (INCOIS) is planning to take the help of the **National Remote Sensing Centre (NRSC) for aerial mapping** of the Andaman and Nicobar Islands and Lakshadweep to get a better picture of the ocean floor, also called '**bathymetric' study**.

FOR MITIGATING RISKS:

NRSC has already done a similar high resolution topographic Airborne Laser Terrain Mapping (ALTM) for the **entire coastal areas of the country**.

Now, it is in the process of **integrating the data for a 3D multi-hazard mapping** of

both the east and west coastline for a more precise picture of the ocean floor.

Such a study has become imperative in **view of the recent tsunamis of the Indonesian coasts** where more than the quake related high waves, damage was due to landslides under the sea beds **causing sudden wave surges** leading to much damage without giving sufficient time to alert people.

The research institute, under the Ministry of Earth Sciences, had also identified 'gaps' across the coast of Andhra Pradesh and Odisha for **installing more tide gauges** for **better monitoring of the sea and more accurate prediction** of impending disasters like cyclones.

These will be in addition to the 36 already in the Bay of Bengal.

INCOIS scientists with their counterparts in the Chennai-based National Institute of Ocean Technology and an United States independent scientific agency, Massachusetts-based Woods Hole Oceanographic Institution, have been **mining the data** recorded by a unique 'Flux Buoy' retrieved from the Bay of Bengal off the Kolkota coast recently.

8.21 NGT Suggests National River Rejuvenation Mechanism

Recently, the **National Green Tribunal (NGT)** directed the Ministry of **Jal Shakti** to devise an appropriate **National River Rejuvenation Mechanism** for effective monitoring of steps to curb pollution and for rejuvenation of all polluted river stretches across the country.

Assessment of the CPCB:

Findings:

According to the 2016-17 assessment of the **Central Pollution Control Board (CPCB)**, the **number of polluted stretches of the country's rivers has increased to 351** from 302 two years ago, and the number of critically polluted stretches — where water quality indicators are the poorest—has gone up to 45 from 34.

Among them, **117 such river stretches are in the States of Assam, Gujarat, and Maharashtra.**

Basis of the CPCB Assessment:

The CPCB, since the 1990s, has a programme to monitor the quality of rivers primarily by measuring **Biochemical Oxygen Demand (BOD)**, which is a proxy for organic pollution—the higher it is, the worse the river.

The CPCB considers a BOD **less than 3 mg/1** an indicator of a healthy river.

Initiative Taken:

The **NGT had constituted a Central Monitoring Committee to prepare and enforce a national plan** to make over 350 river stretches across the country pollution free as it has caused serious threat to safety of water and environment.

Latest Direction:

Observation:

There has been **deterioration in the quality of water in rivers in spite of the Water Act** which was enacted way back in 1974 which was intended to bring about improvement.

Establishment of NRRM:

NGT suggested the mechanism could be called **'National River Rejuvenation Mechanism (NRRM).** NRRM may consider setting up a **National, State or district environment data grid** at appropriate levels as an effective monitoring strategy.

Expansion in the Scope of NRRM:

The process of **rejuvenation of rivers need not be confined to only 351 stretches** but may be applicable to all small, medium and big polluted rivers, including those dried up.

Implementation:

Effective measures should be taken by **Chief Secretaries of all States and UTs** in terms of action plans for abatement of pollution and rejuvenation of rivers.

The Chief Secretaries are also required to **personally monitor progress at least once every month and the NRRM every quarter.**

The **accountability** for failure to comply with the direction **for payment of compensation** will be **of the Chief Secretaries concerned.**

Causes of Polluted River Stretches:

Rapid **urbanisation** and lack of efficient **waste disposal** systems.

Industrial Cities on the banks of rivers.

Run-off from **agricultural activities**, etc.

Impact of Pollution:

The World Bank estimates that the **health costs of water pollution in India equal three percent of India's GDP.**

It has also been suggested that **eighty percent of all illnesses in India and one-third of deaths can be attributed to water-borne diseases.**

The danger Ganga's polluted water poses is not only to the humans but also to **the animals**. Some of the important threatened species include, more than 140 fish species, 90 amphibian species, reptiles such as the **Gharials**, and mammals such as the **South Asian River Dolphin.**

Related Constitutional Provisions:

Article 21: The **fundamental right to clean the environment**, and further, pollution-free water, has been protected under the broad rubric of the **right to life**.

Article 51-A (g): It mandates as a **fundamental duty** of every citizen of India to protect and improve the natural environment including forests, lakes, **rivers and wildlife.**

Initiatives to Tackle Water Pollution:

National Water Policy (2012):

It aims to take cognizance of the existing situation, to propose a framework for creation of a system of laws and institutions and for a plan of action with a unified national perspective.

Started by the Ministry of Water Resources, it highlights the importance of water for human existence as well as for economic development related activities.

It suggests frameworks to conserve water resources through optimal, economical, sustainable and equitable means.

National Water Mission (2010): It ensures integrated water resource management leading to water conservation, less wastage, equitable distribution forming better policies.

National Mission for Clean Ganga (NMCG) which envisages a **five-tier structure at national, state and district level** to take measures for prevention, control, and abatement of environmental pollution in river Ganga.

It aims to ensure continuous adequate flow of water so as to rejuvenate the river Ganga.

Namami Gange Project: It integrates the efforts to clean and protect the Ganga River in a comprehensive manner.