

UPSC EPFO Monthly Current Affairs February 2020

Polity and Governance

SATHI Initiative

- Department of Science & Technology has launched a scheme called Sophisticated Analytical & Technical Help Institutes for building shared, professionally managed robust S&T infrastructure.

Objective of the initiative

- The aim is to provide shared, professionally managed, and strong Science and Technology infrastructure centres in the country which is readily accessible to academia, startups, manufacturing, industry and R&D labs.

About SATHI

- These Centres are expected to house principal analytical instruments to provide essential services of high-end analytical testing, thus avoiding duplication and reduced dependency on foreign sources.
- These would be operated with a transparent, open access policy.
- It will also address the problems of accessibility, maintenance, redundancy and duplication of expensive equipment in our Institutions, while reaching out to the less endowed organizations in need, e.g., industry, MSMEs, startups and State Universities.
- Currently, DST has already set up three such centres in the country, one each at IIT Kharagpur, IIT Delhi and BHU.
- It is planned to set up five SATHI Centres every year for the next four years.

Gram Nyayalayas

- Recently the Supreme Court has directed the states, which are yet come out with notifications for establishing 'Gram Nyayalayas', to do so within four weeks.
- The Supreme Court also took into account the fact that several states have issued notifications for establishing 'Gram Nyayalayas' but all of them were not functioning except in Kerala, Maharashtra and Rajasthan.

About the Gram Nyayalayas or Village Courts

- Gram Nyayalayas are mobile village courts in India established under Gram Nyayalayas Act, 2008.
- The objective of their setup is speedy and easy access to the justice system in the rural areas of India.
- They are aimed at providing inexpensive justice to people in rural areas at their doorsteps.
- It exercises the powers of both Criminal and Civil Courts.
- It can try criminal cases, civil suits, claims or disputes which are specified in the First Schedule and the Second Schedule to the Gram Nyayalaya Act.

Appointment of Judges

- Gram Nyayalaya is the State Government appoints courts of Judicial Magistrate of the first class and its presiding officer (Nyayadhikari) in consultation with the High Court of the State concerned.

Note:

- The Gram Nyayalaya will not be bound by the rules of evidence provided in the Indian Evidence Act, 1872 but shall be guided by the principles of natural justice and subject to any rule made by the High Court.

Portal Santusht

- Union Minister of State (I/C) for Labour and Employment has given in written reply to a question in Lok Sabha about the Santusht Portal.

About the Santusht Portal



- It has been constituted under the Office of Minister of State for Labour and Employment.
- The objective of 'Santusht' is to promote transparency, accountability, effective delivery of public services and implementation of policies, schemes of Ministry of Labour and Employment at the grassroots level through constant monitoring.

Another portal for public grievances

CPGRAM portal

- Centralized Public Grievance Redressal and Monitoring System is an online web-enabled system.
- The National Informatics Centre develops it in association with Directorate of Public Grievances and Department of Administrative Reforms and Public Grievances.
- Its aim to enable submission of grievances by the aggrieved citizens to Ministries or departments who scrutinize and take action for speedy and favourable redress of these grievances.

New mascot for National Games: flame-throated bulbul

- The flame-throated bulbul, also called the Rubigula, was chosen as the mascot of the 36th National Games to be held in Goa.

About Flame throated Bulbul

- The flame-throated bulbul (*Pycnonotus gularis*) also known as Rubigula, is a member of the bulbul family of passerine birds.
- This is the state bird of Goa.
- They are found only in the forests of the Western Ghats in southern India.

Conservation Status

- These birds are listed as **Least Concern** in IUCN Red List.
- They are listed as Schedule IV species under the Wildlife Protection Act, 1972.

15th Finance Commission

- The report of the Fifteenth FC, along with an Action Taken Report, was tabled in Parliament.

About the 15th Finance Commission

- **N K Singh is the chairman of 15th Finance Commission.**
- The Fifteenth Finance Commission (FC) has considered the 2011 population along with forest cover, tax effort, area of the state, and "demographic performance" to arrive at the states' share in the divisible pool of taxes.

In the Constitution

- The Finance Commission is a constitutionally mandated body that decides, among other things, the sharing of taxes between the Centre and the states.
- Article 280 (1) requires the President to constitute, "within two years from the commencement of this Constitution and after that at the expiration of every fifth year or at such earlier time as the President considers necessary.
- Under Article 280(3) (a), the Commission must make recommendations to the President "as the distribution between the Union and the States of the nett proceeds of taxes which are to be, or maybe, divided between them under this Chapter and the allocation between the States of the respective shares of such proceeds".

Highlights of the Report

- The Commission has reduced the vertical devolution — the share of tax revenues that the Centre shares with the states — from 42% to 41%.
- The 1 per cent decrease in the vertical devolution is roughly equal to the share of the erstwhile state of Jammu and Kashmir, which would have been 0.85% as per the formula described by the Commission.

- The Commission has said that it intends to set up an expert group to initiate a non-lapsable fund for defence expenditure.
- The Fifteenth FC has use of 2011 population figures has resulted in states with larger populations like Uttar Pradesh and Bihar getting larger shares, while smaller countries with lower fertility rates (the number of children born to a woman in her life) have lost out.

The demographic effort

- To reward population control efforts by states, the Commission developed a criterion for the demographic attempt — which is essentially the ratio of the state's population in 1971 to its fertility rate in 2011 — with a weight of 12.5%.
- States such as Kerala, Tamil Nadu, Karnataka, Andhra Pradesh, and Telangana have fertility rates below the replacement rate or the number of children that have to be born to a woman of reproductive age for the population to maintain itself at the current level without migration.

Income distance criterion

- The total area of states, the area under forest cover, and "income distance" were also used by the FC to arrive at the tax-sharing formula.
- Income distance is calculated as the difference between the per capita gross state domestic products (GSDP) of the state from that of the state with the highest per capita GSDP.
- The states with less income getting a higher share to allow them to provide services comparable to those provided by the richer ones.
- The Commission used the per capita GSDP of Haryana as the reference for calculating the income distance, and gave it a weight of 45%, down from the 50% assigned by the 14th FC.
- The weight assigned to state area was unchanged at 15%, and that of forest cover was increased from 7.5% to 10%.

Dropout rate in schools

- The Ministry of Human Resource Development released state-wise figures of the dropout rate in schools in Lok Sabha.

The key finding of the report

- The dropout rate in schools is the highest in Assam, at both primary and secondary levels.
- The dropout rate in Assam at primary level was 10.1% in 2017-18, followed by Arunachal Pradesh (8.1), Mizoram (8), Uttar Pradesh (8) and Tamil Nadu (5.9).
- At the secondary level, Assam's dropout rate was 33.7%, followed by Bihar (32), Odisha (28.3), Tripura (27.2) and Karnataka (24.3).

Broken up between the genders

- The dropout rate among boys in primary schools in Assam was 11.2%, followed by Arunachal Pradesh (10), Mizoram (8.6), Uttar Pradesh (7.2) and Odisha (6).
- For girls at primary level, the highest five dropout rates were in Assam (8.9), Mizoram (7.4), Uttar Pradesh (7.1), Arunachal Pradesh (6.1) and Tamil Nadu (6).
- At the secondary level, the dropout rates for boys were 32.1% in Assam, followed by Bihar (30.3), Odisha (28.7), Tripura (27.1) and Karnataka (26.4).
- Among girls in secondary school, the highest five dropout rates were in Assam (35.2%), followed by Bihar (33.7), Odisha (27.8), Tripura (27.3) and Madhya Pradesh (24.2).

Reason for Dropouts

The Ministry of Human Resource Development said the reasons for children dropping out include

- poverty or economic reasons
- poor health
- a child too young to be attending school

- a child needed for help in domestic work.

Note: National Means-cum-Merit Scholarship Scheme (NMMSS) has helped to reduce the dropout rate at the secondary and senior secondary classes.

National Means-cum-Merit Scholarship Scheme

- Union Minister for Human Resource Development has given in a written reply in Rajya Sabha about the National Means-cum-Merit Scholarship Scheme.

About the National Means-cum-Merit Scholarship Scheme

- It is a Central Sector Scheme which is being implemented since 2008.

Objective

- The objective of the scheme to award scholarships to the meritorious students of economically weaker sections to arrest their drop out at class VIII and encourage them to continue the study at the secondary stage.
- Under the Scheme, one lakh fresh scholarships @ of Rs.12000/- per annum per student are awarded to selected students of class IX every year and their continuation/renewal in classes X to XII for study in a State Government, Government-aided and Local body schools.
- There is a separate quota of scholarships for each State/UT.
- The selection of students for the award of scholarships under the scheme is made through an examination conducted by the States/UTs Governments.

Note: The scheme is boarded on National Scholarship Portal (NSP) since 2015-16 which has been developed by the Department of Electronics and Information Technology.

Janasevaka scheme

- The Karnataka government has launched the Janasevaka scheme in a few municipal corporation wards to ensure home delivery of various services like ration cards, senior citizen identity and health cards.

About Janasevaka scheme

- Janasevaka under the Sakala scheme is a programme to avail the benefits of government schemes at the doorstep.
- The objective of the scheme is to make the lives of the citizens of Karnataka easy.
- Sakala aims to ensure on-time delivery of government services to citizens by practising innovative and efficient management systems through capacity building in government and empowering citizens to exercise their right to assistance.

SC: States not bound to make a reservation in promotions

- In a major judgement, the Supreme Court has said that there is no fundamental right which inheres in an individual to claim reservation in promotions.
- The court said that Articles 16 (4) and 16 (4-A) of the Constitution did not confer individuals with a fundamental right to claim reservations in promotion.
- The Articles empower the State to make a reservation in matters of appointment and promotion in favour of the Scheduled Castes and the Scheduled Tribes only "if in the opinion of the State they are not adequately represented in the services of the State".

2006 judgment in Nagraj Case

- In the 2006 judgment, the Supreme Court had held that it is not mandatory for the State to make reservations for scheduled castes or scheduled tribes (SC/STs) in a matter of promotions.
- However, if the State wishes to exercise its discretion, it has to gather quantifiable data showing backwardness of the class and inadequacy of representation of that class in public employment.
- For making reservations in promotion, states also need to comply with the requirement of maintaining administrative efficiency as per Article 335.

- It was further held that the State is required to adhere to the ceiling-limit of 50 percent and abstain from obliterating the creamy layer or extending the reservation indefinitely.

Lucknow Declaration

- India and African nations adopted the 'Lucknow Declaration' during first-ever India – Africa Defence Minister's Conclave.
- The conclave was held on the sidelines of the 11th edition of the biennial defence exhibition, DEFEXPO India 2020.

Key Highlights

- The leaders recognised the importance of peace and security for both India and the African countries including **"Silence the Guns; Creating Conducive Conditions for African Development"** as the African Union's theme of the year 2020.
- They welcomed the AU vision for peace and security in Africa that coincides with India's vision of SAGAR (Security And Growth for All in the Region).
- India has made available defence equipment and supply to African countries through its robust India-Africa development partnership, including through grant assistance and Lines of Credit.

Background

India and African nations had previously adopted declarations during the

1. India-Africa Forum Summit in New Delhi in April 2008
 2. India-Africa Forum Summit-II in Addis Ababa in May 2011
 3. Third India-Africa Forum Summit in October 2015
 4. The India-Africa Framework for Strategic Cooperation.
- All these declarations had worked to strengthen the multi-faceted partnership between India and Africa.

Emergency Response Sanitation Units

- The Maharashtra government has directed all civic bodies in the state to set up Emergency Response Sanitation Units (ERSUs).

About the Emergency Response Sanitation Unit (ERSU)

- The municipal commissioner of the civic body concerned will be the Responsible Sanitation Authority,
- The ERSU should be headed by a senior civic officer.
- It helps to ensure safeguards for sanitation workers who clean manholes and sewers after multiple cases were reported of workers dying from suffocation or inhalation of hazardous gases.

About the PEMSR ACT, 2013

- The Prohibition of Employment as Manual Scavengers and their Rehabilitation (PEMSR) Act came into force in 2013.
- The law prohibits employing manual scavengers, manual cleaning of sewers and septic tanks without protective equipment and construction of insanitary latrines.
- Those violating the law and getting sewers and septic tanks cleaned without protective equipment can face imprisonment of up to two years or a fine of up to Rs 2 lakh, or both.
- Repeat offenders will face imprisonment of up to five years or a fine of up to Rs 5 lakh, or both.

Web Portal Launched for Star Rating of Mines in India

- In order to promote green, safe and sustainable mining practices using technology as a tool, Ministry of Coal (MoC) has launched a web portal for star rating of coal mines.

How does it work?

- Based on the star ratings obtained through a well-defined mechanism on this web portal, the highest-scoring mines in the country will be awarded in a public ceremony.
- Besides, all the mines will be given an official certificate by the Coal Controller's Organization mentioning their star rating and the particular reporting year.
- The mines that score from
 - a. 91 to 100% will get 5 star
 - b. 81 to 90% 4 star
 - c. 71 to 80% 3 star
 - d. 61 to 70% 2 star
 - e. 41 to 60% 1 star
 - f. 0 to 40% will get No star

Note:

Star Rating Policy

- Ministry of Coal last year had formulated a Star Rating Policy for Coal Mines in India.
- This policy envisages 50 evaluation parameters in Opencast Mines and 47 in Underground Mines as star rating criteria under seven broad modules namely -
 - Mining Operations Related Parameters
 - Environment-related parameters
 - Adoption of Technologies: Best Mining Practices
 - Economic performance
 - Rehabilitation & Resettlement related parameters
 - Worker-related Compliance
 - Safety and security-related parameters.

Scholarship schemes for Indian Students for pursuing higher studies abroad

- Union Minister for Human Resource Development has given in a written reply in the Lok Sabha about the Scholarship schemes for Indian Students for pursuing higher studies abroad.
- Government of India is implementing schemes for scholarship/grant for Indian students travelling abroad for higher studies which are as follows: -

National Overseas Scholarship for Scheduled Caste Students:

- The scheme is implemented by the Department of Social Justice and Empowerment.
- Under the scheme financial assistance is provided to the meritorious Scheduled Caste students for pursuing Master level courses and PhD in foreign universities/institution accredited by the concerned country.

National Overseas Scholarship for Scheduled Tribe Students

- The scheme is implemented by the Ministry of Tribal Affairs.
- The financial assistance is provided to the meritorious Scheduled Tribe students for pursuing Master level courses, PhD and Post Doctoral programme in foreign Universities in the field of engineering, technology and science.
- The family income ceiling for availing is 6 lac per annum.

Overseas Doctoral Fellowship Programme

- The Science and Engineering Research Board (SERB), a statutory body of the Department of Science and Technology launched an Overseas Doctoral Fellowship Program with specific Universities.

Sending Students Abroad for Research Internships

- It is collaborated with All India Council for Technical Education and the 'Mathematics of Information technology and Computer Systems (MITACS)' in 2018.

Supreme Court upholds the constitutional validity of the SC/ST Amendment Act, 2018

- The Supreme Court has upheld the constitutional validity of the SC/ST Amendment Act, 2018 which rules out anticipatory bail in case of atrocities against SC/STs.
- Hearing a bunch of PILs, the Apex Court said, anticipatory bail can only be granted in cases where prima facie case is not made out. A bench headed by Justice Arun Mishra said, a preliminary inquiry is not essential before lodging an FIR under the act nor is the approval of senior police officials

Background:

- The SC/ST Amendment Act 2018 was brought to nullify the effect of a Supreme Court ruling which had diluted the provisions of the stringent Act.
- Earlier, on the 20th of March, 2018, taking note of rampant misuse of the stringent SC/ST Act, the top court ruled out the immediate arrest on any complaint filed under the law.
- Violent protests had taken place across the country after the apex court's verdict in which several persons lost their lives and many were injured

National Institute of Financial Management

- The Centre has decided to rename the National Institute of Financial Management (NIFM), Faridabad, as '**Arun Jaitley National Institute of Financial Management**' (AJNIFM).

About the National Institute of Financial Management

- It was set up in 1993 as a registered society under the Department of Expenditure, Ministry of Finance.
- The institute mandate to train officers of various finance and accounts services recruited by the Union Public Service Commission through the Civil Services Examination, as also officer's of the Indian Cost Accounts Service.
- The Union Finance Minister is the President of the NIFM society.

Criminal in Politics

- The Supreme Court has ordered political parties to publish the entire criminal history of their candidates for Assembly and Lok Sabha elections along with the reasons that goaded them to field suspected criminals over decent people.

Key point of the order

- The information should be published in a local as well as a national newspaper and also in the parties' social media handles.
- It should mandatorily be published either within 48 hours of the selection of candidates or less than two weeks before the first date for filing of nominations, whichever is earlier.
- It ordered political parties to submit compliance reports with the Election Commission of India within 72 hours or risk contempt of court action.
- The judgment is applicable to parties both at the Central and State levels.
- The published information on the criminal antecedents of a candidate should be detailed and include the nature of the offences, charges framed against him, the court concerned and the case number.

Govt launches school health programme under Ayushman Bharat

- Union Government has launched a School Health Programme under Ayushman Bharat-Health & Wellness Centres.

About the School Health Ambassador Initiative

- The initiative has been jointly rolled out by Ministries of Health & Family Welfare and Human Resource Development.

- It will help to teach skills ranging from emotional wellbeing, mental health, and interpersonal relationships to values and maintaining a healthy lifestyle.
- The first phase of implementation will be in all the public upper primary, secondary and senior secondary schools of aspirational districts.
- Subsequently, remaining districts will be taken up in the second year.
- The initiative will be effectively linked with other government initiatives such as Fit India movement, Eat Right campaign, Poshan Abhiyaan for an all-round and holistic development model of health for the school children etc.

Features of the initiative

- Under the initiative, two teachers will be selected as Health and wellness ambassadors in public schools to raise awareness about preventive health aspects.
- These ambassadors will receive support from class monitors, who will serve as Health and Wellness Messengers.
- The health and wellness ambassadors will spread awareness regarding preventive health by organising culturally sensitive activity sessions for one hour every week for 24 weeks in a year to promote joyful learning.
- The ambassadors will be trained by the National Resource Group that was constituted by the National Council of Educational Research and Training.

About Ayushman Bharat

- It has been launched in 2018 under the Ministry of Health and Family Welfare.
- The aim of Ayushman Bharat is to provide universal health care to the poor, needy and vulnerable sections of the country which covers both prevention and health promotion.

Lok Sabha clears Bill to include more tribes in Karnataka in ST category

- The Lok Sabha has passed The Constitution (Scheduled Tribes) Order (Amendment) Bill, 2019.

About the Bill

- The Bill seeks to include the Parivara and the Talawara communities in the ST category.
- The Siddi tribes of Belagavi and Dharwad would also be included in the category apart from those living in the Uttar Kannada districts.

About Siddi Tribe

- These tribes of Karnataka are believed to have descended from the Bantu people of Southeast Africa who were treated as slaves by Portuguese merchants.
- They are predominantly found in the states of the western coast of Gujarat, Maharashtra and Karnataka states.
- They are primarily Muslims although some are Hindus and others belong to the Catholic Church and are included in the list of Particularly Vulnerable Tribal Groups.

About Parivara and Taliwara Tribes:

- Parivara and Taliwara will be part of the Nayaka tribe in the list of Scheduled Tribes of Karnataka.
- They are socially, politically, economically and educationally backwards communities.

Finance Commission constitutes Group on Defence and Internal Security

- The Fifteenth Finance Commission has constituted a Group on Defence and Internal Security.
- The composition of the group are :
 - K. Singh is the Chairman of the Group who is also the chairman of Fifteenth Finance Commission.

Other Member

- a. Shri A. N. Jha, also the member of Fifteenth Finance Commission
- b. Secretary, Ministry of Home Affairs

- c. Secretary, Ministry of Defence
- d. Secretary(Expenditure), Ministry of Finance
- The mandate of the Group on Defence and Internal Security will be 'to examine whether a separate mechanism for funding of defence and internal security.

Related Information

- The Finance Commission is a constitutional body constituted by the President under Article 280 of the India Constitution.
- The Commission is appointed every five years.

The Ninth Schedule of the Constitution

- Recently a minister said that reservation should be put under the Ninth Schedule of the Constitution.

About the Ninth Schedule of the Constitution

- The Ninth Schedule contains a list of central and state laws which cannot be challenged in courts. Currently, 284 such laws are shielded from judicial review.
- The Schedule became a part of the Constitution in 1951 when the document was amended for the first time.
- It was created by the new Article 31B, which along with 31A was brought in by the government to protect laws related to agrarian reform and for abolishing the Zamindari system.
- While Article 31A extends protection to 'classes' of laws, whereas Article 31B shields specific laws or enactments.

About Article 31B

- This article has retrospective operation means if laws are inserted in the Ninth Schedule after they are declared unconstitutional, they are considered to have been in the Schedule since their commencement, and thus valid.
- Although Article 31B excludes judicial review, the apex court has said in the past that even laws under the Ninth Schedule would be open to scrutiny if they violated fundamental rights or the basic structure of the Constitution.

SUTRA PIC

- The government has unveiled a programme called SUTRA PIC (**Scientific Utilisation Through Research Augmentation-Prime Products from Indigenous Cows**) to research on 'indigenous' cows.

About the SUTRA PIC Program

- It is funded by multiple scientific ministries, the initiative, SUTRA PIC, is led by the Department of Science and Technology (DST).
- It has the Department of Biotechnology, the Council of Scientific and Industrial Research, the Ministry for AYUSH (Ayurveda, Unani, Siddha, Homoeopathy) among others and the Indian Council of Medical Research as partners.
- It is based on five themes
 - The uniqueness of Indigenous Cows
 - Prime-products from Indigenous Cows for Medicine and Health
 - Prime-products from Indigenous Cows for Agricultural Applications
 - Prime-products from Indigenous Cows for Food and Nutrition
 - Prime-products from indigenous cows-based utility items

About Rashtriya Gokul Mission

- The Ministry of Agriculture & Farmers Welfare is implementing the scheme of Rashtriya Gokul Mission to conserve **and develop indigenous breeds** in a focused and scientific manner.
- The scheme comprises of two components namely National Programme for Bovine Breeding and National Mission on Bovine Productivity.

Women Army officers eligible for permanent commission, rules SC

- The Supreme Court on Monday dismissed the Union government's submissions that women are physiologically weaker than men as a "sex stereotype" and declared that Short Service Commission (SSC) women officers are eligible for permanent commission and command posts in the Army irrespective of their years of service.
- The Supreme Court ordered the government to implement its judgment in three months.

Additional Information:

- The Government note submitted to supreme court had shown women officers in a poor light, saying isolation and hardships would eat into their resolve and that they would have to heed to the call of pregnancy, childbirth and family. The note had mentioned that women ran the risk of capture by the enemy and taken prisoner of war.
- The court found the remarks in the note not only constitutionally invalid but discriminatory, affecting the dignity of women officers.
- The verdict came on a nearly 10-year-old appeal filed by the government against a March 12, 2010 decision of the Delhi High Court to grant SSC women officers permanent commission.
- The court dismissed the government's stand that only women officers with less than 14 years of service ought to be considered for permanent commission, and those with over 20 years' service should be pensioned immediately. Applying the judgment retrospectively, the court declared that all serving women officers would be eligible for permanent commission.

National e-Governance Service Delivery Assessment (NeSDA) 2019

- Recently the National e-Governance Service Delivery Assessment (NeSDA) 2019 report was recently released by the Union government.

About the Index

- The index has been prepared by the Department of Administrative Reforms and Public Grievances with the National Association of Software and Services Companies (NASSCOM) as the designated knowledge partner.
- It aimed at improving the overall e-Government development by evaluating the efficiency of service delivery mechanism from a citizen's perspective.

The index was based on seven key parameters namely

1. Accessibility
2. content availability
3. ease of use
4. information security and privacy
5. end-service delivery
6. integrated service delivery
7. status & request tracking.

Highlights of the Index

- In the portals category, the State scored only 0.48 on a scale of 'one' standing 13th among all the 17 States assessed.
- This is despite Andhra Pradesh delivering over 51,000 e-services, the highest in the country, as per the report.
- Kerala has topped the index followed by Goa and Haryana.
- Bihar has not been considered at all for the rankings as it failed to give adequate data for the assessment.
- Odisha, Rajasthan, Uttar Pradesh and Tamil Nadu are at the bottom of the list.

Ministries Ranking

- The Ministry of Health & Family welfare was ranked at the top spot while the second position has been secured by the ministry of human resource development.

8th edition of International IP Index 2020

- The International IP Index was released by the Global Innovation Policy Center (GIPC) of the US Chambers of Commerce, a top American industry body.

Highlights of the index

- India has been ranked 40th out of 53 countries on a global intellectual property index.
- India was placed at 36th position among 50 countries in 2019.
- Two new Index economies (Greece and the Dominican Republic) scored ahead of India.
- The Philippines and Ukraine leapfrogged India.
- India's score, however, increased from 36.04 per cent (16.22 out of 45) in 2019 to 38.46 per cent (19.23 out of 50) in 2020, a 2.42 per cent jump in an absolute score.
- However, India's relative score increased by 6.71 per cent.

Cabinet approves revamping of PMFBY and RWBCIS Crop Insurance Schemes

- The Union Cabinet has approved revamping of "Pradhan Mantri Fasal Bima Yojana (PMFBY)" and "Restructured Weather Based Crop Insurance Scheme (RWBCIS)."
- It is proposed to modify certain parameters/provisions of ongoing schemes of PMFBY and RWBCIS as under:
 - i. Allocation of business to Insurance Companies to be done for three years (Both PMFBY/RWBCIS).
 - ii. The option shall be given to States/UTs to choose Scale of Finance or district level Value of National Average Yield (NAY) i.e. NAY* Minimum Support Price (MSP) as Sum Insured for any district crop combination (Both PMFBY/RWBCIS).
 - iii. Central Subsidy under PMFBY/RWBCIS to be limited for premium rates upto 30% for unirrigated areas/crops and 25% for irrigated areas/crops.
 - iv. Districts having 50% or the more irrigated area will be considered as irrigated area/district (Both PMFBY/RWBCIS).
 - v. Enrolment under the Scheme to be made voluntary for all farmers (Both PMFBY/RWBCIS).
 - vi. Central Share in Premium Subsidy to be increased to 90% for the North Eastern States from the existing sharing pattern of 50:50 (Both PMFBY/RWBCIS).

Benefits

- With these changes, it is expected that farmers would be able to manage risk in agriculture production in a better way and will succeed in stabilizing the farm income.
- Further, it will increase coverage in the northeastern region enabling farmers of NER to manage their agricultural risk in a better way.
- These changes will also enable quick and accurate yield estimation leading to faster claims settlement.

Note:

- These changes are proposed to be implemented from Kharif 2020 Season throughout the Country.

22nd Law Commission of India

- The Union Cabinet has approved Twenty-second Law Commission of India for a period of three years.

Benefits

- The Government will have the benefit of recommendations from a specialised body on different aspects of law which are entrusted to the Commission for its study and recommendations, as per its terms of reference.
- The Law Commission shall, on a reference made to it by the Central Government or suo-motu, undertake research in law and review of existing laws in India for making reforms therein and enacting new legislations.

- It shall also undertake studies and research for bringing reforms in the justice delivery systems for elimination of delay in procedures, speedy disposal of cases, reduction in the cost of litigation etc.

The Law Commission of India shall, inter-alia, -

1. identify laws which are no longer needed or relevant and can be immediately repealed;
2. It examines the existing laws in the light of Directive Principles of State Policy and suggests ways of improvement and reform.
3. It also suggests such legislation as might be necessary to implement the Directive Principles and to attain the objectives set out in the Preamble of the Constitution;
4. It considers and conveys to the Government its views on any subject relating to law and judicial administration that may be specifically referred to it by the Government through Ministry of Law and Justice (Department of Legal Affairs);
5. Consider the requests for providing research to any foreign countries as may be referred to it by the Government through the Ministry of Law and Justice (Department of Legal Affairs);
6. take all such measures as may be necessary to harness law and the legal process in the service of the poor.

Background

- The Law Commission of India is a non-statutory body constituted by the Government of India from time to time.
- Originally formed in 1955, the commission is reconstituted every three years and so far, 277 reports have been submitted to the government.
- The various Law Commission have been able to make an important contribution towards the progressive development and codification of Law of the country.
- The 22nd Law Commission will be constituted for a period of three years from the date of publication of its Order in the Official Gazette.

It will consist of:

1. full-time Chairperson;
2. four full-time Members (including Member-Secretary)
3. Secretary, Department of Legal Affairs as ex-officio Member;
4. Secretary, Legislative Department as ex officio Member; and
5. not more than five part-time Members.

Note:

- The 21st Law Commission constituted under Justice B.S. Chauhan (retd.).
- He had submitted reports and working papers on key issues such as simultaneous elections to the Lok Sabha and the Assemblies and a uniform civil code.

Assisted Reproductive Technology Regulation Bill, 2020

- The Union Cabinet has approved the Assisted Reproductive Technology Regulation Bill, 2020 to monitor medical procedures used to assist people to achieve pregnancy.

Key provisions in the bill:

- The Bill provides for a national Board which will lay down a code of conduct to be observed by those operating clinics.
- It will also formulate minimum standards for laboratory and diagnostic equipment and practices to be followed by human resources employed by clinics and banks.
- The States and Union Territories will also have to form State Boards and State authorities within three months of the notification of the proposed legislation.
- Under the proposed law, a national registry and registration authority will maintain a database to assist the National Board to perform its functions.

Punishment

- The Bill also proposes stringent punishment for those who practise sex selection; indulge in sale of human embryos or gametes and those who operate rackets.

Confidentiality clause

- The Bill will also ensure confidentiality of intending couples and protect the rights of the child,”

Related Bill

Surrogacy Regulation Bill 2020

- It proposes to regulate surrogacy in India by establishing the National Board at the central level and State Boards and Appropriate Authorities in the States and Union Territories.
- The Bill has been examined by the Select Committee and the report has been tabled in the Rajya Sabha on the 5th of February 2020.

Benefit of the act

- The major benefit of the Act would be that it will regulate the surrogacy services in the country.
- While commercial surrogacy will be prohibited including
 - sale and purchase of human embryos and gametes
 - ethical surrogacy to the Indian Married couple
 - Indian Origin Married Couple and Indian Single Woman (only widow or Divorcee) will be allowed on fulfilment of certain conditions.
- As such, it will control the unethical practices in surrogacy, prevent commercialization of surrogacy and will prohibit potential exploitation of surrogate mothers and children born through surrogacy.

Farmer Producer Organizations (FPOs)

- The Cabinet Committee on Economic Affairs has given its approval for 10,000 FPOs to be formed in five years period from 2019-20 to 2023-24.
- It will ensure economies of scale for farmers and support to each FPO be continued for 5 years from its year of inception.

About the Scheme

- Formation and Promotion of Farmer Producer Organizations is a new Central Sector Scheme which helps to form and promote 10,000 new FPOs with a total budgetary provision of Rs. 4496.00 crore for five years (2019-20 to 2023-24).
- The three implementing Agencies to form and promote FPOs, namely
 - Small Farmers Agri-business Consortium (SFAC)
 - National Cooperative Development Corporation (NCDC)
 - National Bank for Agriculture and Rural Development (NABARD).
- States may also if so desire, nominate their Implementing Agency in consultation with the Department of Agriculture Cooperation & Farmers Welfare (DAC&FW)

Department of Agriculture Cooperation & Farmers Welfare (DAC&FW).

- DAC&FW will allocate Cluster/States to Implementing Agencies which in turn will form the Cluster-Based Business Organization in the States.
- FPOs will be formed and promoted through Cluster-Based Business Organizations (CBBOs) engaged at the State/Cluster level by implementing agencies.
- Initially, the minimum number of members in FPO will be 300 in plain area and 100 in North East & hilly areas.
- However, DAC&FW may revise the minimum number of membership-based on experience/need with approval of Union Agriculture Minister.
- Priority will be given for the formation of FPOs in aspirational districts in the country with at least one FPO in each block of aspirational districts.
- FPOs will be promoted under "One District One Product" cluster to promote specialization and better processing, marketing, branding & export by FPOs.

Benefits



- Small and marginal farmers do not have the economic strength to apply production technology, services and marketing including value addition.
- Through the formation of FPOs, farmers will have better collective strength for better access to quality input, technology, credit and better marketing access through economies of scale for better realization of income.

Note:

- The report of 'Doubling of Farmer's Income (DFI)' has emphasized this fact and recommended the formation of 7,000 FPOs by 2022 towards convergence of efforts for doubling the farmers' income.

Swachh Bharat Mission (Grameen) Phase-II

- The Union Cabinet has approved the Phase II of the Swachh Bharat Mission (Grameen) [SBM (G)] till 2024-25.

About the Swachh Bharat Mission (Grameen) Phase-II

- SBM (G) Phase-II will be implemented from 2020-21 to 2024-25.
- It will focus on Open Defecation Free Plus (ODF Plus), which includes ODF sustainability and Solid and Liquid Waste Management (SLWM).
- The program will also work towards ensuring that no one is left behind and everyone uses a toilet.
- Under the program, provision for an incentive of Rs.12, 000/- for construction of Individual Household Toilet (IHHL) to the newly emerging eligible households as per the existing norms will continue.
- Funding norms for Solid and Liquid Waste Management (SLWM) have been rationalized and changed to per capita basis in place of no. of households.
- The programme will be implemented by the States/UTs as per the operational guidelines which will be issued to the States shortly.

Fund Sharing

The fund sharing pattern between

1. Centre and States will be 90:10 for the North-Eastern States and the Himalayan States and UT of J&K;
 2. 60:40 for other States
 3. 100:0 for other Union Territories, for all the components.
- The SLWM component of ODF Plus will be monitored on the basis of output-outcome indicators for four key areas:
 - plastic waste management
 - bio-degradable solid waste management (including animal waste management)
 - Greywater management
 - faecal sludge management.

E-MASIHA App

- Recently, the Ministry of Minority Affairs has informed that India has become the first country in the world which has made the entire Haj 2020 process 100% digital.

About the E-MASIHA

- It stands for E- Medical Assistance System for Indian Pilgrims Abroad which has been developed to deal with any emergency in Makkah-Madinah.
- It is an online system to create and maintain the complete health database of Indian pilgrims along with doctors' prescriptions, medical treatment as well as medicine disbursements.
- Other online applications like E-Visa, Haj mobile app, E-luggage pre-tagging providing all information in India itself regarding accommodation/transportation in Makkah-Madinah have been provided to Indian Muslims going for Haj.

North East Sustainable Development Goals Conclave 2020 in Assam

- NITI Aayog is organising “Sustainable Development Goals (SDG) Conclave 2020: Partnerships, Cooperation and Development of North Eastern States” in Guwahati.
- The Conclave is jointly organized by the North Eastern Council, Government of Assam, Tata Trusts, United Nations Development Programme (UNDP) and Research and Information System for Developing Countries (RIS).
- The aim of the conclave to take stock of the progress on the Sustainable Development Goals SDGs by 2030 and discuss and deliberate on the way forward for the North-Eastern region on those issues.

About the North Eastern Council

- The North Eastern Council is the nodal agency for the economic and social development of the North Eastern Region.
- It consists of the eight States of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura.
- The North Eastern Council was constituted in 1971 by an Act of Parliament.

15th Finance Commission sets up an expert group to boost farm exports

- The 15th Finance Commission (FFC) has set up a high-level expert group on farm exports, which will be headed by ITC chairman and **managing director Sanjiv Puri**.
- The Committee will submit its recommendations within three months for further consideration of the Commission.

Committee Function

- The committee will recommend measurable performance incentives for states to encourage agri exports as well as to promote crops to enable high import substitution
- The committee will also advise the FFC strategies and measures to increase farm productivity, enable higher value addition, ensure waste reduction, strengthen logistics infrastructure etc. related to Indian agriculture, to improve the sector's global competitiveness.
- The committee will also identify the impediments for private sector investments along the agricultural value chain and suggest policy measures and reforms that would help attract the required investments.
- The committee is also mandated to suggest appropriate performance-based incentives to the state governments for the period 2021-22 to 2025-26, to accelerate reforms in the agriculture sector as well as implement other policy measures in this regard.

Thirumathikart - a mobile app for SHG (Self Help Group) products

- The National Institute of Technology (NIT), Trichy, Tamilnadu and Union Department of Science and Technology has developed Thirumathikart - a mobile app for SHG (Self Help Group) products.

About the Thirumathikart application

- The main objective of the app is to empower women and help them access market opportunities in a seamless manner.
- The platform will also enable Self Help Groups to showcase their products to a wider audience.

About the Self-Help Groups (SHGs)

- Self Help Groups are groups of 10-20 people in a locality formed for any social or economic purpose. Most of the SHGs are formed for better financial security among its members.
- SHGs can exist with or without registration.
- SHGs in India often work in association with Banks (SHG – Bank Linkage Programme).

- SHG – Bank Linkage was started in India in 1992 under the guidelines of NABARD and Reserve Bank of India.

Atal Kisan - Majdoor canteens

- Haryana government will open Atal Kisan - Majdoor canteens in all mandis and sugar mills across the state.
- Governor Satyadeo Narain Arya made the announcement at the Budget Session of State Assembly which commenced in Chandigarh.
- The move aims to provide affordable and cheap meals to farmers and labourers at a concessional rate of Rs.10 per plate.
- There are twenty-five Atal Kisan-Majdoor canteens will be established in 2020 in the state.

Note:

- Haryana Government also announced that the women and girls belonging to 11 lakh BPL families would be given sanitary napkins free of cost during the year 2020-2021.
- There are 25 such canteens will be established this year.

Himachal Grihini Suvidha Yojana

- Union Home Minister has recently announced that Himachal Pradesh had become the first state in the country to have “100% LPG gas coverage”.
- It has done through the implementation of both Pradhan Mantri Ujjwala Yojana and the state own yojana known as Himachal Grihini Suvidha Yojana to cover the remaining households.

About the Himachal Grihini Suvidha Yojana

- Under this except families having a pensioner, income taxpayer or any member employed with the government, board, corporation etc, all households of the state without an LPG connection were eligible.

About the Pradhan Mantri Ujjwala Yojana

- Pradhan Mantri Ujjwala Yojana was launched by Prime Minister of India in 2016 to distribute 50 million LPG connections to women of BPL families.

Some of the major benefits provided by Pradhan Mantri Ujjwala Yojana are:

- It provides five crore LPG connections to families below the poverty line.
- Under the scheme, oil marketing companies also provide interest-free loans for refilling and purchasing stoves.
- The Pradhan Mantri Ujjwala Yojana covers all the BPL families that come under all forms of the distributorship, and distributes various sizes of cylinders (14.2 kg, 5 kg, etc.) as per the field situation.
- The benefits of this scheme are also available for the people of all Hilly States including the North Eastern States

Delhi's happiness curriculum

- The US President along with the US First Lady will be visiting a Delhi government school where they will attend a happiness curriculum class.

About Delhi's happiness curriculum

- The curriculum is one of the flagship schemes of the Delhi government in the education sector launched in July 2018 in all government schools.

The objectives of the happiness curriculum include

1. developing self-awareness and mindfulness
 2. inculcating skills of critical thinking and inquiry
 3. enabling learners to communicate effectively
 4. helping learners to apply life skills to deal with stressful and conflicting situations around them.
- The curriculum is designed for students of classes nursery through the eighth standard.

Note:

- India ranked 133 among 155 nations in the global rankings in the World Happiness Report 2018.

Jalyukt Shivar Abhiyan

- Minister for Water Resources has cited 'substandard' work carried out under Jalyukta Shivar, a flagship water conservation project.

About Jalyukt Shivar

- It was launched in December 2014 after Maharashtra experienced consecutive droughts.
- The project aimed at rolling out measures that could potentially mitigate water scarcity in the most drought-prone villages in a systematic manner.
- Nearly 52 per cent of the state's geographical area is prone to drought, either naturally or due to poor rainfall.
- Under the scheme, decentralised water bodies are being installed at various locations within villages to enhance the groundwater recharge.
- It also proposes to strengthen and rejuvenate water storage capacity and percolation of tanks and other sources of storage.

Note:

- In the first phase, planned during 2015 – 2019, Jalyukta Shivar envisaged making 5,000 villages drought-free, every year.
- During its proposed tenure, the government eyed at making 25,000 drought-prone villages water-sufficient.

Centralized Public Grievance Redress and Monitoring System 7.0

- Union Minister for Personnel, Public Grievances & Pensions launched the CPGRAMS 7.0 version.
- The CPGRAMS 7.0 version has mapped last-mile grievance officers, saving time and improving quality of disposal.

About the Centralized Public Grievance Redress and Monitoring System

- It is an online web-enabled system over NICNET developed by NIC in association with the Department of Administrative Reforms and Public Grievances.
- It has been developed with an objective of speedy redress and effective monitoring of grievances by Ministries/Departments/Organizations of Government of India.
- It aims at the submission of grievances by the aggrieved citizens from anywhere and anytime (24x7) basis for instant and easy communication between the nodal PG officers of Government Organizations and citizens resulting in the speedy redress of their grievances.

PM KISAN mobile application

- Agriculture Minister has launched a mobile app called PM KISAN mobile application in order to broaden the reach of the scheme of Pradhan Mantri Kisan Samman Nidhi Yojana.

About the Mobile Application

- It has been developed by the National Informatics Centre under the Ministry of Electronics and Information Technology.
- This mobile application has been developed to broaden the reach of the scheme, which is playing a big role in achieving the target of doubling farmers' income by 2022.

About the Pradhan Mantri Kisan Samman Nidhi Yojana

- It is a Central Sector Scheme.

- Under the Scheme, income support of Rs.6000/- per year is provided to all farmer families across the country in three equal instalments of Rs.2000/- each every four months.
- The scheme is implemented by the Ministry of Agriculture and Farmers Welfare.

Note:

- Already, there is a portal on PM-Kisan (www.pmkisan.gov.in/) is in place for registration of farmers under the scheme.

Science and Applied Research Alliance and Support

- Coal India's flagship subsidiary Northern Coalfields Limited (NCL) has set up a centre named "Science and Applied Research Alliance and Support" (SARAS).

About the SARAS

- It helps to promote Innovation, Research & Development and skill development along with improving the company's operational efficiency and utilize resources at an optimum level.
- SARAS will also help and enable the company in Integration of Innovation and Research for enhancing coal production, productivity, and safety in mines.

About Northern Coalfields Limited

- It is a flagship subsidiary of Coal India.
- It accounts for 15 per cent of India's coal production and 10 per cent of thermal power generation of the country is met by the coal produced by this Miniratna Company of Govt. of India.

Rural Infrastructure Development Fund

- National Bank for Agriculture and Rural Development (NABARD) has sanctioned an amount of 400.64 crore rupees to UT of J&K during the current financial year for giving a boost to the infrastructure in the rural areas.

About the Rural Infrastructure Development Fund

- The fund was set up by the Government of India in 1995-96 for financing ongoing rural Infrastructure projects.
- The Fund is maintained by the National Bank for Agriculture and Rural Development.
- The main objective of the Fund is to provide loans to State Governments and State-owned corporations to enable them to complete ongoing rural infrastructure projects.
- The activities to be financed under RIDF as classified under three broad categories namely
 - Agriculture and related sector
 - Social sector
 - Rural connectivity

About NABARD

- It is a development bank focussing primarily on the rural sector of the country. It is the apex banking institution to provide finance for Agriculture and rural development.
- It is a statutory body established in 1982 under Parliamentary act-National Bank for Agriculture and Rural Development Act, 1981.
- It is headquartered in Mumbai, the country's financial capital.
- It is responsible for the development of the small industries, cottage industries, and any other such village or rural projects.

Unnat Bharat scheme

- The Institutions of Eminence (IoEs) will invite Nobel laureates to their campuses and develop model villages as part of the Unnat Bharat scheme for sustainable development in rural India.

About the Unnat Bharat Abhiyan



- It has been launched by the Ministry of Human Resource Development.
- It aims to connect institutions of higher education, including Indian Institutes of Technology (IITs), National Institutes of Technology (NITs) and Indian Institutes of Science Education & Research (IISERs) etc. with local communities to address the development challenges through appropriate technologies.
- The objectives of Unnat Bharat Abhiyan are broadly two-fold:
 - Building institutional capacity in Institutes of higher education in research & training relevant to the needs of rural India.
 - Provide rural India with professional resource support from institutes of higher education, especially those which have acquired academic excellence in the field of Science, Engineering & Technology and Management

About the Institutions of Eminence Scheme

- It has been announced in 2016 Budget speech whose nodal Ministry is Ministry of Human Resource Development.
- It aims to develop 20 world-class teaching and research institutions.

Objectives

- To bring higher education institutions selected as IoEs in top 500 of the world ranking in the next 10 years and in top 100 eventually overtime.
- To provide world-class teaching and research facilities to Indian students within the country and enhance the general level of education.
- To pay special attention to teaching and research in unique and emerging areas of knowledge

National Mission for Technical Textiles

- The Cabinet Committee on Economic Affairs has approved the launch of the National Mission for Technical Textiles.
- The Mission would have a four year implementation period from FY 2020-21 to 2023-24.
- The Mission will also promote technical education at higher engineering and technology levels related to technical textiles and its application areas covering engineering, medical, agriculture, aquaculture and dairy segments.
- Skill development will be promoted and an adequate pool of highly skilled manpower resources will be created for meeting the need of relatively sophisticated technical textiles manufacturing units.
- The Mission will have four components:
 - Component -I (Research, Innovation and Development)
 - Component -II (Promotion and Market Development)
 - Component - III (Export Promotion)
 - Component- IV (Education, Training, Skill Development)

Market Intelligence and Early Warning System (MIEWS) Portal

- Union Minister of Food Processing Industries has launched the– Market Intelligence and Early Warning System (MIEWS) Web Portal.

About the Portal

- It is a 'first-of-its-kind' platform for 'real-time monitoring' of prices of tomato, onion and potato (TOP) and for simultaneously generating alerts for intervention under the terms of the Operation Greens (OG) scheme.

The salient features of the MIEWS portal include:

- A dashboard that would indicate the low price and high price alerts as well as price forecasts for 3 months forward.
- Prices and arrivals of TOP crops across the country including interactive charts and comparisons with previous seasons
- Area, Yield and Production of TOP crops

- Crop Agronomy and Trade Profile of each of the TOP crops
- Regular and special reports on the market situation of the TOP crops.

About the Operation Green

- It was announced in the budget speech of 2018-19 on the line of “Operation Flood”, to promote Farmer Producers Organizations, agri-logistics, processing facilities and professional management.
- Operation Greens seeks to stabilize the supply of Tomato, Onion and Potato (TOP) crops and to ensure availability of TOP crops throughout the country round the year without price volatility.
- **NAFED will be the Nodal Agency to implement price stabilisation measures.**

Objectives

- Enhancing value realisation of TOP farmers by targeted interventions to strengthen TOP production clusters and their FPOs, and linking/connecting them with the market.
- Price stabilisation for producers and consumers by proper production planning in the TOP clusters and introduction of dual-use varieties.
- Reduction in post-harvest losses by creation of farm gate infrastructure, development of suitable agro-logistics, creation of appropriate storage capacity linking consumption centres.
- Increase in food processing capacities and value addition in the TOP value chain with firm linkages with production clusters.
- Setting up of a market intelligence network to collect and collate real-time data on demand and supply and price of TOP crops.

Explained: Ways to measure poverty in India

- Recently President Donald Trump praised India for having lifted “over 270 million people out of poverty” in “a single decade.
- He also said that “12 Indian citizens are lifted out of extreme poverty every single minute of every single day”.

What is poverty?

- Poverty can be defined as a condition in which an individual or household lacks the financial resources to afford a basic minimum standard of living.
- Economists and policymakers estimate “absolute” poverty as the shortfall in consumption expenditure from a threshold called the “poverty line”.
- The official poverty line is the expenditure incurred to obtain the goods in a “poverty line basket” (PLB).
- Poverty can be measured in terms of the number of people living below this line (with the incidence of poverty expressed as the headcount ratio).
- The “depth” of poverty indicates how far the poor are below the poverty line.

What does the basket of goods include?

- The PLB comprises goods and services considered essential to a basic minimum standard of living — food, clothing, rent, conveyance, and entertainment.
- The price of the food component can be estimated using calorie norms or nutrition targets.
- Until the 1990s, the calorie norms method was used — it was based on the minimum number of calories recommended by the Indian Council of Medical Research (ICMR) for a household of five members.
- However, this method does not consider the different food groups that are essential for health — this is why the **Tendulkar Committee targeted nutritional outcomes.**

- **The Lakdawala Committee** assumed that health and education are provided by the state — therefore, expenditure on these items was excluded from the consumption basket it proposed.
- Since expenditure on health and education rose significantly in the 1990s, the Tendulkar Committee included them in the basket.
- As a result of revisions to the basket and other changes in the method of estimation, the percentage of people living below the poverty line in 1993-94 rose from 35.97% to 45.3%.

Why are poverty numbers important?

Poverty numbers matter because of central schemes like:

- Antyodaya Anna Yojana (which provides subsidized foodgrains to households living below the poverty line)
- Rashtriya Swasthya Bima Yojana (health insurance for BPL households) uses the definition of poverty given by the NITI Aayog or the erstwhile Planning Commission.
- The Centre allocates funds for these schemes to states based on the numbers of their poor.
- Errors of exclusion can deprive eligible households of benefits.

Poverty Estimation

- In 2011, Oxford University researchers Sabina Alkire and James Foster devised the Multidimensional Poverty Index (MPI) to capture poverty using 10 indicators.
- These indicators are **nutrition, child mortality, years of schooling, school attendance, ownership of assets, and access to a proper house, electricity, drinking water, sanitation, and clean cooking fuel.**
- Poverty is measured in terms of deprivation in at least a third of these indicators.
- In 2015-16, 369.546 million (nearly 37 crores) Indians were estimated to meet the deprivation cut-off for three or more of the 10 indicators.
- While the overall headcount multidimensional poverty ratio in 2015-16 was 27.9%, the number was 36.8% for rural and 9.2% for urban India.

Committees on the Poverty

Six official committees have so far estimated the number of people living in poverty in India

- a. The working group of 1962 (did not consider age and gender-specific calorie requirements)
- b. V N Dandekar and N Rath in 1971.
- c. Y K Alagh in 1979.
- d. D T Lakdawala in 1993 (excluded health and education expenditure from the consumption basket)
- e. Suresh Tendulkar in 2009 (Included Health, education expenditures along with targeted nutritional outcomes)
- f. C Rangarajan in 2014 (selected food component arbitrarily, excluding sanitation, healthcare, access to clean water, and prevalence of pollutants) which the government did not take a call on the report.

ICoSDiTAUS-2020

- Recently the two-day International Conference on Standardisation of Diagnosis and Terminologies in Ayurveda, Unani and Siddha Systems of Medicine (**ICoSDiTAUS**) concluded in New Delhi.
- The conference was jointly organized by the Ministry of AYUSH and the WHO at New Delhi
- It adopted the “New Delhi Declaration on Collection and Classification of Traditional Medicine (TM) Diagnostic Data”.

About New Delhi Declaration:



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- The New Delhi declaration emphasised the commitment of the countries to Traditional Medicine (TM) as a significant area of health care.
- It further sought the opportunity for including traditional systems of medicine like Ayurveda, Unani, and Siddha in the International Classification of Diseases of WHO, which is the standard diagnostic tool for health management across the world.

gradeup

A promotional banner for Gradeup Green Card. It features a dark blue background on the left with a white silhouette of a person sitting at a desk with a laptop. To the right, the text "Gradeup Green Card" is in white, followed by "Unlimited Access to All Mock Tests of State PCS Exams" in a smaller white font. On the far right, there is a red button with the text "CHECK HERE" in white.

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Economy and Social Development

Union Budget 2020-21

- India's Finance Minister Nirmala Sitharaman had presented Union Budget 2020-21 in the parliament.
- This was the longest Budget speech by any finance minister, going beyond 2 hour 30 minutes. Sitharaman, 60, broke her own record of a 2-hour-17-minute-long maiden Budget speech in July 2019.

The Key Highlights of Union Budget 2020-21 are as follows:

Three prominent themes of the Budget

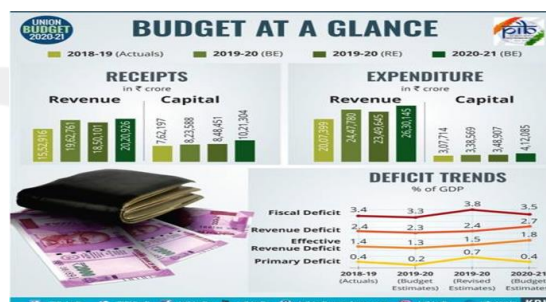
- Aspirational India**- better standards of living with access to health, education and better jobs for all sections of the society.
- Economic Development for all**- "Sabka Saath, Sabka Vikas, Sabka Vishwas".
- Caring Society**- both humane and compassionate; Antyodaya as an article of faith.

Three broad themes are held together by:

- Corruption free, policy-driven *Good Governance*.
- Clean and sound *financial sector*.
- Ease of Living** underlined by the 3 themes of Union Budget 2020-21.

Three components of Aspirational India

- Agriculture, Irrigation & Rural Development
- Wellness, Water, and Sanitation
- Education and Skills



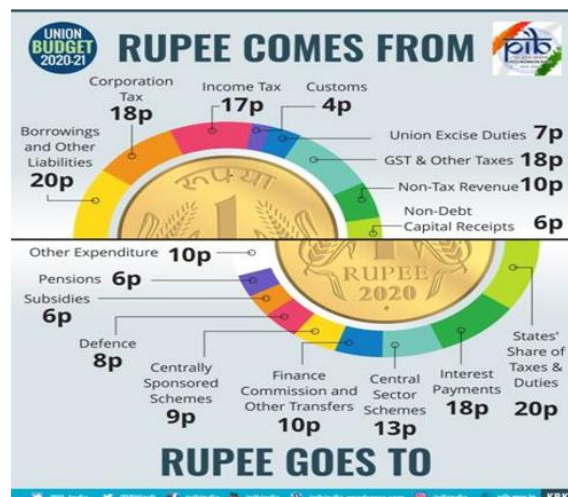
Fiscal deficit target pegged at 3.8% of GDP for FY20.

The Finance Minister said that the Union Budget Aims:

- To achieve seamless delivery of services through **Digital governance**.
- To improve the physical quality of life through the **National Infrastructure Pipeline**
- Risk mitigation through **Disaster Resilience**
- Social security through **Pension and Insurance penetration**.

Tourism Budget

- To make India an attractive destination for both international and domestic tourists, the Finance Minister proposed to allocate Rs 2,500 crores in 2020-21 for the tourism sector and Rs 3,150 crore for the Ministry of Culture.
- The Finance Minister proposed to establish the first Indian Institute of Heritage and Conservation with the status of a deemed university to operate under the Ministry of Culture.
- In a major bid to revitalise tourism, the finance minister proposed 8 new museums, which includes building infrastructure around 5 Iconic Sites, besides proposing renovation of 5 major museums across the length and breadth of India.



- Five Archeological sites to be set-up/developed as Iconic Sites with on-site Museums at the following locations:
 - a. Rakhigarhi (Haryana)
 - b. Hastinapur (Uttar Pradesh)
 - c. Shivsagar (Assam)
 - d. Dholavira (Gujarat)
 - e. Adichanallur (Tamil Nadu).

Financial Sector

- With a view towards unlocking the flow of capital to the financial sector, the Union Minister for Finance unveiled several reforms in the Union Budget 2020-21 across the banking sector, financial markets and infrastructure financing.
- Finance Minister has announced that the Deposit Insurance and Credit Guarantee Corporation (DICGC) has been permitted to increase Deposit Insurance coverage to Rs. 5 lakh per depositor from Rs. 1 lakh previously.
- The limit for NBFCs to be eligible for Debt Recovery Mechanism via SARFAESI Act, 2002, is proposed to be reduced from existing asset size limits of Rs. 500 crore to Rs. 100 crores or loan size from existing Rs. 1 crore to Rs. 50 lakh.
- The Finance Minister proposed necessary amendments in PFRDAI Act that will also facilitate separation of NPS trust for Government employees from PFRDAI.
- This would also enable the establishment of a Pension Trust by the employees other than Government.
- The Government has proposed sale of a part of its holding in LIC by way of Initial Public Offer (IPO).
- She proposed the setting up of an International Bullion Exchange at GIFT-IFSC as an additional option for trade by global market participants.
- FPI limits in corporate bonds are proposed to be increased to 15 per cent of outstanding stocks from the current 9 per cent.
- New Debt-based Exchange Traded Fund (ETF) consisting primarily of Government Securities will be floated.



Social Welfare Budget

- The Finance Minister proposed a budget provision of about Rs 85,000 crore for 2020-21 to further the government's commitment towards the welfare of Scheduled Castes and Other Backward Classes.
- She also provided an allocation of Rs 53,700 crore for the year 2020-21 for further development and welfare of Scheduled Tribes.
- Further, keeping in mind the concerns of senior citizens and DIVYANG, the Finance Minister proposed an enhanced allocation of about Rs 9500 crore for 2020-21 in the Union Budget.

Women and child Budget

- Finance Minister unveiled several key proposals with a focus on women and child in the Union Budget 2020-21.
- The Finance Minister said due to 'Beti Bachao Beti Padhao', Gross enrolment ratio of girls across all levels of education is now higher than boys.
- At the elementary level, it is 94.32 % as against 89.28 % for boys
- Poshan Abhiyan' which was launched in 2017-18 to improve the nutritional status of children (0-6 years), adolescent girls, pregnant women and lactating mothers.
- The task force will be appointed to examine the issue about age of a girl entering motherhood.
- The Finance Minister proposed an outlay of about Rs 28,600 crore for programs that were specific to women.

Health Budget

- About Rs. 69,000 crore has been provided for health care in Union Budget 2020-21 which includes Rs. 6400 crores for Prime Minister Jan Arogya Yojana (PMJAY).
- Viability Gap Funding Window is proposed for Setting Up Hospitals under Prime Minister Jan Arogya Yojana (PMJAY) in PPP Mode.
- The Finance Minister also announced to expand Jan Aushadhi Kendra Scheme to all districts offering 2000 medicines and 300 surgical by 2024.
- The Government will also encourage large hospitals with sufficient capacity to offer resident doctors DNB/FNB courses under the National Board of Examinations.

Education Budget

- The Union Budget 2020-21 lays special emphasis on the employability and quality aspects of education.
- A total outlay of Rs.99,300 crore has been earmarked for the education sector in 2020-21 and Rs.3000 crore for Skill Development.
- National Skill Development Agency will give special thrust to infrastructure-focused skill development opportunities, the Minister explained.

The New Education Policy will be announced soon.

- Steps will be taken to enable sourcing External Commercial

- Borrowings and FDI to ensure a greater inflow of finance to attract talented teachers, innovate and build better labs.
- Degree level full-fledged online education programme will be started to provide quality education to students of deprived sections.
- However, these shall be offered only by institutions that are ranked within the top 100 in the National Institutional Ranking Framework.
- Under its “Study in India” programme, an Ind-SAT is proposed to be held in Asian and African countries for benchmarking foreign candidates who receive scholarships for studying in Indian higher education centres.

Defence Budget

- The Union government allocated Rs 3.37 lakh crore as the defence budget for 2020-21, which is a hike of only 5.8 percent over the allocation for this sector for the current financial year.
- Without the pension, the defence budget is only 1.5 percent of the GDP.
- The disappointing part is that there has been a very marginal increase in the capital outlay for defence for 2020-21 as compared to the budget estimates and revised estimates for 2019-20.
- The bare minimum increase in capital outlay will drastically affect several major acquisitions of the army, navy and air force.

Environment and Climate Change

- On Environment, States that are formulating and implementing plans for ensuring cleaner air in cities above one million to be encouraged.
- Parameters for the incentives to be notified by the Ministry of Environment, Forests and Climate change and the allocation for this purpose is Rs 4,400 crore for 2020-21.

Custom & Excise Duty (Budget)

- To give impetus to the domestic medical equipment industry, the Finance Minister proposed to impose a nominal health cess (at the rate of 5%), by way of a duty of customs, on the imports of medical equipment keeping.
- The Union Budget proposed to abolish anti-dumping duty on PTA (Purified Terephthalic Acid).
- The PTA is a critical input for textile fibres and yarns.
- The Union Budget also proposed to reduce basic customs duty on imports of newsprint and light-weight coated paper from 10% to 5%.
- This levy on these items has put additional burden on print media at a time when it is going through a difficult phase.
- The Budget also proposed to raise excise duty, by way of National Calamity Contingent Duty on Cigarettes and other tobacco
- products. No change is being made in the duty rates of bidis.

Personal Income Tax and Simplification of Taxation

- The Finance Minister has proposed to bring a new and simplified personal income tax regime, wherein income tax rates will be significantly reduced for the individual taxpayers who forego certain deductions and exemptions.
- The proposed changes in tax slabs are listed in the following table:

Taxable Income Slab (Rs.) Existing Tax Rates New Tax Rates

Taxable Income Slab (Rs.)	Existing Tax Rates	New Tax Rates
0-2.5 Lakh	Exempt	Exempt
2.5-5 Lakh	5%	Exempt
5-7.5 Lakh	20%	10%
7.5-10 Lakh	20%	15%
10-12.5 Lakh	30%	20%
12.5-15 Lakh	30%	25%
Above 15 Lakh	30%	30%



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- Surcharge and cess shall be continued to be levied at the existing rates.

Dividend Distribution Tax

- Currently, companies are required to pay Dividend Distribution Tax (DDT) on the dividend paid to its shareholders at the rate of 15% plus applicable surcharge and cess, in addition to the tax payable by the company on its profits.
- In order to increase the attractiveness of the Indian Equity Market and to provide relief to a large class of investors, the Finance Minister has proposed to remove DDT and adopt the classical system of dividend taxation, under which the companies would not be required to pay DDT.
- The dividend shall be taxed only in the hands of the recipients at their applicable rate.
- In order to remove the cascading effect, the Finance Minister has proposed to allow a deduction for the dividend received by holding company from its subsidiary.
- The removal of DDT will lead to estimated annual revenue foregone of Rs. 25,000 crore. This will further make India an attractive destination for investment.

'Vivad se Vishwas' scheme

- Under the proposed 'Vivad se Vishwas' scheme, a taxpayer would be required to pay only the amount of the disputed taxes and will get a complete waiver of interest and penalty, provided he pays by 31st March 2020.
- Those who will avail the scheme after 31st March 2020 will have to pay some additional amount.
- The scheme will remain open till 30th June 2020.

GST (Budget)

- A simplified GST return will be implemented from the 1st April 2020. It will make return filing simple with features like SMS based filing for nil return, return pre-filing, improved
- input tax credit flow and overall simplification.
- The Union Budget has proposed Dynamic QR-code for consumer invoices.
- The GST parameters will be captured when payment for purchases is made through the QR-code.
- A system of cash reward is envisaged to incentivise customers to seek invoice.
- An electronic invoice is another innovation wherein critical information shall be captured electronically in a centralized system. It will facilitate compliance and return filing.

Miscellaneous

- 15th Finance Commission has cut state share of central taxes by one percentage point to 41 per cent.
- The Finance Secretary has stated that LIC IPO may come in the second half of the Fiscal Year 2021
- **Kisan Rail** to be set up by Indian Railways through PPP.
- **Krishi Udaan** to be launched by the Ministry of Civil Aviation:
- **One-Product One-District for** better marketing and export in the Horticulture sector.
- **Jaivik Kheti** Portal – online national organic products market to be strengthened.
- New scheme **NIRVIK** to be launched to achieve higher export credit disbursement, which provides for:
 - Higher insurance coverage
 - Reduction in premium for small exporters
 - Simplified procedure for claim settlements.

Economic Survey 2019-20: Highlights

- The Economic Survey 2019-20 has been tabled in the Parliament by the Union Minister for Finance.
- The theme of Economic Survey 2019-20 is "**India's aspiration of #Economy@5trillion with its theme of #WealthCreation**".

- It is prepared by the Economics Division of the Department of Economic Affairs (DEA) under the guidance of the Chief Economic Adviser (CEA), currently Dr Krishnamurthy Subramanian.

Key Highlights of Economic Survey 2019-20

Wealth Creation: The Invisible Hand Supported by the Hand of Trust

- India's dominance as global economic power for three-fourths of economic history manifests by design.
- Survey posits that India's aspiration to become a \$5 trillion economy depends critically on:
 - Strengthening the invisible hand of the market.
 - Supporting it with the hand of trust.
- Introducing the idea of *trust as a public good*, which gets enhanced with greater use.
- The survey suggests that policies must empower transparency and
- effective enforcement using data and technology.

Entrepreneurship and Wealth Creation at the Grassroots

- Entrepreneurship as a strategy to fuel productivity growth and wealth creation.
- India ranks third in a number of new firms created, as per the World Bank.
- New firm creation in India increased dramatically since 2014:
- 2% cumulative annual growth rate of new firms in the formal sector during 2014-18, compared to 3.8 % during 2006-2014.
- About 1.24 lakh new firms created in 2018, an increase of about 80 % from about 70,000 in 2014.

Divestment in public sector undertakings

- The Survey has aggressively pitched for divestment in PSUs by proposing a separate corporate entity wherein the government's stake can be transferred and divested over a period of time.
- The survey analysed the data of 11 PSUs that had been divested from 1999-2000 and 2003-04 and compared the data with their peers in the same industry.
- Further, the survey has said privatized entities have performed better than their peers in terms of net worth, profit, return on equity and sales, among others.

Golden jubilee of bank nationalization: Taking stock

- The survey observes 2019 as the golden jubilee year of bank nationalization
- India has only one bank in the global top 100 – same as countries that are a fraction of its size: Finland (about 1/11th), Denmark (1/8th), etc.

Doubts regarding GDP Growth

- GDP growth is a critical variable for decision-making by investors and policymakers.
- Therefore, the recent debate about the accuracy of India's GDP estimation following the revised estimation methodology in 2011 is extremely significant.
- As countries differ in several observed and unobserved ways, cross-country comparisons have to be undertaken by separating the effect of other confounding factors and isolating effect of methodology revision alone on GDP growth estimates.
- Models that incorrectly over-estimate GDP growth by 2.7 % for India post-2011 also misestimate GDP growth over the same period for 51 out of 95 countries in the sample.

Balance of Payments (BoP):

- India's BoP position improved from US\$ 412.9 bn of forex reserves in end-March, 2019 to US\$ 433.7 bn in end September 2019.
- Current account deficit (CAD) narrowed from 2.1% in 2018-19 to 1.5% of GDP in H1 of 2019-20.
- Foreign reserves stood at US\$ 461.2 billion as on 10th January 2020.

Global trade:

- India's merchandise trade balance improved from 2009-14 to 2014-19, although most of the improvement in the latter period was due to more than 50% decline in crude prices in 2016-17.



- India's top five trading partners continue to be USA, China, UAE, Saudi Arabia and Hong Kong.

Exports:

- Top export items: Petroleum products, precious stones, drug formulations & biologicals, gold and other precious metals.
- Largest export destinations in 2019-20 (April-November):
 - United States of America (USA), followed by the United Arab Emirates (UAE), China and Hong Kong.
- The merchandise exports to GDP ratio declined, entailing a negative impact on BoP position.

Imports:

- Top import items: Crude petroleum, gold, petroleum products, coal, coke & briquettes.
- India's imports continue to be the largest from China, followed by USA, UAE and Saudi Arabia.
- Large Crude oil imports in the import basket correlate India's total imports with crude prices.
- As crude price raises so does the share of crude in total imports, increasing imports to GDP ratio.

Logistics industry of India:

- According to the World Bank's Logistics Performance Index, India ranks 44th in 2018 globally, up from 54th rank in 2014.

Direct investments and remittances:

- Net FDI inflows continued to be buoyant in 2019-20 attracting US\$ 24.4 billion in the first eight months, higher than the corresponding period of 2018-19.
- Net FPI in the first eight months of 2019-20 stood at US\$ 12.6 bn.
- Net remittances from Indians employed overseas continued to increase, receiving US\$ 38.4 billion in H1 of 2019-20 which is more than 50% of the previous year level.

Prices and Inflation

Inflation Trends:

- Inflation witnessing moderation since 2014
- Consumer Price Index (CPI) inflation increased from 3.7 per cent in 2018-19 (April to December 2018) to 4.1 per cent in 2019-20 (April to December 2019).
- WPI inflation fell from 4.7 per cent in 2018-19 (April to December 2018) to 1.5 per cent during 2019-20 (April to December 2019).

Essential Commodities Act is outdated

- The Centre's imposition of stock limits in a bid to control the soaring prices of onions over the last few months actually increased price volatility, according to the ES.
- The finding came in a hard-hitting attack in the report against the Essential Commodities Act (ECA) and other "anachronistic legislation" and interventionist government policies, including drug price control, grain procurement and farm loan waivers.
- The Centre invoked the Act's provisions to impose stock limits on onions after heavy rains wiped out a quarter of the Kharif crop and led to a sustained spike in prices.

Agriculture

- Agricultural productivity is also constrained by a lower level of mechanization in agriculture which is about 40 % in India, much lower than China (59.5 %) and Brazil (75 %).
- With regard to the agriculture sector, the Survey argued that the beneficiaries of farm loan waivers consume less, save less, invest less and are less productive.

Food Management

- The share of agriculture and allied sectors in the total Gross Value Added (GVA) of the country has been continuously declining on account of relatively higher growth performance of non-agricultural sectors.

- GVA at Basic Prices for 2019-20 from 'Agriculture, Forestry and Fishing' sector is estimated to grow by 2.8 %.

Services Sector

Social Infrastructure, Employment and Human Development

- The expenditure on social services (health, education and others) by the Centre and States as a proportion of
- GDP increased from 6.2 % in 2014-15 to 7.7 % in 2019-20 (BE).
- India's ranking in the Human Development Index improved to 129 in 2018 from 130 in 2017:
- With 1.34 % average annual HDI growth, India is among the fastest-improving countries
- Gross Enrolment Ratio at secondary, higher secondary and higher education level needs to be improved.
- Gender disparity in India's labour market widened due to a decline in female labour force participation especially in rural areas:
- Around 60 % of productive age (15-59) group engaged in full-time domestic duties.

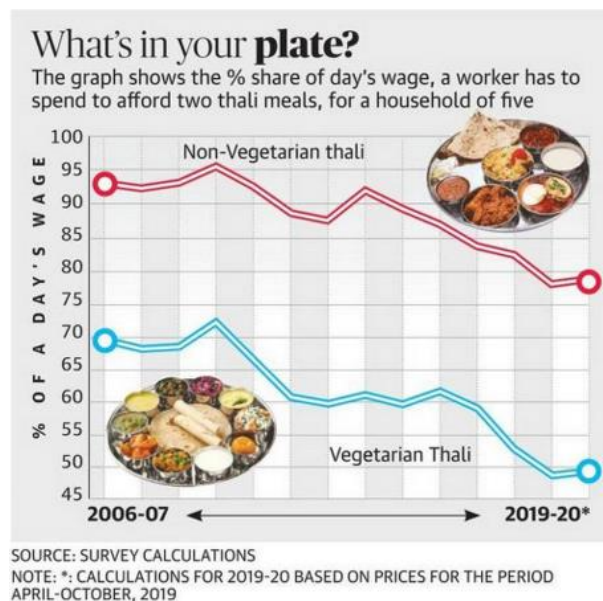
Thalinomics: the Economics of a plate of food in India

- The Economic Survey 2019-20 states that affordability of vegetarian Thalīs improved 29 per cent from 2006-07 to 2019-20 while that for non-vegetarian Thalīs by 18 per cent.
- Affordability of Thalīs vis-à-vis a day's pay of a worker has improved over time, indicating improved welfare of the common person.
- The Survey says that food is not just an end in itself but also an essential ingredient in the growth human capital and therefore important for national wealth creation.

The term 'Thalinomics'

- The conclusion has been drawn on the basis of "Thalinomics: the Economics of a plate of food in India" – an attempt to quantify what a common person pays for a Thali across India.
- Price data from the Consumer Price Index for industrial workers for around 80 centres in 25 States and UTs from April 2006 to October 2019 has been used for the study.
- Using the dietary guidelines for Indians, the price of Thalīs is constructed.
- The Survey states that across India and also the 4 regions- North, South, East and West.
- It is found that the absolute prices of a vegetarian Thali have decreased significantly since 2015-16 though the price has increased in 2019.
- This is owing to the sharp downward trend in the prices of vegetables and dal in contrast to the previous trend of increasing prices.
- As a result, an average household of 5 individuals that eat two vegetarian Thalīs a day, gained around Rupees 10887, on average per year, while a non-vegetarian household gained Rupees 11787, on average per year.

Shift in Thali dynamics



- The Survey states that 2015-16 can be considered as a year when there was a shift in the dynamics of Thali prices.
- Many reform measures were introduced since 2014-15 to enhance the productivity of the agricultural sector as well as efficiency and effectiveness of agricultural markets for better and more transparent price discovery.

Union Budget 2020-21 for Agriculture

- Union Finance Ministry has proposed 16 action points focusing on **doubling Farmers income**, Horticulture sector, Food storage, Animal Husbandry and Blue economy in budget 2020.

Doubling Farmers Income

- Intending to double farmer's income by 2022, the government has proposed to expand PM-KUSUM to 20 lakh farmers for setting up stand-alone solar pumps.
- The operationalize scheme to enable farmers to set up solar power generation capacity on their fallow/barren lands and to sell it to the grid.
- The portal on "**Jaivik kheti**" – online national organic products market will also be strengthened.

Storage and Logistics

- To promote storage infrastructure and reduce wastage of food grains Smt. Sitharaman proposed the creation of warehouses through viability gap funding on a PPP mode at the block level.
- She also proposed warehouse building by Food Corporation of India (FCI) and Central Warehousing Corporation (CWC) on their land too.

Kisan Rail

- It helps to build a seamless national cold supply chain for perishables, inclusive of milk, meat.
- Indian Railways will set up **Kisan Rail**-through PPP arrangements.
- **Krishi Udaan** will help improve value realization, especially in North-East and tribal districts the Ministry of Civil Aviation will launch Krishi Udaan.

Animal Husbandry

- The government aims to eliminate Foot and Mouth disease, brucellosis in cattles and peste des petits ruminants (PPR) in sheep and goat by 2025.
- The government has also facilitated the doubling of milk processing capacity from 53.5 million MT to 108 million MT by 2025.

Agriculture credit



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- Agriculture credit target for the year 2020-21 has been set at Rs 15 lakh crore.
- All eligible beneficiaries of Pradhan Mantri Kisan Samman Nidhi (PM-KISAN) will be covered under the Kisan Credit Card (KCC) scheme.

Horticulture

- For better marketing and export, the government will propose supporting states which, adopting a cluster basis will focus on **one product one district.**”

Blue Economy

- In the Blue Economy, raising of fish production to 200 lakh tonnes is proposed by 2022-23.
- Youth to be involved in fishery extension through 3477 Sagar Mitras and 500 Fish Farmer Producer Organisations.
- Fishery exports hoped to be raised to Rs 1 lakh crore by 2024-25.

Pradhan Mantri Matru Vandana Yojana

- Union Minister of Women & Child Development and Textiles has awarded to States, Union Territories and Districts for best performance in Pradhan Mantri Matru Vandana Yojana.

Highlights of the award

- Madhya Pradesh, Andhra Pradesh and Haryana stood 1st, 2nd and 3rd respectively in the category of best performance since inception of the Scheme to States/ UTs having a population of more than one crore.
- In the same category, among States/ UTs having a population of less than one crore Dadra & Nagar Haveli is in the first position. Himachal stood second, and Chandigarh is in the third position.

District-level awards for States/ UTs with a population of more than one crore.

- Indore (Madhya Pradesh) first position
- Kurnool in Andhra Pradesh second position
- South Salmara Mankachar in Assam was third.

Among the districts of States/ UTs having a population of less than one crore

- The first position went to Serchhip in Mizoram
- The second position to Una in Himachal Pradesh
- Puducherry was in the third position.

About Pradhan Mantri Matru Vandana Yojana

- The PMMVY is a maternity benefit programme being implemented in all districts of the country from 01.01.2017.
- Under PMMVY a cash incentive of Rs. 5000 is provided directly to the bank/ post office account of Pregnant Women and Lactating Mothers (PW&LM).
- The fund transfer is subject to the first living child of the family subject to fulfilling specific conditions relating to maternal and child health.
- PMMVY is implemented using the platform of Anganwadi Services Scheme of Umbrella ICDS under the Ministry of Women and Child Development in respect of States/ UTs.
- PMMVY is implemented through a centrally deployed web-based MIS software application, and the focal point of implementation is the Anganwadi Centre (AWC) and ASHA/ANM.

Global Misery Index

- Recently the Congress party claimed that the Indian economy should be measured in terms of the Global Misery Index (GMI).

About the Global Misery Index

- The misery index, created by Arthur Okun, a member of the Council of Economic Advisers to the U.S.

- However, Prof. Steve Hanke of Johns Hopkins University, an applied economist popularised the Global Misery Index.
- He ranked India a measly 44 out of 95 countries.
- The benchmark measures people's "misery score" based on parameters such as unemployment and inflation rate instead of the conventional gross domestic product (GDP).

Methodology

- It is based on the three critical economic parameters namely:
 - a. Unemployment rate
 - b. Inflation rate
 - c. Lending rate
- To calculate the misery index, the annualised growth of GDP is subtracted from the total of these three rates, which gives a score which defines how miserable people living geography are!

Ujh Multipurpose (National) Project

- The Union Minister of State for Jal Shakti chaired a meeting to fast-track the implementation of Ujh Multipurpose (National) Project, Jammu & Kashmir.

About the Ujh Multipurpose (National) Project

- The Project is under the as per government's commitment to fast track utilization of India's rights under Indus Waters Treaty.
- The project is planned to be constructed in Kathua District of J&K on the River Ujh which is a significant tributary of River Ravi.
- The project will enhance the utilization of waters of Eastern Rivers allotted to India as per the Indus Water Treaty.

About the Indus water treaty

- The Indus Water Treaty is a water-distribution treaty between India and Pakistan signed in 1960.
- The treaty was signed by the then Prime Minister Jawaharlal Nehru and Pakistan's President Ayub Khan and brokered by the World Bank.
- The Indus system comprises the main Indus River, Jhelum, Chenab, Ravi, Beas and Sutlej.
- India and Pakistan mainly share the basin with a small share for China and Afghanistan.
- Under the Indus Waters Treaty, waters flowing in three of Indus tributaries -- the Sutlej, Beas and Ravi -- have been allotted to India; while the Chenab, Jhelum and Indus waters have been allocated to Pakistan.

India's Projects on Indus River

- India has constructed the Bhakra Dam on Sutlej, Pong and Pandoh Dam on Beas and Ranjitsagar on Ravi.
- The project includes:
 - a. Shahpur Kandi dam project located on the Ravi River in Pathankot district, Punjab,
 - b. Sutlej-Beas link project in Punjab
 - c. The Ujh Dam project in Jammu and Kashmir.

Purified Terephthalic Acid

- Recently in Budget, the government abolished an anti-dumping duty that was levied on imports of a chemical called PTA.

About Purified Terephthalic Acid

- It is a basic raw material used to make various products, including polyester fabrics.

- PTA makes up for around 70-80% of a polyester product and is, therefore, important to those involved in the manufacture of human-made fabrics or their components.
- This includes products like polyester staple fibre and spun yarn.

Anti –Dumping duty

- The purpose of anti-dumping functions, in general, is to eliminate dumping which is causing injury to the domestic industry and to re-establish a situation of open and fair competition in the Indian market, which is in the general interest of the country.
- It is administered by the Directorate General of Antidumping and Allied Duties (DGAD) functioning in the Dept. of Commerce in the Ministry of Commerce and Industry.

About Directorate General of Trade Remedies

- It was established in 2018 and functions under the Ministry of commerce and industry.
- It subsumed the Directorate General of Anti-dumping and Allied Duties, Directorate General of Safeguards and some functions of the Directorate General of Foreign Trade.

Mukhyamantri Parivartan Yojna

- Haryana Chief Minister has launched “Mukhyamantri Parivar Samridhi Yojna”.

About the Mukhyamantri Parivar Samridhi Yojna

- It aims to provide social security benefits to eligible families of the state through annual financial assistance.
- Under the scheme, financial assistance of Rs 6000 will be provided to those families in the State whose annual income is upto Rs 1.80 lakh and land holding is less than 5 acres.
- The part of the money paid under this scheme will be utilised to pay the premiums of various social security and insurance schemes run by the central and state governments.

Ease of Living Index and Municipal Performance Index 2019

- Ministry of Housing & Urban Affair has launched two Assessment Frameworks, viz. Ease of living index (EoLI) and Municipal Performance Index (MPI) 2019.
- Both these indices are designed to assess quality of life of citizens.

About Ease of Living Index

- Ease of Living Index is aimed at providing a holistic view of Indian cities.
- The key objectives of the Ease of Living Index are four-folds, viz.
 - Generate information to guide evidence-based policymaking
 - Catalyse action to achieve broader developmental outcomes including the SDG
 - Assess and compare the outcomes achieved from various urban policies and schemes
 - Obtain the perception of citizens about their view of the services provided by the city administration.

The index will assess the ease of living of citizens on three broad parameters namely

- a. quality of life
- b. economic ability
- c. Sustainability which is further divided into 14 categories across 50 indicators.

A Citizen Perception Survey is also being conducted which carries 30% of the marks of the Ease of Living Index.

About Municipal Performance Index

- It aims to assess the performance of municipalities based on five enablers, service, finance, planning, technology and governance which are further divided into 20 sectors and 100 indicators.

International Day of Women and Girls in Science

- International Day of Women and Girls in Science celebrated on February 11 every year by the United Nations to promote equal access to and participation in science for women and girls.
- The theme of this year is **Investment in Women and Girls in Science for Inclusive Green Growth**.

Gender Gap in Science

- UNESCO data from 2014-16 show that only around 30% of female students select STEM (science, technology, engineering and mathematics)-related fields in higher education.
- Female enrolment is particularly low in information technology (3%), natural science, mathematics and statistics (5%) and engineering and allied streams (8%).
- In India, a 2016-17 NITI Aayog report compared female enrolment in various disciplines over five years, until 2015-16.
- In 2015-16, 9.3% of female students in undergraduate courses were enrolled in engineering, compared to 15.6% across genders.
- Conversely, 4.3% of female students were enrolled in medical science, compared to 3.3% across genders.
- The report found that in over 620 institutes and universities, including IITs, NITs, ISRO, and DRDO, the presence of women was 20.0% among Scientific and Administrative Staff.

Why the gender gap

- Various studies have found that girls excel at mathematics and science-oriented subjects in school, but boys often believe they can do better, which shapes their choices in higher studies.
- In 2015, an analysis of PISA scores by OECD found that the difference in maths scores between high-achieving boys and girls was the equivalent of about half a year at school.
- But when comparing boys and girls who reported similar levels of self-confidence and anxiety about mathematics, the gender gap in performance disappeared — when girls were more anxious, they tended to perform poorly.

SPICE+

- Recently Ministry of Corporate Affairs deployed a new Web Form christened 'SPICE+', replacing the existing SPICE form.
- The SPICE stands as Simplified Proforma for Incorporating a Company Electronically.

About SPICE

- It is an application form for incorporating/registering a company with the Ministry of Corporate Affairs.
- The initiative is a part of India's effort to improve the Ease of Doing Business (EODB).
- SPICE+ would offer 10 services by 3 Central Govt Ministries & Departments.
 - Ministry of Corporate Affairs
 - Ministry of Labour & Department of Revenue in the Ministry of Finance)
 - One State Govt. (Maharashtra)

Ten services are:



- Name reservation, incorporation of a new company, applying for Director Identification Number (DIN) allotment, PAN, TAN, EPFO, ESIC, Profession Tax (Maharashtra), Opening a Bank Account and GST Identification Number (GSTIN).
- It would be applicable for all new company incorporations.

Facebook launches digital literacy programme for women in UP

- Facebook has launched its 'We Think Digital' programme here in partnership with the National Commission for Women (NCW) and Cyber Peace Foundation on the occasion of Safer Internet Day.

About the Programme

- The program aims to provide digital literacy training addressing issues around privacy, safety and misinformation to one lakh women across seven states throughout the year.
- The programme will start with the state of Uttar Pradesh and expand to other states including Assam, West Bengal, Madhya Pradesh, Gujarat, Jharkhand and Bihar.

About National Commission for Women

- The National Commission for Women (NCW) is the statutory body of the Government of India.
- It is generally concerned with advising the government on all policy matters affecting women.

Neonatal deaths

- According to the National Health Mission, Madhya Pradesh has recorded the highest percentage of newborn deaths of 11.5% against the total admissions to government-run sick newborn care units (SNCUs) in the past three years across the country.
- Although admissions of neonates (under 28 days) in the State have dropped from April 2017 to December 2019 — remaining lower than West Bengal, Rajasthan and Uttar Pradesh.

Factors responsible for deaths

- Staff crunch
- Low community referrals
- Absence of a special neonatal transport service to health centres
- Reliance on units in cities as last resort
- Non-availability of enough units to cater to increasing institutional deliveries.

Abysmal sex ratio

- Madhya Pradesh has also recorded an abysmal sex ratio in admissions — of 663 (number of girls admitted against 1,000 boys) in the three years against the country average of 733.
- The sex ratio of Madhya Pradesh was 931 as per the 2011 census.
- West Bengal has recorded 34,344 neonatal deaths occurred in the period, the most in the country, the declining percentage of deaths from 9.2% in 2017 to 8.9% in 2019 coincided with a slump in admissions.

Neonatal mortality

According to the Sample Registration System, neonatal deaths in India mainly occur owing to

- premature births and low birth weight (35.9%)
- pneumonia (16.9%)
- birth asphyxia and birth trauma (9.9%)
- other non-communicable diseases (7.9%)
- diarrhoea (6.7%)
- congenital anomalies (4.6%)
- infections (4.2%).

Note:

- Under the United Nations' Sustainable Development Goals, each country, including India, has aimed to bring down neonatal mortality to at least 12 per 1,000 live births.
- In 2018, it stood at 23 for India.

Essential Commodities Act, 1955

- Kerala government has brought packaged drinking water under the ambit of the Essential Commodities Act with a view to regulate its price.

About the Essential Commodities Act, 1955

- It is used by the Government to regulate the production, supply and distribution of certain commodities it declares 'essential' in order to make them available to consumers at fair prices.
- The list of items under the Act includes drugs, fertilisers, pulses and edible oils, and petroleum and petroleum products.
- The Centre can include new commodities as and when the need arises

STF set up to study the minimum age of girls entering motherhood

- The Centre has informed the Delhi High Court that a Special Task Force has been formed to study the issue of the minimum age of girls entering motherhood (Marriage age).
- The Center said that Women's age of marriage was increased from fifteen years to eighteen years in 1978, by amending erstwhile Sharda Act of 1929.

Historical Background

- Social reformer Raja Rammohan Roy pioneered social movements for the upliftment of women in Indian society.
- Associations like Brahmo Samaj and Arya Samaj took up the cause of child marriages.
- Marriageable age was fixed at 14 years for girls and 18 years for boys under the Bramho Act of 1872.
- **This Act later came to be known as the Native Marriage Act.**
- In 1891, the Age of Consent Bill was passed which prohibited cohabitation with a wife under the age of 12.
- This was examined by the Joshi Committee in 1925.
- Based on the recommendations of the Joshi Committee, the Sarda Act was passed in 1929

About the Child Marriage Restraint Act or Sarda Act of 1929

- The act came into force on 1st April 1930 with the aim to restrain solemnization of child marriages in India.
- It applied to all classes of people throughout British India.
- The Act prohibited the marriage of boys below 18years and of girls below 12 years of age.

Child Marriage Restraint (Amendment) Act of 1978

- The Act rose the minimum age at marriage for girls to 18years and that of boys to 21 years.
- However, the marriage performed in violation of this condition still remained valid.

The Prohibition of Child Marriage Act, 2006

- The Act came into effect on 1st November 2007
- The Act extends to the whole of India except the State of Jammu and Kashmir (but now all India after scrapping article 370) and it applies also to all citizens of India without and beyond India
- Under this Act, "child" means a person who, if a male, has not completed twenty-one years of age, and if a female, has not completed eighteen years of age.

- The Act defined "child marriage" as a marriage where either of the contracting parties is a child.

Note:

- Today more than 125 countries in the world have a uniform age of marriage for men and women.
- National Conference on Child Marriage held in New Delhi in August 2018, also recommended that India follow suit and brings uniformity in the minimum age limits.

Blue Dot network

- Recently India and the US will discuss the Blue Dot network, a new proposal to cover infrastructure and development projects across the region and other countries.
- This move is to help counter China moving to expand its strategic footprint through the Belt and Road Initiative (BRI).

About the Blue Dot network

- It was formally announced in November 2019 at the Indo-Pacific Business Forum in Bangkok, Thailand which will be led by the US along with Japan and Australia.
- It is a multi-stakeholder initiative to bring together governments, the private sector and civil society to promote high-quality, trusted standards for global infrastructure development
- It is expected to serve as a globally recognised evaluation and certification system for roads, ports and bridges with a focus on the Indo-Pacific region.
- The initiative will evaluate projects on various parameters, including the level of public consultation, transparency in funding, debt traps and basic environment norms.
- Projects that meet the norms will get a "blue dot", which will enable them to attract private funding and not have to depend on state funding alone.
- **Japan and Australia are already joined as partners in this idea (Blue Dot network)**

About One Belt One Road (OBOR)

- The One Belt One Road (OBOR), the brainchild of Chinese President Xi Jinping.
- Initially announced in the year 2013 with a purpose of restoring the ancient Silk Route that connected Asia and Europe.
- It is also dubbed as the "Project of the Century" by the Chinese authorities, OBOR spans about 78 countries.
- The main focuses of the "Belt and Road" initiative - also known as "One Belt, One Road" - are in infrastructure, transportation and Energy.

The project covers two parts.

- The first is called the "Silk Road Economic Belt," which is primarily land-based and is expected to connect China with Central Asia, Eastern Europe, and Western Europe.
- The second is called the "21st Century Maritime Silk Road," which is sea-based and is expected to will China's southern coast to the Mediterranean, Africa, South-East Asia, and Central Asia.
- **The names are confusing as the 'Belt' is actually a network of roads, and the 'Road' is a sea route.**

Note:

- India is not a member of One Belt One Road Initiative.

Biodiversity Management Committees

- The National Biodiversity Authority has recently told the National Green Tribunal that it created biodiversity management committees and people's biodiversity registers (PBR) as of January 2020.

About the Biodiversity Management Committees

- The Biodiversity Management Committees (BMCs) are statutory bodies that are formed by the local bodies under the Biological Diversity Act 2002.
- The BMC consists of a Chairperson, and six persons nominated by local bodies, including 1/3rd women and 18% SC/ST.

The functions of BMCs are as under:

- Prepare, maintain and validate People's Biodiversity Register (PBR) in consultation with the local people.
- The BMC is to maintain a Register giving information about the details of biological resources and traditional knowledge available within the jurisdiction of BMC.
- Advice on any matter referred to it by the State Biodiversity Board or Authority for granting approval, to maintain data about the local vairs and practitioners using the biological resources
- People's Biodiversity Register contains "comprehensive information on availability and knowledge of local biological resources".

About the National Biodiversity Authority

- The National Biodiversity Authority (NBA) is a statutory autonomous body which is established in 2003 to implement the provisions under the Biological Diversity Act, 2002.
- It works under the Ministry of Environment, Forests and climate change, Government of India
- It headquartered in Chennai, India.

Functions:

- It acts as a facilitating, regulating and advisory body to the Government of India "on issues of conservation, sustainable use of biological resources and fair and equitable sharing of benefits arising out of the use of biological resources.
- It also advises State Governments in identifying the areas of biodiversity importance (biodiversity hotspots) as heritage sites.

About Biological Diversity Act, 2002

- The Biological Diversity Act, 2002 is an Act of the Parliament for the preservation of biological diversity in India.
- It provides for a mechanism for equitable sharing of benefits arising out of the use of traditional biological resources and knowledge.
- The Act was enacted to meet the obligations under the Convention on Biological Diversity to which India is a part in 2002.

Source- Down to Earth

Microsoft launches new program for B2B startups

- Microsoft has recently launched the 100X100X100 program for B2B Software as a service (SaaS) startups in India.

About the Program

- This initiative will bring together 100 committed companies and 100 early and growth startups that have enterprise-ready solutions to offer.
- The program will help enterprises fast track their digital transformation through faster adoption of SaaS solutions.
- Each participating company will commit to spending \$100K over a course of 18 months on solutions provided by the SaaS startups.
- This initiative will help build scale and create amazing opportunities for startups.

Masala bonds

- Asian Development Bank has listed its 10-year masala bonds worth Rs 850 crore on the global debt listing platform of India INX.

- The proceeds would be used to support local currency lending and investment in India, the BSE-owned exchange.

About India INX

- It is the country's first international exchange, located at International Financial Services Centre, GIFT City in Gujarat.
- ADB's masala bonds are listed on both Luxembourg exchange and India INX.

About the Masala Bond

- Masala Bonds are rupee-denominated borrowings issued by Indian entities in overseas markets.
- The objective of Masala Bonds is to fund infrastructure projects in India, fuel internal growth via borrowings and internationalise the Indian currency.

Source- ET

gradeup

Science and Technology

National Mission on Quantum Technologies and Applications

- The government, in its budget 2020 has announced a National Mission on Quantum Technologies & Applications (NM-QTA).
- It is implemented under the ministry of science and technology.

About the Quantum Technology

- It is based on the principles of quantum theory, which explains the nature of energy and matter on the atomic and subatomic level.
- Quantum computers store and process information using quantum two-level systems (quantum bits or qubits) which unlike classical bits, can be prepared in superposition states.
- The mission helps to develop and bring quantum computers secured communications through fibre and free space, quantum encryption and crypt-analysis and associated technologies.
- Its applications which will receive boost include those in aerospace engineering, numerical weather prediction, simulations, securing the communications & financial transactions, cybersecurity etc.
- It also focuses on the creation of high skilled jobs, human resources development, start-ups & entrepreneurship leading to technology leads to economic growth.

CHEOPS Mission

- European Space Agency (ESA) had launched the CHaracterizing ExOPlanet Satellite (CHEOPS) in 2019 that focuses on exoplanets, in particular, to search for habitable planets.
- This is ESA's first mission dedicated to the study of extrasolar planets.
- The mission will not focus on searching for new planets, but instead follow up on the hundreds that have already been discovered, in an attempt to measure their sizes with "unprecedented" precision and accuracy.
- CHEOPS will be able to reveal details about some planets' atmosphere, including the presence of clouds, and may even discover previously unknown worlds

Additional Information

- NASA's Kepler space observatory used the transit method to detect more than 2,600 confirmed exoplanets, most orbiting faint stars 300 to 3,000 light-years away.
- The agency's new Transiting Exoplanet Survey Satellite (TESS) has been doing the same thing since April 2018.

Basmati rice genome sequenced

- Scientists have mapped the complete genome of two basmati rice varieties Basmati 334 and Dom Sufid.

Related Information

- **Basmati 334:** It is from Pakistan, known to be drought tolerant and resistant to rice-killing bacterial blight.
- **Dom Sufid:** It is from Iran, aromatic long-grain rice that is one of the most expensive on the market.
- The most genetic material in basmati comes from japonica —a rice group found in East Asia — followed by the rice group aus found in Bangladesh.

Note:

- West Bengal government's rice research centre has come up with a new variety of rice called Muktoshrī that can be grown in arsenic prone areas.

Female Genital Mutilation

- Recently as per the World Health Organization (WHO), globally, over 200 million girls alive today have suffered FGM in over 30 countries.
- Every year, February 6 is observed as the International Day of Zero Tolerance for Female Genital Mutilation (FGM).

About the Female Genital Mutilation

- It is the name given to procedures that involve altering or injuring the female genitalia for non-medical or cultural reasons.

WHO classifies four types of FGM

- Type 1 (partial or total removal of the clitoral glans)
- Type 2 (partial or total removal of the external and visible parts of the clitoris and the inner folds of the vulva)
- Type 3 (infibulation, or narrowing of the vaginal opening through the creation of a covering seal)
- Type 4 (picking, piercing, incising, scraping and cauterising the genital area).
- Most girls and women who have undergone FGM live in sub-Saharan Africa and the Arab States, but it is also practised in some countries in Asia, Eastern Europe and Latin America.

Why is Female Genital Mutilation practised?

- Depending on the region, there can be various reasons why FGM is performed.
- The United Nations Population Fund has categorised the reasons into five categories:
 - psycho-sexual reasons (when FGM is carried out as a way to control women's sexuality, "which is sometimes said to be insatiable if parts of the genitalia, especially the clitoris, are not removed)
 - sociological or cultural reasons (when FGM is seen as part of a girl's initiation into womanhood and an intrinsic part of a community's cultural heritage)
 - hygiene and aesthetic reasons (this may be the reason for those communities that consider the external female genitalia as ugly and dirty)
 - religious reasons (the UNFPA maintains that while FGM is not endorsed by Christianity or Islam, "supposed" religious doctrines may be used to justify the practice)
 - socio-economic factors (in some communities FGM is a pre-requisite for marriage, especially in those communities where women are dependent on men economically).
- Other reasons cited by the WHO include an attempt to ensure women's premarital virginity since FGM is believed to reduce libido, "and therefore believed to help her resist extramarital sexual acts.

Female Genital Mutilation in India

- In 2018, a study on FGM in India said that the practice was up to 75 per cent across the Bohra Muslim community.
- The Dawoodi Bohra community said that this practice should be allowed since the Constitution grants religious freedom under Article 25.

Remdesivir

- The Wuhan Institute of Virology, China Academy of Sciences, has filed for a patent on Remdesivir, an antiviral experimental drug from US biotechnology firm Gilead Sciences.
- It may help in treating the novel coronavirus (nCoV-2019).

About the Coronavirus

- Wuhan is the epicentre of the coronavirus outbreak, which has killed hundreds in China and infected thousands.
- With the virus spreading to other countries around the world, the World Health Organization (WHO) declared it to be a Public Health Emergency of International Concern (PHEIC) last week.

- It is a Zoonotic Diseases that pass from animals to humans.
- Zoonotic diseases are also called zoonoses which are caused by harmful germs such as bacteria, viruses, fungi and parasites.

Wuhan Coronavirus – Indian Context

- The first case of the Novel Coronavirus in India was confirmed in Kerala.
- The Kerala state government has declared a ‘state calamity’.

Four-fold jump in Li-ion battery imports since 2016

- India has quadrupled its imports of lithium-ion (Li-ion) batteries and more than tripled its import bill on the product, vital for powering a range of devices from cellphones to electric vehicles, from 2016-2018.

Major Source of Imports:

- Indian manufacturers source Li-ion batteries from China, Japan and South Korea and the country among the largest importers in the world.

Need for Increasing Manufacturing in India:

- The Indian Space Research Organisation (ISRO) manufactures such batteries but volumes are limited and they are restricted for use in space applications.
- Electric vehicles are expected to account for a significant share in the growth of the Li-ion battery demand in India though reports say this is unlikely at least until 2025 because electric cars are still significantly costlier than their combustion-engine counterparts.

Steps Taken by Government:

- In June 2018, Central Electro Chemical Research Institute (CECRI) in Tamil Nadu’s Karaikudi, under the Council of Scientific & Industrial Research (CSIR) and RAASI Solar Power Pvt Ltd signed a Memorandum of Agreement for transfer of technology **for India’s first lithium-ion (Li-ion) battery project.**
- To promote indigenous development of such batteries, the Union Cabinet in 2019 approved a programme, called a National Mission on Transformative Mobility and Battery Storage in the NITI Aayog to “drive clean, connected, shared, sustainable and holistic mobility initiatives.”
- The government has announced investments worth \$1.4 billion to make India one of the largest manufacturing hubs for electric vehicles by 2040.

About Lithium-ion Battery:

- A lithium-ion battery is a type of rechargeable battery.
- Li-ion batteries use an intercalated (Intercalation is the reversible inclusion or insertion of a molecule into materials with layered structures) lithium compound as one electrode material, compared to the metallic lithium used in a non-rechargeable lithium battery.
 - The battery consists of electrolyte, which allows for ionic movement, and the two electrodes are the constituent components of a lithium-ion battery cell.
 - Lithium ions move from the negative electrode to the positive electrode during discharge and back when charging.
- They are one of the most popular types of rechargeable batteries used for military, battery electric vehicle and aerospace applications.

SuperCam

- Recently NASA is sending a new laser-toting robot as one of seven instruments aboard the Mars 2020 rover on his Mars Mission which is called SuperCam.

About the SuperCam

- It is a robot used for studying mineralogy and chemistry from up to about 7 metres away.
- It might help scientists find signs of fossilised microbial life on Mars.

Function of SuperCam

- SuperCam looks at rock textures and chemicals to find those that formed or changed in the water on Mars long ago.
- SuperCam looks at different rock and “soil” types to find ones that could preserve signs of past microbial life on Mars — if any ever existed.
- It also identifies which elements in the Martian dust may be harmful to humans.

Yaravirus

- In a lake in Brazil, researchers have discovered a virus that they find unusual and intriguing.
- The Yaravirus infects amoeba and has genes that have not been described before, something that could challenge how DNA viruses are classified.
- Because of the Yaravirus’s small size, it was unlike other viruses that infect amoeba and they named it as a tribute to Yara, the “mother of waters” in the mythological stories of the Tupi-Guarani indigenous tribes.
- The virus does not infect human cells, according to the researchers.

NASA Mission for Venus, moons of Jupiter, Neptune

- NASA has recently announced it has selected four Discovery Program investigations to develop concept studies for possible new missions.
- Two proposals are for trips to Venus, and one each is for Jupiter’s moon Io and Neptune’s moon Triton.

These are:

DAVINCI+ (Deep Atmosphere Venus Investigation of Noble gases, Chemistry, and Imaging Plus)

- This will analyse Venus’s atmosphere to understand how it was formed and evolved, and if it ever had an ocean.
- This will advance understanding of the formation of terrestrial planets.

IVO (Io Volcano Observer)

- It is a proposal to explore Jupiter’s moon Io, which is extremely volcanically active.
- This will try to find out how tidal forces shape planetary bodies.
- The findings could further knowledge about the formation and evolution of rocky, terrestrial bodies and icy ocean worlds in the Solar System.

TRIDENT

- This aims to explore Neptune’s icy moon, Triton, so that scientists can understand the development of habitable worlds in the Solar System.

VERITAS (Venus Emissivity, Radio Science, InSAR, Topography, and Spectroscopy)

- It will aim to map Venus’s surface to find out why Venus developed so differently from Earth.

India’s first ‘darknet’ narcotics operative held

- The Narcotics Control Bureau (NCB) has said it has arrested the country’s first ‘darknet’ narcotics operative.

About the Darknet

- It refers to the deep hidden internet platform that is used for narcotics sale, exchange of pornographic content and other illegal activities by using the secret alleys of the onion router (ToR) to stay away from the surveillance of law enforcement agencies.
- It has end-to-end encryption due to which it is considered very tough to crack when it comes to investigating criminal activities being rendered over it.

About Narcotics Control Bureau

- The Narcotics Control Bureau (NCB) is the nodal drug law enforcement and intelligence agency of India
- It is responsible for fighting drug trafficking and the abuse of illegal substances.
- Its headquarters is located in New Delhi.

- It was also a part of a global '**Operation Trance**', launched in December 2019.
- The **operation Trance** entailing a joint intelligence-gathering action on international postal, express mail and courier shipments containing psychotropic drugs that are abused as sedatives and painkillers.
- Psychotropic drugs are the drugs which can only be purchased on a doctor's prescription.

Google to end 'Station' programme

- Google has decided to gradually wind down the service globally as it believes that better data plans and improving mobile connectivity have made it "simpler and cheaper" for users to get online.
- However, users in India will be able to continue using the existing facilities at the over 400 stations via RailTel, Google's partner in India for the programme.

About the Station Programme

- The programme was kick-started in India in 2015 as a partnership between Google, Indian Railways and RailTel to bring fast and free public WiFi.

Yellow Rust

- The Punjab Agriculture and Farmers' Welfare Department issued an advisory about Yellow Rust disease in wheat crops.

About the Yellow Rust

- The disease appears as yellow stripes of powder or dust on leaves and leaf sheaths of the wheat crop.
- The disease can spread rapidly under congenial conditions and affects crop development, and eventually the yield.
- According to research 5- 30 percent of yield can be affected due to these diseases.
- In India, it is a major disease in the Northern Hill Zone and the North-Western Plain Zone and spreads easily during the onset of cool weather and when wind conditions are favourable.

Note:

- HD-3226 or Pusa Yashasvi was released last year by the Indian Agricultural Research Institute, which had higher levels of resistance against major rust fungi such as the yellow/stripe, brown/leaf and black/stem.

microRNAs

- Researchers from the National Centre for Biological Sciences, Bengaluru, and SASTRA University, Thanjavur, have discovered how small molecules called microRNAs are made in plants.

About the microRNAs

- It is a small non-coding RNA molecule (containing about 22 nucleotides) found in plants, animals and some viruses, that functions in RNA silencing and post-transcriptional regulation of gene expression.
- miRNAs function via base-pairing with complementary sequences within mRNA molecules.
- As a result, these mRNA molecules are silenced, by one or more of the following processes:
 - Cleavage of the mRNA strand into two pieces,
 - Destabilization of the mRNA through shortening of its poly(A) tail
 - Less efficient translation of the mRNA into proteins

Supergiant star Betelgeuse

- Recently the European Space Organisation's (ESO) Very Large Telescope (VLT), astronomers have noticed the unprecedented dimming of Betelgeuse.

About the Star Betelgeuse

- Betelgeuse is usually the eleventh-brightest star in the night sky and, after Rigel, the second brightest in the constellation of Orion which is 20 times bigger than the Sun.
- It was born as a supermassive star millions of years ago and has been “dramatically” and “mysteriously” dimming for the last six months.
- Classified as a red supergiant of spectral type M1-2, Betelgeuse is one of the largest stars visible to the naked eye; imagined as being at the centre of the Solar System.

Indian Biojet Fuel

- An IAF AN-32 aircraft took off from Leh's Kushok Bakula Rimpoche airport using a mixture of 10 per cent Indian bio-jet fuel recently.
- This is the first time that both engines of the aircraft were powered by the bio-jet indigenous fuel.

About the Biojet fuel

- It is prepared from “non-edible tree borne oil”, and is procured from various tribal areas of India.
- This fuel is made from Jatropha oil sourced from Chattisgarh Biodiesel Development Authority and then processed at CSIR-IIP, Dehradun.
- The technology to produce this fuel was developed by CSIR-IIP in 2013, but it could not be tested and certified for commercial use immediately.
- According to official sources, the aircraft was flight tested and its performance was validated at Chandigarh Air Base prior to undertaking the operational flight to Leh.

Environmental Friendly

- The use of biofuel in an Indian Air Force transport aircraft, saying such innovations would bring down carbon emissions and lower the nation's oil import bill.

H1N1 virus

- Recently five judges of Hon. Supreme Court of India has been affected by Swine Flu which is caused by H1N1 virus.

About H1N1

- It is an Influenza virus which was first reported in 2009.
- The strain of the virus that infects humans is alone pandemic.
- The other strains of the virus namely swine influenza infecting pigs and Avian Influenza infecting birds are endemic.

Note:

- Pandemic is a disease that may spread throughout the world.

INCOIS launches three new advance warning systems

- The Indian National Centre for Ocean Information Services (INCOIS) has launched three new products for the benefit of fishermen, people living in coastal areas of South India.
- These Products are
 - Small Advisory and Forecast Services System (SVAS)\
 - Swell Surge Forecast System (SSFS)
 - Algal Bloom Information Service (ABIS)

Small Advisory and Forecast Services System (SVAS)

- SVAS is for small vessels operating in Indian coastal waters warning about potential sites where vessel overturning can take place, 10 days in advance.
- Small vessels of beam width up to seven metres covering the entire range of beam widths of the fishing vessels used in all the nine coastal states and Union Territories can benefit from it.

- The warning system is based on 'Boat Safety Index' (BSI) derived from wave model forecast outputs like wave height, steepness, directional spread and rapid development of wind at sea which is boat-specific.

Swell Surge Forecast System (SSFS)

- The 'SSFS' has been designed for forecasting swell surges occurring in the west coast two-three days in advance as they generally catch the local people by surprise.
- 'Kallakkadal' is a colloquial term used by Kerala fishermen to refer to the freaky flooding episodes; UNESCO too had accepted this term for scientific use.
- During 'Kallakkadals', the sea surges into the land and inundates vast areas.
- However, it is different from Tsunamis as two different kinds of waves are involved.

Algal Bloom Information Service (ABIS)

- The 'ABIS' is to help fishermen, fishery resource managers and ecologists get realtime information about the spread of phytoplankton blooms.
- It gives detailed information about species and size in North Eastern Arabian Sea, coastal waters of Kerala, Gulf of Mannar and coastal waters of Gopalpur.

National Conference on Coastal Disaster Risk Reduction and Resilience

- National Conference on Coastal Disaster Risk Reduction and Resilience (CDRR&R) – 2020' was organized by the National Institute of Disaster Management (NIDM) in New Delhi.
- The objective Enhance human capacity in terms of a better understanding of coastal disaster risks and effective collaborative actions.
- It also implemented the Prime Minister's 10-point agenda and Sendai Framework for Disaster Risk Reduction.

The Prime Minister's 10-point Agenda:

1. All development sectors must imbibe the principles of disaster risk management.
2. Work towards risk coverage for all-starting from poor households to SMEs to multinational corporations to nation-states.
3. More involvement and leadership of women in disaster risk management.
4. Invest in risk mapping globally. For mapping risks related to hazards like earthquakes, we have accepted standards and parameters.
5. Leverage technology to enhance the efficiency of our disaster risk management efforts.
6. Develop a network of universities to work on disaster issues.
7. Utilize the opportunities provided by social media and mobile technologies.
8. Build on local capacity and initiative.
9. The opportunity to learn from a disaster must not be wasted. After every disaster, there are papers on lessons that are rarely applied.
10. Bring about greater cohesion in the international response to disasters.

About Sendai Framework for Disaster Risk Reduction

- It was adopted in 2015 at the Third UN World Conference on Disaster Risk Reduction in Sendai City, Miyagi Prefecture, Japan.
- It is a non-binding agreement on disaster risk reduction.

About National Institute of Disaster Management

- It is a premier institute of the Government of India under the Ministry of Home Affairs.
- It was constituted under the Disaster Management Act 2005.

Henneguya salminicola: Microscopic parasite has no mitochondrial DNA

- An international team of researchers has recently found a multicellular animal with no mitochondrial DNA, making it the only known animal to exist without the need to breathe oxygen.

About the Henneguya salminicola



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- It is a tiny, less than 10-celled parasite lives in salmon muscle.
- One of the common characteristics of all multicellular animals on Earth is mitochondrial respiration—the process by which oxygen is used to generate adenosine triphosphate.
- Adenosine triphosphate (ATP) is used as the fuel used to power cellular processes.
- The process takes place in mitochondria, which has both its own genome and the main genome found in the rest of the body's cells but *Henneguya salminicola* is exception for this.

Note:

- The mitochondria are known as **the powerhouse of the cell** or **kitchen of the cell** where oxygen is captured to make energy.

NASA InSight mission

- The NASA's InSight lander mission touched down on Mars on November 26, 2018, since it reveals “a planet alive with quakes, dust devils and strange magnetic pulses”.

About InSight

- The InSight mission is part of NASA's Discovery Program.
- It is being supported by a number of European partners, which include France's Centre National d'Études Spatiales (CNES), the German Aerospace Center (DLR) and the United Kingdom Space Agency (UKSA).

Unique feature of InSight

- InSight is the first mission dedicated to looking deep beneath the Martian surface.
- Among its science tools are a seismometer for detecting quakes, sensors for gauging wind and air pressure, a magnetometer, and a heat flow probe designed to take the planet's temperature.
- InSight is also equipped with a magnetometer, which has detected magnetic signals.

Underground: rumbles

- Mars trembles more often than expected, but also more mildly. This emerged from readings of the ultra-sensitive seismometer, called the Seismic Experiment for Interior Structure (SEIS).
- The instrument enables scientists to “hear” multiple trembling events from hundreds to thousands of miles away.
- Mars doesn't have tectonic plates like Earth, but it does have volcanically active regions that can cause rumbles.

Magnetism

- Billions of years ago, Mars had a magnetic field although it is no longer present; it left behind what NASA describes as “ghosts” – magnetised rocks that are now between 61 m to several km below ground.
- At a Martian site called Homestead hollow, the magnetic signals are 10 times stronger than what was predicted earlier (based on data from orbiting spacecraft). Because InSight's measurements are more local, they are more precise.

Dust devils

- It has detected/felt (but hasn't seen yet) thousands of passing whirlwinds, which are called dust devils when they pick up grit and become visible.

Security Matters

Curtain Raiser - DefExpo 2020

- The 11th edition of DefExpo-2020 has been recently held for the first time in Lucknow, Uttar Pradesh.
- This year's theme of the DefExpo India is '**India: The Emerging Defence Manufacturing Hub**' and the focus will be on '**Digital Transformation of Defence**'.
- DefExpo 2020 promises to bring new technologies, technological solutions, where Defence manufacturing companies from India and abroad showcase their products and services in Defence arena, on a single platform.

About DefExpo

- It is a flagship biennial event of the Ministry of Defence.
- Defence Ministers from 40 countries are attending the event.
- The 10th edition of the event was held at Chennai (Tamil Nadu) in 2018.

Pranash ballistic missile

- The Defence Research and Development Organisation has started developing a 200-km strike range tactical ballistic missile 'Pranash'.

About the Pranash ballistic missile

- It is a surface-to-surface missile.
- It will be a non-nuclear missile which will be propelled by a single-stage solid-propellant engine.
- The missile is capable of striking targets at a range of 200km.
- It will be of use for both the Air Force and Army.
- The missile is an advanced version of the 150-km strike range Prahar missile which was being developed for tactical missions.

Exercise AJEYA WARRIOR-2020

- The 5th edition of Joint Military Exercise AJEYA WARRIOR-2020 between India and the United Kingdom will be conducted at Salisbury Plains, United Kingdom.

About the Exercise AJEYA WARRIOR-2020

- The aim of this exercise is to conduct company level joint training with an emphasis on counter-terrorists operation in Urban and Semi-Urban areas.
- It is an important exercise in terms of the security challenges faced by both nations in the realm of changing facets of global terrorism.
- The exercise is conducted alternatively in the United Kingdom and India.
- It will also promote defence cooperation and enhance interoperability while sharing experiences between both the armies.

BIMSTEC Disaster Management Exercise

- National Disaster Response Force will host the second Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation Disaster Management Exercise in Odisha.

About the BIMSTEC Disaster Management Exercise

- The aim of the exercise is to test the existing emergency procedures for notification, preparedness and emergency response, during a major natural disaster.
- It will also test the multi-stakeholders' coordination in a disaster scenario involving international, national, state, district and local agencies
- Bangladesh, India, Myanmar, Sri Lanka and Nepal are participating in the exercise while Bhutan and Thailand, where travel restrictions are in place, will be absent.

About BIMSTEC



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- The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) is an international organization founded in 1997.
- It is headquartered in Dhaka, Bangladesh.
- It comprises seven Member states namely Bangladesh, India, Myanmar, Sri Lanka, Thailand, Bhutan, and Nepal.

About National Disaster Response Force

- The National Disaster Response Force is a specialised force constituted "for the purpose of specialist response to a threatening disaster situation or disaster" under the Disaster Management Act, 2005.
- National Disaster Response Force (NDRF) is under the National Disaster Management Authority
- National Disaster Management Authority is the "Apex Body for Disaster Management" in India.
- The Chairman of the NDMA is the Prime Minister.
- The 'Nodal Ministry' in the central government for the management of natural disasters is the Ministry of Home Affairs.

The US approves sale of Integrated Air Defence Weapon System to India

- The US has approved the sale of an Integrated Air Defence Weapon System to India also known as the NASAMS II.

About the National Advanced Surface to Air Missile System-II

- It is a network-centric short to the medium-range ground-based air defence system.
- The NASAMS-II will be tasked with protecting Indian interests from attacks by cruise missiles and aircraft.
- NASAMS-II is estimated to have a range of around 25km.

Munich Security Conference

- The External Affairs Minister has recently represented India at the Munich Security Conference being held in Munich, Germany.
- The theme of this year conference is 'Westlessness'

About the Munich Security Conference

- It is an annual conference on international security policy being held since 1963.
- The objectives of the conference are to address the topical main security issues and to debate and analyse the main security challenges.
- The conference is organized privately and therefore not an official government event

Exercise MILAN 2020

- Exercise MILAN 2020 will be conducted in Vishakhapatnam.
- The theme of MILAN 2020 is : **Synergy across the Seas**

About the Exercise

- It is a multilateral naval exercise hosted by the Indian Navy under the aegis of the Andaman and Nicobar Command.
- It was first held in 1995 and has been held biennially except for 2001, 2005, and 2016
- The first edition of the MILAN Exercises was in 1995 when just four countries from the neighbourhood including – Indonesia, Singapore, Sri Lanka, and Thailand participated.
- These countries mainly focused on promoting deeper cooperation in areas like maritime security and humanitarian assistance and disaster relief (HADR).

Note:

- 41 countries are expected to participate in Milan 2020.

IDSA renamed Manohar Parrikar Institute for Defence Studies and Analyses

- The Union government has decided to rename well-known think tank Institute for Defence Studies and Analyses (IDSA) as 'Manohar Parrikar Institute for Defence Studies and Analyses'.

About the Institute for Defence Studies and Analyses

- It is an Indian think tank for advanced research in international relations, especially strategic and security issues.
- It also provided training to civilian and military officers of the Indian government.
- It is funded by the Indian Ministry of Defence but operates as a non-partisan and autonomous body.
- It aims to promote national and international security by carrying out research on defence and security-related issues and disseminating the knowledge among the policymakers and wider public.

Joint IAF - RAF EX Indradhanush - V 2020

- The Indian Air Force (IAF) and Royal Air Force (RAF) jointly commenced the fifth edition of Ex Indradhanush.
- The focus of this edition of the exercise is '**Base Defence and Force Protection**'.
- This theme is of significance considering the recent threats to military establishments from terror elements.

About the Ex Indradhanush

- It provides a platform for the IAF and RAF to share and jointly validate strategies and tactics to counter terror threats to their installations.

Light Combat Helicopter

- Raksha Mantri has inaugurated the new Light Combat Helicopter Production Hangar at Helicopter Division in Hindustan Aeronautics Limited (HAL) Complex at Bengaluru, Karnataka.

About Light Combat Helicopter

- It is a 5.5-tonne class combat helicopter designed and developed by HAL.
- It is powered by two Shakti engines and inherits many technical features of the Advanced Light Helicopter.
- LCH has the distinction of being the first attack helicopter to land in Forward Bases at Siachen, 4,700 m above sea level with 500kg load.

YARD 45006 VAJRA: Offshore patrol vessel

- Union Shipping Minister has launched the sixth offshore patrol vessel 'Yard 45006 VAJRA'.

About the YARD 45006 VAJRA

- It helps to enhance coastal security.
- The vessel, built by Larsen and Toubro under the Centre's 'Make in India' campaign.
- The vessel is fitted with state-of-the-art machinery, equipment and navigation systems.
- The vessel would be utilised for day and night surveillance along with anti-terrorist, anti-smuggling operations in the exclusive economic zone.
- It is equipped with two diesel-driven engines and can reach a maximum speed of 26 knots.
- The ship would be fitted with CRN-91 and 12.7 mm guns and an integral twin-engine helicopter enhancing its operational, surveillance, search and rescue capability.
- It has two navigation radars with ultra-modern technology, sophisticated navigational and latest communication systems.

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