



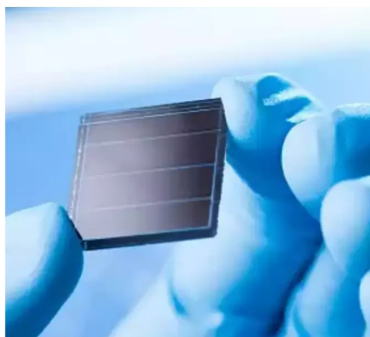
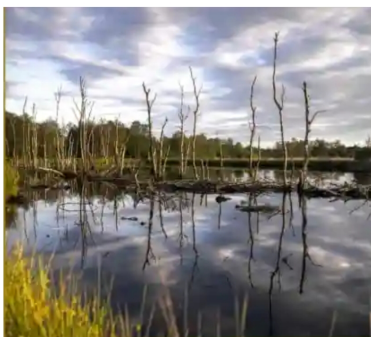
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Joint Maritime Exercise: Paschim Lehar (Xpl-2022)

A joint maritime exercise Paschim Lehar (XPL-2022) conducted by the Indian Navy off the West Coast.

- The exercise was conducted over a duration of 20 days with an objective to validate operational plans of the Western Naval Command.

More about the Exercise

It was aimed to enhance Inter-Service synergy among the Indian Navy, IAF, Indian Army and Coast Guard.

- The intra-theatre exercise included mobilisation and participation of over 40 ships and submarines of the Indian Navy.
- In addition, the IAF deployed SU 30 MKI & Jaguar maritime strike aircraft, Flight Refuelling Aircraft and AWAC.
- The exercise provided all participating forces an opportunity to operate together under realistic conditions, in responding to contemporary maritime challenges, across the areas of the Command's responsibility.
- The exercise was conducted under the aegis of Western Naval Command.

India-Central Asia Virtual Summit

Prime Minister hosted the first India-Central Asia Summit in virtual format on 27 January 2022.

- The event was attended by Presidents of the Republic of Kazakhstan, Kyrgyz Republic, Republic of Tajikistan, Turkmenistan and Republic of Uzbekistan.

Key Highlights of the Summit

This first India-Central Asia coincided with the 30th anniversary of establishment of diplomatic relations between India and Central Asian countries.

- The Leaders agreed to institutionalize the Summit mechanism by deciding to hold it every 2 years.
- They also agreed on regular meetings of Foreign Ministers, Trade Ministers, Culture Ministers

and Secretaries of the Security Council to prepare the groundwork for the Summit meetings.

- An India-Central Asia Secretariat in New Delhi would be set up to support the new mechanism.
- The Leaders discussed far-reaching proposals to further cooperation in various areas.
- The evolving situation in Afghanistan was also discussed with the Central Asian leaders.

About Central Asia

The Central Asia region (CA) comprises the countries of Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, and Uzbekistan.

The region is bordered by the Caspian Sea in the west and China in the east, and by Afghanistan to Russia in the south and north.

The five nations have a total population of 69 million people with Uzbekistan having the highest population.



India-ASEAN Digital Work Plan 2022

The 2nd ASEAN Digital Ministers (ADGMIN) meeting with India was held recently on a virtual platform.

- The ADGMIN is an annual meeting of Telecom Ministers of 10 ASEAN and the dialogue partner countries.
- The dialogue partner countries include Australia, Canada, China, EU, India, Japan, Republic of Korea, New Zealand, Russia, UK and US.

Key Points

The meeting discussed and deliberated various matters relevant to strengthening regional digital cooperation in the spirit of digital inclusion and integration.

- The Ministers meeting approved the India-ASEAN Digital Work Plan 2022.
- The work plan includes the following:
 - ♦ system for combating the use of stolen and counterfeit mobile handsets,
 - ♦ Wi-Fi Access network interface for nation-wide public internet,
 - ♦ the capacity building and knowledge sharing in emerging areas in the field of Information and Communication Technologies such as Internet of Things (IoT), 5G, etc.

About ASEAN

The Association of Southeast Asian Nations, or ASEAN, was established on 8 August 1967 in Bangkok, Thailand, with the signing of the ASEAN Declaration.

- There were five founding nations namely Indonesia, Malaysia, Philippines, Singapore and Thailand.
- Brunei Darussalam then joined on 7 January 1984,
 - ♦ Viet Nam on 28 July 1995,
 - ♦ Lao PDR and Myanmar on 23 July 1997,
 - ♦ and Cambodia on 30 April 1999,
 - ♦ making up what is today the ten Member States of ASEAN.
- The ASEAN Summit is the highest policy-making body in ASEAN comprising the Head of States or Government of ASEAN Member States.
- ASEAN's primary objective was to accelerate economic growth and through that social progress and cultural development.
- ASEAN was preceded by an organisation formed in 1961 called the Association of South-east Asia (ASA).

The group consisted of Thailand, the Philippines, and the Federation of Malaya.

ASEAN Countries and India

- India became a sectoral dialogue partner of ASEAN in 1992.
- Mutual interest led ASEAN to invite India to become its full dialogue partner during the fifth

ASEAN Summit in Bangkok in 1995.

- India also became a member of the ASEAN Regional Forum (ARF) in 1996.
- India and ASEAN have been holding summit-level meetings on an annual basis since 2002.
- India's search for economic space resulted in the 'Look East Policy'.
- The Look East Policy has today matured into a dynamic and action oriented 'Act East Policy'.
- PM at the 12th ASEAN India Summit and the 9th East Asia Summit held in Nay Pyi Taw, Myanmar, in November, 2014, formally enunciated the Act East Policy.
- The relations between India and the ASEAN countries was upgraded to Strategic Partnership in 2012.
- In August 2009, India signed a Free Trade Agreement (FTA) with the ASEAN members in Thailand.
- This was followed by ASEAN-India Agreements on Trade in Service and Investments in 2015.
- India-ASEAN trade and investment relations have been growing steadily, with ASEAN being India's fourth largest trading partner.
- India's trade with ASEAN stands at US\$ 81.33 billion, which is approx. 10.6% of India's overall trade.
- India's export to ASEAN stand at 11.28% of our total exports.
- Investment flows are also substantial both ways, with ASEAN accounting for approximately 18.28% of investment flows into India since 2000.



Image: ASEAN

Samagra Siksha Abhiyan

The Department of School Education and Literacy has launched an Integrated Centrally Sponsored Scheme for School Education- Samagra Shiksha Abhiyan.

- The scheme treats school education as a continuum and is in accordance with Sustainable Development Goal for Education (SDG-4).

Key Points

- The Scheme subsumes the three erstwhile Centrally Sponsored Schemes of :
 - ♦ Sarva Shiksha Abhiyan (SSA),
 - ♦ Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and
 - ♦ Teacher Education (TE).
- It is an overarching scheme for the school education sector extending from pre-school to class XII.
- The aim is to ensure inclusive and equitable quality education at all levels of school education.
- Samagra Shiksha scheme has been aligned with the recommendations of NEP 2020
- The scheme was launched with effect from the year 2018-19 and has been continued for a period of five years with effect from 01.04.2021 to 31.03.2026.

Objectives of the Scheme

- Support States and UTs in implementing the recommendations of the National Education Policy 2020.
- Support States in implementation of Right of Children to Free and Compulsory Education (RTE) Act, 2009.
- Focus on Early Childhood Care and Education.
- Emphasis on Foundational Literacy and Numeracy.
- Thrust on Holistic, Integrated, Inclusive and activity based Curriculum and Pedagogy to impart 21st century skills among the students
- Provision of quality education and enhancing

learning outcomes of students.

- Bridging Social and Gender Gaps in School Education.
- Strengthening and up-gradation of State Councils for Educational Research and Training (SCERTs) and District Institutes for Education and Training (DIET) as nodal agency for teacher training.

Under the Scheme, financial assistance is provided to all the States and UTs for undertaking above activities including training for universalization and delivery of quality school education.

Introducing millets in Mid-Day Meal Scheme

Central Government has requested State Governments/Union Territory Administrations to explore the possibility of introducing millets under PM POSHAN Scheme.

- It is suggested to introduce millets (coarse grains) based menu once a week and also conduct cooking competitions among Cook-cum-Helpers to popularize millet based recipes.

Key Points

- NITI Aayog is also promoting introduction of millets in PM POSHAN Scheme and has conducted a national consultation with State Governments/Union Territory Administrations.
- During consultation best practices on millets from Odisha, Telangana and Karnataka have been shared with other State Governments/Union Territory Administrations.
- The Scheme provides for 3 types of food grains i.e. wheat, rice and coarse grains.
- Food grains allocations are proposed by State Governments as per their requirement in Annual Work Plan & Budget (AWP&B).
- The allocations are then approved by Program Approval Board of the Scheme.
- The food grains are allocated biannually by the Department of School Education and Literacy

with the concurrence of Department of Food and Public Distribution.

- It is also mentioned that the entire cost of food grains is borne by Central Government.

About Millets

Millets are group of small grained cereal food crops which are highly tolerant to drought and other extreme weather conditions.

- They comprise of sorghum, pearl millet, finger millet (Major millets) foxtail, little, kodo, proso and barnyard millet (minor millets).
- They are grown with low chemical inputs such as fertilizers and pesticides.
- Most of millet crops are native of India and are popularly known as Nutri-cereals.
 - ♦ This is because they provide most of the nutrients required for normal functioning of human body.
- Millets are gluten free and non- allergenic.
- Millet consumption decreases triglycerides and C- reactive protein, thereby preventing cardiovascular disease.
- All millets are rich in dietary fibre.

National Scheme for PM POSHAN

Cabinet Committee on Economic Affairs (CCEA) had approved the continuation of 'National Scheme for PM POSHAN in Schools' for the five year period 2021-22 to 2025-26.

- PM POSHAN Scheme will provide one hot cooked meal in Government and Government-aided schools from 2021-22 to 2025-26.
- This is a Centrally-Sponsored Scheme which covers all school children studying in Classes I-VIII of Government, Government-Aided Schools.
- The earlier name of the scheme was 'National Scheme for Mid Day Meal in Schools' popularly known as Mid Day Meal Scheme.
- The scheme covers about 11.80 crore children studying in 11.20 lakh schools across the country.

Note: Mid-day Meal Scheme (under the Ministry of Education) was also a centrally sponsored scheme which was launched in 1995.

Coverage under Drip and Micro Irrigation

The Government is making all efforts to enhance

water use efficiency at farm level through adoption of micro irrigation in all the States of the Country.

- So far an area of 137.80 lakh ha has been covered under Micro Irrigation.

Key Points

The Department of Agriculture and Farmers Welfare (DA&FW) is implementing Per Drop More Crop component of Pradhan Mantri Krishi Sinchayee Yojana (PMKSY-PDMC) from 2015-16.

- The PDMC scheme focuses on enhancing water use efficiency at farm level through Micro Irrigation viz. Drip and Sprinkler irrigation systems.
- A Micro Irrigation Fund (MIF) has also been created with National Bank for Agriculture and Rural Development (NABARD) for the financing of such projects.
 - ♦ The major objective of the fund is to facilitate the States in mobilizing the resources for expanding coverage of Micro Irrigation.
 - ♦ And also for incentivising micro irrigation beyond the provisions available under PDMC scheme to encourage farmers to install Micro Irrigation systems.
- In addition, Indian Council of Agricultural Research (ICAR) imparts training and organizes field demonstrations through Krishi Vigyan Kendras (KVKs).
 - ♦ The aim is to educate farmers for promotion of efficient irrigation techniques/ Micro Irrigation for various crops.
- The Government provides financial assistance/ subsidy:
 - ♦ @ 55% of the indicative unit cost to Small & Marginal farmers and
 - ♦ @45% to Other farmers
 - ♦ for encouraging them to install Drip and Sprinkler Irrigation systems under the PDMC scheme to enhance the coverage.

About Pradhan Mantri Krishi Sinchayee Yojana

Launched on 1st July, 2015 with the motto of "Har Khet Ko Paani", the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) is being implemented to expand cultivated area with assured irrigation, reduce wastage of water and improve water use efficiency.

- PMKSY not only focuses on creating sources

for assured irrigation, but also creating protective irrigation by harnessing rain water at micro level through "Jal Sanchay" and "Jal Sinchan".

- Micro irrigation is also incentivized through subsidy to ensure "Per drop-More crop".
- PMKSY has been conceived amalgamating ongoing schemes viz.
 - ◆ Accelerated Irrigation Benefit Programme (AIBP) of the Ministry of Water Resources,
 - ◆ River Development & Ganga Rejuvenation (MoWR, RD&GR),
 - ◆ Integrated Watershed Management Programme (IWMP) of Department of Land Resources (DoLR) and
 - ◆ the On Farm Water Management (OFWM) of Department of Agriculture and Cooperation (DAC).

Scheme components

PMKSY consists of three major components implemented by various ministries. They are as follows:

- Component 1: Accelerated Irrigation Benefits Programme (AIBP) and Har Khet Ko Pani (HKKP)

This is being implemented by Department of Water Resources, River Development and Ganga Rejuvenation,

Ministry of Jal Shakti

- Component 2: Watershed Development

This component is being managed by department of Land Resources,

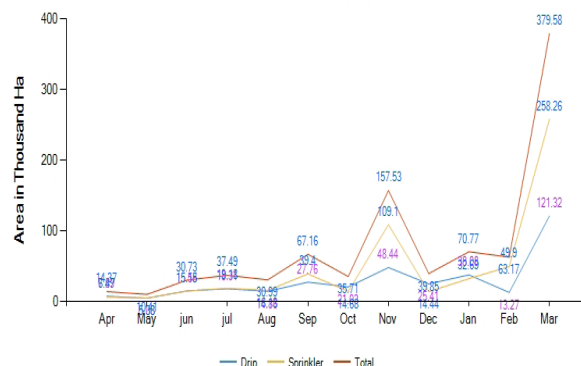
Ministry of Rural Development

- Component 3: Per Drop More Crop
 - ◆ This is being implemented by Department of Agriculture and Farmers Welfare, Ministry of Agriculture & Farmers Welfare.

Duration

- Initially, Krishi Sinchayee Yojana was approved for a period of 5 years (2015-16 to 2019-20) with a financial outlay of Rs.50,000 crores.
- Later on, Accelerated Irrigation Benefit Programme (AIBP), Har Khet ko Paani (HKKP) and Watershed Development components have been approved for continuation during 2021-26.

Micro Irrigation Area Coverage (2020-2021)



50th Statehood day of Tripura and Manipur

The Prime Minister paid tribute to the people who have contributed to the establishment and development of Tripura and Manipur on the occasion of the 50th Statehood day.

Historical Background: Tripura

The former princely state of Tripura was ruled by Maharajas of Manikya dynasty.

- It was an independent administrative unit under the Maharaja even during the British rule in India
- As per Rajmala, the royal chronology of Tripura, a total of 184 kings ruled over the state before it merged with the Indian Union on October 15 1949.
- On January 26, 1950 Tripura was accorded the status of a 'C' category state and on November 1, 1956, it was recognized as a Union Territory.
- Tripura gained full statehood on January 21, 1972, as per the North-East Reorganisation Act, 1971.
- Autonomous District Council (ADC) was constituted in 1982 under the 7th Schedule of the Constitution and later on in 1985 it was brought under the 6th Schedule.
- The ADC in Tripura encompasses 68.10% of the state's total geographical territory and is home to roughly one third of the state's population.
- Once Tripura was a single-district state.
- Now keeping the administrative convenience in view, decentralization has been taken further ahead by forming eight districts.

Tripura: State Facts

It is bordered to the north, west, and south by Bangladesh, to the east by the state of Mizoram, and to the northeast by the state of Assam.

- Capital: Agartala
- Official Languages: Bengali, Kokborok and English
- Other Languages: Mogh, Chakma, Halam, Garo, Bishnupriya Manipuri, Manipuri, Hindi, Oriya etc.
- Rainy Season: June to September
- Literacy Rate: 87.8% (as recorded in 2011 Census). As per recent data, the literacy rate is around 96%.
- The state is rich in natural resources such as natural gas, rubber, tea, and medicinal plants.
- Rice is the major crop of the state and is cultivated in 91% of the cropped area.

About Manipur: State Facts

Manipur is one of the Border States in the northeastern part of the country having an international boundary of about 352 kms. long stretch of land with Myanmar in the southeast.

- It is bounded by Nagaland in the north, Assam in the west and Mizoram in the south.
- Geographically, the State of Manipur could be divided into two regions, viz. the hill and the valley.
- The valley lies in the central part of the State and the hills surround the valley.
- As per the Peberon Report, 1835, the territory of Manipur was very large as compared to the present one.
- King Pamheiba generally known by his other name Garibaniwaj, was one of the great conquerors of Manipur.
- In the subsequent years King Garibaniwaj repeatedly invaded Burma (now Myanmar).
- Manipur was a princely state under the British rule in 1891.
- Slowly, the British started interfering in the administration of Manipur.
- This ultimately led to a full-fledged war with the British in 1891.
- The last phase of this battle was fought at Khongjom and ended on 23rd April 1891.
- The Manipuri forces at Khongjom, led by

Major Paona were defeated eventually by the British forces.

- So this day, the 23rd April has been commemorated every year by the Manipuris as “Khongjom Day“ by declaring a state holiday.
- The first free Indian tricolour flag was hoisted on the Indian soil at Moirang (45 k.m. from Imphal) in Manipur on 14th April, 1944 by the I.N.A. led by Netaji Subashchandra Bose.
- A democratic form of government with Maharaja as the executive head was established in 1947, under the Manipur Constitution act.

The territory became a full-fledged state with the integration on 21st January 197



Online Storage Management (OSM) for PDS

The Department of Food and Public Distribution under Ministry of Consumer Affairs, Food and Public Distribution with its principal agency, FCI, has developed a road map to roll out Online Storage Management (OSM) in the country.

- The OSM envisages putting in place a single source of information for the food grains stored in the country for central pool through integrating State portals with the central portal.

About OSM

The OSM will develop an ecosystem of storage management applications across the States, each being capable of capturing the Minimum Storage Specifications (MSS).

- These MSSs have been identified through intense and elaborate discussions with the con-

cerned States and FCI.

- This would help in route optimization for distribution as well.
- Sixteen (16) States have reassured of their commitment to develop/implement storage management applications with MSSs and integrate them with the central portal.
- This exercise, expected to be completed by Mar'22, will improve efficiency and transparency in stocking, storage, movement and distribution of foodgrains.

Advantages?

- It will help in driving down costs of food storage and distribution by checking leakages in the entire process.
- It will also enable the Government with readily available information for both monitoring and fast-paced decision making to benefit the stakeholders, especially PDS consumers.

Vision Document for the Electronics Sector

Ministry of Electronics and Information Technology, in association with ICEA, released a 5-year roadmap and Vision Document for the electronics sector.

- The document titled “\$300 bn Sustainable Electronics Manufacturing & Exports by 2026.”

Key Points

This roadmap is the second volume of a two-part Vision Document – the first of which titled “Increasing India’s Electronics Exports and Share in GVCs” was released in November 2021

- This report provides a year-wise break-up and production projections for the various products.
- Aims is to lead India’s transformation into a US\$300 billion electronics manufacturing powerhouse, from the current US\$75 billion.
- Amongst the key products that are expected to lead India’s growth in electronics manufacturing include:
 - ♦ Mobile Phones,
 - ♦ IT Hardware (laptops, tablets),
 - ♦ Consumer electronics (TV and audio),
 - ♦ Industrial electronics,
 - ♦ Auto electronics,
 - ♦ Electronic components,
 - ♦ LED Lighting, Strategic electronics,
 - ♦ PCBA, Wearables and hearables, and
 - ♦ Telecom equipment.

- Mobile manufacturing that is expected to cross US\$100 billion annual production - up from the current US\$30 billion - is expected to constitute nearly 40% of this ambitious growth.
- The numbers in the 2nd Volume of vision document confirms that there is a real opportunity in electronics sector, driven by 2 factors:
 - ♦ growth of digital consumption, and
 - ♦ growth and diversification of global value chains.
- The domestic market is expected to increase from US\$65 billion to US\$180 billion over the next 5 years.
- This will make electronics amongst India’s 2-3 top ranking exports by 2026.
- Of the US\$300 billion, exports are expected to increase from the projected US\$15 billion in 2021-22 to US\$120 billion by 2026.
- The US\$300 billion electronics manufacturing comes on the back of US\$10 billion PLI Scheme announced by the government to propel forward the Semiconductor and Display ecosystem.
- The government has committed nearly US\$17 billion over the next 6 years across four PLI Schemes –
 - ♦ Semiconductor and Design,
 - ♦ Smartphones,
 - ♦ IT Hardware and
 - ♦ Components.

Product segment	2020-21 (US\$ billion)	2025-26 (US\$ billion)
Mobile Phones	30	126.9
IT Hardware (laptops, tablets)	3	25.4
Consumer electronics (TV and audio)	9.5	23.1
Strategic electronics	4	11.5
Industrial electronics	10.5	25.4
Wearables and hearables	-	8.1
PCBA	0.5	11.5
Auto electronics	6	23.1
LED Lighting	2.2	16.2
Telecom equipment	-	11.5
Electronic components	9	17.3
Total	74.7	300.0

Chart: Road map to manufacture US\$300 billion Electronic Products

12th National Voters’ Day

The 12th National Voters’ Day (NVD) was celebrated across the country today on January 25, 2021.

- The theme for this year’s NVD, ‘Making Elections Inclusive, Accessible and Participative’.

Key Points

Since 2011, National Voters’ Day has been celebrated

on January 25 every year, all across the country to mark the foundation day of the Election Commission of India, i.e. 25th January 1950.

- The main purpose of the NVD celebration is to encourage, facilitate and maximise enrolment, especially for the new voters.
- Dedicated to the voters of the country, the day is utilized to spread awareness among voters and for promoting informed participation in the electoral process.
- An ECI Publication 'Leap of Faith: Journey of Indian Elections' was also released.
 - ♦ The book narrates India's electoral history and the growth of representative and electoral principles in India
- To mark the occasion, National Awards for the Best Electoral Practises for the year 2021-22 was conferred on State and District level officers.
 - ♦ National Awards will also be given to important stakeholders like government departments, ECI icons and media groups for their valuable contribution towards voters' awareness.
- Another Publication 'Pledging to Vote – A decadal Journey of The National Voters Day in India' was also launched.
 - ♦ The book presents the journey of National Voters' Day celebrations by ECI from Diamond Jubilee celebration onwards.



About ECI

Election Commission is a permanent and an independent body established by the Constitution of India under the Article 324.

- Constitution provides that the power of superintendence, direction and control of elections to
 - ♦ parliament,
 - ♦ state legislatures,
 - ♦ the office of president of India and

- ♦ the office of vice-president of India
- ♦ shall be vested in the election commission

- Thus, the Election Commission is an all-India body in the sense that it is common to both the Central government and the state governments.

Composition

- The Election Commission shall consist of the chief election commissioner and such number of other election commissioners, if any, as the president may from time to time fix.
- As of now, the Election Commission of India is a three-member body, with one Chief Election Commissioner and two Election Commissioners.
- The President of India appoints the Chief Election Commissioner and the Election Commissioners.

Independence

- The chief election commissioner is provided with the security of tenure.
 - ♦ He cannot be removed from his office except in same manner and on the same grounds as a judge of the Supreme Court.
- The chief election commissioner and the two other election commissioners have equal powers and receive equal salary, allowances and other perquisites, which are similar to those of a judge of the Supreme Court.
- They hold office for a term of six years or until they attain the age of 65 years, whichever is earlier.
- They can resign at any time or can also be removed before the expiry of their term.

Qualification

- The Constitution has not prescribed the qualifications (legal, educational, administrative or Judicial) of the members of the Election Commission.
- The Constitution has not debarred the retiring election commissioners from any further appointment by the government.

Powers and functions

- To determine the territorial areas of the electoral constituencies throughout the country on the basis of the Delimitation Commission Act of Parliament.

- To prepare and periodically revise electoral rolls and to register all eligible voters.
- To grant recognition to political parties and allot election symbols to them.
- To act as a court for settling disputes related to granting of recognition to political parties and allotment of election symbols to them.
- To determine the code of conduct to be observed by the parties and the candidates at the time of elections.
- To advise the president on matters relating to the disqualifications of the members of Parliament.
- To advise the president whether elections can be held in a state under president's rule in order to extend the period of emergency after one year.
- To register political parties for the purpose of elections and grant them the status of national or state parties on the basis of their poll performance.

EC Machinery

- The Election Commission is assisted by deputy election commissioners.
 - ♦ They are drawn from the civil service and appointed by the commission with tenure system.
- At the state level, the Election Commission is assisted by the chief electoral officer who is appointed by the chief election commissioner in consultation with the state government.
- Below this, at the district level, the collector acts as the district returning officer.
 - ♦ He appoints a returning officer for every constituency in the district and presiding officer for every polling booth in the constituency.

National Level Conference on Beekeeping Sector

National Bee Board (NBB) organized a National Conference on Beekeeping Sector in collaboration with NAFED, TRIFED and NDDB.

- During the conference, the importance of National Beekeeping & Honey Mission (NBHM) was highlighted in achieving the "Sweet Revolution" in the country.

About National Bee Board

Development of Beekeeping for Improving Crop

Productivity, a Central Sector Scheme was launched by the Ministry of Agriculture in 1994-95.

- A Beekeeping Development Board also functioned to coordinate the Beekeeping activities under the scheme.
- In May 2005, Beekeeping was included as a supplemental activity under National Horticulture Mission (NHM) for promoting cross pollination of Horticultural Crops.
- Accordingly, the National Bee Board (NBB) was reconstituted in June, 2006.
- The main objective of the National Bee Board (NBB) is:
 - ♦ to overall development of Beekeeping by promoting Scientific Beekeeping in India,
 - ♦ to increase the productivity of crops through pollination and
 - ♦ to increase the Honey production so as to supplement the income of the Beekeepers/ Farmers.
- Presently NBB is implementing National horticulture mission (NHM) and Horticulture Mission for North East and Himalayan State (HMNEM).

About NAFED

National Agricultural Cooperative Marketing Federation of India Ltd.(NAFED) was established on the auspicious day of Gandhi Jayanti on 2nd October 1958.

- NAFED is registered under the Multi State Co-operative Societies Act.
- NAFED was setup with the object to promote Co-operative marketing of agricultural produce to benefit the farmers.
- Agricultural farmers are the main members of NAFED, who have the authority to say in the form of members of the General Body in the working of NAFED.
- NAFED is also creating 65 clusters/ Farmers Producers Organisations (FPOs) of beekeepers/ Honey Processors.
 - ♦ These 65 FPOs will be part of the honey corridor linking northwest to north-eastern regions.
 - ♦ NAFED is aiming at bringing all these 65 FPOs under the National Beekeeping and Honey Mission.

About the National Beekeeping and Honey Mission

National Beekeeping & Honey Mission (NBHM) was approved by the GoI for three years (2020-21 to 2022-23).

- The mission was announced as part of the AtmaNirbhar Bharat scheme.
- NBHM aims for the overall promotion & development of scientific beekeeping in the country to achieve the goal of 'Sweet Revolution' (MadhuKranti).
- Sweet Revolution is being implemented through National Bee Board (NBB).

Coal Directory of India 2020-21

Coal Controller's Organization, a subordinate office under the Ministry of Coal, released one of its flagship publications, the 'Coal Directory of India 2020-21'.

- The Statistical Publication was released by the Secretary, Ministry of Coal.

Key Points

- The 'Coal Directory of India 2020-21' contains information regarding the performance of Coal and Lignite sectors during the financial year 2020-21.
- It incorporates the grade wise data of production and dispatch and reserves of coal.
- The publication also provides information on pit head closing stock, import- export and prices of coal for last few years.
- The Directory is accessible from the official websites of the Coal Controller's Organisation and Ministry of Coal.

About Office of Coal Controller

Office of Coal Controller (earlier Coal Commissioner), established in 1916, is one of the oldest offices in Indian Coal sector.

- It was established during the First World War to meet the coal requirement of the Government during the war.
- Vision: Vision of CCO is focused towards sustainable development of the coal and lignite industry with a view to satisfy its obligations towards economic prosperity of the country.

Capacity Building Plan of Ministry of Food Processing Industries (MoFPI)

Vision Document of Capacity Building Plan of Ministry of Food Processing Industries under Mission Karmayogi was released.

Key Points

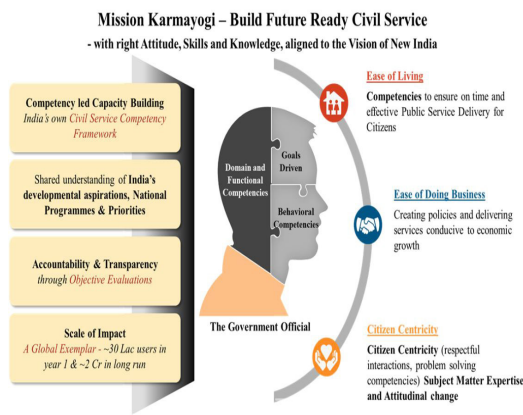
- The Vision Document of Capacity Building Plan (CBP) has been developed with the support of Capacity Building Commission.
- The Ministry of Food Processing Industries is the first amongst all Ministries and Departments to develop and implement CBP under Mission Karmayogi.
- The objective of the plan is to enable employees to be more creative, proactive, technology-enabled, and citizen centric by providing them training in domain areas relating to Food Processing Sector.
- Nearly 150 employees of the Ministry will be given training to build and strengthen behavioural, functional and domain competencies.

About Mission Karmayogi

Mission Karmayogi is the National Programme for Civil Services Capacity Building.

- It has been envisioned by the Government to address the changing needs and aspiration of the citizen.
- The Programme has been designed to enhance the civil services under a national Programme, anchored by an apex body headed by the Prime Minister.
- Central to the Programme is the recognition that a fit-for-purpose government workforce requires a competency driven capacity building approach that focuses on imparting competencies critical to discharge its roles.
- This is achieved through a Competency Framework for Civil Services that will be totally indigenous to India.
- It is complemented by iGOTKarmayogi - a comprehensive online platform.
- iGOT will enable online, face-to-face, and blended learning and will manage lifelong learning records of the officials.
- The entire Programme will be managed by a robust Institutional Framework with shared

- ownership between the Centre and the States.
- The Department of Personnel and Training will manage the entire programme, in collaboration with the given institutional structure.



President Address to the Joint Sitting of two Houses of Parliament

Recently, President addressed the Joint Sitting of two Houses of Parliament on the start of the budget session.

Key Points

Article 87 of the constitution provides two instances when the President specially addresses both Houses of Parliament.

- The President of India addresses both the Rajya Sabha and the Lok Sabha at the beginning of the first Session after each general election.
 - This is when the reconstituted lower house meets for the first time.
- The President also addresses both the houses at beginning of the first session of each year.
 - The President's speech essentially highlights the government's policy priorities and plans for the upcoming year.
 - The address provides a broad framework of the government's agenda and direction.

Presidential Address and Motion of Thanks

- The first session of every fiscal year is addressed by the president.
- In this address, the president outlines the policies and programmes of the government in the preceding year and ensuing year.

- This address of the president is discussed in both the Houses of Parliament on a motion called the 'Motion of Thanks'.
- At the end of the discussion, the motion is put to vote.
- This motion must be passed in the House. Otherwise, it amounts to the defeat of the government.

National Commission for Women's 30th Foundation Day

The National Commission for Women's (NCW) 30th Foundation Day was celebrated on 31st January.

- The theme of the programme 'She The Change Maker' is aimed at celebrating the achievements of women in different fields.

About NCW

The National Commission for Women was set up as statutory body in January 1992 under the National Commission for Women Act, 1990 .

- The objective of the commission was to:
 - review the Constitutional and Legal safeguards for women ;
 - recommend remedial legislative measures ;
 - facilitate redressal of grievances and
 - advise the Government on all policy matters affecting women.
- The First Commission was constituted on 31st January 1992 with Mrs. Jayanti Patnaik as the Chairperson.
- The Commission shall consist of :-
 - A Chairperson, committed to the cause of women, to be nominated by the Central Government.
 - five Members to be nominated by the Central Government- Provided that at least one Member each shall be from amongst persons belonging to the Scheduled Castes and Scheduled Tribes respectively; and
 - a Member-Secretary to be nominated by the Central Government.

19th Electric Power Survey (EPS) report

The 19th Electric Power Survey (EPS) report was recently discussed in Rajya Sabha.

- The EPS report covers electricity demand projection for the year 2016-17 to 2026-27.

Key Highlights

- The 19th Electric Power Survey (EPS) Report covers electricity demand projection of Distribution Companies, States/UT's, Regions all over India.
- The report has been brought out by Central Electricity Authority (CEA).
- The Report covers year-wise electricity demand projection for the years 2016-17 to 2026-27 for Discoms, States/UT's, Regions and for the country.
- The report also covers perspective electricity demand projection for the years 2031-32 and 2036-37.
- As on 31.12.2021, the Installed Generation Capacity of the country was around 393 GW.
- Further, to meet the future demand of electricity as projected in 19th EPS, by 31.03.2030, the installed generation capacity is planned to be around 817 GW.
- The CEA is responsible for the technical coordination and supervision of programmes and is also entrusted with a number of statutory functions.
- It is headed by a Chairman, who is also ex-officio Secretary to the Government of India.
- The authority comprises six full time Members of the CEA of the rank of ex-officio Additional Secretary to the Government of India, they are designated as:
 - ◆ Member (Thermal),
 - ◆ Member (Hydro),
 - ◆ Member (Economic and Commercial),
 - ◆ Member(Power Systems),
 - ◆ Member(Planning) and
 - ◆ Member(Grid Operation and Distribution).

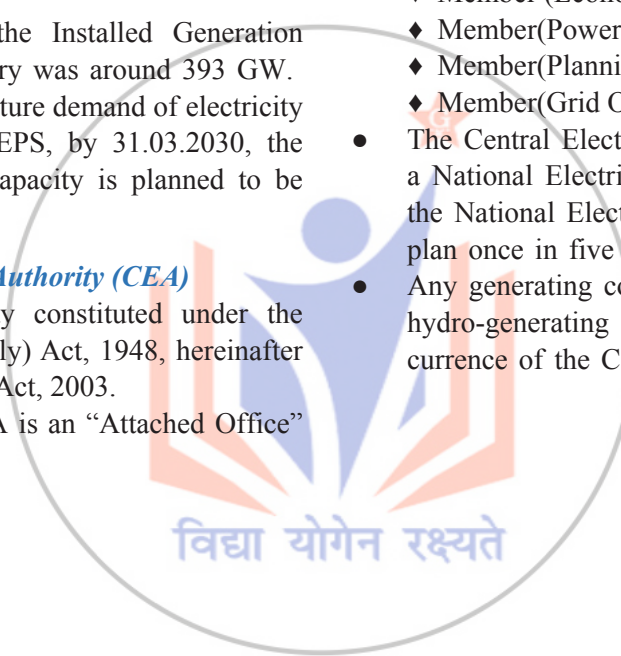
About Central Electricity Authority (CEA)

CEA is a Statutory Body constituted under the erstwhile Electricity (Supply) Act, 1948, hereinafter replaced by the Electricity Act, 2003.

- The office of the CEA is an "Attached Office"

of the Ministry of Power.

- The Central Electricity Authority shall prepare a National Electricity Plan in accordance with the National Electricity Policy and notify such plan once in five years.
- Any generating company intending to set-up a hydro-generating station also requires the concurrence of the Central Electricity Authority.



Definition under State of Forest Report

As per decision 19/Conference of Parties (CP) 9-Kyoto Protocol, the forest can be defined by any country depending upon the capacities and capabilities of the country.

- India's definition of forest has been taken on the basis of three criteria only and very well accepted by UNFCCC and FAO for their reporting/communications.

What is India's definition of Forest?

The forest cover is defined as 'all land, more than one hectare in area, with a tree canopy density of more than 10 percent irrespective of ownership and legal status'.

- Such land may not necessarily be a recorded forest area. It also includes orchards, bamboo and palm.
- The definition of forest cover has clearly been defined in all the India State of Forest Report (ISFR) and in all the International communications of India.
- Forest is defined structurally on the basis of:
 - ◆ Crown cover percentage: Tree crown cover- 10 to 30% (India 10%)
 - ◆ Minimum area of stand: area between 0.05 and 1 hectare (India 1.0 hectare) and
 - ◆ Minimum height of trees: Potential to reach a minimum height at maturity in situ of 2 to 5 m (India 2m)
- In ISFR 2021 recently published by the Ministry, the forest cover figures are divided as 'Inside Recorded Forest Area' and 'Outside Recorded Forest Area'.
 - ◆ Those 'Inside Recorded Forest Area' are basically natural forests and plantations of Forest Department.
 - ◆ The Forest cover 'Outside Recorded Forest

Area' are mango orchards, coconut plantations, block plantations of agroforestry.

- ◆ Thus data of mango plantations etc. is automatically getting separated out as Forest Survey of India is reporting the figures of 'Outside Recorded Forest Area' separately.

World Wetlands Day

World Wetlands day 2022 was celebrated in India at Sultanpur National Park, Ramsar site of Haryana.

- Two new Ramsar sites (Wetlands of International Importance), Khijadia Wildlife Sanctuary in Gujarat and Bakhira Wildlife Sanctuary in U.P were also announced on the occasion.

Key Points

India now has a network of 49 Ramsar sites covering an area of 10,93,636 hectares, the highest in South Asia.

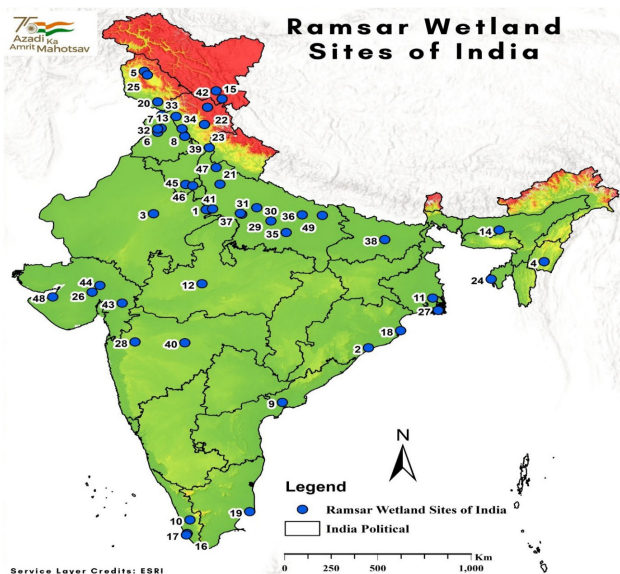
- Bakhira Wildlife Sanctuary in UP provides a safe wintering and staging ground for a large number of species of the Central Asian Flyway.
- Khijadia Wildlife Sanctuary is a coastal wetland with rich avifaunal diversity providing a safe habitat to endangered and vulnerable species.

What is World Wetlands Day?

World Wetlands Day is celebrated each year on 2 February to raise awareness about wetlands.

- This day also marks the anniversary of the Convention on Wetlands, which was adopted as an international treaty in 1971, in the Iranian city of Ramsar.
- Wetlands Action for People and Nature is the theme in 2022.

Ramsar Site of India



S.No	Site Name	Designation Date	Area (Sq. Km)
1	Keoladeo National Park	01-10-1981	28.73
2	Chilika Lake	01-10-1981	1165
3	Sambhar Lake	23-03-1990	240
4	Loktak Lake	23-03-1990	266
5	Wular Lake	23-03-1990	189
6	Harike Lake	23-03-1990	41
7	Kanjli	22-01-2002	1.83
8	Ropar	22-01-2002	13.65
9	Kolleru Lake	19-08-2002	901
10	Vembanad-Kol Wetland	19-08-2002	1512.5
11	East Calcutta Wetlands	19-08-2002	125
12	Bhoj Wetland	19-08-2002	32.01
13	Pong Dam Lake	19-08-2002	156.62
14	Deepor Beel	19-08-2002	40
15	Tsomoriri	19-08-2002	120
16	Sasthamkotta Lake	19-08-2002	3.73
17	Ashtamudi Wetland	19-08-2002	61.4
18	Bhitarkanika Mangroves	19-08-2002	650
19	Point Calimere Wildlife and Bird Sanctuary	19-08-2002	385
20	Surinsar-Mansar Lakes	08-11-2005	3.5
21	Upper Ganga River	08-11-2005	265.9
22	Chandertal Wetland	08-11-2005	0.49
23	Renuka Wetland	08-11-2005	0.2
24	Rudrasagar Lake	08-11-2005	2.4
25	Hokera Wetland	08-11-2005	13.75
26	Nalsarovar	24-09-2012	120
27	Sundarban Wetland	30-01-2019	4230
28	Nandur Madhameshwar	21-06-2019	14.37
29	Sarsai Nawar Jheel	19-09-2019	1.6127
30	Nawabganj Bird Sanctuary	19-09-2019	2.246
31	Sandi Bird Sanctuary	26-09-2019	3.0854
32	Beas Conservation Reserve	26-09-2019	64.2892

33	Keshopur-Miani Community Reserve	26-09-2019	3.439
34	Nangal Wildlife Sanctuary	26-09-2019	1.16
35	Samaspur Bird Sanctuary	03-10-2019	7.99371
36	Parvati Arga Bird Sanctuary	02-12-2019	7.22
37	Saman Bird Sanctuary	02-12-2019	5.263
38	Kabartal Wetland	21-07-2020	26.2
39	Asan Conservation Reserve	21-07-2020	4.444
40	Lonar Lake	22-07-2020	4.27
41	Sur Sarovar	21-08-2020	4.31
42	Tso Kar Wetland Complex	17-11-2020	95.77
43	Wadhvana Wetland	05-04-2021	6.3
44	Thol Lake Wildlife Sanctuary	05-04-2021	6.99
45	Bhindawas Wildlife Sanctuary	25-05-2021	4.12
46	Sultanpur National Park	25-05-2021	1.4252
47	Haiderpur Wetland	13-04-2021	69.08
48	Khijadia Wildlife Sanctuary	13-04-2021	5.11745
49	Bakhira Wildlife Sanctuary	29-06-2021	28.94

Steel Industry Reduces its Energy Consumption

The average CO₂ emission intensity of the Indian steel industry has reduced from around 3.1 Tonne/tonne of crude steel (T/tcs) in 2005 to around 2.6 T/tcs by 2020.

- The reduction in energy consumption and carbon emissions has been achieved with the widespread adoption of Best Available Technologies in the modernisation & expansions projects.

Key Points

To mitigate and adapt to the adverse impact of climate change India has introduced various measures under the umbrella of National Action Plan for Climate Change (NAPCC).

- National Mission for Enhanced Energy Efficiency (NMEEE) is one of the eight missions under NAPCC.
- The Perform Achieve & Trade (PAT) is a flagship scheme under NMEEE.
- It is a market based mechanism for enhancing energy efficiency, under which specific targets of energy savings are set.
- Those achieving the set targets are awarded Energy Saving Certificates (ESCerts), each equal to 1 Metric Tonne of Oil Equivalent.
- Those unable to meet their assigned targets are required to purchase ESCerts from the over-achievers through a centralised online trading mechanism.
- The Indian steel industry is an important stake-

holder under the PAT Scheme.

- The Steel sector has been able to achieve incredible energy savings from PAT Cycles PAT-I, PAT-II & PAT-III for the period from 2012- 20.
 - ♦ The savings are to the tune of 5.5 MTOE (Million Tonne of Oil Equivalent) and corresponding CO₂ reduction of 20 Million tonne.
- Further, the steel sector has been made an important stakeholder in the National Green Hydrogen Energy Mission.
 - ♦ So that the sector can facilitate deployment of green hydrogen in the iron & steel making process.

India's Stand at COP-26

26th session of the Conference of the Parties (COP26) to the United Nations Framework Convention on Climate Change (UNFCCC) was held in Glasgow, United Kingdom.

- The Government of India has articulated and put across the concerns of developing countries at the session.

Panchamrit of India's climate action:

India presented the following five nectar elements (Panchamrit) of India's climate action at the COP 26:

- Reach 500GW Non-fossil energy capacity by 2030.
- 50 per cent of its energy requirements from renewable energy by 2030.
- Reduction of total projected carbon emissions by one billion tonnes from now to 2030.
- Reduction of the carbon intensity of the economy by 45 per cent by 2030, over 2005 levels.
- Achieving the target of net zero emissions by 2070.

Mantra of LIFE

- India also highlighted the mantra of LIFE- Life-style for Environment to combat climate change was also shared in COP 26.
- It was stated that Lifestyle for Environment has to be taken forward as a campaign to make it a mass movement of Environment Conscious Lifestyles.

- The message conveyed by India was that the world needs mindful and deliberate utilization, instead of mindless and destructive consumption.

Note: India's stand was recently discussed in Rajya Sabha.

COP 26

- The 26th session of the Conference of the Parties (COP 26) to the UNFCCC was originally scheduled to take place in November 2020, in Glasgow, UK.
- The event was eventually hosted by the UK in partnership with Italy from 31 October to 12 November 2021.
- At COP 26, Nations adopted the Glasgow Climate Pact, aiming to turn the 2020s into a decade of climate action.
- The aim is to limit the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit it to 1.5 °C.

Fourth Asia Ministerial Conference on Tiger Conservation

Minister for Environment, Forest and Climate Change spoke at the 4th Asia Ministerial Conference on tiger conservation.

- The event is considered important for reviewing progress towards the Global Tiger Recovery Programme and commitments to tiger conservation.

About the Event

The 4th Asia Ministerial Conference (AMC) on Tiger Conservation was jointly organized by the Malaysian Government and Global Tiger Forum, with the support of local and international partners, including WWF.

- The event started with the adoption of the Kuala Lumpur Joint Statement, listing a number of actions that will need to be taken in order to effectively recover the species across Asia.
- It was the first major Global Tiger Initiative meeting held in Southeast Asia since Thailand hosted the 1st AMC in January 2010.

About The Global Tiger Initiative (GTI)

The Global Tiger Initiative (GTI) was launched in 2008 as a global alliance of governments, international organizations, and civil societies with the aim of working together to save wild tigers from extinction.

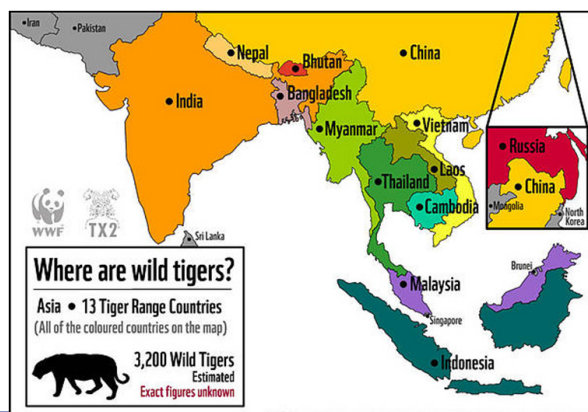
- In 2013, the scope was broadened to include Snow Leopards.
- The GTI's founding partners included the World Bank, the Global Environment Facility (GEF), the Smithsonian Institution, Save the Tiger Fund, and International Tiger Coalition (representing more than 40 non-government organizations).
- The initiative is led by the 13 tiger range countries (TRCs).
- In November 2010, leaders of the tiger range countries (TRCs) assembled at an International Tiger Forum in St. Petersburg, Russia to adopt the St. Petersburg Declaration on Tiger Conservation.
- Their overarching goal was to double the number of wild tigers across their geographical area from about 3,200 to more than 7,000 by 2022. (TX2)
- India is one of the Founding members of the intergovernmental platform of Tiger Range Countries – Global Tiger Forum.

Note: 2nd Global Tiger Summit will be held in Vladivostok on September 5th where the New Delhi declaration will be adopted.

Note: India has already achieved the remarkable feat of doubling the tiger population in 2018 itself, 4 years ahead of the targeted year 2022.

Tiger Range Countries

Bangladesh, Bhutan, Cambodia (locally extinct), China, India, Indonesia, Lao PDR (locally extinct), Malaysia, Myanmar, Nepal, Russia, Thailand, and Viet Nam (locally extinct).



Global Center of Excellence in Affordable and Clean Energy

The Global Center of Excellence in Affordable and Clean Energy (GCoE-ACE) was launched at the Indian Institute of Technology, Dharwad (IITDh), Karnataka.

Key Points

- The center is supported by the Corporate Social Responsibility (CSR) donation from HHSIF.
- The first phase of the CSR project with HHSIF is to establish equipment for the GCoE-ACE mainly as skill development, fabrication, and R&D equipment.
- The subsequent phases are envisaged to encourage innovation and to provide incubation support for the solutions to the grass-root problem statements in the affordable and clean-energy domain.

About HHSIF

The Honeywell Hometown Solutions India Foundation (HHSIF) is a not-for-profit organization that deploys efforts in five critical areas:

- Science and math education
- Family safety and security
- Housing and shelter
- Sustainability
- Humanitarian relief

Cage Aquaculture in Reservoir

Department of Fisheries, Ministry of Fisheries, Animal Husbandry and Dairying organized a webinar on “Cage aquaculture in Reservoir: Sleeping Giants”.

- The event highlighted the importance of reservoirs and cage aquaculture for the development of fisheries sector.

What is Cage Aquaculture?

Cage aquaculture involves the growing of fishes in

existing water resources while being enclosed in a net cage which allows free flow of water.

- It is an aquaculture production system made of a floating frame, net materials and mooring system (with rope, buoy, anchor etc.).
- The system comes with a round or square shape floating net to hold and culture large number of fishes and can be installed in reservoir, river, lake or sea.
- There are 4 types of fish-rearing cages namely:
 - ◆ i) Fixed cages,
 - ◆ ii) Floating cages,
 - ◆ iii) Submerged cages and
 - ◆ iv) Submersible cages.

- Economically speaking, cage culture is a low impact farming practice with high returns and least carbon emission activity.
- Farming of fish in an existing water body removes one of the biggest constraints of fish farming on land, i.e., the need for a constant flow of clean, oxygenated water.



PM-Devine

A new scheme, Prime Minister's Development Initiative for North-East, PM-Dev INE was announced during the budget presentation.

- An initial allocation of Rs. 1,500 crore will be made for the new scheme.

Key Points

- PM-Dev INE will be implemented through the North-Eastern Council.
- It will fund infrastructure, in the spirit of PM Gati Shakti, and social development projects based on felt needs of the North-East.
- This will enable livelihood activities for youth and women, filling the gaps in various sectors.
- However, it will not be a substitute for existing central or state schemes.

Trust-Based Governance for Ease of Doing Business 2.0

While presenting Union Budget 2022-23, Union Finance Minister announced that with advent of Amrit Kaal, the next phase of Ease of Doing Business 2.0 (EODB 2.0) and Ease of Living, will be launched.

- This new phase will be guided by an active involvement of the States, digitisation of manual processes and interventions, integration of the Central and State-level systems through I-T bridges.

Key Highlights

Endeavour of the Government to improve productive efficiency of capital and human resources, and the Government will follow the idea of 'trust-based governance'.

- Working in the direction of 'minimum government & maximum governance', over 25,000 compliances were reduced and 1,486 Union laws were repealed in recent years.

- These measures have improved India's Ease of Doing Business in all parameters.
- Green Clearances: The Finance Minister proposed to expand the scope of single window portal, PARIVESH to provide information to the applicants.
 - ◆ Based on location of units, information about specific approvals will be provided.
 - ◆ It will enable application for all four approvals through a single form, and tracking of the process through Centralized Processing Centre-Green (CPC-Green).
- Land Records Management: States will be encouraged to adopt Unique Land Parcel Identification Number to facilitate IT-based management of land records.
 - ◆ The facility for transliteration of land records across any of the Schedule VIII languages will also be rolled out.
- Government Procurement: To enhance transparency and to reduce delays in payments, end-to-end online e-Bill System to be launched for use by all Central ministries for their procurements.
 - ◆ The system will enable the suppliers and contractors to submit online their digitally signed bills and claims and track their status from anywhere.
 - ◆ To reduce indirect cost for suppliers and work-contractors, the use of surety bonds as a substitute for bank guarantee will be made acceptable in government procurements.
- AVGC Promotion Task Force: An animation, visual effects, gaming, and comic (AVGC) promotion task force with all stakeholders will be set-up.
 - ◆ It will recommend ways to tap into the immense potential of this sector to employ youth and build domestic capacity for serving our markets and the global demand.

- Accelerated Corporate Exit: Centre for Processing Accelerated Corporate Exit (C-PACE) with process re-engineering, will be established.
 - ♦ The aim is to facilitate and speed up the voluntary winding-up of these companies from the currently required 2 years to less than 6 months.
- 5G Production-Linked Incentive Scheme (PLI): The finance minister also proposed a scheme for design-led manufacturing to build a strong ecosystem for 5G as part of the Production Linked Incentive Scheme.

Digital Rupee & Digital Banking

The Finance Minister announced the introduction of Digital Rupee to be issued by the Reserve Bank of India starting 2022-23.

- Presenting the Union Budget 2022-23 the Finance Minister said that the Central Bank Digital Currency (CBDC) will give a big boost to digital economy.

Key Points

- Digital currency will also lead to a more efficient and cheaper currency management system.
- The Digital Currency will be based upon block chain and other technologies.
- Digital Banking: It is also proposed to set up 75 Digital Banking Units (DBUs) in 75 districts of the country by Scheduled Commercial Banks.
- Anytime- Anywhere Post Office Savings:
 - ♦ 100 per cent of 1.5 lakh post offices will come on the core banking system enabling financial inclusion and access to accounts through net banking, mobile banking, ATMs.
 - ♦ They will also provide online transfer of funds between post office accounts and bank accounts.
 - ♦ This will be helpful, especially for farmers and senior citizens in rural areas, enabling interoperability and financial inclusion.

Capital Expenditure

The outlay for capital expenditure in the Union Budget is being stepped up sharply by 35.4% from Rs. 5.54 lakh crore in the current year to Rs. 7.50 lakh crore in 2022-23.

- The capital expenditure has thus increased to more than 2.2 times the expenditure of 2019-20 and it would be 2.9% of GDP in 2022-23.

Key Points

- Effective Capital Expenditure: With capital expenditure taken together with the provision made for creation of capital assets through Grants-in-Aid to States:
 - ♦ the 'Effective Capital Expenditure' of the Central Government is estimated at Rs. 10.68 lakh crore in 2022-23, which will be about 4.1% of GDP.
- Green Bonds: Sovereign Green Bonds would be issued for mobilizing resources for green infrastructure as a part of the government's overall market borrowings in 2022-23.
 - ♦ The proceeds would be deployed in public sector projects which help in reducing the carbon intensity of the economy.

Export of Organic Food Grains

The National Programme for Organic Production (NPOP), introduced by the Department of Commerce, is aimed at regulation and promotion of organic production for exports.

Institutional Structure of Organic Farming: India

The National Centre for Organic Farming (NCOF), under the Ministry of Agriculture & Farmers Welfare, is the nodal organization for organic farming in the country.

- NCOF implements the National Project on Organic Farming (NPOF) to promote production, certification and marketing of organic products.
- APEDA, an autonomous organisation under the administrative control of Department of Commerce, has been mandated with implementation of NPOP and export promotion of organic products.
- APEDA provides assistance to the exporters of organic products under various components of its export promotion scheme.
- APEDA also undertakes various activities to promote exports of organic products such as:

- ◆ addition of new products under NPOP,
- ◆ making efforts to get NPOP standards recognized by the importing countries,
- ◆ promoting 'India Organic' brand through participation in international trade fairs and exhibitions,
- ◆ organising Buyer-Seller Meets (BSMs),
- ◆ organising capacity building and outreach programmes etc.

Export of Organic Products

- India's exports of organic products amounted to USD 1.04 billion during 2020-21.
- Organic food grains are being exported from the country mainly under the category Cereal & Millets.
- During 2020-21, 59908 MT of organic products under the category 'Cereal & Millets', worth 76 million USD, have been exported from India under the National Programme for Organic Production (NPOP).
- GoI has been promoting Organic farming in the country, including in Bundelkhand and Uttarakhand.
- This has been done through dedicated schemes namely Paramparagat Krishi Vikas Yojana (PKVY) and Mission Organic Value Chain Development for North Eastern Region (MOVCDNER) since 2015-16.
- Assistance of Rs 6800/ ha under PKVY and Rs 5000/ ha under MOVCDNER is provided for marketing, branding and trade.
- Brand 'Organic Uttarakhand' has been developed under PKVY for the State of Uttarakhand.

Status of National Initiative for Design Innovation

Government had launched the scheme of "National Initiative for Design Innovation (NIDI)" in March, 2014.

- Scheme envisaged establishment of 20 Design Innovation Centres (DIC), One Open Design School (ODS) and One National Design Innovation Network (NDIN).

Status Update on the Scheme

- Presently, 20 DICs have been established on Hub-Spoke Model with 64 Spokes.
- DIC Hubs include 10 Indian Institutes of Technology (IIT), 9 Central/State Government Universities and a School of Planning and Architecture.
- ODS and NDIN have been established in IIT, Bombay and Indian Institute of Science (IISc), Bangalore respectively.
- The NIDI scheme does not provide the allocation of funds to any specific district.
- DICs are established by co-locating them in existing publicly funded institutes of national repute, like IIT's, NIT's, Central and State universities.
 - ◆ This is to facilitate optimal utilization of the existing resources including faculty and infrastructure with a funding of Rs.10.00 Cr. for each DIC.
- Institutes are selected for setting up of DICs on the basis of the thematic areas to be worked upon, innovative ideas/products to be developed under the scheme, discipline of institute.
- The objective of the scheme is to promote a culture of innovation and creative problem-solving.

Note: Under the scheme, More than 50 start-ups have been initiated/supported, around 2000 innovative products initiated/delivered and approximately 250 patents are filed.

Towns of Export Excellence

Thirty-Nine (39) Towns have been recognized as Towns of Export Excellence (TEE) under the Foreign Trade Policy 2015-20 (extended up to 31.03.2022).

Key Points

- Recognized associations of units in Towns of Export Excellence can avail financial assistance under Market Access Initiative (MAI) scheme.
 - ◆ The financial assistance can be achieved on priority basis, for export promotion projects for marketing, capacity building and technological services.
- Common Service Providers in the Towns of Export Excellence are entitled for Authorisation under Export Promotion Capital Goods (EPCG)

Scheme.

What is Towns of Export Excellence (TEE)?

- Towns producing goods of Rs. 750 Crore or more can be recognised as Towns of Export Excellence (TEE) based on potential for growth in exports.
- However, for Town of Export Excellence (TEE) in Handloom, Handicraft, Agriculture and Fisheries sector, the threshold limit is Rs.150 Crore.

‘Banking On Electric Vehicles in India’ Report

NITI Aayog, Rocky Mountain Institute (RMI), and RMI India released a report, titled ‘Banking on Electric Vehicles in India’.

- The report outlines the importance of priority-sector recognition for retail lending in the electric mobility ecosystem.

Key Points

- The report provides considerations and recommendations to inform the inclusion of EVs in the Reserve Bank of India’s (RBI’s) priority-sector lending (PSL) guidelines.
- Banks and non-banking financial companies (NBFCs) in India have the potential to achieve an electric vehicle (EV) financing market size of Rs 40,000 crore (USD 5 billion) by 2025.
- This can even scale upto Rs 3.7 lakh crore (USD 50 billion) by 2030. However, retail finance for EVs has been slow to pick up.
- Financial institutions can play an important role in accelerating the adoption of EVs in India and supporting the decarbonisation of road transport.
- RBI’s PSL mandate has a proven track record of improving the supply of formal credit towards areas of national priority.
- It can provide a strong regulatory incentive for banks and NBFCs to scale their financing to EVs.
- Priority-sector lending can encourage banks to

fast-track India’s transition to EVs and help achieve our 2070 climate goals.

- The report indicates that electric two-wheelers, three-wheelers, and commercial four-wheelers are early segments to prioritise under PSL.
- To maximise the impact of the inclusion of EVs, the report also recommends a clear sub-target and penalty mechanism for priority sector lending to renewable energy and EVs.
- Furthermore, it suggests recognition of EVs as an infrastructure sub-sector by the Ministry of Finance and the incorporation of EVs as a separate reporting category under the RBI.

Priority Sector means those sectors which the Government of India and Reserve Bank of India consider as important for the development of the basic needs of the country and are to be given priority over other sectors.

About PSL

- The categories of priority sector are as follows:
 - ◆ Agriculture
 - ◆ Micro, Small and Medium Enterprises
 - ◆ Export Credit
 - ◆ Education
 - ◆ Housing
 - ◆ Social Infrastructure
 - ◆ Renewable Energy
 - ◆ Others
- The goal of a PSL initiative is to provide credit to the weaker sections of the society, as opposed to funding only profitable sectors.
- The banks are mandated to encourage the growth of such sectors with adequate and timely credit.

Largest Exporters of Cucumber and Gherkins

India has emerged as the largest exporter of gherkins in the world.

Key Points

India has crossed the USD 200 million mark of export of agricultural processed product, i.e. pickling

cucumber, which is globally referred as gherkins or cornichons.

- Gherkins are exported under two categories -- cucumbers and gherkins, which are prepared and preserved by vinegar or acetic acid.
- Gherkin cultivation, processing and exports started in India during the early 1990s with a modest beginning in Karnataka.
- Later, it was extended to the neighbouring states of Tamil Nadu, Andhra Pradesh and Telangana.
- Nearly 15% production of the world's gherkin requirement is grown in India.
- Gherkins is currently exported to more than 20 countries, with major destinations being North America and European countries.
- Apart from its export potential, the gherkin industry plays a key role in the creation of rural employment.
- In India, cultivation of gherkins is carried out under contract farming by around 90,000 small and marginal farmers with an annual production area of 65,000 acres.

Engineering Goods Exports

Exports of Engineering Goods jumped to USD 81.8 Billion during April-December 2021.

- This is a growth of 54% compared to USD 52.9 Billion during same period in the previous year (2020).

Key Points

- Engineering Goods sector constitutes the largest, more than 27%, share of India's total exports basket during the period.
- India's top five export destinations for the Engineering Goods sector in April-November 2021 are:
 - ♦ USA (14.7%),
 - ♦ China (5.8%),
 - ♦ UAE (5.1%),
 - ♦ Italy (4%) &
 - ♦ Germany (3.4%)
- The impressive growth in Engineering Goods exports in recent years has largely been due to the Zero duty Export Promotion Capital Goods (EPCG) scheme.

- The scheme has been started by the Ministry of Commerce & Industry and forms part of the Foreign Trade Policy (FTP) of Government of India.

Note: The Engineering Goods sector comprises of metal products, industrial machinery and equipment, automobiles and its components, transport equipment, bicycles, medical devices and renewable equipment.

Exports of Gems and Jewellery

India's exports of Gems and Jewellery shot up by a whopping 71% during the first three quarters of the current Financial Year.

- The sector clocked USD 28.9 Billion exports as compared to USD 16.9 Billion during same period in the year 2020.

Key Points

- The Gems and Jewellery sector makes up 9.6% share of India's entire exports basket during the period (Apr-Dec, 2021).
- This makes the sector third largest commodity share after Engineering and Petroleum Products being first and second largest respectively.
- Top 5 export destinations in April-November 2021 are: U S A (38.7%), Hong Kong (24.6%), UAE (11.9%), Belgium (6.6%) & Israel (3.9%).
- Gems and Jewellery industry contributes about 7% of India's total GDP.
- It also employs the largest skilled and semi-skilled workforce of more than 50 lakh workers.
- It may be noted that the Government has declared the Gems & Jewellery sector as a focus area for export promotion.

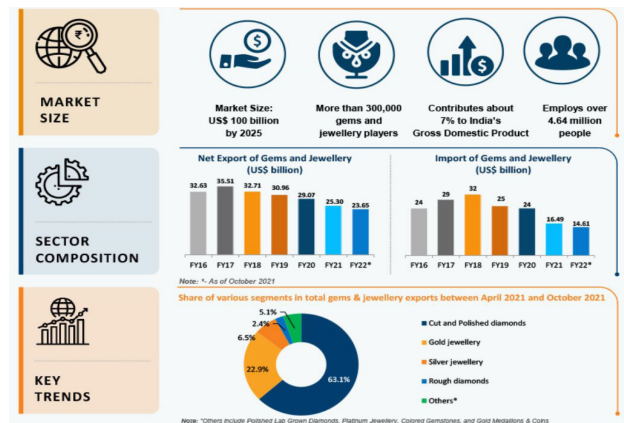
Gems and Jewellery Industry

- The Government has permitted 100% FDI in the sector under the automatic route
- The gem and jewellery sector is likely to employ ~8.23 million persons by 2022, from ~5 million in 2020.
- The Government of India is aiming at US\$ 70 billion in jewellery export in the next five years (until 2025), up from US\$ 35 billion in 2020.

International Customs Day, 2022

The Central Board of Indirect Taxes and Customs (CBIC) observed the International Customs Day, 2022.

- The theme for this year, as given by the World Customs Organisation (WCO) was “Scaling up Customs Digital Transformation by Embracing a Data Culture and Building a Data Ecosystem”.



About WCO

The World Customs Organization (WCO) was established in 1952 as the Customs Co-operation Council (CCC) and is an independent intergovernmental body.

- Its mission is to enhance the effectiveness and efficiency of Customs administrations.
- Today, the WCO represents 184 Customs administrations across the globe that collectively process approximately 98% of world trade.
- As the global centre of Customs expertise, the WCO is the only international organization with competence in Customs matters.
- International Customs Day 2022: The WCO is dedicating 2022 to scaling up Customs Digital Transformation by Embracing a Data Culture and Building a Data Ecosystem.
 - WCO Members will have the opportunity to showcase their efforts and activities in this domain.

About CBIC

Central Board of Indirect Taxes and Customs (erstwhile Central Board of Excise & Customs) is a

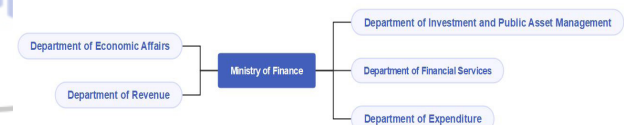
part of the Department of Revenue under the Ministry of Finance.

- It deals with the tasks of formulation of policy concerning the following:
 - levy and collection of Customs,
 - Central Excise duties,
 - Central Goods & Services Tax and IGST,
 - prevention of smuggling and administration of matters relating to Customs,
 - Central Excise,
 - Central Goods & Services Tax, IGST and
 - Narcotics to the extent under CBIC's purview.

Conditional Market Authorization for Covaxin and Covishield

The National Regulator, Drugs Controller General of India (DCGI), has given nod to market authorization of two COVID19 vaccines, Covaxin and Covishield.

- The Subject Expert Committee (SEC) of the Central Drugs Standard Control Organization (CDSCO) had recommended for upgradation of status for the vaccines.
- Upgradation of status meant that from restricted use in emergency situations to grant of new drug permission with conditions in the adult population.



Key Highlights

The market authorization of two COVID19 vaccines, Covaxin and Covishield, in the country by DCGI is subject to the following conditions:

- Firm shall submit data of overseas ongoing clinical trials of the product with due analysis on six monthly basis or as and when available, whichever is earlier.
- The vaccine shall be supplied for programmatic setting and all vaccinations done within the country to be recorded on CoWIN platform.
- Adverse Event Following Immunization [AEFI], Adverse Event of Special Interest [AESI] shall

continue to be monitored.

- The firm shall submit the safety data including AEFI and AESI with due analysis on six monthly basis or as and when available, whichever is earlier as per NDCT Rules, 2019.

What is Conditional Market Authorization?

Conditional Market Authorization is a new category of market authorization that has emerged during the current global pandemic of COVID19.

- The approval pathways through this route are fast-tracked with certain conditions to enhance the access to certain pharmaceuticals for meeting the emerging needs of drugs or vaccines.

Development of Green Ports & Green Shipping In India

Union Minister for Ports, Shipping and Waterways reviewed the progress on various green initiatives being implemented, as per Maritime India Vision (MIV) 2030, for the development of Green Ports & Green Shipping in India.

Key Highlights

- As part of MIV 2030, Total of 963 initiatives have been identified for implementation across major ports with an estimated investment of Rs. 67,720.24 crores.
- A total of 208 initiatives with estimated investment of Rs. 4,424.47 crores have been completed in FY 2021.
- Further 504 initiatives with estimated investment of Rs. 48,256.13 crores are under implementation.
- A number of initiatives have been taken in India to promote green ecosystem in maritime sector.
- These are in line with International Maritime Organization (IMO)'s 2030 Decarbonisation strategy and 2050 Green House Gases (GHG) strategy.
- Initiatives are being implemented by Major Ports of India that include:
 - ♦ increase share of renewable energy to more than 60% across major ports by 2030,
 - ♦ setting up of solar power plants,
 - ♦ availing of shore power supply to vessels via

berths,

- ♦ multi-clean fuel adoption for vehicles within port ecosystem,
- ♦ and gradual phasing out of diesel locomotives at ports, etc.

About Maritime India Vision (MIV) 2030

The Ministry of Ports, Shipping and Waterways has prepared a blueprint - Maritime India Vision 2030 (MIV 2030).

- This is to ensure coordinated and accelerated growth of India's maritime sector in the next decade.
- Objective is to drive India to the forefront of the Global Maritime Sector.
- MIV 2030 envisions an overall investment of INR 3, 00,000-3, 50,000 C r across ports, shipping, and in land waterways categories.
- MIV 2030 identifies over 150 initiatives across 10 themes covering all the facets of the Indian maritime sector.
- MIV 2030 has identified initiatives such as developing world-class Mega Ports, trans-shipment hubs and infrastructure modernization of ports.
- These initiatives are targeted at following benefits:
 - ♦ lowering overall operational costs of ports,
 - ♦ reducing turnaround time for vessels,
 - ♦ increasing efficiency and throughput,
 - ♦ providing ability to handle larger ships and
 - ♦ developing Indian Port's strategic importance in the South Asian region.
- This vision roadmap is estimated to help unlock Rs. 20,000+ crore worth of potential annual revenue for Indian Ports.

India: Maritime Facts

India comprises a significant size maritime sector with 12 Major and 200+ Non-Major Ports situated along its 7500 km long coastline and a vast network of navigable waterways.

- 95% of the country's trade volume and 65% of the trade value are undertaken through maritime transport.
- Ports: Two Indian Ports, JNPT and Mundra have the distinction of featuring in the list of top 40

global container ports.

- ◆ India augmented its capacity by over 65% across all Major Ports in the last 5 years.

Key Performance Indicators to Achieve Vision 2030

MIV 2030 – Key targets			
Key Performance Indicator		Current (2020)	Target (2030)
1	Major Ports with >300 MTPA cargo handling capacity	-	3
2	% of Indian cargo transshipment handled by Indian ports	25%	>75%
3	% of cargo handled at Major Ports by PPP/ other operators	51%	>85%
4	Average vessel turnaround time (containers)	25 hours	<20 hours
5	Average container dwell time	55 hours	<40 hours
6	Average ship daily output (gross tonnage)	16,500	>30,000
7	Global ranking in ship building and ship repair	20+	Top 10
8	Global ranking in ship recycling	2	1
9	Annual cruise passengers	4,68,000	>15,00,000
10	% share of Indian seafarers across globe	12%	>20%
11	% share of renewable energy at Major Ports	<10%	>60%

- ◆ Of the total cargo handled at Indian Ports, over 54% is handled at the country's 12 Major Ports.
- Inland Water Transport:
 - ◆ India has increased the modal share of cargo from 0.5% to 2% and has witnessed 19% year-on-year growth in cargo volumes over the last 5 years.
 - ◆ India has over 5,000 km of navigable inland waterways under development.
- Shipping:
 - ◆ Globally, India ranks 2nd in ship recycling and 21st in ship building.
 - ◆ India is ranked amongst the top 5 countries supplying trained manpower, with 17% growth in seafarers in the last 3 years.
 - ◆ Port infrastructure:
 - ◆ Total traffic handled at Indian Ports rose from 885 MTPA in 2010-11 to 1300 MTPA in 2019-20.
 - ◆ There is 4 % CAGR growth in overall cargo traffic over last 5 years.
- Logistics:
 - ◆ With an aim to achieve ~5% share in world exports, India's exports need to grow aggressively in next 5 to 10 years.
- Cruise Industry:
 - ◆ The Indian cruise industry, though in its nascent stage, is growing at over ~35 % in the last three years.
 - ◆ Over the next decade, the Indian cruise market has the potential to increase by 8X driven by rising demand and disposable incomes.
 - ◆ India currently contributes to 10-12% of

world sea farers but is facing rising competition from other countries in South East Asia such as Philippines.

About IMO Green House Gases (GHG) strategy

The initial GHG strategy envisages a reduction in carbon intensity of international shipping.

- Aim: To reduce CO2 emissions per transport work, as an average across international shipping, by at least 40% by 2030, pursuing efforts towards 70% by 2050, compared to 2008.
- Total annual GHG emissions from international shipping should be reduced by at least 50% by 2050 compared to 2008.

About IMO

As a specialized agency of the United Nations, IMO is the global standard-setting authority for the safety, security and environmental performance of international shipping.

- Its main role is to create a regulatory framework for the shipping industry that is fair and effective, universally adopted and universally implemented.
- In 1948 an international conference in Geneva adopted a convention formally establishing IMO.
 - ◆ The original name was the Inter-Governmental Maritime Consultative Organization, or IMCO, but the name was changed in 1982 to IMO.
- The IMO Convention entered into force in 1958.

Economic Survey Highlights for Healthcare Sector

The central theme of this year's Economic Survey is the "Agile approach", implemented through India's economic response to the COVID-19 Pandemic shock.

- The preface of Economic Survey states that the "Agile approach" is based on feed-back loops, real-time monitoring of actual outcomes, flexible responses, safety-net buffers and so on.

Key Highlights

- **COVID Vaccination Strategy:** The Economic Survey highlighted that vaccination is not

merely a health response but is critical for opening up the economy.

- ◆ The Liberalized Pricing and Accelerated, National COVID-19 Vaccination Strategy was implemented from May 2021.
- ◆ From 3rd January, 2022, COVID-19 vaccine coverage has been extended to age group of 15-18 years.
- ◆ Further, from January, 2022, Health Care Workers, Frontline Workers and persons aged more than 60 years with co-morbidities have been made eligible to receive a precaution dose of COVID-19 vaccine.
- ◆ Union Budget for 2021-22 allocated Rs. 35,000 crore for procurement of vaccines under the nationwide COVID-19 Vaccination Program.
- ◆ Making it a technology driven vaccination program, Arogya Setu mobile app was launched.
- **Health Sector Expenditure:** The Economic Survey mentions that although the pandemic has affected almost all social services, yet the health sector was the worst hit.
 - ◆ Expenditure on health sector increased from Rs. 2.73 lakh crore in 2019-20 (pre-COVID-19) to Rs. 4.72 lakh crore in 2021-22 (BE), an increase of nearly 73%.
 - ◆ Union Budget 2021-22, announced Ayushman Bharat Health Infrastructure Mission, a new Centrally Sponsored Scheme.
 - ◆ The mission is with an outlay of about Rs. 64,180 crore in next five years to develop capacities of primary, secondary and tertiary Health Care Systems.
 - ◆ The National Health Policy, 2017 envisaged to increase Government's health expenditure to 2.5% of GDP by 2025.
 - ◆ It says that in keeping with this objective, Central and State Government's Budgeted expenditure on health sector reached 2.1% of GDP in 2021-22, against 1.3% in 2019-20.
- National Family Health Survey-5 (NFHS-5): As per latest the NFHS-5, social indicators such have improved over year 2015-16.
 - ◆ All child nutrition indicators have also improved at the all India level.
 - ◆ Under-Five Mortality Rate (U5MR) has de-

clined from 49.7 in 2015-16 to 41.9 in 2019-21.

- ◆ IMR has declined from 40.7 per 1000 live births in 2015-16 to 35.2 per 1000 live births in 2019-21.
- ◆ Stunting has declined from 38% in 2015-16 to 36% in 2019-21.
- ◆ Wasting has also declined from 21% in 2015-16 to 19% in 2019-21.
- ◆ And, underweight declined from 36% in 2015-16 to 32% in 2019-21.
- ◆ Total Fertility Rate (TFR) has further come down to 2.0 in 2019-21 from 2.2 in 2015-16.
- ◆ The Survey highlights that the TFR has even come down below the replacement level of fertility (2.1 children per women) in the country.
- ◆ The Sex Ratio, number of females per 1000 males, in the total population has risen from 991 females in 2015-16 (NFHS-4) to 1020 in 2019-20 (NFHS-5).
- ◆ More importantly, the sex ratio and birth female children per 1000 male children born in the last five years, has grown from 919 in 2015-16 to 929 in 2019-21.

Economy Survey Analysis: Agriculture Sector

The Agriculture sector which accounts for 18.8 per cent of Gross Value Added (GVA) of the country in 2021-22 has experienced buoyant growth in the past 2 years.

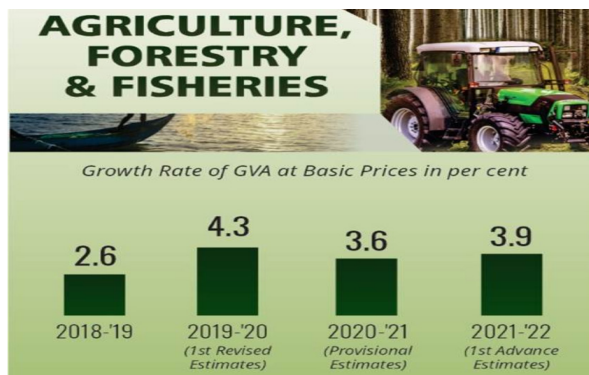
- It grew at 3.9 per cent in 2021-22 and 3.6 per cent in 2020-21 showing resilience in the face of COVID-19.

Key highlights

The share of the agriculture and allied sector in total GVA of the economy has settled at around 18 per cent in the long term states the Survey.

- In the year 2021-22 it is 18.8 per cent and in the year 2020-21 it was 20.2 per cent.
- Another trend observed is, higher growth in allied sectors (Livestock, Forestry and Logging, Fishing and Aquaculture) compared to the crop sector.
- The Survey notes that there is a direct correlation between capital investments in agriculture and its growth rate.

- The Survey suggests “higher access to institutional credit to farmers and greater participation of the private corporate sector” may improve private sector investment in agriculture.
- **Agricultural Production:** The production of rice, wheat and coarse cereals had increased at Compound Annual Growth Rates (CAGR) of 2.7, 2.9 and 4.8 per cent respectively over the period between 2015-16 and 2020-21.
 - ◆ For pulses, oilseeds and cotton during the same period it has been 7.9, 6.1 and 2.8 per cent respectively.
 - ◆ India is the second largest producer of sugar in the world and has become a “sugar surplus nation”.
 - ◆ It points out that since 2010-11, the production has outstripped the consumption except in the year 2016-17.
- **Crop Diversification:** The Economic Survey warns that the existing cropping pattern is skewed towards cultivation of sugarcane, paddy and wheat.
 - ◆ This has led to depletion of fresh ground water resources at alarming rates.
 - ◆ It has also led to extremely high water stress levels are recorded in the country’s north-western region.
 - ◆ To promote water use efficiency and sustainable agriculture and ensure higher incomes to farmers:
 - ◆ The Government is implementing Crop Diversification Programme in the original green revolution States.
 - ◆ The states are Punjab, Haryana and Western Uttar Pradesh.
 - ◆ This comes as a sub-scheme under Rashtriya Krishi Vikas Yojana since 2013-14 to shift area under paddy cultivation towards less water intensive crops such as oilseeds, pulses and nutri-cereals etc.
- **Water and Irrigation:** The Survey points that 60 per cent of the net irrigated area in the country is serviced through groundwater.
 - ◆ The rate of extraction of groundwater is very high (more than 100%) in the states of Delhi, Haryana, Punjab and Rajasthan.
 - ◆ The survey noted that increased coverage under micro-irrigation can be the most effective mode of water conservation.
- ◆ States need to focus on both medium and long term ground water recharge and conservation plans.
- ◆ For that, a Micro-Irrigation Fund (MIF) with corpus of Rs. 5000 crores was created under NABARD during 2018-19.
- ◆ Further, Pradhan Mantri Krishi Sinchayee Yojana has also helped in implementation of micro-irrigation in the country.
- **Agricultural Credit and Marketing** According to the Economic Survey, the agricultural credit flow for the year 2021-22 has been fixed at Rs. 16,50,000 crores.
 - ◆ Moreover, under Atma Nirbhar Bharat programme, the government also announced Rs. 2 lakh crore concessional credit boost to 2.5 crore farmers through Kisan Credit Cards (KCC).
 - ◆ Towards this end, banks have issued KCCs to 2.70 crore eligible farmers till Jan 2022.
 - ◆ Further Government has extended the KCC facility to fisheries and animal husbandry sector in 2018-19.
 - ◆ Additionally under the National Agricultural Market (e-NAM) scheme as on 1st December 2021, 1000 mandis of 18 States and 3 UTs have been integrated with the e-NAM platform.
 - ◆ The Government has also launched a central sector scheme of ‘Formation and Promotion of 10,000 Farmer Producer Organisations (FPOs)’ by 2027-28.
 - ◆ A full-fledged Ministry of Co-operation in July 2021 with a view to provide greater focus on co-operative sector.
- **National Mission on Edible Oils:** India is the world’s second largest consumer and number



one importer of vegetable oil.

- ◆ The Survey highlights that the oilseed production in India has been steadily growing since 2016-17.
- ◆ It had grown at almost 43 per cent from 2015-16 to 2020-21.
- ◆ In view of the persistently high import of edible oil, a centrally sponsored scheme of National Food Security Mission: Oilseeds (NFSM - Oilseeds) is being implemented since 2018-19.
- ◆ Under the scheme the government has set up 36 oilseed hubs between 2018-19 and 2019-20 to increase availability of high yielding quality seed.
- ◆ Government has launched National Mission on Edible Oils – Oil Palm (NMEO-OP) to augment availability of edible oil.
- ◆ The scheme aims to cover an additional area of 6.5 lakh hectares for oil palm by 2025-26 and thereby reach a target of 10 lakh hectares ultimately.

Commercial Banking System

The economy survey highlights that the economic shock of the pandemic has been weathered well by the commercial banking system.

- The Survey also notes that the bank credit growth stands at 9.2 per cent as on 31st December 2021.

Key Highlights

- **Growth in personal loans improved to double digits:**
 - ◆ The Survey highlights that the growth in personal loans improved to 11.6% as compared with 9.2% in the previous year.
 - ◆ Housing loans, the largest constituent of personal loans, registered growth of 8 per cent in November 2021.
- **Credit Growth:**
 - ◆ The Survey states that the credit to Agriculture continued to register robust growth, and was at 10.4 per cent (YoY) in 2021 as compared with 7 per cent in 2020.
 - ◆ Credit growth to micro & small industries accelerated to 12.7 per cent in 2021.
- **Deposit insurance in India:**

- ◆ The Deposit Insurance and Credit Guarantee Corporation (Amendment) Act, made significant changes in the landscape of deposit insurance in India.
- ◆ The Survey also notes that Bank-group wise, the percentage of insured deposits vis-à-vis total deposits is
 - ◆ 84 per cent for RRBs,
 - ◆ 70 per cent for cooperative banks,
 - ◆ 59 per cent for SBI,
 - ◆ 55 per cent for PSBs,
 - ◆ 40 per cent for private sector banks and
 - ◆ 9 per cent for foreign banks.

- **Digital payments:**

- ◆ According to the Survey, Unified Payments Interface (UPI) is currently the single largest retail payment system in the country in terms of volume of transactions.
- ◆ In December 2021, 4.6 billion transactions worth Rs 8.26 lakh crore were carried out by UPI.
- ◆ RBI and the Monetary Authority of Singapore announced a project to link UPI and PayNow, which is targeted for operationalization by July 2022.
- ◆ Bhutan recently became the first country to adopt UPI standards for its QR code.
- ◆ It is also the second country after Singapore to have BHIM-UPI acceptance at merchant locations.

- **NBFCs:**

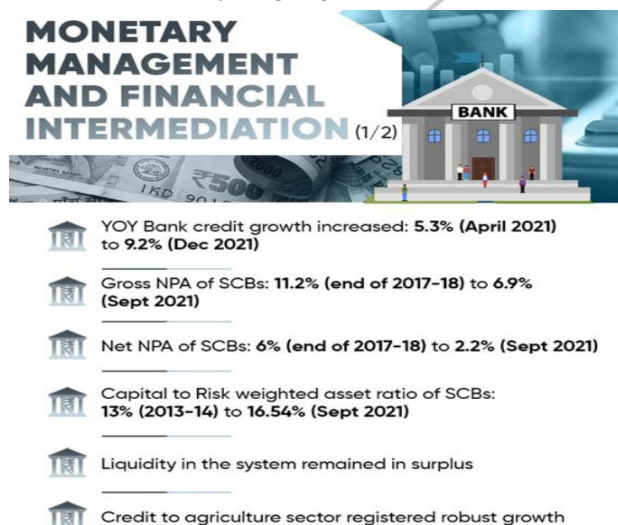
- ◆ The Survey states that the total credit of NBFC sector increased marginally from Rs 27.53 lakh crore in March 2021 to Rs 28.03 lakh crore in September 2021.
- ◆ The credit intensity of NBFCs, measured by NBFC credit as a ratio of GDP has been rising consistently and stood at 13.7% at end March 2021.
- ◆ Industry remained the largest recipient of credit extended by the NBFC sector, followed by retail loans and services.

- **PENSION SECTOR:**

- ◆ The total number of subscribers under New Pension Scheme (NPS) and Atal Pension Yojana (APY) showed an increase of 23.7%.
- ◆ The overall contribution under NPS grew by

more than 29 per cent during the period September 2020 - September 2021.

- **SCHEDULED COMMERCIAL BANKS (SCBS):**
- The Survey observes that the Gross Non-performing Advances (GNPA) of the SCBs reduced to 6.9% in the year 2021.
- The Net Non-performing advances (NNPA) stands @2.2%.
- Restructured Standard Advances (RSA) ratio of SCBs increased from 0.4 per cent to 1.5 per cent.
- Overall, the Stressed Advances ratio of SCBs increased to 8.5% at end September 2021.
- **Public Sector Banks (PSBs):**
 - ♦ The Survey highlights that the GNPA de-



creased to 8.6 per cent at end-September 2021.

- ♦ The Stressed Advances ratio of PSBs increased to 10.1 per cent during the same period on account of rise in restructured advances.
- ♦ All Public Sector and Private Sector banks maintained the Capital Conservation Buffer (CCB) well over 2.5 per cent.

Services Contributed Over 50% to GDP

Services Sector contributed over 50% to India's GDP, highlighted the Economic Survey 2021-22.

- The Survey also noted that Services Sector registered a steady recovery during the first half of the current fiscal year.

Key Highlights

Overall, the Services Sector grew by 10.8% Year on

Year (YoY) in first half (H1) 2021-22.

- The overall Services sector GVA is expected to grow by 8.2 per cent in 2021-22.
- **FDI in Services:** The Services Sector was the largest recipient of FDI inflows in India.
- **Trade in Services:** India has a dominant presence in global services exports.
 - ♦ It remained among the top ten services export countries in 2020.
 - ♦ The share in world commercial services exports increased to 4.1% in 2020 from 3.4% in 2019.

Sub-Sector Wise Performance

- **IT-BPM (Information technology - Business Process Management) Sector:**
 - ♦ The Economic Survey described IT-BPM sector as a major segment of India's services.
 - ♦ During 2020-21, according to NASSCOM's provisional estimates, IT-BPM revenues (excluding e-commerce) reached \$ 194 billion, growing by 2.26% YoY.
 - ♦ The Survey further noted that within the IT-BPM sector, IT services constitutes the majority share (>51%).
- **Startups and Patents**
 - ♦ The Startups in India had grown remarkably over the last six years, most of which belonged to Services Sector.
 - ♦ More than 61,400 startups have been recognized in India as of January 10, 2022.
 - ♦ Further, the Survey stated that India had a record number of Startups (44) reaching unicorn status in 2021.
 - ♦ The number of patents filed in India has gone up to 58,502 in 2020-21 from 39,400 in 2010-11.
 - ♦ The patents granted in India has gone up to 28,391 from 7,509 during the same period.
- **Ports, Shipping and Waterways Services**
 - ♦ Ports handled around 90% of export-import cargo by volume and 70% by the value.
 - ♦ The Survey stated that the total cargo capacity of all ports had increased to 1,246.86 Million Tonnes Per Annum (MTPA).
 - ♦ Also, the Port traffic had picked up in 2021-22 registering a growth of 10.16% during April-November 2021.

India Telecom 2022

‘India Telecom 2022’ – an Exclusive International Business Expo to be held virtually under Market Access Initiative Scheme (MAI) of Department of Commerce, Government of India.

- The main objective of the event is to provide opportunities to the Indian telecom stakeholders to meet qualified overseas buyers.

Key Highlights

India Telecom 2022 is basically a platform for convergence of technology and business exchange.

- Qualified buyers from more than 45 countries are attending the event.
- Apart from conference, 40+ Indian telecom companies are showcasing their products and capabilities at the exhibition.

Electronics and IT Developments in India

- The IT & Electronics industry is one of the fastest-growing industries in India, both in terms of production and export.
- Information Technology and Business process management (IT-BPM) industry revenue grew 7% y-o-y to reach US\$ 191 billion in FY20 and is estimated to grow to US\$ 350 billion by 2025.
- Moreover, revenue from the digital segment is expected to account for 38% of the total industry revenue by 2025.
 - ♦ Digital economy is estimated to reach US\$ 1 trillion by 2025.
- India has also emerged as a major electronics manufacturing hub.
 - ♦ Today, electronics manufacturing in India is close to US dollars 75 billion.
 - ♦ It's growing at more than 20% CAGR.
- The country has also developed its own indigenously developed 4G core & radio network.
 - ♦ The 5G network is also in its final stages of development.
 - ♦ 5G can lead to proliferation of FinTech solutions in the India.

Coal Import Reduction

To reduce the dependence on imports of coal, major reforms have been carried out by the Ministry of Coal with the vision of “Atma Nirbhar Bharat”.

- The reforms have led to an increase in domestic production of coal by 9.01%.

Key Points

- With increase in domestic production of coal, we have achieved significant reduction in import of coal despite surge in power demand.
- The coal based power generation upto November 2021 is 671.906 BU (Billion Units) with an increase of 5.17%.
 - ♦ This is compared to generation of 638.82 BU during the corresponding period of FY 20.
- Imported coal based power generation which was 61.78 BU during April to Nov 2019 has reduced by 51.38% to 30.036 BU.
- Imports of all grades of Non Coking Coal has reduced to 107.36 MT during the period April to November 2021 from a level of 131.51 MT.
 - ♦ This is in comparison of the corresponding months of the FY 20, leading to a decline of about 18.36%.
- The import of Non Coking coal primarily used in power sector has decreased by 57.59% from 46.53 MT to 19.73 MT.
- The overall import of coal has also reduced to 147.14 MT, a decrease of about 11.13% which has resulted in significant savings of forex reserves.

Note: A target of all India coal production of 1.2 Billion Tonne upto the year 2023-24 has been fixed.

FDI in India

Foreign Direct Investment inflows (FDI) has shown a continuous increase from US\$ 45.15 billion in 2014-15 to US\$ 81.97 billion in 2020-21.

- During the last five financial years, Foreign Direct Investment (FDI) inflows worth US\$ 339.55 billion have been reported into India.

Details of FDI in India

The financial year wise details are as under:

S. No.	Financial Year	Amount of FDI inflows (in US\$ billions)
1.	2016-17	60.22
2.	2017-18	60.97
3.	2018-19	62.00
4.	2019-20	74.39
5.	2020-21	81.97

Future Energy Materials

Department of Science & Technology (DST) is supporting development of indigenous technology for batteries, especially in the field of graphene-based batteries.

- DST has also supported a project on Graphene Protected Si Nano-Spheres (interconnected) for Developing High Energy Density Li-Ion Battery.

Various Organisations Working in Future Materials

- Science and Engineering Research Board (SERB) Statutory Body under the DST, has supported 42 projects including few national and international conferences/workshops.
- The aim is to disseminate the knowledge of advancement in future energy materials in general, and
 - ♦ in aluminium ion batteries, sodium ion batteries, polymer batteries and graphene based batteries in specific.
- International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI) is an autonomous Research and Development Centre under DST.
 - ♦ The centre is working on materials and devices for super-capacitor and Na-ion (Sodium ion) battery as future technologies.
 - ♦ ARCI has been engaged in development of indigenous technologies to produce electrode materials (cathode and anode) in large quantities for Li-ion batteries for electric vehicles.
 - ♦ ARCI has also been successfully demonstrated technologies for Lithium-Ion-Phosphate (LFP) and Lithium Titanate (LTO), which are key materials in Li-ion batteries.
- Indian Space Research Organization (ISRO) is also working on indigenization of Graphite based materials and Lithium-ion cells for Space applications.

- Department of Atomic Energy (DAE), Govt. Of India has fabricated Sodium ion coin cell with energy density of ~200Wh per kilogram using indigenously synthesized electrode material.
 - ♦ A polymer-based proton battery has also been designed and fabricated.
 - ♦ Organic - inorganic hybrid perovskite material namely, $\text{CH}_3\text{NH}_3\text{PbI}_3$ is a newly discovered solar cell material with photovoltaic efficiency more than 28%.
- Central Electro Chemical Research Institute (CECRI) is an institute under Council of Scientific and Industrial Research (CSIR).
 - ♦ It has been engaged in Greener and cheaper iron based redox flow batteries for energy storage applications;
 - ♦ Exploring graphene-based polymer nanocomposites for supercapacitor applications
 - ♦ Enabling the development of Na-ion batteries Scaled-up synthesis of high power Li-ion battery among other things.
- NITI Aayog has also nudged institutions to focus on creating world-class EV R&D infrastructure and innovation programs.
 - ♦ This is to create future workforce and facilitate the acceleration in adoption of Electric Mobility ecosystem in India.

Phenol To 1,4 Hydroquinone

Indian researchers have found that electrolysis using surface-modified electrodes for efficient large-scale transformation of phenol to 1,4 hydroquinone.

- 1,4 hydroquinone is used as intermediate in the manufacturing of food preservatives, pharmaceuticals, dyes, polymers.

Key Points

- India currently imports 1,4 hydroquinone at a heavy cost due to lack of efficient processes for conversion of phenol to 1,4 hydroquinone.
- Phenol and its oxidized products like 1,4-hydro-

quinone, catechol, or resorcinol are vital and primary building blocks.

- ◆ They are used in the synthesis of many medicinal and industrially used organic compounds.
- Especially products like 1,4 hydroquinone are used as intermediates in the manufacturing of food preservatives, pharmaceuticals, dyes, polymers, etc.
- In addition, oxidation of phenol leads to a huge value addition.
- India imports phenol worth 23.6 million USD while India spends US\$56.5M for importing 1,4-hydroquinone.
- This work has been published in the 'New Journal of Chemistry' recently and is done by researchers from the Centre for Nano and Soft Matter Sciences.

Drone Use in Agriculture

In a major boost to promote precision farming in India, the Union Ministry of Agriculture and Farmers Welfare has issued guidelines to make drone technology affordable to the stakeholders of agriculture sector.

Key Points

The guidelines have been provided under the "Sub-Mission on Agricultural Mechanization" (SMAM).

- It envisages granting upto 100% of the cost of agriculture drone or Rs. 10 lakhs, whichever is less, as grant for purchase of drones.
- The grant facility will be available to agricultural institutes like:
 - ◆ Farm Machinery Training & Testing Institutes,
 - ◆ ICAR institutes,
 - ◆ KrishiVigyanKendras and
 - ◆ State Agriculture Universities
- The aim of the grant will be large scale demonstrations of drone technology on the farmers' fields.
- The Farmers Producers Organizations (FPOs) would also be eligible to receive grant up to 75% of the cost of agriculture drone for its demonstrations on the farmers' fields.
- A contingency expenditure of Rs.6000 per hectare would be provided to implementing agencies that do not want to purchase drones but will hire drones for demonstrations.

- The contingent expenditure to implementing agencies that purchase drones for drone demonstrations would be limited to Rs.3000 per hectare.
- The financial assistance and grants would be available until March 31, 2023.
- In order to provide agricultural services through drone application, 40% of the basic cost of drone and its attachments or Rs.4 lakhs, whichever less would be available as financial assistance for drone purchase.
- These financial assistances would be provided by such existing Custom Hiring Centres which are set up by Cooperative Society of Farmers, FPOs and Rural entrepreneurs.
- New CHCs or the Hi-tech Hubs will also be established by the Cooperative Societies of Farmers, FPOs and Rural entrepreneurs.
- Such new hubs will also get financial assistance from SMAM, RKVY or any other Schemes can also include Drone as one of the machines along with other agricultural machines.
- Agriculture graduates establishing Custom Hiring Centers would be eligible to receive 50% of the basic cost of drone and its attachments or up to Rs.5 lakhs in grant support for drone purchases.
- The drone operations are being permitted by Ministry of Civil Aviation (MoCA) and Director General of Civil Aviation (DGCA) through the conditional exemption route.
- The Department of Agriculture & Farmers Welfare has also brought out Standard Operating Procedures (SOPs) for use of:
 - ◆ Drone application with pesticides for crop protection in agricultural, forestry, non-cropped areas, etc. and
 - ◆ for Drone Application in Spraying for Soil and Crop Nutrients.

About Sub-Mission on Agricultural Mechanization

The Ministry of Agriculture and Farmers Welfare launched Sub-Mission on Agricultural Mechanization (SMAM) in 2014-15.

- Under this scheme, it has been proposed to established Village Level farm Machinery Bank (VLFMB), Custom Hiring Centres (CHC) and High Tech Hubs (HTH).
- This is aimed at facilitating easy availability

of farm implements and machineries for hiring by farmers.

- Mission Objectives:
 - ◆ Increasing the reach of farm mechanism to small and marginal farmers and to the regions where availability of farm power is low;
 - ◆ Promoting 'Custom Hiring Centres' to offset the adverse economics of scale arising due to small landholding and high cost of individual ownership;
 - ◆ Creating hubs for hi-tech & high value farm equipments;
 - ◆ Creating awareness among stakeholders through demonstration and capacity building activities;
 - ◆ Ensuring performance testing and certification at designated testing centres located all over the country
- Under it, subsidy is provided for purchase of various types of agricultural equipment and machinery to the extent of:
 - ◆ 40-50% for all the States,
 - ◆ For NER (North Eastern Region) States it is 100%,
 - ◆ limited to Rs.1.25 lakhs per beneficiary.

Why Mechanisation?

- Agricultural implements and machinery are essential inputs for modern agriculture that enhance the productivity of crops besides reducing human drudgery and cost of cultivation.
- Mechanization also helps in improving the utilization efficiency of other inputs.
- These factors in turn help the agriculture sector to boost the income of farmers and growth of the agricultural economy.

New and Emerging Technologies

New and emerging technologies are powering national initiatives in key areas with the help of solutions for people-centric problems.

- These are being developed at the 25 innovation hubs across the country through the National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS).

Various New Technologies and Their Contribution:

- ARTPARK at IISc Bangalore developed an AI-driven platform that helped Chest X-ray

interpretation of images sent over WhatsApp.

- ◆ This brought early intervention through rapid screening of COVID 19, aiding doctors who have no access to X-ray machines.
- ◆ The solution called XraySetu is quick and easy to use and can work with low-resolution images sent via mobiles, facilitating detection in rural areas.
- ◆ Using machine learning algorithms, it generates a patient report showing suspicious abnormal regions in the lungs.
- ◆ This helps detect if the person is likely positive for COVID, pneumonia, or other lung abnormalities.

● RAKSHAK: Remedial Action, Knowledge Skimming, and Holistic Analysis of COVID-19 (RAKSHAK).

- ◆ A team of scientists from IIT Bombay has developed a tapestry method for screening COVID-19 under RAKSHAK.
- ◆ This initiative is supported by the Technology Innovation Hub (TIH) at IIT Jodhpur.
- ◆ The Tapestry method has been shortlisted by X-prize in an open Innovation Track.
- AmbiTag: It is a first-of-its-kind Internet of Things (IoT) device that monitors ambient temperature during the transportation of various products.

◆ These products include vaccines (COVID vaccines also), medicines, blood samples, food and dairy products, meat products, and animal semen.

- ◆ It has been developed by researchers at the IIT Ropar Technology Innovation Hub - AWaDH and its startup ScratchNest.
- ◆ So far, such devices were being imported by India.
- ◆ The institute is gearing for its mass production of AmbiTag.

● Mission I-STAC.DB: A consortium launched by IITM Pravartak Technologies Foundation and five other entrepreneurial start-up companies in deep tech and engineering domain have been established Under the mission I-STAC.DB.

- ◆ I-STAC.DB stands for Indian Space Technologies and Applications Consortium Design Bureau.
- ◆ It will focus on building an end-to-end At-

manirbhar ecosystem for space technologies.

- ◆ These technologies include: on-demand access to space, including rapid launch capability, satellites, sensors, future generation communication such as 6G, satellite data, and its applications.

Note: NM-ICPS under Industry 4.0 is being implemented through 25 Technology Innovation Hubs (TIHs) established in top academic, and National R&D Institutes.

Source: pib.gov.in

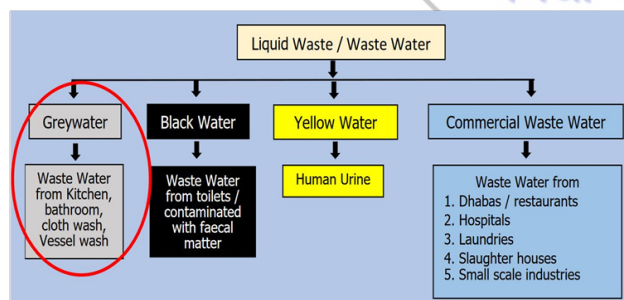
Grey Water Management

Sirsi village of Karnal district in Haryana has adopted Waste Stabilization Pond system for Grey water management.

- The village was struggling with waste water that overflowed from households and collection points such as handpumps.
- These waste water would overflow onto the village paths and accumulate in low lying areas leading to bad odour and mosquito breeding in such areas.

About Waste Stabilization Pond

A waste stabilization pond (WSP) is a series of shallow man-made basins that facilitate digestion of organics in the greywater through natural processes within the stipulated retention time.



- A WSP comprises of anaerobic, facultative, and maturation ponds.
- The ponds can be used individually, or linked in a series for improved treatment.

IREDA and Goa Shipyard Ltd Signs MoU

IREDA signed a Memorandum of Understanding (MoU) with Goa Shipyard Limited (GSL) to provide its techno-financial expertise to set-up a rooftop solar power project.

- Under the MoU, IREDA will assist GSL to set-up a rooftop solar power project at the headquarters of the company situated in Vasco



da Gama, Goa.

Key Points

- IREDA will also extend its techno-commercial expertise to GSL for Environmental & Social (E&S) due diligence of rooftop solar and other RE projects.
- After setting up a rooftop solar power project at its building, GSL will be able to bring down the expenditure on electricity and reduce its carbon footprint as well.
- In order to cater to the increasing demand of the RE sector, a dedicated Business Development and Consultancy division was set up by IREDA one and a half years ago.
- Under the new division, this is the seventh MoU signed by IREDA within the last 14 months to provide its consultancy services for developers of RE and Energy transition.
- IREDA is looking forward to extending its consulting services to other PSUs and private organisations for the overall growth of the RE sector.

About IREDA

Indian Renewable Energy Development Agency Limited (IREDA) is a Mini Ratna (Category – I) Government of India Enterprise under the administrative control of Ministry of New and Renewable Energy (MNRE).

- IREDA is a Public Limited Government Company established as a Non-Banking Financial Institution in 1987.
- It is engaged in promoting, developing and extending financial assistance for setting up projects relating to new and renewable sources of energy and energy efficiency/ conservation.
- The company's motto is: "ENERGY FOR

EVER”.

- IREDA has been notified as a “Public Financial Institution” under section 4 ‘A’ of the Companies Act, 1956.
- objectives of IREDA are :
 - ♦ To give financial support to specific projects and schemes in new and renewable sources and conserving energy through energy efficiency.
 - ♦ To increase IREDA’s share in the renewable energy sector by way of innovative financing.

About Goa Shipyard Limited (GSL)

Goa Shipyard Limited (GSL) was established in 1957 on the West Coast of India, functioning under the administrative control of Ministry of Defence, Govt. of India.

- GSL is strategically located on the banks of river Zuari in Goa.
- For over four decades, GSL has designed, built and commissioned a wide range of sophisticated vessels for varied applications in the defence and commercial sectors.

Use of Geo-Spatial Data And Cartographic Techniques

The usage of new forms of data and information for tracking the economic activity and development is an important theme in this year’s economic survey.

- The survey mentions that geo-spatial data and cartographic techniques can be used to track, compare and represent longer term developments.

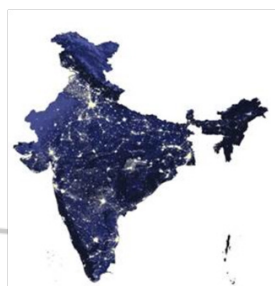
Key Points

The Survey highlights the importance of Geospatial maps in visualizing data to better understand trends, relationships and patterns.

- **Comparison of Night-time luminosity data between 2012 and 2021:** It provides an interesting representation of:
 - ♦ the expansion of electricity supply,
 - ♦ the geographical distribution of population and economic activity,
 - ♦ urban expansion as well as growth of ribbon developments between urban hubs.
- **Expansion of National Highways:**
 - ♦ India’s National Highway Network has grown from 71,772 Km in August 2011 to 1,40,152

Km August 2021.

- **Comparison of Number of Operationalised Airports in India between 2016 and 2021:**
 - ♦ The number of Operationalised Airports (Pre-UDAN) has grown from 62 (As of Nov. 2016) to 130 by December 2021.
- The Economic Survey has also presented the data/information using the satellite imaging for



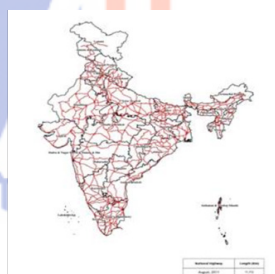
Luminosity 2012: India
Night Time



Luminosity 2021: India
Night Time

the following:

- ♦ Annual water storage,
- ♦ Population densities of various cities,
- ♦ Metro network densities



India's National Highway Network
(As of August 2011)

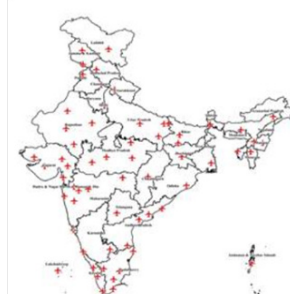


India's National Highway Network
(As of August 2021)

- ♦ Kharif Crop Cycle and
- ♦ Wasteland redeployment among others.

Neglected Tropical Diseases Day

India illuminated the iconic New Delhi Railway



Operationalised Airports
(Nov. 2016)



Operationalised Airports
(Dec. 2021)

Station in purple and orange hues, to highlight the 3rd World Neglected Tropical Diseases (NTDs) Day.

What are Neglected Tropical Diseases (NTDs)?

NTDs are caused mostly by a variety of pathogens including viruses, bacteria, parasites, fungi, and toxins.

- They are “neglected” because they are almost absent from the global health agenda of the developed countries and are associated with stigma and social exclusion.
- They are diseases of neglected populations that perpetuate a cycle of poor educational outcomes and limited professional opportunities.
- NTDs are widespread in the world’s poorest regions, where water safety, sanitation and access to health care are substandard.
- NTDs affect over 1 billion people globally.

Indian Scientists Develop Efficient and Durable Solar Cells

Indian Scientists have devised a new process for increasing the efficiency and stability of Titanium dioxide (TiO_2) nanorods based on Perovskite Solar Cells (PSC).

- It will help develop solar cells with stable light-harvesting active layer.

Key Highlights

- The team controlled nanostructures of the TiO_2 -NR by varying the concentration of the titanium precursor and the growth time.
- The power conversion efficiency for nanorod-based PSCs was enhanced with variation in the length and porosity of the TiO_2 -NR.
- The present work was published in the ‘Journal of Alloys and Compounds’,

What are Perovskite Solar Cells?

Perovskites are a family of materials with a specific crystal structure, named after the mineral with that structure.

- When used to create solar cells, they have shown potential for high performance and low production costs.

Perovskite solar cells have shown remarkable progress in conversion efficiency, from reports of about 3% in 2006 to over 25%.

IDEA Database

The Department has commenced the work for creating various agricultural services built around a core layer of Farmers’ Database (Agristack) in the country.

- In order to create Agristack, the department is in the process of finalising the “India Digital Ecosystem of Agriculture (IDEA)” which lays down a framework for building Agristacks.

Key Points

The IDEA would help in laying down the architecture for the Agri-stack in the country and that would serve as a foundation to build innovative agri-focused solutions leveraging emerging technologies.

- This Ecosystem shall help the Government in effective planning towards following two objectives:
 - ♦ increasing the income of farmers in particular and
 - ♦ improving the efficiency of the Agriculture sector, as a whole.
- As a first step, in this direction, the Government has already initiated building federated farmers’ database.
- The database is being built by taking the publicly available data as existing in the Department and in various data silos in Government and linking them with the digitised land records.
- At present, proposed farmers’ database will include the farmers registered under the PM-Kisan Scheme.

Fairbank's Disease and Acromegaly In India

Cases of Fairbank's Disease and Acromegaly have been recently reported in India.

About Fairbank's Disease

Fairbank's disease or multiple epiphyseal dysplasia (MED) is a rare genetic disorder (dominant form: 1 in 10,000 births).

MED is a group of disorders of cartilage and bone development, primarily affecting the ends of the long bones in the arms and legs (epiphyses).

There are two types of MED, which are distinguished by their patterns of inheritance - autosomal dominant and autosomal recessive.

Signs and symptoms may include joint pain in the hips and knees; early-onset arthritis; a waddling walk; and mild short stature as adults.

Most people are diagnosed during childhood, but mild cases may not be diagnosed until adulthood.

About Acromegaly

- Acromegaly is a hormonal disorder that develops when your pituitary gland produces too much growth hormone during adulthood.
- When you have too much growth hormone, your bones increase in size.
- In childhood, this leads to increased height and is called gigantism.
- But in adulthood, a change in height doesn't occur.
 - ◆ Instead, the increase in bone size is limited to the bones of your hands, feet and face, and is called acromegaly.
- Common changes in appearance include enlarged or swollen nose, ears, hands, and feet.
- Acromegaly is rare. Scientists estimate that about 3 to 14 of every 100,000 people have been diagnosed as having acromegaly.
- Acromegaly is most often diagnosed in middle-aged adults, but symptoms can appear at any age.
- Treatment can reduce risk of complications and significantly improve symptoms, including the enlargement of the features.

Status of Goitre Or Thyroid Disorders In India

India has completed its transition from iodine deficiency to iodine replete status.

Key Points

- It is believed that iodine supplementation can cause a spurt in autoimmune thyroid dysfunction and hypothyroidism.
- This happens when the thyroid gland more susceptible to damage by body's own immune system.
- The prevalence of self-reported goitre or thyroid disorder in National Family Health Survey IV [NFHS IV (2015-2016)] was 2.2%, while it was 2.9% in NFHS-V (2019-2021).
- The NFHS IV (2015-2016) has reported that amongst individuals between the age 15-49 years, the self-reported prevalence of goitre or thyroid disorder was nearly 2% in females and

less than 1% in males.

- Also, the reported prevalence increased with age in women (15-19 years: 0.7%; 20-34 years: 1.8%; 35-49 years: 3.4%).

What is Iodine Deficiency?

Iodine is an element that is needed for the production of thyroid hormone.

- The body does not make iodine, so it is an essential part of your diet.
- If you do not have enough iodine in your body, you cannot make enough thyroid hormone.
- Prevention of iodine deficiency by the introduction of iodized salt has virtually eliminated iodine deficiency from some parts of the world.
- However, approximately 30% of the world's population still remains at risk for iodine deficiency.

What is autoimmune thyroid dysfunction?

Also called as Hashimoto's disease, it is an autoimmune disorder affecting the thyroid gland.

- The thyroid is a butterfly-shaped gland located at the base of the neck just below the Adam's apple.
- The thyroid produces hormones that help regulate many functions in the body.

The thyroid gland makes hormones that control metabolism.

- ◆ This includes your heart rate and how quickly your body uses calories from the foods you eat.
- An autoimmune disorder is an illness caused by the immune system attacking healthy tissues.
- In Hashimoto's disease, immune-system cells lead to the death of the thyroid's hormone-producing cells.
- The disease usually results in a decline in hormone production (hypothyroidism).
- What causes the immune system to attack thyroid cells is not clear.
- The onset of disease may be related to:
 - ◆ Genetic factors.
 - ◆ Environmental triggers, such as infection, stress or radiation exposure.
 - ◆ Interactions between environmental and genetic factor.
- Too much iodine in the diet may function

as a trigger among people already at risk for Hashimoto's disease.

Hydrogen Fuel for Vehicles

Ministry of Road Transport and Highways had notified G.S.R. 889(E) dated 16th September, 2016, for use of Hydrogen as an automotive fuel in the country.

~~The specifications for Hydrogen for Internal~~

A goitre (sometimes spelled "goitre") is a **swelling of the thyroid gland that causes a lump in the front of the neck**. The lump will move up and down when you swallow.

Combustion notifies that there should be 18% blend of Hydrogen with CNG.

Key Points

- Earlier in 2016, the Environment Pollution Prevention and Control Authority (EPCA) had also suggested to switch to H-CNG.
- H-CNG is a blend of hydrogen and CNG, the ideal hydrogen concentration being 18%.
- Compared to conventional CNG, use of H-CNG can reduce emission of carbon monoxide up to 70%, besides enabling up to 5% savings in fuel.



Inclusive Welfare Focus In Budget 2022-23

The Union Budget has made budgetary allocations to various central government scheme that could potentially lead to more inclusive growth.

Key Highlights

- **HarGhar, Nal Se Jal Scheme:** An allocation of Rs. 60,000 crore has been made to cover 3.8 crore households in 2022-23 under the scheme.
 - ♦ The current coverage of HarGhar, Nal Se Jal is 8.7 crores, out of which 5.5 crore households were provided tap water in last 2 years itself.
- **Pradhan Mantri Awas Yojana:** An announced allocation of Rs.48,000 crore for completion of 80 lakh houses for the identified eligible beneficiaries of PM Awas Yojana, both Rural and Urban, in 2022-23.
 - ♦ The Central Government will work with the state governments for reduction of time required for all land and construction related approvals.
 - ♦ The Government will also work with the financial sector regulators to expand access to capital along with reduction in cost of intermediation.
- **Vibrant Villages Programme:** The Finance Minister proposed to cover villages on the Northern border under the new Vibrant Villages Programme.
 - ♦ Border villages with sparse population, limited connectivity and infrastructure often get left out from the development gains.
 - ♦ Such villages on the northern border will be covered under the new Vibrant Villages Programme.
 - ♦ The activities will include construction of village infrastructure, housing, tourist centres, road connectivity, provisioning of decentralized renewable energy among other things.
- **Aspirational Blocks Programme:** The focus of the Aspirational Districts Programme will be on the Blocks which have not shown sufficient

progress in key sectors.

- ♦ 95 per cent of those 112 districts have made significant progress in key sectors such as health, nutrition, financial inclusion and basic infrastructure.
- ♦ They have surpassed the state average values.
- ♦ However, in those districts, some blocks continue to lag.
- ♦ In 2022-23, the programme will focus on

All Inclusive Welfare Focus For 2022-23

- > 3.8cr households under **Har Ghar, Nal Se Jal**
- > 80 lakh houses under **PM Awas Yojana**
- > Develop lagging blocks under **Aspirational Blocks Programme**
- > Develop villages on Northern Border under **Vibrant Villages Programme**
- > Digital Banking by all Post Offices
- > **75 Digital Banking Units** in 75 districts by Scheduled Commercial Banks

such blocks in those districts.

Focus On Skilling and Employability

The Finance Minister announced that the skilling programmes and partnership with the industry will be reoriented to promote continuous skilling avenues, sustainability, and employability.

- The National Skill Qualification Framework (NSQF) will be aligned with dynamic industry needs.

Key Highlights

- Digital Ecosystem for Skilling and Livelihood – the DESH-Stack e-portal will be launched.
- This portal aims to empower citizens to skill,

reskill or upskill through on-line training.

- It will also provide API-based trusted skill credentials, payment and discovery layers to find relevant jobs and entrepreneurial opportunities.
- A Digital University will also be established to provide access to students across the country for world-class quality universal education with personalised learning experience at their doorsteps.
 - ♦ The University will be built on a networked hub-spoke model, with the hub building cutting edge ICT expertise.
 - ♦ The best public universities and institutions in the country will collaborate as a network of hub-spokes.
- 'One class-one TV channel' programme of PM e-VIDYA will be expanded from 12 to 200 TV channels.
 - ♦ This will enable all states to provide supplementary education in regional languages for classes 1-12
- To promote crucial critical thinking skills, to give space for creativity, 750 virtual labs in science and mathematics, and 75 skilling e-labs for simulated learning environment, will be set-up in 2022-23.

Education
Building Smart India With Quality Skills

- Digital University with Universal Education
- Launch of DESH-Stack E-Portal: A Digital Ecosystem for Skilling and Livelihood
- High Quality E-Content through Digital Teachers
- 'One Class One TV' Channel Programme Expanded from 12 to 200 TV Channels
- Startups to Facilitate Drone Shakti for Drone-As-A-Service
- 750 Virtual Labs in Science & Mathematics
- 75 Skilling E-Labs for Simulated Learning Environment

Chhattisgarh Implements One Nation One Ration Card

Department of Food & Public Distribution has approved the integration of Chhattisgarh with the existing cluster of portability States/UTs under

ONORC.

- Accordingly, the ONORC plan for nation-wide portability of the National Food Security Act (NFSA) ration cards has been enabled in the Chhattisgarh State from 2nd February 2022.
- With the integration of Chhattisgarh, the ONORC plan is now operational in 35 States/UTs covering almost 96.8% NFSA population (about 77 Crore NFSA beneficiaries) in the country.
- The migrant NFSA beneficiaries of Chhattisgarh State will also now be able to take the benefit of subsidised food grains at any Fair Price Shop (FPS) across the country.

About One Nation One Ration Card (ONORC)

The ONORC scheme is being implemented by the Department of Food & Public Distribution for the nation-wide portability of ration cards under National Food Security Act (NFSA).

- ONORC is a technology driven distribution system which makes food security portable across the country.
- Through this all eligible ration card holders/beneficiaries covered under NFSA can access their entitlements from anywhere in the country.
- This system allows all NFSA beneficiaries, particularly migrant beneficiaries, to claim either full or part food grains from any Fair Price Shop (FPS) in the country.
 - ♦ This can be done through existing ration card with biometric/Aadhaar authentication in a seamless manner.
 - ♦ The system also allows their family members back home, if any, to claim the balance food grains on same the ration card.
- Since inception of the ONORC plan in August 2019, so far more than 56 Crore portability transactions have been recorded.
- This has led to delivering nearly total 100 LMT food grains through both inter-State and intra-State portability transactions equivalent to about Rs. 31,000 Crore in food subsidy.
- As a key indicator, presently a monthly average of about 2.5 Crore portability transactions are being recorded in the States/UTs under ONORC.

Welfare Schemes for Transgenders

The Ministry of Social Justice and Empowerment has formulated a scheme “SMILE - Support for Marginalized Individuals for Livelihood and Enterprise”.

- This includes sub scheme - ‘Comprehensive Rehabilitation for Welfare of Transgender Persons’.

Key Points

The focus of the sub-scheme is on rehabilitation, provision of medical facilities and intervention, counselling, education, skill development, economic linkages to the transgender persons.

- Ministry has also initiated 12 pilot shelter homes namely GarimaGreh: Shelter Home for Transgender Persons.
- Ministry will also provide financial assistance to community-based organizations (CBOs) for setting up of these shelter homes.
- These pilot shelter homes are in States of Maharashtra, Gujarat, Delhi, West Bengal, Rajasthan, Chhattisgarh, Tamil Nadu, Odisha and Bihar.
- The main aim of GarimaGreh is to provide shelter to transgender persons with basic amenities like food, medical care and recreational facilities.
- SMILE scheme has also provision for Transgender Protection Cell under the charge of Director General of Police
 - ♦ The aim is to monitor cases of offences against Transgender persons and to ensure timely registration, investigation and prosecution of such offences.

Khadi Prakritik Paint

Khadi Prakratik Paint has been developed from cow dung by Kumarappa National Handmade Paper Institute (KNHPI).

- KNHPI is a unit of Khadi and Village Industries Commission (KVIC), under the administrative control of the Ministry of MSME.

Key Points

- Khadi Prakratik paint is eco-friendly and cost effective.
- The product developed by KNHPI has been tested at National Test House and Shri Ram Institute of Industrial Research, Delhi (An ISO

certified test lab) and satisfies the parameters required for paint.

- It is envisaged that manufacture of Khadi Prakratik Paint will promote local manufacturing, create sustainable employment and generate additional revenue for farmers and cow shelter homes.
- It will also generate employment in the rural areas, which will improve the rural economy and help in controlling the migration from rural to urban areas, in the country.
- Cow dung is a major constituent used in the manufacture of Prakritik Paint.
 - ♦ 100 kgs. of cow dung is utilized for making 500 liters of paint.
 - ♦ Therefore, setting up of paint units would be helpful in utilization of cow dung and thereby help in cleaning the environment.
- KNHPI imparts training in manufacture of Khadi Prakritik Paint.
- Prakritik Paint manufacturing units are being set up under Prime Minister’s Employment Generation Programme (PMEGP) scheme of Ministry of MSME.
- The technology for the manufacture of Khadi Prakritik Paint has been provided to many units in villages in the country.

National Digital Health IDs

The National Digital Health Mission (now known as Ayushman Bharat Digital Mission) was launched on 15th August 2020 as a pilot in six Union Territories.

- The pilot phase of ABDM was successfully conducted from 15th August 2020 to 27th September 2021.

More about the Digital Health IDs

Three key registries of NDHM namely Health ID, Health Professional Registry (HPR), Health Facility Registry (HFR) and digital infrastructure for data exchange have been developed and implemented in the piloted UTs.

- On 27th September 2021, the national rollout of the ABDM was announced.
- Till January 2022, more than 15 crore Health IDs (now known as ABHA – Ayushman Bharat Health Accounts) have been created in the country.
- A total of 15,016 health facilities and 8,378

doctors have also been registered under ABDM ecosystem.

- Creation of Health ID is voluntary.
- ABHA numbers (earlier known as Health IDs) have been created for those beneficiaries enrolled through CoWIN platform.

About Ayushman Bharat Digital Mission (ABDM)

The Ministry of Health and Family Welfare has formulated the Ayushman Bharat Digital Mission with the aim to provide the necessary support for the integration of digital health infrastructure in the country.

- It will bridge the existing gap amongst different stakeholders of Healthcare ecosystem through digital highways.
- This visionary initiative, stemming from the National Health Policy, 2017 intends to digitize healthcare in India.
- National Health Authority (NHA) has been entrusted with the role of designing strategy, building technological infrastructure and implementation of Ayushman Bharat Digital Mission.
- NHA is also apex body for implementation of Ayushman Bharat- Pradhan Mantri Jan ArogyaYojana” (AB-PMJAY).
- The ABDM is a collaborative initiative between many ministries/departments.
- The ABDM has been designed, developed, deployed, operated and maintained by the Government following the guiding principles as laid out in National Digital Health Blueprint (NDHB).

National Service Scheme (NSS)

Government of India has decided to continue the NSS over the 15th Finance Commission Cycle (2021-22 to 2025-26).

- NSS's goal is to develop the personality and

leadership qualities of the youth and to engage them in community service for nation building activities.

Key Points

- The NSS is an ongoing Central Sector Scheme of Department of Youth Affairs, Ministry of Youth Affairs & Sports.
- The Scheme was launched in the year 1969 with the primary objective of developing the personality and character of the student youth through voluntary community service.
- The ideological orientation of the NSS is inspired by the ideals of Mahatma Gandhi.
- Very appropriately, the motto of NSS is “NOT ME, BUT YOU” in Hindi “Lo;a ls igys vki”.
- NSS is implemented in Senior Secondary Schools, Colleges and Universities in all States and UTs across the country.
- The design of the NSS envisages that each educational institution covered under the Scheme has at least one NSS unit comprising of normally 100 student volunteers, led by a teacher designated as Programme Officer (PO).
- Each NSS unit adopts a village or slum for taking up its activities.
- Each NSS volunteer is required to put in minimum 120 hours of community service per year for two years, i.e., total 240 hours.
- Each NSS unit organizes a Special Camp of 7 days' duration in adopted villages or urban slums during vacations with some specific projects by involving the local communities.
- Each volunteer is required to participate in a Special Camp once during the 2-year period.

Indigenous Knowledge & Health Care: The Way Forward

Tribal Research Institute (TRI), Telangana in collaboration with the Ministry of Tribal Affairs, organised a two Days workshop on 'Indigenous Knowledge & Health Care: The Way Forward'.

- The workshop was organised with technical support from the United Nations Development Programme.

Key Points:

- The event discussed the importance of indigenous practices of tribal healers and their utility



in remote areas as these are plant-based remedies and have little side effects.

- Tribals have lot of faith in such healers and have ready acceptance among the tribal communities.
- Ministry of Tribal Affairs is working on creating repository of researches done on tribal healers and indigenous practices.
- Tribal Research Institute, Uttarakhand has been designated as the nodal TRI for coordination with other TRIs and compile all projects related to traditional medicine and healing practices across country.

Nation Celebrates National Girl Child Day

National Girl Child Day is celebrated in the country on January 24 every year with an objective to provide support and opportunities to the girls of India.

- National Girl Child Day was first initiated in 2008 by the Ministry of Women and Child Development.

Key Points

- Objectives: The objective of National Girl Child Day is to create awareness about the rights a girl owns and to give girls the opportunities like everyone else.
- Another objective of celebrating this day is to promote awareness about the inequalities that a girl child faces and educate people about girl's education.
- The main focus is on changing society's attitude towards girls, decrease female feticide and create awareness about the decreasing sex ratio.
- Steps taken by Govt.- Government has started several campaigns and programmes some of them are:
 - ◆ Save the Girl Child
 - ◆ BetiBachaoBetiPadhao
 - ◆ SukanyaSamridhiYojana
 - ◆ CBSE Udaan Scheme
 - ◆ Free or subsidized education for girl child
 - ◆ Reservation for women in colleges and universities
 - ◆ National Scheme of Incentive to Girls for Secondary Education

Swachhata Start-Up Challenge

Ministry of Housing & Urban Affairs (MoHUA) in partnership with DPIIT and Agence Française de

Development (AFD) today launched the Swachhata Start-Up Challenge.

- The aim is to provide an impetus to innovative start-ups to come forward and drive catalytic transformation in the sanitation and waste management sector.

Key Points

The Challenge seeks to promote an enabling environment for enterprise development under Swachh Bharat Mission-Urban 2.0 (SBM-U 2.0).

- The Swachhata Start-Up Challenge launched aims to capitalise on the start-up movement by providing opportunities for entrepreneurship to young innovators to create socially impactful and market ready business solutions.
- The Challenge is open to start-ups registered in India and French actors collaborating with an Indian start-up (as a joint venture).
- The challenge invites solutions across four thematic areas viz.
 - ◆ (i) social inclusion,
 - ◆ (ii) zero dump (solid waste management),
 - ◆ (iii) plastic waste management, and
 - ◆ (iv) transparency through digital enablement.
- The Challenge aims to capitalize on the skills and expertise of this space to find implementable ideas and solutions that can be adopted and replicated at scale across urban India.
- The French Development Agency will provide seed funding to the tune of 25 lakh rupees and one year of customized support to each of the 10 selected start-ups.

Mentally Challenged Child Entitled To Family Pension

Union Minister Dr Jitendra Singh highlighted that mentally challenged child of a deceased Government employee/Pensioner is entitled to Family Pension and the spirit of this provision needs to be understood and respected.

Key Highlights

- Some banks were not allowing Family Pension in respect of a mentally challenged child through the person nominated by the Pensioner or his/her spouse.
 - ◆ Banks insist for a Guardianship Certificate

issued by a Court of Law.

- Department of Pension & Pensioners' Welfare took note of such events and hence the rights of a mentally challenged child was highlighted.

SERVICES E-HEALTH ASSISTANCE AND TELECONSULTATION

Home Delivery of medicines recently began under SERVICES e-HEALTH ASSISTANCE AND TELECONSULTATION (SeHAT).

- SeHAT is the tri-services teleconsultation service of the MoD designed for all entitled personnel and their families.

Key Points

SeHAT stay home OPD is a patient-to-doctor system where the patient can consult a doctor remotely through the internet using his Smartphone, laptop, Desktop or Tablet.

- The consultation occurs through video, audio and chat at the same time.
- It aims to provide quality healthcare services to patients from the comfort of their homes.
- The user does not need to pay anything to seek teleconsultation & can simply access the services by visiting <https://sehatopd.gov.in>, or by using the SeHAT apps.
- Since its launch, there have been more than 10,000 successful teleconsultations on SeHAT, with a strong team of 2000 plus doctors onboard.
- Providing Home Delivery or Self Pickup of Medicines to patients seeking consultation on SeHAT is also being implemented.

Employment Indicators Bounced Back

The various indicators of employment have bounced back remarkably, after showing a decline during the nationwide lockdown due to Covid pandemic.

- The Economic Survey has analysed trends in labour market and the impact of Covid-19 on employment.

Key Highlights

Trends in Urban Labour Market

- The Survey states that with the revival of the economy:
 - ♦ the Unemployment Rate (UR),
 - ♦ the Labour Force Participation Rate (LFPR) and

- ♦ the Worker Population Rate (WPR)
- ♦ almost reached their pre-pandemic levels during the last quarter of 2020-21 as per Periodic Labour Force Survey Data.

- The Economic Survey also analyses trends in urban employment using Employees Provident Funds Organization (EPFO) payroll data.
- EPFO data suggests significant acceleration in formalization of the job market, during 2021.
- In fact, in November, 2021, the monthly net additional EPF subscription peaked with 13.95 lakh new subscribers.
 - ♦ This is the highest subscription in any given month since 2017.
 - ♦ The Survey further states that the monthly net addition in EPF subscriptions during 2021 shows following trends:
 - ♦ Subscription has been higher than the corresponding monthly values in 2020.
 - ♦ In fact, they have also surpassed the levels of the corresponding months during pre-pandemic year 2019.

Trends in Rural Labour Market

Economic Survey 2021-22 analyses trends in Rural Labour Market with the help of latest data on demand for work under Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS).

- The Survey observes that the MGNREGS employment peaked during the nationwide lockdown in 2020.
- However an interesting trend was observed for many migrant source states like West Bengal, Madhya Pradesh, Odisha, and Bihar:
 - ♦ That the MGNREGS employment in most

SOCIAL INFRASTRUCTURE & EMPLOYMENT



Expenditure on Social Services by Centre & States Increased from **6.2% of GDP (2014-15)** to **8.6% of GDP (2021-22 BE)**

- > Swift recovery in labour market indicators
- > Recovery in employment in urban sector to pre-pandemic level (Source: Periodic Labour Force Survey)
- > Jobs formalisation continued during second Covid wave (Source: EPFO)
- > Increase in allocation of funds to MGNREGS

months of 2021 has been lower than the corresponding level in 2020.

- ◆ In contrast, the demand for MGNREGS employment has been higher for migrant recipient states like Punjab, Maharashtra, Karnataka and Tamil Nadu for most months in 2021 over 2020.
- Although, the demand for MGNREGS work has stabilized after the second Covid wave.
- It further states that the aggregate MGNREGS employment is still higher than pre-pandemic level.
- During the second Covid wave, demand for MGNREGS employment reached the maximum level of 4.59 crore persons in June 2021.

Long Term Trends in Employment using Annual PLFS Data

- During PLFS 2019-20 (survey period from July 2019 to June 2020), employment at usual status continued to expand.
- Between 2018-19 and 2019-20, about 4.75 crore additional persons joined the workforce.
- This is about three times more than the employment created between 2017-18 and 2018-19.
- The rural sector contributed much more to this expansion relative to the urban sector (3.45 crore in rural sector and 1.30 crore in urban sector).
- Further, amongst the additional workers, 2.99 crore were females (63 percent).
- About 65 percent of the additional workers joined in 2019-20 were self-employed.
- About 75 percent of the female workers who joined as self-employed were 'unpaid family labour'.
- About 18 percent of the additional workers were Casual Labourer and 17 percent were 'Regular Wage/Salaried Employee'.
- Further, the number of unemployed persons in 2019-20 has also decreased by 23 lakhs, constituted largely by males from the rural sector.
- With respect to industry wise employment in India, of the workers added in 2019-20, more than 71 percent were in agricultural sector.
- Among the new workers in the agriculture sector, females account for about 65 percent.
- Trade, hotel and restaurant sector accounted for

a little over 22 percent of the new workers, in line with previous year's trend where the sector represented more than 28 percent of the new workers.

- The share of manufacturing has declined from 5.65 percent of new workers added in 2018-19 to about 2.41 percent of new workers added in 2019-20, and so has that of construction from 26.26 percent to 7.36 percent.

Jal Jeevan Mission: Scheme Update

More than 5.5 crore households have been provided with tap water supply since the start of the Jal Jeevan Mission (JJM) in August, 2019.

- JJM seeks to provide adequate safe drinking water through individual household tap connection to households in rural India by 2024.
- The mission will benefit more than 19 crore rural families or more than 90 crore rural population.

Key Highlights

- The Survey observes that in 2019, out of about 18.93 crore families in rural areas, about 3.23 crore (17 percent) rural families had tap water connections in their homes.
- As on 2nd January, 2022, 5, 51, 93,885 households have been provided with tap water supply since the start of the mission.
- Six States/UTs have achieved the coveted status of 100 percent households with tap water supply.
 - ◆ They are Goa, Telangana, A & N Islands, Puducherry, Dadra and Nagar Haveli and Daman and Diu and Haryana.
- As of Jan 2022, under Jal Jeevan Mission, 8, 39,443 schools were provided water supply.
- Under the JJM, priority is for quality affected areas, villages in drought prone and desert areas, SansadAdarsh Gram Yojana (SAGY) villages.
 - ◆ So as to provide functional tap connection to Schools, Anganwadi Centres, GP Buildings, Health Centre, wellness centres and community buildings.
- Total outlay for the mission is Rs.3.60 lakh crores.

Depletion of Ground Water

Central Ground Water Board (CGWB) is periodically

monitoring the ground water levels throughout the Country on a regional scale, through a network of monitoring wells.

Key Points

In order to assess the long term fluctuation in ground water levels, the water level data collected by CGWB during November 2021 have been compared with the decadal mean of November (2011-2020).

- Analysis of water level data indicates that about 30% of the wells monitored have registered a decline in ground water level.
 - But, on the other hand 70 % wells have registered rise (in ground water levels).
- Ground water levels in various parts of the country appear to decline mainly because of continuous withdrawal due to reasons such as:
 - increased demand for freshwater for various uses,
 - vagaries of rainfall,
 - increased population,
 - industrialization & urbanization etc.

Various State Initiative for Ground water conservation

- Mukhyamantri Jal Swavlamban Abhiyan in Rajasthan
- Jalyukt Shibir in Maharashtra,
- Sujalam Sufalam Abhiyan in Gujarat,
- Mission Kakatiya in Telangana,
- Neeru Chettu in Andhra Pradesh,
- Jal Jeevan Hariyali in Bihar,
- Jal Hi Jeevan in Haryana, and
- Kudimaramath scheme in Tamil Nadu.

Water Stressed Blocks

The Dynamic Ground Water Resources of the country are being periodically assessed jointly by Central Ground Water Board (CGWB) and State Governments.

Key Points from the Assessment

The assessment is based on the 2020 report in which an assessment unit refers to Block/ Taluks/ Mandals/ Watersheds/ Firkas.

- Out of the total 6965 assessment units in the country, 1114 units (16%) in 15 States/UTs have been categorized as 'Over-exploited' (OE).
- Over-exploited means that the Annual Ground

Water Extraction is more than Annual Extractable Ground Water Resource.

- Further, OE assessment units in decreasing order are as follows:
 - States of Tamil Nadu (435) being highest,
 - Rajasthan (203),
 - Haryana (85) and Uttar Pradesh (66) etc.
- Further, the assessment units are not in uniform size and vary in geographical areas in different States as per their laid down criteria.

CATEGORIZATION OF ASSESSMENT UNITS

(Blocks/ Mandals/ Firkas/ Taluks etc.)

S. No.	Category	Assessment Units		Recharge worthy Area		Annual Extractable Ground Water Resource	
		Number	%	in lakh sq. km.	%	(in bcm)	%
1	Safe	4427	64 %	15.67	64 %	280.26	70 %
2	Semi-Critical	1057	15 %	3.40	14 %	54.11	14 %
3	Critical	270	04 %	0.86	04 %	12.71	03 %

CATEGORIZATION OF ASSESSMENT UNITS

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1	Safe	4427	64 %	15.67	64 %	280.26	70 %
2	Semi-Critical	1057	15 %	3.40	14 %	54.11	14 %
3	Critical	270	04 %	0.86	04 %	12.71	03 %
4	Over-Exploited	1114	16 %	4.09	17 %	50.54	13 %
5	Saline	97	01 %	0.3	01 %	NA	NA
Total		6965		24.33		397.62	



Fig. 3.1: Annual Rainfall Map-2019

SAMRIDH Healthcare

Atal Innovation Mission (AIM), NITI Aayog, and the U.S. Agency for International Development (USAID) announced a new partnership under SAMRIDH initiative.

- The initiative will improve access to affordable and quality healthcare for vulnerable populations in tier-2 and tier-3 cities, and rural and tribal regions.

Key Points

SAMRIDH is Sustainable Access to Markets and Resources for Innovative Delivery of Healthcare initiative.

- In 2020, USAID, IPE Global, and stakeholders from the Indian government, academia, and the private sector developed the innovative SAMRIDH blended finance facility.
 - ◆ The aim was to combine public and philanthropic funds with commercial capital to create and rapidly scale market-based health solutions.
- SAMRIDH will also leverage Atal Innovation Mission's expertise in innovation and entrepreneurship in its efforts to reach vulnerable populations.
- The collaboration will focus on innovations across the healthcare landscape with the common goal, i.e.:
 - ◆ to mount an effective response to the ongoing third wave of COVID-19 and
 - ◆ build health system preparedness for future infectious disease outbreaks and health emergencies.

Status of Employment And Funds Under MGNREGS

In the current FY 2021-22 against the total demand for wage employment, a total of 99.34% has been offered wage employment.

- In case of non-offering of work, the beneficiary is eligible for unemployment allowances to be paid by the State as per provision of the Mahatma Gandhi National Rural Employment Guarantee Act (Mahatma Gandhi NREGA).

Key Points

Mahatma Gandhi NREGS is a demand driven wage employment programme.

- The funds under it are released to the States/

UTs on the basis of "agreed to" Labour Budget (LB) and performance of the States/UTs during the financial year.

- No States/UTs wise financial allocation is made under the Scheme.
- In financial year 2021-22 (as on 03.02.2022), an amount of Rs. 81,406.73 crore has been released to States/UTs for the implementation of the Scheme.
- As per the Scheme, a rural household is eligible for at least 100 days of guaranteed wage employment against their demand for wage employment.

Rehabilitation/Vocational Skill Schemes for Beggars

Ministry of Social Justice and Empowerment has formulated an umbrella scheme "SMILE - Support for Marginalized Individuals for Livelihood and Enterprise".

- It includes the sub-scheme – 'Central Sector Scheme for Comprehensive Rehabilitation of persons engaged in the act of Begging'.

Key Points

- This umbrella scheme covers several comprehensive measures including welfare measures for persons who are engaged in the act of begging.
- The focus is extensively on rehabilitation, provision of medical facilities, counselling, education, skill development, economic linkages etc.
- This is done with the support of State Governments/UTs/Local Urban Bodies, Voluntary Organizations, Community Based Organizations (CBOs) and institutions and others.
- Scheme provides for the use of the existing shelter homes for rehabilitation of the persons engaged in the act of begging.
- In case of non-availability of existing shelter homes, new dedicated shelter homes to be set up for the Persons engaged in the act of begging by the implementing agencies.
- Ministry of Social Justice and Empowerment has initiated pilot projects on Comprehensive Rehabilitation of Persons engaged in the act of Begging.
 - ◆ These pilot projects are in major seven cities of the Country including Delhi, Patna, Nagpur, Indore, Hyderabad, Bengaluru and Lucknow.



Art and Culture

Hundred years of Chauri Chaura incident

The Prime Minister remembered the heroes of our freedom struggle on completion of hundred years of Chauri Chaura incident.

About Chauri Chaura

- The Chauri Chaura incident occurred at Chauri Chaura in the Gorakhpur district of the United Province, (modern Uttar Pradesh) in British India on 4 February 1922.
- It happened when 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 deaths of three civilians and 23 policemen.
- Mahatma Gandhi, who was strictly against violence, halted the Non-cooperation Movement on the national level on 12 February 1922, as a direct result of this incident.

Netaji Subhas Chandra Bose

The President of India along with the entire nation paid homage to Netaji Subhas Chandra Bose on his 125th birth anniversary (January 23, 2022).

About Netaji

- Subhas Chandra Bose was born on January 23, 1897 in Cuttack, Orissa.
- Subhas Chandra Bose was a brilliant student right from the childhood.
- He topped the matriculation examination of Calcutta province and graduated with a First Class in Philosophy from the Scottish Churches College in Calcutta.
- To fulfill his parents' wishes he went to England in 1919 to compete for Indian Civil Services.
- In England he appeared for the Indian Civil Service competitive examination in 1920, and came out fourth in order of merit.

- However, Subhas Chandra Bose was deeply disturbed by the Jallianwalla Bagh massacre, and left his Civil Services apprenticeship mid-way to return to India in 1921.
- After returning to India Netaji Subhash Chandra Bose came under the influence of Mahatma Gandhi and joined the Indian National Congress
- On Gandhi ji's instructions, he started working under Deshbandhu Chittaranjan Das, whom he later acknowledged as his political guru.
- In 1928 the Motilal Nehru Committee appointed by the Congress declared in favour of Domination Status, but Subhas Chandra Bose along with Jawahar lal Nehru opposed it.
- Bose also announced the formation of the Independence League.
- Subhas Chandra Bose was jailed during Civil Disobedience movement in 1930 and was released in 1931 after Gandhi-Irwin pact was signed.
- He was soon arrested again under the infamous Bengal Regulation.
- After a year he was released on medical grounds and was banished from India to Europe.
- Defying the ban on his entry to India, Subash Chandra Bose returned to India and was again arrested and jailed for a year.
- After the General Elections of 1937, Congress came to power in seven states and Subash Chandra Bose was released.
- Shortly afterwards he was elected President of the Haripura Congress Session in 1938.
- During his term as President, he set up a National planning Committee in Oct, 1938.
- At the end of his first term, the presidential election to the Tripuri Congress session took place in early 1939.
- Subhas Chandra Bose was re-elected, defeating Dr. Pattabhi Sitaramayya who had been backed by Mahatma Gandhi and the Congress Working Committee.
- In January 1941, Subhas Chandra Bose disap-

peared from his home in Calcutta and reached Germany via Afghanistan.

- Working on the maxim that "an enemy's enemy is a friend", he sought cooperation of Germany and Japan against British Empire.
- In January 1942, he began his regular broadcasts from Radio Berlin, which aroused tremendous enthusiasm in India. In July 1943, he arrived in Singapore from Germany.
- In Singapore he took over the reins of the Indian Independence Movement in East Asia from Rash Behari Bose and organised the Azad Hind Fauj (Indian National Army) comprising mainly of Indian prisoners of war.
- Azad Hind Fauj proceeded towards India to liberate it from British rule. Enroute, it liberated Andaman and Nicobar Islands.
- The I.N.A. Headquarters was shifted to Rangoon in January 1944.
- Azad Hind Fauj crossed the Burma Border, and stood on Indian soil on March 18, 1944.
- Subhas Chandra Bose was reportedly killed in an air crash over Taipeh, Taiwan (Formosa) on August 18, 1945.

Kathakali dancer Ms. Milena Salvini passes away

Milena Salvini, an Italy-born dancer who was a great enthusiast of Indian classical art, especially Kathakali, passed away in France.

About Milena Salvini

- In 1962, she obtained a scholarship to get trained in Kathakali at Kerala Kalamandalam.
- After completing her studies, she sponsored Kathakali troupes from Kerala and arranged stage performances in many European countries.
- This helped to increase the acceptance of Indian classical dance in the west.
- She had also established Centre Mandapa, a school of Indian dance forms in Paris, which flourished as a learning centre.
- Her efforts helped UNESCO recognise Koodiyattam as an ancient art form and include it in the Intangible Cultural Heritage of Humanity programme in May 2001.
- India had honoured her with Padma Shri in 2019.

About Kathakali

- Kathakali, as a dance form popular today, is considered to be of comparatively recent origin.
- However, it is an art which has evolved from many social and religious theatrical forms which existed in the southern region in ancient times.
- Chakiarkoothu, Koodiyattam, Krishnattam and Ramanattam are few of the ritual performing arts of Kerala which have had a direct influence on Kathakali in its form and technique.
- Kathakali is said to be originated from Kerala's shores over 300 years ago.
- Kathakali is a blend of dance, music and acting and dramatizes stories, which are mostly adapted from the Indian epics.
- The dancer expresses himself through codified hastamudras and facial expressions, closely following the verses (padams) that are sung.
- Kathakali derives its textual sanction from Balarama Bharatam and Hastalakshana Deepika.
- The pomp and magnificence of Kathakali is partly due to its décor which include
 - ♦ the kireetam (huge ornamental headgear),
 - ♦ the kanchukam (over sized jackets), and
 - ♦ a long skirt worn over a thick padding of cushions.



Sacred Ensembles of the Hoysalas temples

The Hoysala Temples of Belur, Halebid and Somnathapura in Karnataka have been finalised as India's nomination for consideration as World Heritage for the year 2022-2023.

- The 'Sacred Ensembles of the Hoysala' are already on UNESCO's Tentative list since 15th April, 2014.

About Sacred Ensembles of the Hoysala

The Hoysala era is one that contributed enormously to the development of several creative fields as well as spiritual and humanistic thought.

- During their reign, the Hoysalas built more than 1500 temples all across their empire of which only a little over 100 survive today.
- The Hoysaleswara temple follows the Shaivism tradition, but includes themes from Vaishnavism and Shaktism, too, along with images from Jainism.
- The sculptures inside the temple depict scenes from the Ramayana, the Mahabharata and the Bhagavata Purana.
- The most remarkable architectural achievement of the Hoysala is the numerous intricately carved stone temples in star shaped plans.
- The architecture of the Hoysalas is a hybrid of the nagara style of temple architecture of north India and the dravidian style from the South.
- The temples were built on platforms and had a star shaped plan.
- A navaranga was usually included as a place for people to gather and participate in cultural programs such as music and dance.
- Visual elements such as a gently curving bell shaped chajja, and lathe turned stone pillars with circular rings carved on them are typical stylistic elements of Hoysala architecture.
- The exterior walls of the numerous temples were intricately decorated with stone sculptures and carving.
- Kalyanior stepped wells are commonly found in the Hoysala sacred ensembles.
- The temple complex had rathabeedior wide streets for processions and circumambulation of the deities on enormous chariots.

Various temples of Hoysala

- **Belur:** Belur was the first capital city of the Hoysalas.
 - ♦ The Chennakeshava temple complex was at the center of the old walled town located on the banks of the Yagachi River.



- ♦ Construction of the temple commenced in 1117 AD and took a 103 years to complete.
- ♦ A total of 118 stone inscriptions have been recovered from the temple complex covering a period from 1117 to 18th century.
- ♦ The Chennakeshava temple was devoted to Lord Vishnu. However, some of the representations of Lord Shiva are also included.
- **Halebid:** At the zenith of the Hoysalaempire, the capital was shifted from Belur to Halebid that was then known as Dorasamudhra.
 - ♦ Far bigger and grander than Belur, the city served as the capital for nearly three centuries.
 - ♦ However, the fort was attacked numerous times by northern invaders of the Delhi Sultanate who finally succeed in pillaging the city in 1310.



- ♦ The Hoysaleswara temple at Halebidu is the most exemplary architectural ensemble of the Hoysalas extant today.
- ♦ Built in 1121CE during the reign of the Hoysala King, Vishnuvardhana Hoysaleswara.
- ♦ The temple, dedicated to Shiva, was sponsored and built by wealthy citizens and merchants of Dorasamudra.
- ♦ It is said to be the largest monument in Halebidu, a town in Karnataka and erstwhile capital of the Hoysala Empire.
- ♦ Halebid has a walled complex containing of three Jainabasadi (temples) of the Hoysala period as well as a stepped well.
- ♦ The basadiare located in close proximity to the Dorasamudhralake.
- ♦ The Parshvanatha Basadi, the Adinatha

Basadi, and the Shanthinatha Basadi are three Jaina shrines containing tall idols of the Jaina deities.

- ◆ The Kedareshwara temple is another exquisitely carved temple dedicated to Shiva that is close to the Jainabasadi complex.
- ◆ Ranganathaswamy temple, the Huccheshwara temple and the recently excavated remains of the Nagareshwara temple complex are also present in Halebid.



- ◆ Along with this temple, the nearby Kesava temple in Somanthapura has also been proposed to be listed under UNESCO World Heritage Sites.

Statue of Equality

The Prime Minister dedicated to the nation the 'Statue of Equality' in Hyderabad commemorating the 11th century Bhakti Saint Sri Ramanujacharya.

- The 216-foot tall Statue of Equality celebrates the idea of equality in all aspects of living including faith, caste and creed.

More about the Statue

- The statue is 216-feet tall and erected in the 40-acre land in the outskirts of Hyderabad.
- It is mounted on a 54-ft high base building named 'Bhadra Vedi'.
 - ◆ The building has floors devoted to a digital library and research centre, ancient Indian texts, a theatre, and an educational gallery detailing many works of Shri Ramanujacharya.
- Moreover, the statue is made of 'Panchaloha' which is a combination of five metals - gold, silver, copper, brass, and zinc.
- The statue will be the tallest metallic statue in a sitting position in the world.



About Sri Ramanujacharya

- Sri Ramanuja was born in Sriperumbudur, Tamil Nadu, in 1017 A.D.
- He dedicated his entire life for reformism and left no stone unturned in dispelling darkness from the minds and lives of people.
- Ramanuja was married at the age of 16 to Rakshakambal.
- Soon after marriage and the unexpected departure of his father from this world, Ramanuja moved to Kanchi with his family.
- At Kanchi, he started studying the advaita-vaad philosophy under the guidance of Yadav Prakash.
- However, the impersonal and offensive explanations of Yadav greatly distressed the heart of Ramanuja, who was a pure devotee of the Lord.
- Later on, Ramanujacharya left the school of Yadav Prakash and started his own school in his own house and soon became very well-known.

Sri Ramanujacharya's Contribution

- The great poet-saint Ramanuja was an eminent teacher and the founder of Vishishtadwaita.
- A community of Vaishnavites has been following his path called Vedanta.
- Sri Ramanujacharya was also known for his social reforms.
- His ultimate objective was to inculcate Vedic way of life into society.
- He was a saint who propagated universal brotherhood.
- He embraced the untouchables and treated them on par with the elite.
- Seeing his compassion towards the oppressed, his delighted guru honoured him with the cov-

eted title “Em-perum- anar” you are ahead of us.

- Shri Ramanujacharya wrote nine scriptures called Navaratnas and composed numerous commentaries on Vedic scriptures.
- His greatest contribution is the propagation of Vasudhaiva Kutumbakam which means all universe is one family.

Legendary singer Lata Mangeshkar passes away

Legendary singer Lata Mangeshkar passed away at the Breach Candy Hospital in Mumbai.

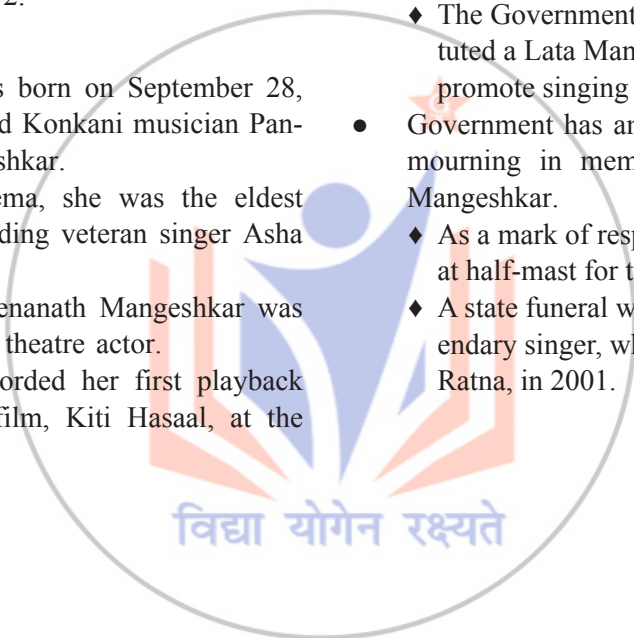
- The veteran singer, popularly known as the Melody Queen, was 92.

About Lata Mangeshkar

- Lata Mangeshkar was born on September 28, 1929, to a Marathi and Konkani musician Pandit Deenanath Mangeshkar.
- Originally named Hema, she was the eldest of five siblings, including veteran singer Asha Bhosle.
- Her father Pandit Deenanath Mangeshkar was a classical singer and theatre actor.
- Lata Mangeshkar recorded her first playback song for a Marathi film, Kiti Hasaal, at the

age of 13.

- In year 1946, she recorded her first Hindi film playback song for Aap Ki Seva Mein, directed by Vasant Jogalekar.
- In 1972, Lata Mangeshkar won the first National Award for Best Female Playback Singer for the film Parichay.
- Over the years, the veteran singer won numerous national and international awards including the prestigious Bharat Ratna, the title of Officer of the French Legion of Honour, Dadasaheb Phalke Award, and many more.
- In 1984, the State Government of Madhya Pradesh instituted the Lata Mangeshkar Award.
 - ♦ The Government of Maharashtra also instituted a Lata Mangeshkar Award in 1992 to promote singing talent.
- Government has announced a two-day national mourning in memory of Bharat Ratna Lata Mangeshkar.
 - ♦ As a mark of respect, the national flag will fly at half-mast for two days.
 - ♦ A state funeral will be accorded to the legendary singer, who received the Bharat Ratna, in 2001.





Internal Security

Union Defence Budget 2022-23

Ministry of Defence has been allocated a total budget of Rs 5.25 lakh crore, which is 13.31% of the total budget.

- The total Defence Budget represents an enhancement of Rs 46,970 crore (9.82%) over Budget Estimates 2021-22.

Key Highlights

Government has placed modernisation and infrastructure development of the Armed Forces at the centre stage of the National Security and Defence Planning process.

- The total allocation under Capital Outlay of the Defence Services has been increased from Rs 86,740 crore in 2013-14 to 1.52 lakh crore in 2022-23.
- This is an enhancement of 76% over a period of nine years.
- The defence budget also includes an amount of Rs 1.19 lakh crore for Defence Pensions.
- Pensions has increased by 107.29%, from Rs 2.53 lakh crore in 2013-14 to Rs 5.25 lakh crore in 2022-23.
- In order to give push to indigenous Domestic Enterprises under the 'Aatmanirbhar Bharat', the share of domestic capital procurement has increased.
 - ♦ It was earmarked at 64% in 2021-22, and has been enhanced to 68% of the Capital Acquisition Budget of the Defence Service for the FY 2022-23.

Amar Jawan Jyoti and National War Memorial

The government has put out the eternal flame of the Amar JawanJyoti underneath India Gate and merged it with the one instituted at the National War Memorial.

About Amar JawanJyoti

The eternal flame at the Amar JawanJyoti was underneath India Gate in central Delhi.

- It was an iconic symbol of the nation's tributes to the soldiers who have died for the country in various wars and conflicts since Independence.
- Established in 1972, it was to mark India's victory over Pakistan in the 1971 War, which resulted in the creation of Bangladesh.
- The then Prime Minister Indira Gandhi had inaugurated it on Republic Day 1972, after India defeated Pakistan in December 1971.
- Originally, All India War Memorial was built by the British in 1931 at the India Gate.
- It was erected as a memorial to around 90,000 Indian soldiers of the British Indian Army, who had died in several wars and campaigns till then.
- As it was a memorial for the Indian soldiers killed in wars, the Amar JawanJyoti was established underneath it by the government in 1972.

How the eternal flame was kept burning?

- For 50 years the eternal flame had been burning underneath India Gate, without being extinguished.
- Since 1972, when it was inaugurated, it used to be kept alive with the help of cylinders of liquefied petroleum gas, or LPG.
- In 2006 the flames were changed from LPG to piped natural gas, or PNG.

About National War Memorial

The National War Memorial, which is around 400 meters from India Gate was inaugurated in February 2019.

- It was built to commemorate all the soldiers who have laid down their lives in the various battles, wars, operations and conflicts of Independent India.
- Discussions to build such a memorial had been ongoing since 1961, but it did not come up.
- In 2015, the current government approved its construction, and the location east of the India Gate at C Hexagon was finalised.

- The architecture of the memorial is based on four concentric circles.
- Largest is the Raksha Chakra or the Circle of Protection which is marked by a row of trees, each of which represent soldiers, who protect the country.
- The Tyag Chakra, the Circle of Sacrifice, has circular concentric walls of honour based on the Chakravartu.
- The walls have independent granite tablets for each of the soldiers who have died for the country since Independence.
- As of today, there are 26,466 names of such soldiers on these granite tablets etched in golden letters.
- A tablet is added every time a soldier is killed in the line of duty.
- Next circle is Veerta Chakra, the Circle of Bravery, has a covered gallery with six bronze crafted murals depicting the battles and actions of our Armed Forces.
- The final is the Amar Chakra, the Circle of Immortality, which has an obelisk, and the Eternal Flame.
- Busts of the 21 soldiers who have been conferred with the highest gallantry award of the country, ParamVir Chakra, are also installed at the memorial.



Radio Frequency Identification (RFID) Of Ammunition

The Indian Army commenced implementation of Radio Frequency Identification (RFID) tagging of its ammunition inventory.

- The event was flagged off by the Director General Ordnance Services.

Key Points

- The RFID implementation has been steered by the Ordnance Services Directorate of the Indian Army, in conjunction with Munitions India Limited (MIL), Pune.
- Munitions India Limited (MIL), Pune is the newly created entity formed post corporatisation of the Ordnance Factories Board (OFB).
- The RFID tagging is in conformity with global standards in consultation with GS-1 India, a Global Standards organisation set up by the Ministry of Commerce and Industry.
- The RFID tags will be interpreted and used for assets tracking by the Enterprise Resource Application run by the Computerised Inventory Control Group (CICG) of the Ordnance Services Directorate.
- The implementation of the RFID solution for ammunition asset visibility will transform management of ammunition.
- The endeavour will make ammunition storage and use by soldiers safer and provide enhanced satisfaction to the field Army.
- The implementation shall lead to increased efficiency in all technical activities carried out in Ammunition Depots and reduce inventory carrying costs.

First Convocation Ceremony Of Indian Institute Of Petroleum And Energy (IPE)

The Vice President attended the First Convocation ceremony of the Indian Institute of Petroleum and Energy (IPE) in Visakhapatnam.

- The Vice President called for increasing indigenous production of crude oil through strong R&D efforts to ensure energy security of the country.

‘Atma Nirbharta’ in the country’s energy mix

The VP suggested to focus more on increasing domestic exploration of petroleum, harnessing the full potential of renewable sources and aiming for excellence and innovation in the energy industry.

- India is the world’s third largest consumer of crude oil and yet import-dependent for more than 80 percent of its needs.
- Domestic production will not only save foreign exchange but will also ensure energy security.
- India’s primary energy demand is expected to grow at an average rate of more than 3% till 2045 as compared to less than 1% growth for the rest of the world.

About IPE

The Indian Institute of Petroleum and Energy (IPE) is an autonomous institute under the Ministry of Petroleum & Natural Gas, Govt. of India.

- It is also backed by public sector Oil and Gas giant viz. HPCL, IOCL, ONGC, GAIL, OIL whose CEOs are on the Board of IPE.
- The objective of establishing IPE is to meet the quantitative and qualitative gap and supply of skilled manpower for Petroleum Sector.
- It also aims to boost the research activities needed for growth of the sector.
- IPE was recognized as an Institution of National Importance in 2017 through an Act of Parliament.

Pradhan Mantri Rashtriya Bal Puraskar-2022

29 Children have been conferred the Pradhan Mantri Rashtriya Bal Puraskar this Year, selected from all regions of the country.

Key Points

- The awards were given for their exceptional achievements in Innovation (7), Social Service (4), Scholastic (1), Sports (8), Art & Culture (6) and Bravery (3) categories.
- There are 15 Boys and 14 Girls among the awardees belonging to 21 States and UTs.

About the Award:

- The National Child Award for Exceptional Achievement was instituted in 1996.
 - ♦ The award gave recognition to children with exceptional abilities and outstanding achievements in the fields of innovation, scholastic achievements, social service, arts & culture and sports.
 - ♦ A medal and a cash prize are given to each awardee.
- From the year 2018, the award has been renamed as the Bal Shakti Puraskar and achievements of children in the field of bravery are also acknowledged.

Padma Awards 2022 Announced

Padma Awards were recently announced on the eve of Republic day.

Key Points:

- Padma Awards - one of the highest civilian Awards of the country, are conferred in three categories, namely, Padma Vibhushan, Padma Bhushan and Padma Shri.
- The Awards are given in various disciplines/ fields of activities, viz.-
 - ♦ art,

- ◆ social work,
- ◆ public affairs,
- ◆ science and engineering,
- ◆ trade and industry,
- ◆ medicine,
- ◆ literature and education,
- ◆ sports,
- ◆ civil service, etc.
- 'Padma Vibhushan' is awarded for exceptional and distinguished service;
 - ◆ 'Padma Bhushan' for distinguished service of high order and
 - ◆ 'Padma Shri' for distinguished service in any field.
- The awards are announced on the occasion of Republic Day every year.
- These awards are conferred by the President of India at ceremonial functions which are held at Rashtrapati Bhawan.

Padma Vibhushan(4)

SN	Name	Field	State/Country
1.	Ms. Prabha Atre	Art	Maharashtra
2.	Shri Radheyshyam Khemka (Posthumous)	Literature and Education	Uttar Pradesh
3.	General Bipin Rawat (Posthumous)	Civil Service	Uttarakhand
4.	Shri Kalyan Singh (Posthumous)	Public Affairs	Uttar Pradesh

Jeevan Raksha Padak Series of Awards-2021

The President of India has approved the conferment of Jeevan Raksha Padak Series of Awards - 2021 on 51 persons.

- This includes Sarvottam Jeevan Raksha Padak to 06, Uttam Jeevan Raksha Padak to 16 and Jeevan Raksha Padak to 29 persons.
- Five awardees are posthumous.

More about the Awards

The Jeevan Raksha Padak series of awards are given to a person for meritorious act of human nature in saving the life of a person.

- The award is given in three categories, namely, Sarvottam Jeevan Raksha Padak, Uttam Jeevan Raksha Padak and Jeevan Raksha Padak.
- Persons of all walks of life are eligible for these awards.
- The award can also be conferred posthumously.

Longest Highway Tunnel Above 10,000 Feet

Atal Tunnel has officially been certified by World Book of Records, as the 'World's Longest Highway Tunnel above 10,000 Feet'.

- The stupendous achievement is the work of Border Roads Organisation (BRO) who constructed this engineering marvel connecting Manali to the Lahaul - Spiti Valley.

About Atal Tunnel

- The 9.02 km long, strategically significant, Atal Tunnel, that runs under the 'Rohtang Pass' was constructed on the Manali - Leh Highway.
- Prior to the construction of the tunnel, the highway remained closed during winter season for six months, isolating Lahaul & Spiti from the mainland.
- Construction of this tunnel has reduced the distance on Manali - Sarchu road by 46 km and travel time by four to five hours, providing all-weather connectivity on the Manali - Leh axis.
- It has been constructed in extremely harsh and challenging terrain, wherein the temperatures in winters dipped to bone-chilling -25 degrees.

Rohtang Pass (or Rohtam Pass) is a high mountain pass at an elevation of 3979m (13,054ft) above the sea level, located on the eastern Pir Panjal Range of the Himalayas.

- ◆ Also, often the temperature inside the tunnel soared to nearly 45 degrees.

First-Ever Freight Train Reaches Manipur

The first-ever freight train arrived at the Rani Gaidinliu Railway Station in Tamenglong district of Manipur.

- It is for the first time that Manipur has been put on the country's railway map.
- Manipur Government had earlier announced its decision of renaming the Kaimei Railway Station into 'Rani Gaidinliu Railway Station'.

About Rani Gaidinliu

- Rani Gaidinliu was a spiritual and political leader born in the Tamenglong District of

Manipur.

- She belonged to the Rongmei tribe.
- At 13, she became associated with freedom fighter and religious leader, Haipou Jadonang, and became his lieutenant.
- Gaidinliu, along with her cousin Haipou Jadonang joined the Heraka movement.
 - ♦ The movement aimed at revival of the Naga tribal religion and establishing self-rule of the Nagas ending the British rule.
- Rani Gaidinliu's association with Jadonang prepared her to fight the British.
- Rani started a serious revolt against the British and was eventually imprisoned for life.
- She was released after 14 years, in 1947.
- Jawaharlal Nehru called her the "Daughter of the Hills" and gave her the title "Rani" or queen.
- She was conferred with the Tamrapatra in 1972, Padma Bhushan in 1982, Vivekananda Sewa Summan in 1983, Stree Shakti Purashkar in 1991 and Bhagwan Birsa Munda Puraskar in 1996 posthumously.
- However, the Government of India (GoI) on 1996 also issued a Commemorative Stamp of Rani Gaidinliu.

Subhash Chandra Bose Aapda Prabandhan Puraskar 2022

Subhash Chandra Bose Aapda Prabandhan Puraskar is given in the field of disaster management by Government of India.

- This is to recognize and honour the invaluable contribution and selfless service rendered by individuals and organizations in the field.

Key Points

The award is announced every year on 23rd January, the birth anniversary of Netaji Subhash Chandra Bose.

- The award carries a cash prize of Rs. 51 lakh and a certificate in case of an institution and Rs. 5 lakh and a certificate in case of an individual.
- For the year 2022,
 - ♦ (i) Gujarat Institute of Disaster Management (in the Institutional category) and
 - ♦ (ii) Professor Vinod Sharma (in the Individual category)
 - ♦ have been selected for the Subhash Chandra Bose Aapda Prabandhan Puraskar for their excellent work in Disaster Management.

About Gujarat Institute of Disaster Management (GIDM)

Established in 2012, the Gujarat Institute of Disaster Management (GIDM) has been working to enhance the disaster risk reduction (DRR) capacity of Gujarat.

- Through a series of strategically designed capacity building programs, GIDM has trained more than 12,000 professionals.
- The training has been on diverse issues concerning multi-hazard risk management and reduction during the pandemic.
- Some recent key initiatives include:
 - ♦ the development of a user-friendly Gujarat Fire Safety Compliance Portal, and
 - ♦ Development of a Mobile App Technology based Advanced COVID-19 Syndromic Surveillance (ACSyS) system.

About Professor Vinod Sharma

He is a senior professor at the Indian Institute of Public Administration and Vice-Chairman of the Sikkim State Disaster Management Authority.

- ♦ He also was the founder co-ordinator of the National Centre of Disaster Management, now known as the National Institute of Disaster Management.
- ♦ He has worked tirelessly towards bringing disaster risk reduction (DRR) to the forefront of the national agenda.
- ♦ As Vice Chairman of the Sikkim State Disaster Management Authority, he has made Sikkim a model State in implementing DRR.

Sela Tunnel Project

The final blast for the 980-metre long Sela Tunnel (Tunnel 1) was conducted by Director General Border Roads (DGBR) through an e-ceremony.

- This marks the culmination of the excavation works on the complete Sela Tunnel Project.

About Sela Tunnel Project

- The Sela Tunnel Project is located in the West Kameng District of Arunachal Pradesh.
- Once completed, it will be a lifeline as it will provide all weather connectivity to Tawang.
- The project comprises of Tunnel 1, which is a 980 m long single tube tunnel and Tunnel 2, which is a 1555 m long twin tube tunnel.
- It will also be one of the longest tunnels to have been constructed above altitude of 13,000 feet.

At- 120/E, Opp. Krishna App. S.K. Puri Boring Road, Patna-1

Contact:- 9341104468 / 7905464832, Visit us: www.gyanias.in

- The foundation stone of the Sela Tunnel Project was laid in 2019.

REC achieves a 'Perfect' score

REC Limited has been evaluated as the highest score of 100 for FY21 for the targets and milestones set by the Department of Public Enterprises, Ministry of Finance.

- This is under the rigorous and aspirational 'Memorandum of Understanding (MoU)' framework prescribed for the Central Public Sector Enterprises (CPSEs).
- REC is the only CPSE to secure a Perfect score amongst the 123 CPSEs across 32 sectors.

About REC

Rural Electrification Corporation (REC) Limited was set up in 1969 with the primary objective of providing

financial assistance for rural electrification in the country.

- REC was declared a Public Financial Institution under Section 4-A of the Companies Act in 1992.
- In February 1998, the corporation was registered as a Non-Banking Financial Company (NBFC) under Section 45-1A of the RBI Act, 1934.
- REC is a Navratna company under the Ministry of Power.
- The company registered its highest ever Net Profit of ₹8,362 crores in FY21, which was a 71% jump over the previous financial year.
- The Net Worth of the company also climbed by 24% to reach its highest ever at ₹43,426 crores as on 31st March 2021.

