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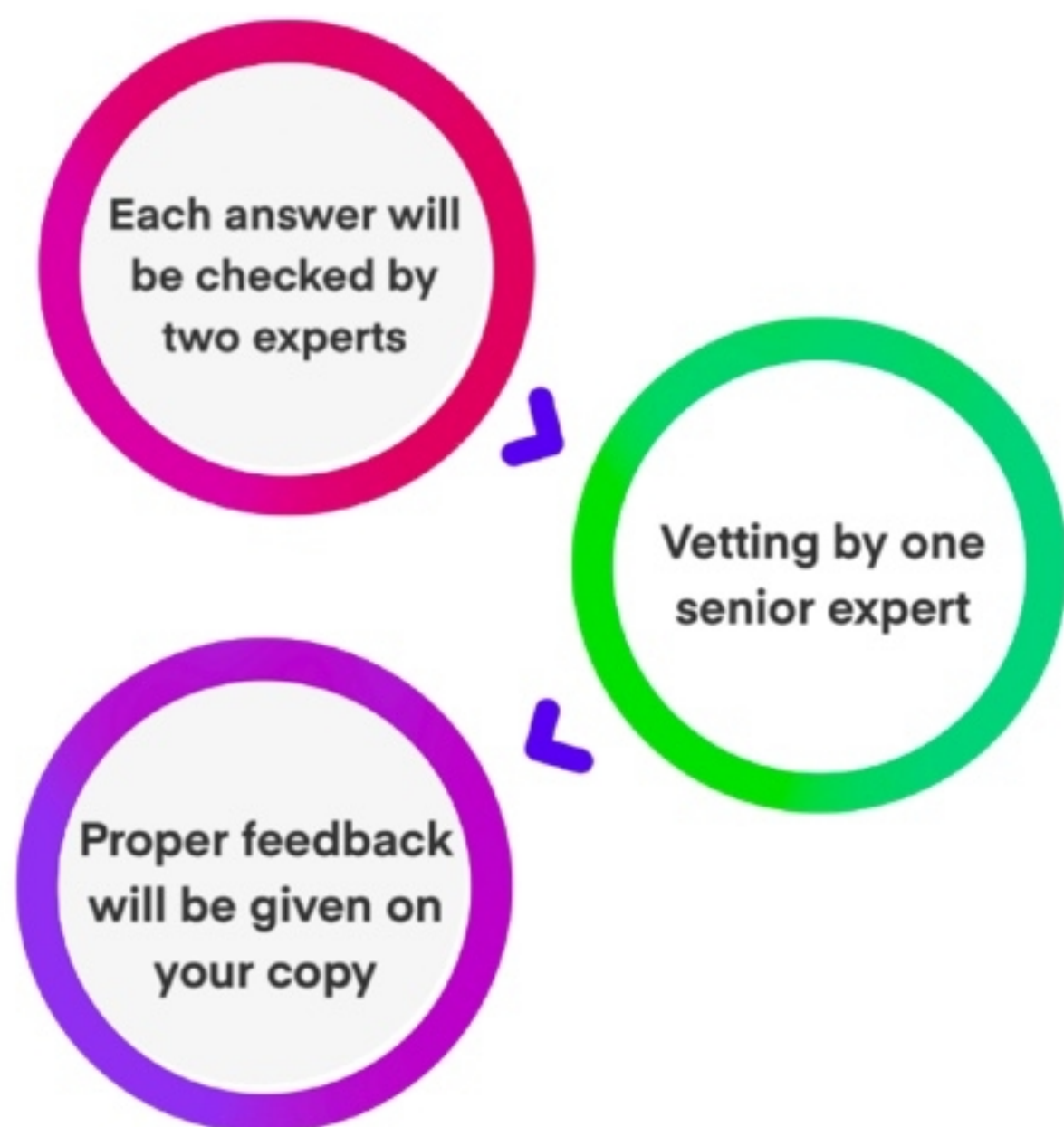
Candidate has to submit daily, **2 answers out of 6 questions** provided. **6 days a week**

The nature of questions will be strictly **based on syllabus and mix of static and current affairs**

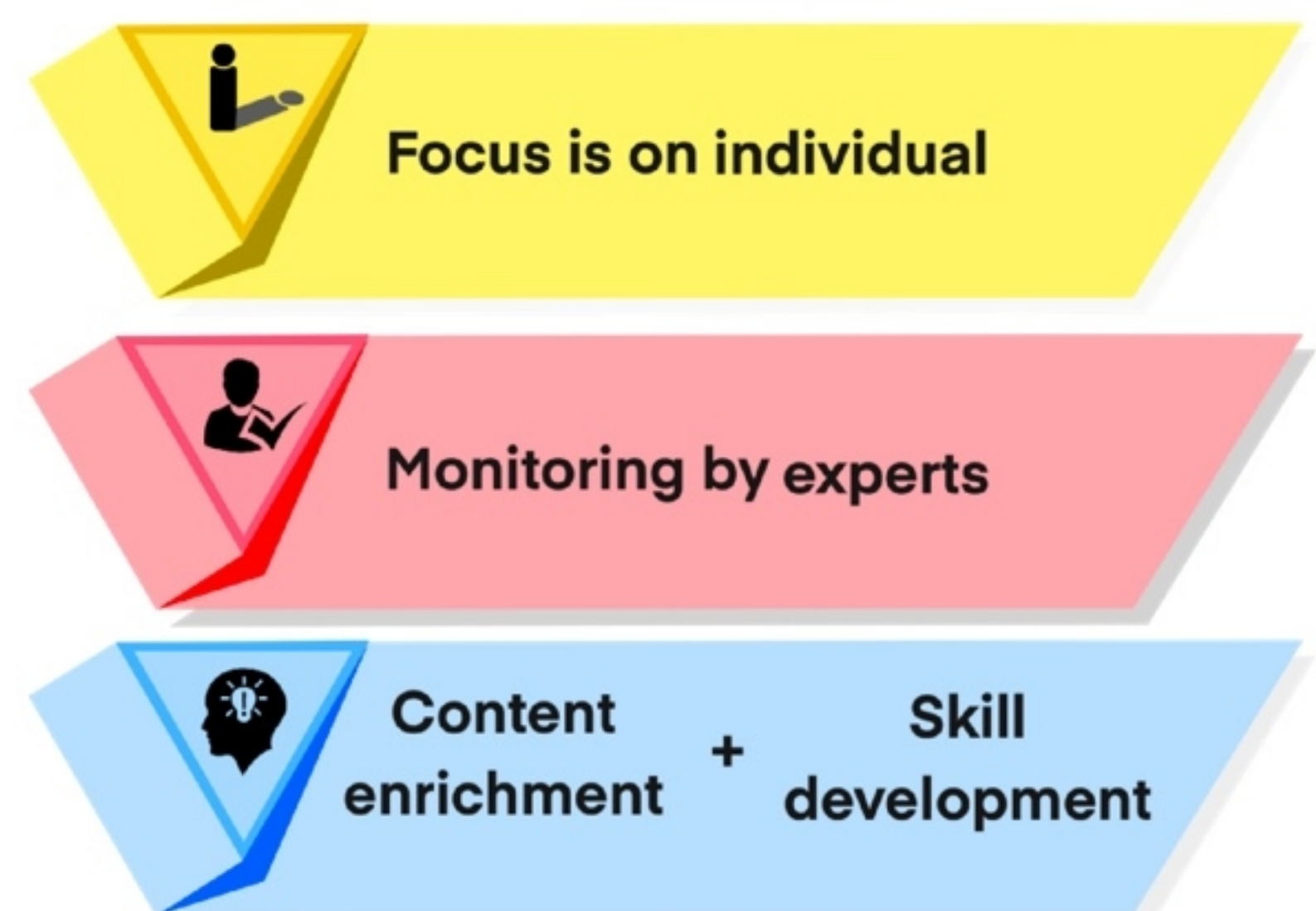
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ABOUT CURRENT CONNECT

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

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

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

Team KSG

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GS - II	Indian constitution- Amendments, acts and bills.	Legislative, executive and judicial processes.	Constitutional, non-constitutional, judicial, quasi-judicial, administrative and other types of bodies.	Federal structure and local bodies. Their powers and functions.	Government policies and various governance issues like transparency, accountability and – governance	Committees and schemes.	Non-government issues, self-help groups and role of civil society	Vulnerability sections of our society and social sector issues and initiatives	International Relation -India and other countries, various Indian and international agreements, effects of other countries on		
GS - III	Various measures to boost Indian economy- planning, policies, management.	Government budgeting and issues related to budget.	Agriculture, animal husbandry and transport	Food security- measures to boost food security and food processing. Issues related to land- land reforms	Industries and infrastructure- their growth and investment model	Space and technology, IT space, robotics and computer	Disease, biotechnology and human welfare	Innovations, intellectual property, Awards, POI and other import and export aspects of S&T	Environment: Government initiatives, various judgments, pollution, degradation and conservation efforts	Disaster & Management	Challenges to internal security, Various Security forces and agencies and their mandate. Cybersecurity: money laundering and its prevention.
GS - IV	Ethical issues related to family society, education, Corruption etc.	Ethics in public and private administrative	Issues	Related laws and rules	Governance/ Governance	Ethics in international issues	Personalities and their	Other important topics			
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POLITY

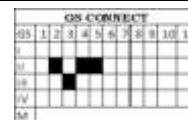
Farm Act and Federalism

News Excerpt

Recently the President of India gave assent to three farm bills (now acts) passed by the Parliament in the monsoon session 2020.

The three farm acts are:

1. The Farmers Produce Trade and Commerce (Promotion and Facilitation) Act, 2020;
2. The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020
3. The Essential Commodities (Amendment) Act, 2020



Condition of farmers

- Indian agriculture is highly unremunerative.
- The Committee on Doubling Farmers' Income (2017) observes, "the dependence of the rural workforce on agriculture for employment has not declined in proportion to the falling contribution of agriculture to GDP". At the time of Independence, about 70% of India's workforce was employed in the agriculture sector which accounted for around 54% of India's national income. As of 2019-20, 55% of Indians depend on agriculture and related activities which accounted for around 17% of contribution to national output.
- The combined result of several such inefficiencies is that most Indian farmers are heavily indebted. The data shows that 40% of the 24 lakh households that operate on landholdings smaller than 0.01 ha are indebted.
- The NABARD All India Rural Financial Inclusion Survey (NAFIS) shows that average agriculture household income was a mere Rs 8,931 per month in 2016-17.

Why new legal framework

- According to the government, the new Bills passed by Parliament attempt to make it easier for farmers to sell to and produce for the private sector.
- The hope is that liberalising the sector and allowing greater play for market forces will make Indian agriculture more efficient and more remunerative for the farmers.
- Lastly, the government hopes that these reforms, including the relaxations to stocking food articles, will boost the food processing industry.

Provisions of the Acts and Concerns

The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act, 2020

- ✓ **Trade of farmers' produce:** The Act allows intra-state and inter-state trade of farmers' produce outside: (i) the physical premises of market yards run by market committees formed under the state APMC Acts and (ii) other markets notified under the state APMC Acts. Such trade can be conducted in an 'outside trade area' including: (i) farm gates, (ii) factory premises, (iii) warehouses, (iv) silos, and (v) cold storages.
- ✓ **Electronic trading:** The Act permits the electronic trading of scheduled farmers' produce (agricultural produce regulated under any state APMC Act) in the specified trade area. An electronic trading and transaction platform may be set up to facilitate the direct and online buying and selling of such produce through electronic devices and internet. The following entities may establish and operate such platforms: (i) companies, partnership firms, or registered societies, having permanent account number under the Income Tax Act, 1961 or any other document notified by the central government, and (ii) a farmer producer organisation or agricultural cooperative society.
- ✓ **Market fee abolished:** The Act prohibits state governments from levying any market fee, cess or levy on farmers, traders, and electronic trading platforms for trade of farmers' produce conducted in an 'outside trade area'.
- ✓ Note that the Acts do not repeal the existing APMC laws (as done by Bihar), but limit the regulation of APMCs to the physical boundaries of the markets under their control.

Concerns raised

- ✓ Critics view the dismantling of the monopoly of the APMCs as a sign of ending the assured procurement of food grains at minimum support prices (MSP). To the Centre's 'one nation, one market' call, critics have sought 'one nation, one MSP'.
- ✓ Critics argue that ensuring a larger number of farmers get the MSP for their produce and straightening kinks in the APMCs, instead of making these State mechanisms redundant is the need of the hour.
- ✓ Many commentaries erroneously suggest that so far farmers had no choice but to sell their produce to rapacious middlemen operating in the mandis. This is far from the truth. Nationally representative data of agricultural households suggests that only 25% of all transactions in India during 2012-13 passed through these mandis, whereas 55.9% were sold to private traders.

The Farmers (Empowerment and Protection) Agreement of Price Assurance and Farm Services Act, 2020

- **Farming agreement:** The Act provides for a farming agreement between a farmer and a buyer prior to the production or rearing of any farm produce. The minimum period of an agreement will be one crop season, or one production cycle of livestock. The maximum period is five years, unless the production cycle is more than five years.
- **Pricing of farming produce:** The price of farming produce should be mentioned in the agreement. For prices subjected to variation, a guaranteed price for the produce and a clear reference for any additional amount above the guaranteed price must be specified in the agreement. Further, the process of price determination must be mentioned in the agreement.
- **Dispute Settlement:** A farming agreement must provide for a conciliation board as well as a conciliation process for settlement of disputes. The Board should have a fair and balanced representation of parties to the agreement. Appeals to boards decisions (or in case of failure to reach a decision within 30 day time limit) lies before Sub Divisional Magistrate followed by an appeal to an Appellate Authority (presided by collector or additional collector) against decisions of the Magistrate.

Concerns raised

- The Price Assurance Act, while offering protection to farmers against price exploitation, does not prescribe the mechanism for price fixation. There is apprehension that the free hand given to private corporate houses could lead to farmer exploitation.
- Critics are apprehensive about formal contractual obligations owing to the unorganised nature of the farm sector and lack of resources for a legal battle with private corporate entities.

Current farm marketing related legal framework:

- ❖ It has been heavily regulated by the government and protected from the free play of market forces.
- ❖ Agriculture Produce Marketing Committee (APMC) laws: Agricultural markets in India are mainly regulated by state APMC laws.
 - APMCs were set up with the objective of ensuring fair trade between buyers and sellers for effective price discovery of farmers' produce.
 - APMCs can: (i) regulate the trade of farmers' produce by providing licenses to buyers, commission agents, and private markets, (ii) levy market fees or any other charges on such trade, and (iii) provide necessary infrastructure within their markets to facilitate the trade.
- ❖ Minimum Support Price: MSP is the price at which the government buys a crop from a farmer. MSPs provide "guaranteed prices" and an "assured market" to farmers, and save them from price fluctuations.
- ❖ The Essential Commodities Act, 1955: It was enacted to stop the hoarding and black marketing of foodstuffs (and other essential items) to ensure its availability for common consumers at a reasonable price. It empowers the central government to designate certain commodities (such as food items, fertilizers, and petroleum products) as essential commodities.

The Essential Commodities (Amendment) Act 2020

- ✚ **Regulation of food items:** The Act removes cereals, pulses, oilseeds, edible oils, onion and potatoes from the list of essential commodities. The central government is allowed regulation of supply during war, famine, extraordinary price rise and natural calamity, while providing exemptions for exporters and processors at such times as well.
- ✚ **Stock limit:** The Act requires that imposition of any stock limit on agricultural produce must be based on price rise. A stock limit may be imposed only if there is: (i) a 100% increase in retail price of horticultural produce; and (ii) a 50% increase in the retail price of non-perishable agricultural food items. The increase will be calculated over the price prevailing immediately preceding twelve months, or the average retail price of the last five years, whichever is lower.

Concerns raised

- ✚ It may lead to exporters, processors and traders hoarding farm produce during the harvest season, when prices are generally lower, and releasing it later when prices increase.
- ✚ It may undermine food security since the States would have no information about the availability of stocks within the State.
- ✚ Critics anticipate irrational volatility in the prices of essentials and increased black marketing.

A common concern in all three Acts

- ◇ Undermining of Cooperative Federalism: Since agriculture and markets are State subjects – entry 14 and 28 respectively in List II – the Acts are being seen as a direct encroachment upon the functions of the States and against the spirit of cooperative federalism enshrined in the Constitution.
- ◇ The Centre, however, argued that trade and commerce in food items is part of the concurrent list, thus giving it constitutional propriety.

Way Forward

- ▽ Constitutional division of law making power between Center and states should be respected. Instead of Center passing umbrella legislations on items mentioned in the state list, unions may nudge states to pass their own laws. Indeed several states like Bihar have either already repealed APMC acts or have reformed their acts.
- ▽ Center should ensure that farmers are not exploited by powerful corporations. There should be a guideline for determining and enforcing a minimum price for each produce, in absence of which private players will dictate price to small farmers.
- ▽ Farmers should come together to make “Farmers Producers Organisations”. These FPOs should negotiate prices with private players instead of individual farmers.
- ▽ Need to improve both Public and Private investment in post harvest infrastructure: Mere removing restrictions from selling produce to APMC will not be sufficient as experience of Bihar shows. APMC act was abolished but condition of farmers in Bihar has not substantially improved.
- ▽ Responsive grievance redressal mechanism is required to resolve any conflict between two contracting parties. Currently India has a very poor record on contract enforcement.

Mission Karmayogi: National Programme for Civil Services Capacity Building

News Excerpt

The Union Cabinet has approved launching of a National Programme for Civil Services Capacity Building (NPCSCB).

Pre-Connect

- It is also proposed to set up a Capacity Building Commission, with a view to ensure a uniform approach in managing and regulating the capacity building ecosystem on collaborative and co-sharing basis.
- A Public Human Resources Council comprising of select Union Ministers, Chief Ministers, eminent public HR practitioners, thinkers, global thought leaders and Public Service

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functionaries under the Chairmanship of Prime Minister will serve as the apex body for providing strategic direction to the task of Civil Services Reform and capacity building.

- It will have a Coordination Unit headed by the Cabinet Secretary.
- To cover around 46 lakh Central employees, a sum of Rs.510.86 crore will be spent over a period of 5 years from 2020-21 to 2024-25.
- The expenditure is partly funded by multilateral assistance to the tune of USD 50 million.
- A wholly owned Special Purpose Vehicle (SPV) for NPCSCB will be set up under Section 8 of the Companies Act, 2013.



Salient Features

NPCSCB has been carefully designed to lay the foundations for capacity building for Civil Servants so that they remain entrenched in Indian Culture and sensibilities and remain connected, with their roots, while they learn from the best institutions and practices across the world. The Programme will be delivered by setting up an Integrated Government Online Training-iGOT-Karmayogi Platform. The core guiding principles of the Programme will be:

- Supporting Transition from 'Rules based' to 'Roles based' HR Management. Aligning work allocation of civil servants by matching their competencies to the requirements of the post.
- To emphasize on 'on-site learning' to complement the 'off-site' learning
- To create an ecosystem of shared training infrastructure including that of learning materials, institutions and personnel
- To calibrate all Civil Service positions to a Framework of Roles, Activities and Competencies (FRACs) approach and to create and deliver learning content relevant to the identified FRACs in every Government entity
- To make available to all civil servants, an opportunity to continuously build and strengthen their Behavioural, Functional and Domain Competencies in their self-driven and mandated learning paths.
- To enable all the Central Ministries and Departments and their Organizations to directly invest their resources towards co-creation and sharing the collaborative and common ecosystem of learning through an annual financial subscription for every employee,
- To encourage and partner with the best-in-class learning content creators including public training institutions, universities, start-ups and individual experts
- To undertake data analytics in respect of data emit provided by iGOT- Karmayogi pertaining to various aspects of capacity building, content creation, user feedback and mapping of competencies and identify areas for policy reforms.

Role of Commission

- ✓ To assist the PM Public Human Resources Council in approving the Annual Capacity Building Plans.
- ✓ To exercise functional supervision over all Central Training Institutions dealing with civil services capacity building.
- ✓ To create shared learning resources, including internal and external faculty and resource centers.

PEPPER IT WITH

Article 312, Article 315, Union Public Service Commission, State Public Service Commission, Joint Public Service Commission, National Recruitment Agency

- ✓ To coordinate and supervise the implementation of the Capacity Building Plans with the stakeholder Departments.
- ✓ To make recommendations on standardization of training and capacity building, pedagogy and methodology
- ✓ To set norms for common mid-career training programs across all civil services.
- ✓ To suggest policy interventions required in the areas of HR Management and Capacity Building to the Government.

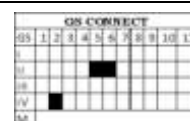
Conclusion

Mission Karmayogi aims to prepare the Indian Civil Servant for the future by making him more creative, constructive, imaginative, innovative, proactive, professional, progressive, energetic, enabling, transparent and technology-enabled. Empowered with specific role-competencies, the civil servant will be able to ensure efficient service delivery of the highest quality standards.

Committee on Content Regulation in Government Advertising

News Excerpt

Meeting of Supreme Court of India mandated Committee on Content Regulation in Government Advertising (CCRG) was recently held virtually.



Pre-Connect

- As per directions of the Supreme Court, states are mandated to set up their respective three member committees on content regulation of government advertisements.
- Committee should be empowered to address complaints from general public on violation of the Supreme Court's guidelines and make suitable recommendations.
- Karnataka, Goa, Mizoram and Nagaland have already constituted 3 member committees.
- Chhattisgarh has given its consent to the Central Committee to monitor the content of their government advertisements.

Background

- As per the directions of the Supreme Court in the case of **"Common Cause vs. Union of India, 2015"**, Centre in 2016 had set up a 3-member body consisting of "persons with unimpeachable neutrality and impartiality and who have excelled in their respective fields", to look into content regulation of government funded advertisements of all media platforms.
- Apex Court's guidelines dated 13th May, 2015:
 - Advertisement should be relevant to the government's constitutional and legal obligations as well as the citizen's rights and entitlements.
 - Advertisement should be presented in an objective, fair and accessible manner and designed to meet the objectives of the campaign.
 - Advertisement materials should be objective and not directed at promoting political interests of ruling party.
 - Advertisement Campaigns be justified and undertaken in an efficient and cost-effective manner.
 - Government advertising must comply with legal requirement and financial regulations and procedures.

Highlights

- ✓ The meeting was chaired by Om Prakash Rawat, former Chief Election Commissioner of India, attended by two other members, Ramesh Narayan from Asian Federation of Advertising Associations, and Ashok Kumar Tandon from Prasar Bharti Board.
- ✓ CCRGA meeting took a serious note of the fact that other states are yet to constitute committees.
- ✓ CCRGA was of the view that some states delay in setting up the committees may be construed as contempt of Supreme Court's order.
- ✓ CCRGA's attention was also drawn to the fact that some respondents were yet to furnish their replies to the notices issued to them in response to the complaints received by the Committee.

PEPPER IT WITH
Article 19(1)(a), Prasar Bharati, Editor's Guild of India, Press Trust of India, Bhasha, United News of India, UNI-Varta

- ✓ In view of the Covid19, the Committee decided to allow further time to respondents to furnish their replies to the notices in all the pending complaints.
- ✓ CCRGA felt that non-compliance of its decisions was a serious matter.
- ✓ The Committee may, if necessary, also decide to summon the concerned official of the agencies dealing with release of advertisements in the event of undue delay in responding to Committee's notices.

Analytica

- The principle behind government advertisements is to enhance awareness of the people regarding government schemes and projects, welfare programs, and other such state initiatives.
- These government advertisements inform people about potential entitlements, eligibility conditions, application portals, and other such necessary details.
- It becomes critical that the government spends money in a way to ensure that the maximum number of people are made aware of these benefits.
- Politicians frequently claim they do not discriminate while giving advertisements on the basis of caste, class, religion, or ideology, but it's not considered as true.
- The fundamental right to information of the citizens is violated time and again.
- Due to underdeveloped revenue models, newspapers are especially dependent on revenue from government advertisement. This threatens its independence.
- By starving them of funds despite their evident popularity, the government also muzzles their voices.

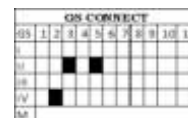
Conclusion

Publicizing a leader or a party's greatness at public expense and at the cost of conveying valuable information is a blatant misuse of public funds for private and political gains. The ads become more a source of self-aggrandizement rather than a genuine attempt at informing people. Corrective steps must be taken to ensure that this do not happen.

Timelines for Publicity of Criminal Antecedents

News Excerpt

As part of efforts help the voters in exercising their choices in a more informed manner and discourage political parties from fielding persons with criminal antecedents in the election, the Election Commission issued revised guidelines for publishing such antecedents in the newspapers and television.



Pre-Connect

- In October, 2018, EC had issued directions making it compulsory for candidates contesting elections and the parties fielding them to advertise their criminal antecedents in TV and newspapers at least three times during electioneering.
- A Compendium of all instructions and formats issued so far, regarding the timelines for publicity of criminal antecedents, is being published for the benefit of stakeholders.
- It will be helpful in creating more awareness amongst the voters and other stakeholders.
- All instructions, in this regard, must be complied by the contesting candidates with criminal antecedents and the political parties regarding their nominated candidates.
- Commission has always emphasised on this moral yardstick for overall betterment of electoral democracy.
- The modified instructions applied with immediate effect.
- In consequence, candidates contesting the upcoming Bihar elections as well as those fighting 64 assembly by polls and one Lok Sabha by-election in the coming days will have to adhere to the new timeline while advertising their criminal antecedents.

PEPPER IT WITH

Art. 324&326, Salient Features of Representation of the People's Act, 1951

Highlights

A. Revised Timeline for Publicity

Candidates as well as the political parties, regarding candidates nominated by them, will publish the details of criminal antecedents, if any, in newspapers and television in following manner:

I publicity: Within first 4 days of last date of withdrawal.

II publicity: Within 5th to 8th day of last date of withdrawal

III publicity: From 9th day till the last day of campaign, i.e. two days prior to date of poll.

B. Publicity for Uncontested Winning Candidates

The uncontested winner candidates as well as the political parties who nominate them shall also publicise the criminal antecedents, if any, as prescribed for other contesting candidates and political parties.

Supreme Court Directives

- In February this year, the Supreme Court had ordered all political parties to publish the criminal history of their candidates for Assembly and Lok Sabha elections.
- The Apex Court directed that it shall be mandatory for political parties to upload on their website detailed information regarding individuals with pending criminal cases who have been selected as candidates, along with the reasons for such selection, as also as to why other individuals without criminal antecedents could not be selected as candidates.
- The reasons as to selection shall be with reference to the qualifications, achievements and merit of the candidate concerned, and not mere 'winnability' at the polls," the court had ordered.
- The EC had welcomed the move and issued notification in this regard.

Conclusion

The move is significant because the new guidelines will now mean that the declaration by candidates with criminal antecedents will have to spread over three rounds of publicity beginning with soon after filing nomination and ending towards the end of campaign period. EC felt in absence of detailed timelines, candidates had the option of clubbing publicity of such records.

Institute of Teaching and Research in Ayurveda Bill, 2020

News Excerpt

The Institute of Teaching and Research in Ayurveda Bill 2020 has been passed by Rajya Sabha. The Bill was earlier passed in Lok Sabha on 19th March, 2020.

GS CONNECT											
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12

Pre-Connect

- It paves the way to establish a state-of-the-art Ayurvedic institution called the Institute of Teaching and Research in Ayurveda (ITRA) at Jamnagar, Gujarat, and to confer the status of Institution of National Importance (INI) to it.
- ITRA will be the first institution with INI status in the AYUSH Sector, and this will enable the institution to be independent and innovative in the matter deciding course content and pedagogy.

Highlights

- The ITRA is sought to be established by conglomerating the presently existing Gujarat Ayurveda University campus, Jamnagar. This is a cluster of highly reputed institutions, as follows:
 - Institute for Post Graduate Teaching and Research in Ayurveda
 - Shree GulabKunverbaAyurveda Mahavidyalaya
 - Institute of Ayurvedic Pharmaceutical Sciences
 - MaharshiPatanjali Institute for Yoga Naturopathy Education & Research

PEPPER IT WITH

Ayurveda, Yoga and Naturopathy, Unani, Siddha, Homeopathy, DirectorateGeneral of Health Services, National Health Policy, National Health Portal

- These institutions had come up over the past many decades, and together made a unique family of Ayurveda institutions existing in close proximity.
- Among the above, Maharshi Patanjali Institute for Yoga Naturopathy Education & Research, will be formed part of the Department of Swasthivritta of the proposed ITRA.

Analytica

- ✓ It is expected that the enactment of the proposal will further provide autonomy to the institute to develop patterns of teaching in undergraduate and postgraduate education in Ayurveda and Pharmacy.
- ✓ The synergies among the different constituent institutions will help ITRA to demonstrate high standards of such education and to emerge as a lighthouse institution to the entire AYUSH Sector.
- ✓ It is expected to provide the highest level of training of personnel in all important branches of Ayurveda including Pharmacy, and to take up in-depth study and research in the field of Ayurveda.

Conclusion

The decision to establish a state-of-the-art Ayurvedic institution and to confer it the status of Institution of National Importance, comes at a time when global interest in health solutions based on traditional wisdom is at an unprecedentedly high level and ITRA is poised to take Ayurveda education to new vistas.

Criminal Law Reform Committee

News Excerpt

The Ministry of Home Affairs has commissioned a Committee for Reforms in Criminal Laws, to “recommend reforms in the criminal laws of the country in a principled, effective, and efficient manner which ensures the safety and security of the individual, the community and the nation; and which prioritises the constitutional values of justice, dignity and the inherent worth of the individual.”

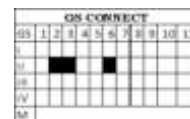
Pre-Connect

- The five-member all-male committee is headed by Professor Ranbir Singh, founder Vice Chancellor of the National Law University, Delhi. With his vast teaching and administrative experience, considering he was also the founder Vice Chancellor of NALSAR, University of Law, Hyderabad.

Background

- The Indian Penal Code (IPC) is almost 160 years old and not any major effort was made to look into the whole gamut of criminal law reforms.
- This committee is looking into the IPC, the Cr. P. C. (the Code of Criminal Procedure), the Indian Evidence Act and the Narcotics Act.
- These laws being colonial laws—they were drafted when there was no Universal Declaration of Human Rights, and we didn't also have our own Constitution.
- Now we should look at the laws to examine whether they are compatible with international covenants and our Constitution.

No effort was made to look into the criminal laws from the point of view of the Constitution and particularly fundamental human rights.



Cases and convictions

In 2017, while the chargesheeting and conviction rates in cases of 'rape' and 'murder with rape' were well above the overall rate on violent crimes, the pendency rates were similar. The pendency rates, in courts, in the case of crimes against Dalits were much higher



All figures in %	Rape	Murder with rape	All crimes against women	Crimes against Dalits	All violent crimes
Chargesheeting rate	86.6	95	78.3	82.6	82.6
Pendency rate (police station)*	29.3	32.9	32.9	27.8	28.2
Conviction rate	32.2	57.9	23.9	35.3	30.9
Pendency rate (court)**	87.5	90.1	89.6	91.7	87.8

*Number of cases in the police station pending investigation at the end of the year relative to the total number of cases for investigation

**Number of cases pending trial at the end of the year relative to the total number of cases for trial

SOURCE: NCRB 2017

- Malimath Committee gave good recommendations, but its mandate was different and it did not look at the whole landscape of criminal law reforms.
- These reforms were long overdue and probably there is a need to seriously look into what is required and what should be expunge.

The guiding principles of this committee are

- Primacy of constitution
- Primacy of human rights
- Simplified, unambiguous and consistent procedure
- Fair and time bound investigation as well as trial
- Transparency and accountability
- Victim justice
- Principled sentencing
- Infusing techno-centricity
- Revisiting the relationship between the state and the individual
- Balancing the rights of the victims vis-à-vis the accused

PEPPER IT WITH

Salient Features of Criminal Procedure Code, 1973; Indian Evidence Act, 1872; Indian Penal Code, 1860; Article 50

Objectives of the Committee

1. The Committee is required to look at substantive criminal law, procedural law and law of evidence. Under substantive criminal law it is looking at revising definitions of offences, punishments, reviewing amounts of fine, identifying offences requiring addition to the IPC, identifying redundant offences and so on.
2. Under procedural law, the committee will largely look at restructuring the Criminal Procedure Code (Cr. P. C.) in line with the preferred model of criminal process and specifically it looks at Streamlining the trial process, strengthening the plea-bargaining process, reforming punishments, developing a coherent sentencing policy, aligning the code with judicial decisions and so on.
3. The mandate for the law of evidence is for examining exclusionary rules for admissibility of evidence, update admissibility of electronic evidence and so on.

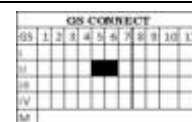
Conclusion

The criminal justice system is skewed against the poor and the vulnerable not only because of the laws but also because of the poor implementing by agencies. The report is only one part of that. Apart from that, the committee requires to look after every concern carefully.

eGram Swaraj Portal

News Excerpt

To strengthen e-Governance in Panchayati Raj Institutions (PRIs) across the country, Ministry of Panchayati Raj has launched eGram Swaraj, a user-friendly web-based portal.



Pre-Connect

- Prime Minister Narendra Modi has launched two mobile portals eGram Swaraj Portal & Swamitva Scheme on April 24, 2020.
- eGram Swaraj aims to bring in better transparency in the decentralised planning, progress reporting and work-based accounting.
- The portals can be accessed at egramswaraj.gov.in and can be downloaded on the mobile.
- The portal has been launched for the improvement of society.
- The portals were launched through video conferencing with Sarpanches of panchayats across the nation.
- The eGram Swaraj Portal marks the complete digitization of the villages to strengthen e-governance in Panchayati Raj institutions in the whole country.

Panchayats and municipalities need to be empowered to ensure Atmanirbharta for country.

What is Gram Swaraj Portal/App?

- The egramswaraj.gov.in portal is one single interface on which the details are listed panchayat wise.

- The platform will provide records of work from planning to the implementation in every village panchayat under Gram Panchayati Development Plan (GPDP).

What is the benefit of Gram Swaraj Portal/App?

- ✓ Monitoring and recording all the work via Gram Swaraj Portal/App will help speed-up the implementation of projects in village areas.
- ✓ As it will contain the details of ongoing development works and the fund allocated for the projects, one can access and know about the groundwork.
- ✓ All the details related to Panchayat Sachiv and Panch can be viewed on Gram Swaraj Portal.
- ✓ The works of the Ministry of Panchayati Raj are accessible through Gram Swaraj Portal.
- ✓ The Gram Swaraj Portal and application provides a boost in transparency by decentralized planning of development projects, with progress reports updates and increased accountability.

PEPPER IT WITH
Part X of the Constitution, 73rd
and 74th Constitutional
Amendment Act, e-governance

Who can create an account on the Gram Swaraj Portal/App?

- Anybody can create an account on the Gram Swaraj Portal and know about the developmental works of villages.
- The Gram Swaraj Portal and mobile application will boost e-governance in the Panchayati Raj Institutions across the nation.

Conclusion

Nearly 70 per cent of India's 1.3 billion population lives in rural areas. India have municipalities in the urban areas and panchayats in the rural areas. Good governance depends on the effective working of these local institutions. Therefore, the transformation of India depends on how well the panchayats function. In 2017, Prime Minister Narendra Modi said, "Panchayats are effective ways to fulfil the aspirations of people in rural India. They are playing a vital role in India's transformation." Since then, there has been a continuous and systematic effort to empower the panchayats with the necessary powers and provisions so that they work in an effective and transparent manner.

Insolvency and Bankruptcy Code Bill (Second Amendment)

News Excerpt

Lok Sabha passed the Insolvency and Bankruptcy Code (Second Amendment) Bill, which provides that insolvency proceedings against defaulting companies will not be initiated for at least six months starting from March 25.

KSG CONNECT										
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89	90	91	92	93	94	95	96	97	98	99
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Pre-Connect

- The Insolvency and Bankruptcy Code (Second Amendment) Bill, 2020 was introduced in Rajya Sabha. It amends the Insolvency and Bankruptcy Code, 2016.
- The Code provides a time-bound process for resolving insolvency in companies and among individuals.
- Insolvency is a situation where individuals or companies are unable to repay their outstanding debt.
- The Bill seeks to temporarily suspend initiation of the Corporate Insolvency Resolution Process (CIRP) under the Code.
- It replaces the Insolvency and Bankruptcy Code (Amendment) Ordinance, 2020 promulgated on June 5, 2020.
- Comparing the performance, the recovery rate under the Code was 42.5%, while under Lok Adalat (2018-19): the figure was 5.3%; DRT proceedings had led to 3.5% recovery and under the SARFAESI Act, 14.5% of the dues were recovered.

PEPPER IT WITH
Lok Adalat, Debt Recovery
Tribunal, SARFAESI Act,
NCLT, NCLAT

Prohibition on the initiation of CIRP for certain defaults

- When a default occurs, the Code allows the creditors of the company or the company itself to initiate CIRP by filing an application before the National Company Law Tribunal (NCLT).

- The Bill provides that for defaults arising during the six months from March 25, 2020, CIRP can never be initiated by either the company or its creditors.
- The central government may extend this period to one year through notification.
- The Bill clarifies that during this period, CIRP can still be initiated for any defaults arising before March 25, 2020.

Liabilities for wrongful trading

- ✓ Under the Code, a director or a partner of the corporate debtor may be held liable to make personal contributions to the assets of the company in certain situations.
- ✓ This liability can occur if despite knowing that the insolvency proceedings cannot be avoided, the person did not exercise due diligence in minimising the potential loss to the creditors.
- ✓ The Resolution Professional is appointed to manage the resolution process upon the acceptance of an application for initiation of CIRP.
- ✓ The legislation prohibits the Resolution Professional from filing such an application in relation to the defaults for which initiation of CIRP has been prohibited.

Concerns

- The amendments had a lot of grey areas, leaving loopholes for large debtors.
- The worst casualty would be the MSME sector, which employed 1.2 million people and catered to large corporates.
- The amendments would adversely impact the concepts of asset maximisation and entrepreneurship.

Clarifications

- ✚ The government clarifies that the Code was not a recovery law.
- ✚ The creditors, including MSMEs, had several other options to recover their claims.
- ✚ The proposed amendments, brought in the form of an Ordinance on June 5, suspended the application of three provisions to prevent any company, stressed due to the COVID-19 situation, from being pushed into insolvency proceedings.
- ✚ A proviso for further extension of six months has also been given. The initial six-month period ended on September 24.

Conclusion

A blanket suspension of the provisions of IBC 2016 without exploring alternatives to debt restructuring and debt recovery will further aggravate the economic crisis and increase financial distress. Corporate debtors would take an advantage, accelerate the debt during the time-period of suspension and would try to find a permanent escape out of the incurred debt. Therefore, it is important to look at the existing provisions in law regarding the resolution of debt that strikes a balance between the interests of all the stakeholders and introduce measures to fast-track the resolution process.

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SOCIAL ISSUES, SCHEMES, REPORTS & INDICES

Family Pension for divorced daughters

News Excerpt

Now divorced daughter can receive family pension even if the divorce has not finally taken place but the divorce petition has been filed by her, according to the rule change and other reform initiative of the Department of Pension and Pensioner's welfare.

Pre-Connect

The earlier rule provided for payment of Family Pension to a divorced daughter only if the divorce had taken place during the lifetime of deceased parent pensioner or his spouse.

More about the new rule

- The new circular will not only bring ease in the life of pension receiving individuals but also ensure respectable and equitable rights for the divorced daughters in the society.
- Orders have also been issued for grant of Family Pension to a Divyang child or sibling even if the Disability Certificate is produced after the death of the pensioner parent but the disability had occurred before the death of the parents.
- For Divyang pensioners, the Attendant Allowance for the helper has been increased from Rs. 4,500 per month to Rs. 6,700 per month.
- For senior citizens who have gone and settled abroad with their children after retirement, the concerned Bank Branch abroad and the Indian Embassy/ Consulate/ High Commission have been instructed to provide Life Certificate and commencement of Family Pension there itself.
- All Pension Disbursing Banks have been instructed to provide doorstep Life Certificate to those pensioners who are unable to visit the bank.

The Department of Pension & Pensioners' Welfare

It is the nodal department for formulation of policies relating to pension and other benefits of Central Govt. employees covered under CCS (Pension) Rules, 1972. Apart from formulation of pension policy for the Central Govt. pensioners/Family Pensioners, it also seeks to promote pensioners welfare and serves as a forum for the redressal of Pensioners' grievances.

However, the pensioners of Ministries of Railways and Defence are governed by their respective pension rules having their independent administrative set up. The employees working in the establishments belonging to the class of industries/ other establishment listed in the schedule appended to EPF & MP Act. 1950 are covered under EPS Scheme administered by Ministry of Labour. Further, the pensionary matters of those who joined/ would join Central Government on or after 1.1.2004, are dealt by Ministry of Finance (Department of Financial Services) under National Pension System.

PEPPER IT WITH

Hindu succession Act 2005, Deendayal disabled rehabilitation scheme, SC's verdict on Women Right to Inheritance

Centralized Farm Machinery Performance Testing Portal

News Excerpt

Recently, Union Minister for Agriculture and Farmers Welfare launches "Centralized Farm Machinery Performance Testing Portal" in the public domain.

Pre-connect

The portal has been developed by the Department of Agriculture, Cooperation and Farmers Welfare as a further step to improve services of farm machinery testing institutions and to bring out transparency in the entire process of testing and evaluation of machines.

Analytica

Meaning and purpose of Agricultural mechanization

- It is the process of improving farm labour productivity through the use of agricultural machinery, implements and tools.
- Apart from cost reduction and productivity increase, it also results in a significant modification of the social structure in rural areas. It frees the farmers from much of the laborious, tedious, hard work on the farms. The pressure on land decreases and the status of the farmers improves.

Importance of testing of farm machineries

Testing and evaluation of agricultural machinery encourages improvement in quality and functional suitability. Comparable data for similar machines is available to manufacturers, which help them in improving the design of their product and open up avenues in commercialization of agricultural machinery not only on national level but also Globally.

Why portal launched?

- To build on the momentum of significant increase in adoption of agricultural machines which has resulted in the phenomenal expansion of cropped area, cropping diversity and the country's agricultural production.
- For promoting agricultural mechanization and to design farm equipment which can be utilized in cost effective manner by small and marginal farmers.
- To incentivise manufacturers in producing farm machineries.

PEPPER IT WITH
FMTTIS, DAC&FW, Farm Machinery Training & Testing Institutes and Yantra Laxmi Scheme

About the portal

- ✓ This portal will facilitate manufacturers in applying, communicating and monitoring the progress of testing of their machines in a seamless manner as it is easily accessible from any location and from any device connected to the Internet.
- ✓ It offers the possibility of integrated management in a unified manner within the organization and thus will help in improving the efficiency of the testing institutes thereby reducing testing time for various agricultural machines and equipments.

The portal offers following benefits to the users

- In line with Government Policy of "Ease of Doing Business", this would facilitate applying for testing of machinery online.
- Ensure Transparency in the entire processes of testing.
- Faster Feedback
- Help in Reducing testing Time
- Reduced Business Expenses of Agricultural Manufacturers
- Testing Efficiency Improvement
- Thoroughness in Testing
- Flexible Access – Officers concerned at Ministry and manufacturers can monitor testing activities from anywhere with internet access.

Farm Mechanization Scheme

Under the Farm Mechanization Scheme, the center encourages to inculcate the use of modern machinery and techniques. Accordingly, in the case of small, marginal, and SC/St farmer, it provides a 35% subsidy for tractor and 50% for other machines.

Some of the scheme are:

1. **Rashtriya Krishi Vikas Yojana (RKVY)**
2. **National Food Security Mission (NFSM)**
3. **Sub-Mission on Agricultural Mechanization (SMAM)**
4. **NABARD loans in India:** This scheme offers every farmer the opportunity to purchase necessary machines.

Way Forward

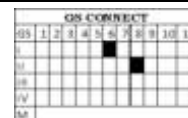
Establishing of farm equipments testing infrastructure is an important step in increasing farm productivity. However other steps like consolidation of farm holdings, awareness generation

among farming communities and training farmers in handling sophisticated farm equipments are further required to take full benefit of agricultural mechanisation.

National Tribal Research Conclave

News Excerpt

Recently, Ministry of Tribal Affairs & Indian Institute of Public Administration organized a two days 'National Tribal Research Conclave' virtually.



Pre-Connect

The conclave discussed and reviewed the outcome and the best practices of various research projects being implemented under partnerships with Tribal Research Institutes (TRIs) and other stakeholders.

Recent Initiatives taken by government for tribal welfare

- An agreement has been signed between Ministry of Tribal Affairs and Indian Institute of Public Administration (IIPA) for setting up National Tribal Research Institute (NTRI) in their campus.
- NTRI would help in better coordination and management among TRIs and would go a long way in improving tribal research resulting in evidence based planning and development of tribal areas across the country.
- Special attention in terms of analysis and overall implementation of the programmes and projects initiated is given to Ladakh.
- Announcement of new projects with themes such as Health, Livelihood, Education, Digitalization, Water Conservation, Data Sciences and Development Models for aspiration and model villages.
- Swasthya Portal is compiling tribal Health and Nutrition data for 177 districts captured from M/oH&FW, M/o WCD and various districts.
- Ministry of Tribal Affairs has also taken a multi-pronged initiative to promote sustainable livelihood in the villages of Ladakh region.
- This initiative would largely focus on productivity enhancing, harvesting, post-harvesting, processing and marketing of various products belonging to Ladakh region.
- Tribal Digital Document Repository', is an innovative step towards providing a common platform for all the documentation (Research Reports/Published Books/Monographs/Evaluation Reports/Documentaries) prepared by the TRIs and CoEs pertaining to tribals.
- To support and resolve the water problems in the tribal areas, UNDP India is working on 1000 springs project with community participation to revive drying streams.

National Training Academy for Rural Self-Employment Training Institutes

- ❖ Ministry of Rural Development laid e-Foundation stone laying ceremony of new training Institute of National Academy of RUDSETI (NAR) at Bengaluru.
- ❖ National Academy of RUDSETI (NAR) is a resource organization committed to Entrepreneurship Development through motivation, training and facilitation.
- ❖ It is an exceptional joint venture promoted by two public sector Banks and an Educational Trust of Sri KshetraDharmasthala.
- ❖ NAR has been established to spread RUDSETI model of Entrepreneurship Development, which has been found effective in motivating the unemployed youth to take up self-employment as a career option.
- ❖ National Academy of RUDSETI (NAR), an offshoot of RUDSETI movement is spearheading the concept by Training the Trainers/facilitators and mentoring the Rural Self Employment Training Institutes (RSETIs) established across the country.
- ❖ The NAR is also in to capacity building of development organizations by orienting and training the rural development workers and development officials.

PEPPER IT WITH

NTRI, Swasthya Portal, UNDP India, and VVKI

- Vyakti Vikas Kendra India (VVKI) aim to create social change in the tribal communities and lead them towards overall socio-economic development.
- Tribal Healers and Tribal medicines: Tribals have vast traditional knowledge of treating diseases with locally available medicinal plants. In order to protect this knowledge, which is fast vanishing, Patanjali Research Institute has been given pilot project for research on Tribal Healers and Medicinal Plants in Uttarakhand.

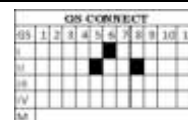
Conclusion

Experiments & researches have proved that it is possible to develop entrepreneurship by motivation, proper training & facilitation. RUDSETI has experimented this and achieved success. Highly encouraging success of this approach has resulted in developing lakhs of entrepreneurs out of un employed or un employable youth across the country. It is time to further promote such activities to general employment in tribal areas.

Global Multidimensional Poverty Index

News Excerpt

Recently, NITI Aayog as the nodal agency has been assigned the responsibility of leveraging the monitoring mechanism of the Global Multidimensional Poverty Index (MPI) to drive reforms.

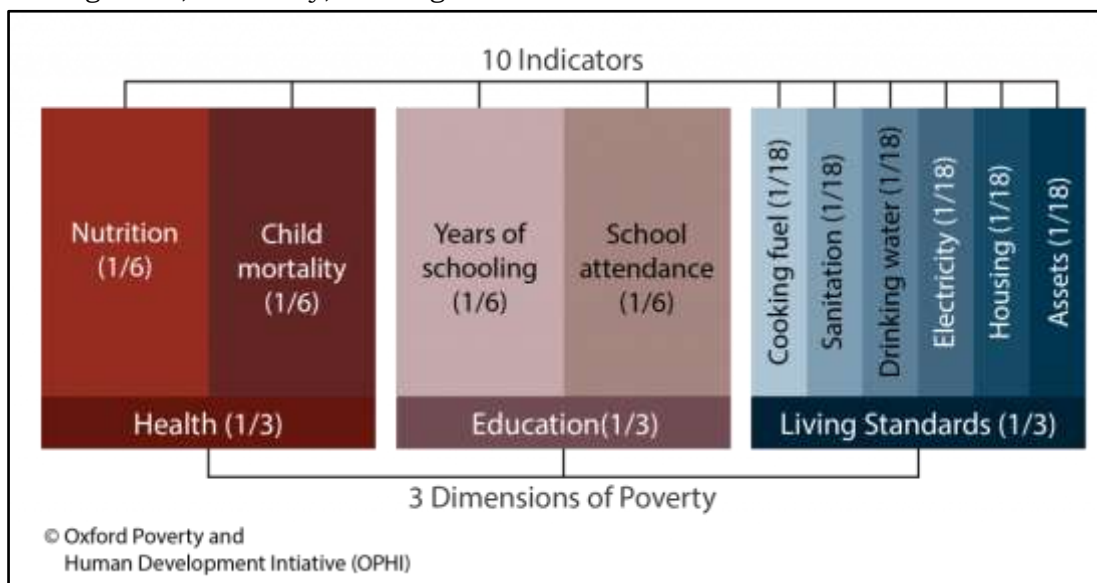


Pre-Connect

- GPI was first developed in 2010 by Oxford Poverty and Human Development Initiative and United Nations Development Programme for UNDP's Human Development Reports.
- NITI Aayog prepare a Multidimensional Poverty Index (MPI) parameter dashboard to rank states and Union Territories, along with a State Reform Action Plan (SRAP).
- As the Nodal agency for the MPI, NITI Aayog has constituted a Multidimensional Poverty Index Coordination Committee (MPICC).

What is Global Multidimensional Poverty Index?

- The global Multidimensional Poverty Index (MPI) is an international measure of acute multidimensional poverty covering over 100 developing countries. It complements traditional monetary poverty measures by capturing the acute deprivations in health, education, and living standards that a person faces simultaneously.
- Global MPI is computed by scoring each surveyed household on 10 parameters based on - nutrition, child mortality, years of schooling, school attendance, cooking fuel, sanitation, drinking water, electricity, housing and household assets.



- It utilises the National Family Health Survey (NFHS) which is conducted under the aegis of Ministry of Health and Family Welfare (MoHFW) and International Institute for Population Sciences (IIPS).

- The global MPI shows who is poor and how they are poor and can be used to create a comprehensive picture of people living in poverty.

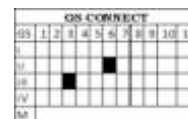
India's Performance in GPI 2020

According to Global MPI 2020, India is 62nd among 107 countries with an MPI score of 0.123 and 27.91% headcount ratio.

e-Gopala App: Breed Improvement Marketplace

News Excerpt

Recently, Prime Minister inaugurated PM MatsyaSampada Yojana (PMMSY), a flagship scheme for the sustainable development of India's fisheries sector and also launched e-Gopala App.



About Pradhan Mantri MatsyaSampad Yojana

- The Pradhan Mantri MatsyaSampada Yojana (PMMSY) is a flagship scheme for focused and sustainable development of fisheries sector in the country with an estimated investment of Rs. 20,050 crores for its implementation during a period of 5 years from FY 2020-21 to FY 2024-25 in all States/Union Territories, as a part of AatmaNirbhar Bharat Package. The investment of Rs. 20,050 crores under PMMSY is the highest ever in the fisheries sector.
- Out of this, an investment of about Rs 12340 crores is proposed for beneficiary-oriented activities in Marine, Inland fisheries and Aquaculture and about Rs 7710 crores investment for Fisheries Infrastructure.

Objective

- PMMSY aims at enhancing fish production by an additional 70 lakh tonne by 2024-25, increasing fisheries export earnings to Rs.1,00,000 crore by 2024-25, doubling of incomes of fishers and fish farmers, reducing post-harvest losses from 20-25% to about 10% and generation of additional 55 lakhs direct and indirect gainful employment opportunities in fisheries sector and allied activities.
- It will help in doubling of incomes of fish farmers.
- PMMSY is designed to address critical gaps in fish production and productivity, quality, technology, post-harvest infrastructure and management, modernization and strengthening of value chain, traceability, establishing a robust fisheries management framework and fishers' welfare.
- PMMSY scheme primarily focuses on adopting 'Cluster or Area based approaches' and creation of Fisheries clusters through backward and forward linkages.
- Special focus will be given for employment generation activities such as seaweed and ornamental fish cultivation.
- It emphasizes on interventions for quality brood, seed and feed, special focus on species diversification, critical infrastructure, marketing networks etc.

e-Gopala App

- ❖ e-Gopala App is a comprehensive breed improvement marketplace and information portal for direct use of farmers.
- ❖ At present no digital platform is available in the country for farmers managing livestock including buying and selling of disease free germplasm in all forms (semen, embryos, etc); availability of quality breeding services (Artificial Insemination, veterinary first aid, vaccination, treatment etc) and guiding farmers for animal nutrition, treatment of animals using appropriate Ayurvedic medicine/ethno veterinary medicine. There is no mechanism to send alerts (on due date for vaccination, pregnancy diagnosis, calving etc) and inform farmers about various government schemes and campaigns in the area.
- ❖ The e-Gopala App will provide solutions to farmers on all these aspects.

Other inaugurations related to Fisheries sector

- ✓ It is planned to establish Fish Brood Bank at Sitamarhi, and of Aquatic Disease Referral Laboratory at Kishanganj, for which assistance has been provided under PMMSY.

- ✓ These facilities will help in enhancing productivity of fish by ensuring timely availability of quality and affordable fish seed for the fish farmers and address the need for disease diagnosis as well as water and soil testing facilities.
- ✓ Comprehensive Fish Production Technology Centre at Dr. Rajendra Prasad Central Agricultural University, Pusa, Bihar is also in the pipeline.
- ✓ The Center, with facilities for Seed production technology and demonstration unit technology for fish, referral laboratory and diagnostic testing, will facilitate in boosting fish production and assist in capacity building of fish farmers.

Other inaugurations related to Animal Husbandry sector

- Semen Station with state of the art facilities, which has been established under Rashtriya Gokul Mission in Purnea, Bihar.
- This is one of the largest semen stations in the government sector with production capacity of 50 lakh semen doses per annum.
- This Semen Station will also give new dimension to development and conservation of indigenous breeds of Bihar and meet demand of semen doses of eastern and north eastern States.
- IVF lab established at Animal Sciences University, Patna under Rashtriya Gokul Mission.
- Use of sex sorted semen in artificial insemination under Rashtriya Gokul Mission by Baroni Milk Union in Begusarai district of Bihar.
- Through use of sex sorted semen in AI, only female calves can be produced (with more than 90% accuracy). This will help double the growth rate of milk production in the country.
- Demonstration of IVF technology at farmer's doorstep. This will propagate the technology for multiplication of high yielding animals at a faster rate as through use of technology they can give birth to 20 calves in a year.

PEPPER IT WITH
Gokul Mission; Artificial
Insemination, Mission
Fingerling, Dr. B.
Meenakumari Committee

Increasing use of technology in fisheries and animal husbandry will not only increase income of farming community depend on these but will also lead to increased food security for India. Our problem of hidden hunger is result of over dependence on food grains for our food. Diversified plate will increase micronutrient intake.

Increased productivity will also enable India to increase export of these products.

Pandit Deendayal Upadhyay National Welfare Fund for Sportspersons' scheme

News Excerpt

Recently, Ministry of Youth Affairs and Sports provided financial assistance to the former and present national level sportspersons through 'Pandit Deendayal Upadhyay National Welfare Fund for Sportspersons' scheme.

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Pre-Connect

- Pandit Deendayal Upadhyay National Welfare Fund For Sportspersons (PDUNWFS) was set up in March, 1982 with a view to assisting outstanding Sportspersons of yesteryear, living in indigent circumstances who had brought glory to the Country in sports.
- The scheme as revised in May, 2016 to provide for lump sum ex-gratia assistance to outstanding Sportspersons of yesteryears.
- Provision of pension has been done away with as there is already a Scheme of Pension for Meritorious Sportspersons.

Objective of the scheme

- To provide suitable assistance to outstanding sportspersons now living in indigent sportspersons.
- To provide suitable assistance to outstanding sportspersons injured during the period of their training for competitions and also during the competitions, depending on the nature of the injury.

PEPPER IT WITH
Khelo India scheme; Olympic
Gold quest; National Sports
Development Fund; Sports
Authority of India

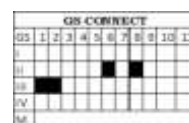
- To provide suitable assistance to outstanding sportspersons who bring glory to the country in international field and who are disabled as an after effect of their strenuous training or otherwise and to provide them assistance for medical treatment.
- To administrator and apply the funds of the Fund to promote the welfare of the sportspersons generally in order to alleviate distress among them and their dependents in indigent circumstances
- To administer and apply the funds of the Fund for active sportspersons individually or collectively as a group.

Such schemes are important for social security of sport persons. Except for few sports like Cricket, Sport persons still do not get adequate financial compensation. These schemes will incentivise our youth to take sports as a career and make India proud in international platforms.

New Labour Codes

News Excerpt

Recently, the Lok Sabha cleared new versions of three labour codes — Industrial Relations Code Bill, 2020, Code on Social Security Bill, 2020 and Occupational Safety, Health and Working Conditions Code Bill, 2020.



Pre-Connect

In 2019, government introduced The Code on Wages Bill, 2019 which seeks to amend and consolidate laws relating to wages, bonus and matters connected therewith. The Code will subsume four labour laws -- Minimum Wages Act, Payment of Wages Act, Payment of Bonus Act and Equal Remuneration Act. After its enactment, all these four Acts would be repealed.

What are the new labour codes?

New Industrial Relations Code 2020

- The Industrial Relations Code combines the features of three erstwhile laws — the Trade Unions Act, 1926, the Industrial Employment (Standing Orders) Act, 1946, and the Industrial Disputes Act, 1947.
- It defines 'workers' to include, besides all persons employed in a skilled or unskilled, manual, technical, operational and clerical capacity, supervisory staff drawing up to Rs18,000 a month as salary.
- It introduces 'fixed term employment', giving employers the flexibility to hire workers based on requirement through a written contract. Fixed term employees should be treated on par with permanent workers in terms of hours of work, wages, allowances and other benefits, including statutory benefits such as gratuity.
- The Code says any establishment that employs 300 or more workers must prepare standing orders relating to classification of workers, manner of intimating to them periods and hours of work, holidays, pay days etc, shifts, attendance, conditions for leave, termination of employment, or suspension, besides the means available for redress of grievances.
- Where there is more than one trade union in an establishment, the sole negotiating union status will be given to the one that has 51% of the employees as its members. It has been brought down from the 75% requirement in the 2019 version.
- The Code prohibits strikes and lock-outs in all industrial establishments without notice. No unit shall go on strike in breach of contract without giving notice 60 days before the strike, or within 14 days of giving such a notice, or before the expiry of any date given in the notice for the strike.

PEPPER IT WITH

Industrial Disputes Act, 1947, The Code on Wages Bill, 2019 Minimum Wages Act, Payment of Wages Act, Payment of Bonus Act and Equal Remuneration Act

The Code on Social Security 2020-

- It provides for "Social security funds" for unorganised workers, gig workers and platform workers by Central Government, with state governments setting up separate social security funds for unorganised workers. Any aggregator may set aside funds between 1-2% of the annual turnover as decided by govt for such social security funds - not exceeding 5%.

- Definition of employees expanded to include more workers like - inter-state migrant workers, platform worker, film industry workers and construction workers.
- Gratuity period for working journalists reduced from five to three years.
- Penalty for unlawfully deducting the employer's contribution from the employee's wages is only Rs 50,000 fine with no imprisonment.
- Central government may defer or reduce the employer's or employee's contributions (under PF and ESI) for a period of up to three months in the case of a pandemic, endemic, or national disaster. Representation of central government officials in the National Social Security Board for unorganised workers increased to 10 members.

Code on Occupational Safety, Health and Working Conditions, 2020:

- The code combines 13 Central labour enactments relating to occupation, safety, health and working conditions of workers.
- Factory definition expanded to 20 workers for premises where the process uses power and 40 workers where the process uses no power.
- Manpower limit on hazardous conditions removed and mandates applying Code on contractors employing 50 or more workers instead of 20.
- Daily work hour limit fixed at maximum of 8 hours per day
- Women will be entitled to be employed in all establishments for all types of work and employer required to provide adequate safeguards in hazardous conditions.
- Workers earning a maximum of Rs 18,000 per month, or such higher amount deemed **as inter-state migrant workers and will be allowed to avail benefits like Public distribution system (PDS), building cess, insurance and provident fund.**
- Central and state governments to maintain or record the details of inter-state migrant workers in a portal.

Analytica

How these new codes will help?

- Employers can find relief in the following: **They reduce complexity in compliance due to a multiplicity of labour laws.** They facilitate ease of doing business. India's present ranking is 77, and the goal is to reach a position among the top 50 countries of the world.
- This will result in employment generation **without diluting basic aspects of securing employee rights, safety, security and health of workers, and standardisation of definitions under different labour laws.**
- The Codes are for simplification, and rationalisation. Provision of one licence/one registration and one return will save time, resources and efforts of the establishment.
- It will result in **reduction in cost of compliance**, a single, decentralised authority for implementation.
- Web-based electronic labour inspectors/facilitators shall, before initiation of prosecution proceedings, give an opportunity to the employer to comply with the provisions of the Codes. It will also eliminate the high cost of claims for beneficiaries.
- The Codes have much to offer, especially for incumbent formal job seekers. Some of the overarching benefits include: The attempt to encompass a large cross-section of workforce, beyond those in the organised sector, and provide them with protection under the labour laws through outreach schemes, specifically for the informal and unorganised sectors.

Constitution Rights

The articles which directly concerns labour rights are: (14), (16), 19(1) (c), 23-24, 38 and 41-43(A).

- ❖ Article 14 concludes that everyone should be equal before the law,
- ❖ Article 15 states that state should not discriminate against citizen, Article 16 promises equality of opportunity.
- ❖ Article 19(c) gives the right to form unions or associations.
- ❖ Article 23 prohibits forced labour and Article 24 goes on to prohibit child labour which includes that child below the age of 14 years should not be included in hazardous jobs.
- ❖ Article 38(1) promotes the welfare of people and 38(2) minimizes or decreases the inequality of income.
- ❖ Article 43(A) inserted through the 42nd amendment secures the participation of workers in the management of undertakings.

- There is also a **statutory requirement to issue appointment letters** to every employee to prevent exploitation and implementation of clear and transparent ways of employee engagement.
- The cut-off date for salary disbursement advanced to the 7th of the subsequent month, facilitating prompt remittances of statutory contributions by the 15th of the subsequent month. This impacts every employee/worker across all sections. Change in the provision of gratuity payout is beneficial for today's workers.

Concerns raised related to provisions of these codes

- ✓ While industry has welcomed the changes, others have said that the unclear provision regarding retrenchment would lead to uncertainty, and discretionary behaviour during implementation by the central or state government. **This can lead to misuse of the provisions.**
- ✓ **Unequal bargaining powers between the worker (on fixed term employment) and employer** could affect the rights of such workers since the power to renew such contracts lies with the employer. This may result in **job insecurity** for the employee and may deter him from raising issues about unfair work practices, such as extended work hours, or denial of wages or leaves.
- ✓ The labour rights for workers in small establishments having less than 300 workers will be greatly compromised.
- ✓ Codes has further liberalised the provisions relating to employment of contract labour and making their regulation applicable only in establishments employing 50 or more workers, instead of 20 or more, as was the case earlier. This will lead to lesser protection for contract labours.
- ✓ The threshold for factories has now been doubled — from 10 to 20 workers with power — thereby eliminating a large number of important regulatory provisions for the smaller factories.
- ✓ **Inspection provisions have been diluted in all the Codes.**
- ✓ The changes have also made **legal industrial action a virtual impossibility** and the presence of unions even less possible.
- ✓ Strike is a mean to put pressure on management if workers perceive them to be taking anti-labour steps. **New code has made going on strike a virtual impossibility.** For instance, the IR Code proposes that no person employed in an industrial establishment shall go on strike without a 60-day notice and during the pendency of proceedings before a Tribunal or a National Industrial Tribunal and sixty days after the conclusion of such proceedings.
- ✓ As a whole, these legislations will **reduce bargaining power of the labour.**
- ✓ Allowing the states to override central legislation, as provided for in these codes, without justification, will create future problems for federalism.
- ✓ The 2020 **Acts bars civil courts from hearing any matters under the Act.** In some matters where persons are aggrieved by the orders of authorities such as, by the order of the Inspector-cum-facilitator in the case of factories, or by the revocation of a license for contractors, the Bill provides for an administrative appellate authority to be notified. However, it does not provide a judicial mechanism for hearing disputes under the Bill.

Way Forward

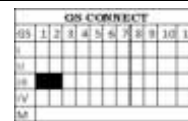
India needs a labour code which balanced employers' interests with workers' security and rights. Attempt should be made to incentivise industries to increase formalisation of labour. Formal employment not only provides better compensation and security to workers but also increases productivity. Focus on skilling and re-skilling labour forces is another area which needs attention.

Economy

GDP Contraction

News Excerpt

The Ministry of Statistics and Programme Implementation (MoSPI) released the data for the first quarter (April, May, June) of the financial year 2020, which shows the contraction of 23.9% in the Gross Domestic Product (GDP) of 2020 compared to the same period in 2019.



Pre-Connect

- In any economy, the GDP (total demand for goods and services) is generated from one of the four engines of growth.
- The biggest engine is consumption demand from private individuals, which account for 56.4% of all GDP before this quarter.
- The second biggest engine is the demand generated by private sector businesses which account for 32% of all GDP in India.
- The third engine is the demand for goods and services generated by the government, which account for 11% of India's GDP.
- The last engine is the net demand on GDP after we subtract imports from India's exports, since India typically imports more than it exports, its effect is negative on the GDP.

Gross Domestic Product (GDP)

- ❖ GDP is the final value of the goods and services produced within the geographic boundaries of a country during a specified period of time, normally a year. GDP growth rate is an important indicator of the economic performance of a country.
- ❖ GDP can be calculated in three ways: using the production, expenditure, or income approach. All methods should give the same result.
- ❖ The formula for calculating GDP with the expenditure approach is: $GDP = \text{private consumption} + \text{gross private investment} + \text{government investment} + \text{government spending} + (\text{exports} - \text{imports})$.

Analytica

- Almost all the major indicators of growth in the economy be it production of cement or consumption of steel shown a deep contraction. Even total telephone subscribers saw a contraction in this quarter.
- With GDP contracting by more than what most observers expected, it is believed that the full-year GDP could also worsen.
- Since economic liberalisation in the early 1990s, Indian economy has clocked an average of 7% GDP growth each year. This year, it is likely to turn turtle and contract by 7%.

Reason for GDP contraction

- ✓ The Private consumption, w-hich is the biggest engine driving the Indian economy has fallen by 27%.
- ✓ The second biggest engine, which is the investments by businesses has fallen even harder as it is half of what it was last year same quarter. So the two biggest engines, which accounted for over 88% of Indian total GDP, Q1 saw a massive contraction.
- ✓ The net export demand (NX) has turned positive in Q1 because India's imports have crashed more than its exports.
- ✓ The government's expenditure went up by 16% but this was nowhere near enough to compensate for the loss of demand (power) in other sectors (engines) of the economy.
- ✓ Also, the government's spending increased but it could cover just 6% of the total fall in demand being experienced by people and businesses.
- ✓ The net result is that while, on paper, government expenditure's share in the GDP has gone up from 11% to 18% yet the reality is that the overall GDP has declined by 24%.

Implications of declining GDP

- The construction (-50%), trade, hotels and other services (-47%), manufacturing (-39%), and mining (-23%) were the worst affected sector. It is important to note that these are the sectors that create the maximum new jobs in the country.

- In terms of the gross value added (a proxy for production and incomes) by different sectors of the economy, data-- show that barring agriculture, where GVA grew by 3.4%, and all other sectors of the economy saw their incomes fall.

Impact on Economy

- ✚ In a scenario where sectors like construction, trade and other services is contracting so sharply i.e., their output and incomes are falling, it would lead to more and more people either losing jobs (decline in employment) or failing to get one (rise in unemployment).

- ✚ With Covid-19, as people have stayed at home, the multiplier effect of spending has broken down to a large extent. This has, in turn, had a further negative impact on jobs and spending.
- ✚ Private consumption during April to June contracted 26.7%. Also, with a physical lockdown in place and migrant labour moving away from the economically well-off parts of the country to their homes.
- ✚ In fact, construction contracted by a little more than 50% during the period. Also, investment in the economy contracted by 47.1%.
- ✚ As companies are encouraging their employees to work from home many peoples like drivers and cleaners where losing their jobs.

ENGINES OF GROWTH FALTER				
Sources of total demand /engines of growth	Q1 FY20 (Rs crore)	Q1 FY21 (Rs crore)	Difference (Rs crore)	% change (year on year)
Expenditure by individual consumers [C]	19,92,967	14,61,164	-5,31,803	-27
Expenditure/Investment by private businesses [I]	11,32,195	5,99,192	-5,33,003	-47
Expenditure by Govt [G]	4,18,249	4,86,636	68,387	16
Net demand from exports minus imports	-1,17,242	75,675	1,92,917	165
Total (including discrepancies)	35,35,267	26,89,556	-8,45,711	-23.9

Source: MoSPI and Express Research GrOup

Way Forward

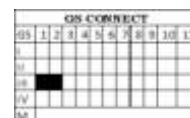
There is only one engine that can boost GDP and that is the government (G). Only when government spend more, either by building roads and bridges and paying salaries or by directly handing out money, then the economy can revive in the short to medium term. If the government does not spend adequately enough then the economy will take a long time to recover. Also, some suggested measures could be followed to revive the economy:

- ◇ Banks should cut interest rates to ease the pressure on consumption.
- ◇ Companies and brands should offer discounts and offers to get people to consume again.
- ◇ Government can clearly do to get consumption going again is to reduce the GST on two-wheelers from 28% to 18%.
- ◇ Government expenditure between April and June went up by 16.4% by putting in money into female Jan Dhan accounts. Now is the time to put money in male Jan Dhan accounts as well.
- ◇ The government also increased allocation and spending through the Mahatma Gandhi National Rural Employment Guarantee Scheme.
- ◇ The Reserve Bank of India can also print money and fund government expenditure.

RBI moves to Ease Liquidity

News Excerpt

The Reserve Bank of India (RBI) recently announced several measures to ensure orderly functioning of financial markets, which includes two tranches of special open market operations (OMOs) in bonds and a hike in the held-to-maturity (HTM) limit under the statutory liquidity ratio (SLR) for banks.



Pre-Connect

The steps came against the backdrop of a sharp rise in bond yields after the Monetary Policy Committee left interest rates unchanged and also against the contraction of GDP in the first quarter of financial year 2020.

To counter the rise in market interest rates, the RBI said it will undertake the following steps:

- Conduct special **open market operation** with simultaneous purchase and sale of **government securities** for an aggregate amount of Rs 20,000 crore in two tranches. The auctions took place on September 10 and September 17.
- The RBI also said it remains committed to conducting more such auctions as warranted by market conditions.
- The central bank will hold **term repo operations** for an aggregate amount of Rs 100,000 crore at floating rates in mid-September. This is being done to counter any liquidity pressures that may emerge due to advance tax payments.
- In addition, banks that had availed funds under the **long term repo operations** are being allowed to refinance their borrowings via these term repo auctions at lower costs. This is being done to ensure that banks don't get stuck with higher cost funds as policy rates fall.
- The RBI has allowed banks to hold fresh government securities acquired from Sept. 1, 2020 in the **held-to-maturity** bucket up to an overall limit of 22% of deposits till March 31, 2021. This will increase demand for government bonds without banks fearing mark-to-market losses due to fluctuation in bond yields.

The measures are being taken to "continue to ensure orderly market conditions and congenial financial conditions.

Open Market Operations	G-Securities	Term Repo	Held-To-Maturity (HTM)
Open market operations or OMOs are conducted by the Reserve Bank of India (RBI) by way of sale and purchase of G-Secs (government securities) to and from the market with an objective to adjust the rupee liquidity conditions in the market on a durable basis. When the Reserve Bank feels that there is excess liquidity in the market, it resorts to sale of securities thereby sucking out the rupee liquidity. Similarly, when the liquidity conditions are tight, RBI may buy securities from the market, thereby releasing liquidity into the market.	Open market operations or OMOs are conducted by the Reserve Bank of India (RBI) by way of sale and purchase of G-Secs (government securities) to and from the market with an objective to adjust the rupee liquidity conditions in the market on a durable basis. When the Reserve Bank feels that there is excess liquidity in the market, it resorts to sale of securities thereby sucking out the rupee liquidity. Similarly, when the liquidity conditions are tight, RBI may buy securities from the market, thereby releasing liquidity into the market.	A term repo is a repo of more than one-day duration. The word term denotes longer period. Hence it is a way for banks to avail money from the RBI for more than one-day duration. As in the case of repo, the loan seeking bank should submit securities to the RBI. Since the loan is for more duration, the bank should give higher interest than the repo rate. Under the RBI's new restructured liquidity framework, the term repo is named as Variable Rate Term Repo. It is called variable rate repo because the interest rate is varied depending upon the auction rate.	Held-to-maturity securities are debt security investments which the holder has the intention and ability to hold them until specific date of maturity. The investments classified under HTM need not be marked to market and will be carried at acquisition cost, as subsequent changes in market value are ignored because the return is predetermined. Therefor this type of security is reported at amortized cost on a bank's balance sheet.

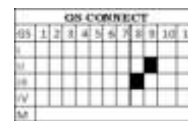
Way forward

To maintain the congenial financial conditions, mitigate the impact of Covid-19 and restore the economy to a path of sustainable growth while preserving macroeconomic and financial stability the RBI is committed to using all instruments at its command to revive the economy. The move taken by the RBI guarantees the orderly functioning of the financial market after its proper implementation.

The Global Innovation Index (GII)

News Excerpt

The GII 2020 has been recently released, where India has shown a growth and ranked 48 position.



Pre-Connect

- The Global Innovation Index (GII) is a ranking of countries as per their success and capacity in innovation.
- The GII is co-published by Cornell University, INSEAD, and the World Intellectual Property Organization (WIPO), a specialized agency of the United Nations.
- GII 2020 ranks 131 economies based on 80 indicators, compiled under 7 pillars.
- The GII relies on two sub-indices i.e., the Innovation Input Sub-Index and the Innovation Output Sub-Index, each built around pillars.
- It was first released in the year 2007 with an aim to provide insightful data on innovation and, in turn, to assist economies in evaluating their innovation performance and making informed innovation policy considerations.
- The 2020 edition of the GII drawn expertise from the Confederation of Indian Industry (CII).

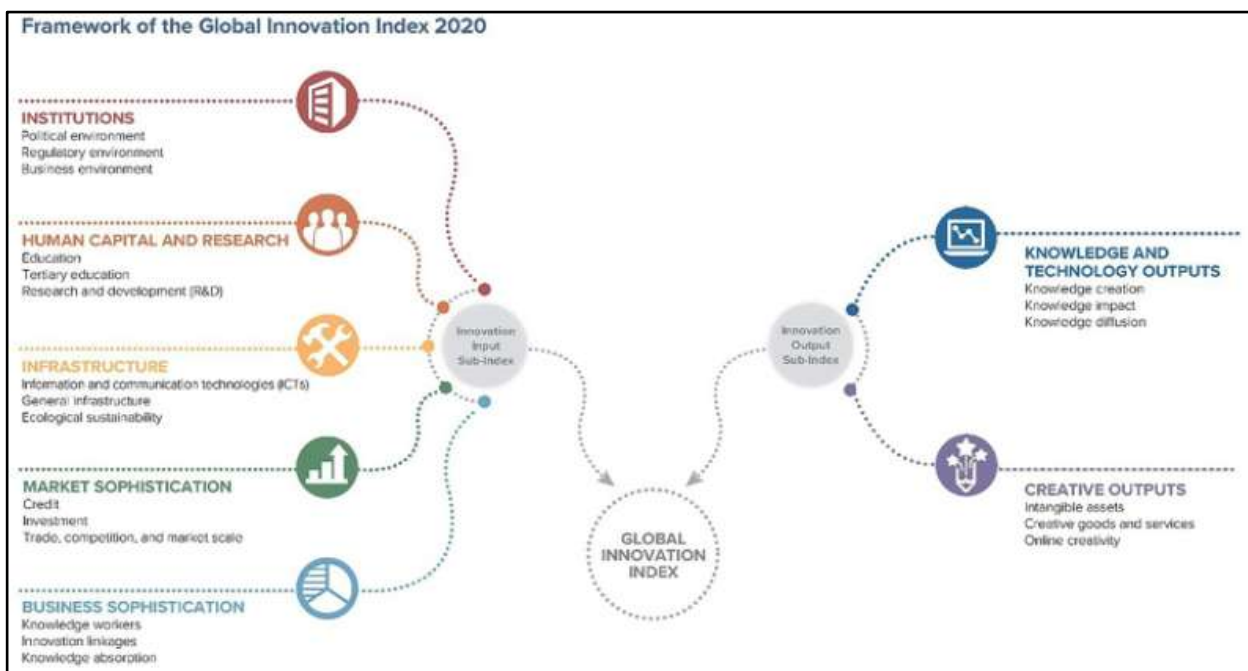
Analytica

- In GII 2020, Switzerland bagged the first spot in the GII ranking followed by Sweden, United States of America, United Kingdom and Netherlands.
- China, India, the Philippines and Vietnam have made the most progress on the index in recent years, with all four now among the top 50,
- China, which is the only middle-income economy among the top 30, now holds the 14th place.
- India has been ranked as the 48th most innovative nation in the world in 2020; entering the top 50 nations for the first time.

India's Achievement

- ✓ India has retained its position as the most innovative country among Central and South Asian countries.
- ✓ India was at the 52nd position in 2019 and was ranked 81st in the year 2015. It is a remarkable achievement to be in a league of highly innovative developed nations all over the globe.
- ✓ India ranks in the top 15 in indicators such as ICT services exports, government online services, graduates in science and engineering, and R&D-intensive global companies.
- ✓ India increased the most in three pillars: Institutions (61st), business sophistication (55th), and creative outputs (64).
- ✓ For the first time, an Indian city, Bengaluru, figured in the top 100 science and technology clusters globally.
- ✓ The WIPO had also accepted India as one of the leading innovation achievers of 2019 in the central and southern Asian region, as it has shown a consistent improvement in its innovation ranking for the last 5 years.

- ✓ The consistent improvement in the global innovation index rankings is owing to the immense knowledge capital, the vibrant startup ecosystem, and the amazing work done by the public & private research organizations.



Way Forward

India must aim high and double its efforts in improving its ranking in the global innovation index. The call for AatmaNirbhar Bharat by the Central government could only be realized if India punches above its weight class and compete with global superpowers in developing scientific interventions. It is time that India brings a paradigm shift and aims to be in the top 25 countries in the next global innovation index rankings.

Business Reform Action Plan Ranking of States

News Excerpt

The latest ease of doing business rankings for Indian states, released by the Department for Promotion of Industry and Internal Trade (DPIIT) based on implementation of Business Reform Action Plan for the year 2019.

Pre-Connect

- The Department for Promotion of Industry and Internal Trade (DPIIT) has developed Business Reform Action Plan (BRAP) for State Reforms since 2015 and circulated it with States/UTs for implementation.
- The Government is committed in bringing ease to regulatory compliance for businesses.
- It has started an ambitious program for reforms in partnership with State Governments to make it easier, simpler and quicker for businesses to operate.
- These reforms cover the entire lifecycle of the business and aim at reducing compliance burden on industry significantly.
- The Plan is designed keeping in mind 2 factors viz. Measurability and Comparability across States.
- To support this initiative, an online portal

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EASE OF DOING BUSINESS RANKS, TOP 10 IN 2019

State	2015	2016	2017	2019
Andhra Pradesh	2	1	1	1
Uttar Pradesh	10	14	12	2
Telangana	13	1	2	3
Madhya Pradesh	5	5	7	4
Jharkhand	3	7	4	5
Chhattisgarh	4	4	6	6
Himachal	17	17	16	7
Rajasthan	6	8	9	8
West Bengal	11	15	10	9
Gujarat	1	3	5	10

Source: DPIIT

(www.eodb.dipp.gov.in) showcasing rankings was developed and launched in April 2016, it is the first such platform for knowledge on regulatory compliance requirements across 36 States/UTs in the country.

- The portal allows for collaborative dialogue between the DPIIT and the State Governments/ Union Territory Administrations in finalizing the evidence submitted for reforms implemented. States/ UTs are given chances to modify/ add evidence if required.-
- Till date, State Rankings have been released for the years 2015, 2016 and 2017-18.
- BRAP 2019 is an 80-point list of reforms recommended to simplify, rationalise and digitise the regulatory framework in a state.
- The reforms are grouped into 12 broad areas like land administration, labour regulation, obtaining electricity and water supply permits, environment regulation, etc.
- The ranking this time gives full weightage to the feedback from over thirty thousand respondents at the ground level, who gave their opinion about the effectiveness of the reforms.

Analytica

- The Business Reform Action Plan 2019 released by the Centre contains a list of 80 reforms (187 reform action points) to be implemented by 19 State departments.
- Andhra Pradesh has achieved 100 percent compliance to the 187 reform action points by DPIIT-World Bank as a part of BRAP 2019
- Andhra Pradesh was the first state to have come up with the “ReSTART” package in post-Covid scenario for business continuity of micro-small-and-medium enterprises (MSMEs).
- Andhra Pradesh has undertaken several reforms in the last year, ranging from the development of online systems, enhancing transparency to regulating inspections covering the entire lifecycle of the business.
- UP jumped ten spots to number two and Telangana slipped to three.
- Gujarat, which was first in the first-ever edition of the rankings, was ranked 11; Haryana slipped all the way to 17.
- Delhi has improved its ranking by 11 notches to the 12th position among 36 states and Union territories.
- This is good news for India’s ranking because, despite marked improvement in recent years to a record 63rd position last year, Delhi’s poor performance continued to partly weigh down the country’s ranking.
- For the first time since its inception in 2015, the BRAP rankings relied entirely on the feedback it received from the businesses for whom these reforms were intended. This is in sync with a practice adopted by the World Bank when it ranks countries on ease of doing business.
- Earlier editions computed scores based on the responses of the relevant state government departments. The 2017-18 edition used a combination of state government and user feedback to compute the score
- The ranking this time gives full weightage to the feedback from over thirty thousand respondents at the ground level, who gave their opinion about the effectiveness of the reforms. State rankings will help attract investments, foster healthy competition and increase Ease of Doing Business in each State..

Rankings related to ease of doing Business

- ❖ India climbed ranks 63 in the World Bank’s Ease of Doing Business 2020 survey, among 190 countries.
- ❖ The Global Competitiveness Index, 2019, released by the World Economic Forum (WEF) showed India at 68 position (out of 141 countries).

Way Forward

The larger objective of attracting investments and increasing Ease of Doing Business in each State was sought to be achieved by introducing an element of healthy competition through a system of ranking states based on their performance in the implementation of Business Reform Action Plan.

Monetization of subsidiaries of Power Grid Corporation of India

News Excerpt

The Cabinet Committee on Economic Affairs has approved Asset Monetization of subsidiaries of Power Grid Corporation of India Limited- POWERGRID through Infrastructure Investment Trust.

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Pre-Connect

- POWERGRID is a public limited company under the administrative control of the Ministry of Power, Government of India, started its commercial operation in the year 1992-93 and is today, a Maharatna company, engaged in the business of power transmission.
- The Company, along with its wholly owned subsidiaries acquired through the Tariff Based Competitive Bidding (TBCB) process, owns and operates a pan India transmission network.
- The Company meets its fund requirement for its Capital Expenditure (CAPEX) through its internal accruals and debt.
- The Budget 2019-20 emphasized investment led growth and indicated that new and innovative financial instruments including Infrastructure Investment Trusts (InvITs), have been launched as part of the brown field asset monetization strategy for augmenting infrastructure investment.
- The Cabinet Committee on Economic Affairs has accorded approval to the POWERGRID to monetise transmission assets held in SPVs through InvIT model.

Infrastructure Investment Trusts (InvITs)

- InvITs is like a mutual fund, which enables direct investment of small amounts of money from possible individual/institutional investors in infrastructure to earn a small portion of the income as return.
- InvITs work like mutual funds or real estate investment trusts (REITs) in features.
- InvITs can be treated as the modified version of REITs designed to suit the specific circumstances of the infrastructure sector.
- SEBI notified the SEBI (Infrastructure Investment Trusts) Regulations, 2014 on September 26, 2014, providing for registration and regulation of InvITs in India. The objective of InvITs is to facilitate investment in the infrastructure sector.

Analytica

- ✓ This is the first time any PSU in the power sector will undertake asset recycling by monetising its assets through the InvIT model and using the proceeds to fund the new and under-construction capital projects.
- ✓ This approval would help the PGCIL to monetise in the first lot, assets with gross block value of more than Rs 7,000 crore.
- ✓ These assets, which are mainly high voltage transmission lines and substations, are held by POWERGRID in form of special purpose vehicles (SPVs).
- ✓ The proceeds from the asset monetisation would be deployed by POWERGRID in their new and under-construction projects.
- ✓ The PGCIL, a public limited company under the administrative control of the Ministry of Power, is engaged in the business of power transmission.
- ✓ The company, along with its wholly-owned subsidiaries acquired through the Tariff Based Competitive Bidding (TBCB) process, owns and operates a pan India transmission network.
- ✓ Based on the experience gained, further monetisation shall be carried out in future, the statement said.
- ✓ Asset recycling is a key strategy of the Government of India to release the capital invested in operational assets and the proposed InvIT of the PGCIL would attract both domestic as well as global investors including Sovereign Wealth Funds.
- ✓ Sale of assets to InvITs is a way of accessing long term, relatively cheap finance required to fund infrastructure projects in the transmission sector.
- ✓ The capital expenditure plan of Power Grid for 2020-21 and 2021-22 is Rs 20,500 crore.
- ✓ The Government of India has enacted an enabling regulatory and taxation framework for InvITs and the proposed InvIT by PGCIL would deepen this market.

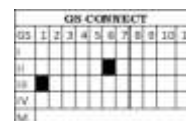
Way forward

The InvIT would provide an opportunity to the general public and institutional investors such as Pension Funds, Mutual Funds, to benefit from this investment opportunity and -participate in the growth of Indian Infrastructure Sector.

Doorstep Banking Services

News Excerpt

The government recently launched a doorstep banking services initiative by public sector banks (PSBs) which will provide convenience to customers.



Pre-Connect

- Doorstep Banking Service is a part of EASE (Enhanced Access and Service Excellence) reforms that the Department of Financial Services had undertaken in 2018.
- PSB Reforms EASE Agenda is a common reform agenda for PSBs aimed at institutionalizing clean and smart banking.

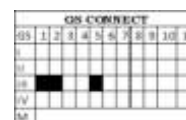
Highlights of the doorstep Banking

- Doorstep Banking Services is envisaged to provide convenience of banking services to the customers at their door step through the universal touch points of Call Centre, Web Portal or Mobile App. Customers can also track their service request through these channels.
- The services shall be rendered by the Doorstep Banking Agents deployed by the selected Service Providers at 100 centres across the country.
- At present only non-financial services viz. Pick up of negotiable instruments (cheque / demand draft / pay order, etc.), Pick up new cheque book requisition slip, Pick up of 15G / 15H forms, Pick up of IT / GST challan, Issue request for standing instructions, Request for account statement, Delivery of non-personalised cheque book, demand draft, pay order, Delivery of term deposit receipt, acknowledgement, etc., Delivery of TDS / Form 16 certificate issuance, Delivery of pre-paid instrument / gift card are available to customers. Financial services shall be made available from October 2020.
- The services can be availed by customers of Public Sector Banks at nominal charges. The services shall benefit all customers, particularly Senior Citizens and Divyangs who would find it at ease to avail these services.

EASE 2.0 and PSBs

News Excerpt

Recently the EASE 2.0 Index was released and the Union Minister of Finance & Corporate Affairs felicitated the best performing banks on EASE Banking Reforms Index.



Pre-Connect

- PSB Reforms EASE Agenda is a common reform agenda for PSBs aimed at institutionalizing clean and smart banking.
- It was launched in January 2018.
- As per EASE 1.0 report, significant development in PSB performance in resolution of Non-Performing Assets (NPAs) transparently was highlighted.
- In EASE 2.0, the government had proposed pushing liquidity in the public sector banks, reconstituting the management committee and possible mergers among the ideal partners in the Indian banking sector.

- In 2020, EASE 3.0, the Public Sector Bank (PSB) Reforms Agenda 2020-21 for smart, tech-enabled banking was also unveiled.
- EASE Reforms Index has equipped Boards and leadership for effective governance, instituted risk appetite frameworks, created technology- and data-driven risk assessment and prudential underwriting and pricing systems, introduced Early Warning Signals (EWS) systems and specialised monitoring for time-bound action in respect of stress, put in place focussed recovery arrangements, and established outcome-centric HR systems.

Analytica

- Bank of Baroda, State Bank of India, and erstwhile Oriental Bank of Commerce were felicitated for being the top three (in that order) in the 'Top Performing Banks' category according to the EASE 2.0 Index Results.
- Bank of Maharashtra, Central Bank of India & erstwhile Corporation Bank were awarded in the 'Top Improvers' category basis EASE 2.0 Index.
- Punjab National Bank, Union Bank of India, and Canara Bank were also recognized for outstanding performance in select themes.

PSB's performance on EASE 2.0 Index

- ✓ The PSBs has followed the EASE Agenda which aimed at institutionalizing clean and smart banking.
- ✓ It was launched in January 2018, and the subsequent edition of the program – EASE 2.0 built on the foundation laid in EASE 1.0 and furthered the progress on reforms.
- ✓ PSBs have shown a healthy trajectory in their performance over fourquarters since the launch of EASE 2.0 Reforms Agenda.
- ✓ The overall score of PSBs increased by 37% between March-2019 and March-2020, with the average EASE index score improving from 49.2 to 67.4 out of 100.
- ✓ Significant progress is seen across six themes of the Reforms Agenda, with the highest improvement seen in the themes of 'Responsible Banking', 'Governance and HR', 'PSBs as Udyamimitra for MSMEs', and 'Credit off-take'.
- ✓ PSBs have adopted tech-enabled, smart banking in all areas, setting up retail and MSME Loan Management Systems for reduced loan turnaround time and PSB loans in 59 minutes.

EASE 3.0

- ❖ It sets the agenda and roadmap for FY21 for their transformation into digital and data-driven NextGen Banking of the Future for an aspiring India.
- ❖ It emphasizes on the use of digital, analytics & AI, FinTech partnerships across customer service, convenient banking, end-to-end digitalised processes for loan sourcing and processing, analytics-driven risk management as well as decision support systems for HR.

Key reforms in EASE 3.0 include:

- ❖ Dial-a-loan: Digitally-enabled doorstep facilitation for initiation of retail and MSME loans.
- ❖ Customer-need driven credit offers by larger PSBs to existing customers through analytics.
- ❖ Partnerships with FinTechs and E-commerce companies for customer-need driven credit offers
- ❖ Credit@click: End-to-end digitalised, time-bound retail and MSME lending by larger PSBs, leveraging Account Aggregators.
- ❖ Cash-flow-based MSME credit by larger PSBs, using FinTech, Account Aggregator and other third-party data and transactions-based underwriting models
- ❖ Tech-enabled agriculture lending
- ❖ Palm banking
- ❖ EASE Banking Outlets

- ✓ PSBs have instituted real-time visibility to retail and MSME customers on the status of their loans. Most branch-based services are now accessible from home and mobile, including in local languages.

Top 3 banks in each theme

Top 3 banks for EASE 2.0 Index <ul style="list-style-type: none"> Bank of Baroda State Bank of India Oriental Bank of Commerce 	Theme 1: Responsible Banking <ul style="list-style-type: none"> Bank of Baroda State Bank of India Punjab National Bank 	Theme 4: Udyam iMitra for MSMEs <ul style="list-style-type: none"> Oriental Bank of Commerce State Bank of India Union Bank of India
Top 3 banks in improvement from March baseline <ul style="list-style-type: none"> Bank of Maharashtra Central Bank of India Corporation Bank 	Theme 2: Customer Responsiveness <ul style="list-style-type: none"> State Bank of India Oriental Bank of Commerce Bank of Baroda 	Theme 5: Deepening FI & Digitalisation <ul style="list-style-type: none"> Bank of Baroda Canara Bank Punjab National Bank
	Theme 3: Credit Off-take <ul style="list-style-type: none"> Oriental Bank of Commerce Union Bank of India State Bank of India 	Theme 6: Governance and HR <ul style="list-style-type: none"> State Bank of India Bank of Baroda Punjab National Bank

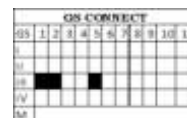
Way Forward

PSBs have not only cleaned up legacy stress and addressed underlying systemic weaknesses but have emerged stronger as a result of comprehensive and institutionalized EASE reforms.

Establishment of the Development Council for Footwear and Leather Industry

News Excerpt

The Department for Promotion of Industry and Internal Trade (DPIIT) has issued a notification to constitute a Development Council for Footwear & Leather Industry (DCFLI).



Pre-Connect

- The Development Council for Footwear and Leather Industry has been established for the formulation and implementation of promotional and developmental measures for the growth of labour intensive footwear and leather sectors in India.
- To boost domestic production and encourage exports, the Developmental Council is envisaged to play a very proactive role in preparing a futuristic vision for development, designing and manufacturing of high-quality world-class footwear and leather products in India.

About the DCFLI

- It is a 25-member council constituted for 2 years.
- It will be formed under Industrial (Development and Regulation) Act, 1951.
- The council is headed by a chairman, who is a representative of the industry. A joint secretary in the Department for Promotion of Industry and Internal Trade (DPIIT) is its member secretary and other members are drawn from various government bodies and trade, one of the officials said.
- The council is represented by the Union ministry of textiles, the Director General Foreign Trade (DGFT), the ministry of micro, small and medium enterprises (MSMEs), the National Institute of Fashion Technology (NIFT), the Bureau of Indian Standards (BIS), the Footwear Design and Development Institute (FDDI), Council for Leather Exports (CLE) and some other leading companies.
- The council is set up as per the directive of Ministry of commerce and industry.

- Currently, the council will be chaired by Shri R K Gupta for 2 years and 24 other members have also been nominated.

Way forward

The Development Council for Leather and Footwear Industry will provide a big boost to the domestic sector by bringing all stakeholders under one roof in a bid to establish synergies in both representations and policy formulations

SWAMIH Investment Fund

News Excerpt

In order to give relief to homebuyers of stalled projects, a Special Window for Completion of Affordable and Mid-Income Housing (SWAMIH investment fund) has been created for funding stalled projects.

[illegible]

SWAMIH Investment Fund

- SWAMIH investment fund will provide last mile funding to the stressed affordable and middle-income housing projects in the country.
- It has been created for funding stalled projects that are net-worth positive, including those projects that have been declared as Non-Performing Assets (NPAs) or are pending proceedings before the National Company Law Tribunal under the Insolvency and Bankruptcy Code.
- It was first announced on November 06, 2019 by the Finance Minister as a proposal to set up a 'Special Window' in the form of Alternative Investment Fund to provide priority debt financing for the completion of stalled housing projects.
- SBICAP Ventures, an arm of SBI Capital Markets, is entrusted by the government to manage this AIF.
- The Sponsor of the Fund is the Secretary, Department of Economic Affairs, Ministry of Finance, Government of India on behalf of the Government of India.

Requirement

- Several real estate projects have suffered due to a combined effect of two changes in the real estate sector.
- On one hand, incremental launches and slow sales have increased unsold inventory in each project while that effect has then got compounded by the fact that consumer preference is now towards completed projects rather than under construction projects.
- This preference has developed as consumers are largely avoiding taking project completion risk and instead are more inclined to completed projects.
- SWAMIH Investment Fund has been formed to complete construction of stalled, brownfield, RERA registered residential developments that are in the affordable housing / mid-income category, are net-worth positive and requires last mile funding to complete construction.

Scheme for Integrated Textile Park (SITP)

News Excerpt

Recently, the government has proposed to set up Mega Textile Park by Ministry of Textiles.

[illegible]

Pre-Connect

- Scheme for Integrated Textile Park is a demand driven scheme in which the prospective entrepreneurs can send their proposals to the Government, after completion of stipulated conditions as per guidelines.
- The scheme was launched in 2005 and it aims to provide industry with state of the art world-class infrastructure facilities for setting up their textile units.
- The infrastructure facilities under SITP for setting up of textile units are developed in a Public-Private-Partnership (PPP) model.

Analytica

- To boost the textile sector of India the government is implementing SITP model.

- Under SITP, Government of India will provide grant of upto 40% of project cost with ceiling limit of Rs 40 crore for each park.
- Also, centre will provide grant upto 90% of the project cost for first two projects (each) in the States of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Tripura, Sikkim, Himachal Pradesh, Uttarakhand and Union Territory of Jammu & Kashmir and Union Territory of Ladakh.
- The Special Purpose Vehicle (SPV) will be formed by the representatives of local industry, Financial Institutions, State Industrial and Infrastructural Corporations and other agencies of State and Central Governments registered as a Corporate Body under the Companies Act.
- The government is considering a plan to set up 1,000-acre mega textile parks as it revamps the Scheme for Integrated Textile Park (SITP) whose slow progress is attributed to delay in obtaining land and other statutory clearances from state governments and slow fund mobilisation by the textile parks.
- A total of 59 textile parks have been sanctioned under SITP by the textiles ministry out of which 22 textile parks have been completed and rest are under various stages of construction.

India's Textile Sector

- ❖ India's textiles industry contributed seven per cent of the industry output (in value terms) in FY19.
- ❖ It contributed two per cent to the GDP of India and employed more than 45 million people in FY19.
- ❖ The sector contributed 15 per cent to India's export earnings in FY19.
- ❖ Textiles industry has around 4.5 crore employed workers including 35.22 lakh handloom workers across the country.
- ❖ The domestic textiles and apparel market stood at an estimated US\$ 100 billion in FY19.
- ❖ From April 2000 to September 2019, India's textiles sector received Rs 19,398.71 crore or \$3.3 billion of FDI which is 0.74% of the total inflows.

Other initiatives taken by Government of India are

- i. **Knitting and Knitwear Sector:** In order to boost production in knitting and knitwear clusters, Government has launched a separate scheme for development of Knitting and Knitwear Sector to boost production in knitting and knitwear cluster at Ludhiana, Kolkata and Tirupur.
- ii. Government is implementing **Amended Technology Up-gradation Fund Scheme (ATUFS)** for technology up-gradation of the textile industry to incentivize production with an outlay of Rs.17,822 crore during 2016-2022. It is expected to attract investment of Rs.1 lakh crore and generate 35.62 lakhs employment in the textile sector by 2022.
- iii. Government has launched a special package of Rs.6000 crore in 2016 to boost investment, employment and exports in the garmenting and made-ups sector with the following components viz., (i) full refund is provided under Remission of State Levies (ROSL) to the exporters for the State level taxes; (ii) production linked additional incentive of 10% is provided under the Amended Technology Up-gradation Fund Scheme (ATUFS).
- iv. **Scheme for Integrated Textile Park (SITP):** Government of India grant with a ceiling limit of Rs. 40 crore for setting up textiles parks for creation of world class infrastructure facilities for setting up of textile units.

The Overhaul



- **Mega textile parks of 1,000 acre** may come up
- **59 parks** sanctioned, 22 complete, others under construction
- **Extant scheme** slow to take off
- **Clearances delay**, slow fund mobilisation push for scheme overhaul



₹19,398 Cr FDI received by textiles sector, which is 0.74% of total inflows BCCL

- v. National Handloom Development Programme, Comprehensive Handloom Cluster Development Scheme, Handloom Weaver Comprehensive Welfare Scheme and Yarn Supply Schemes under which financial assistance is provided for raw material purchase, looms and accessories, design innovation, product diversification, infrastructure development, skill upgradation, marketing of handloom products & loans at concessional rate etc. for enhancing production and boost the textile sector.
- vi. National Handicrafts Development Programme (NHDP) and Comprehensive Handicraft Cluster Development Schemes aims at holistic development of handicrafts clusters through integrated approach by providing support on design, technology up-gradation, infrastructure development, market support etc.
- vii. **PowerTex India:** A comprehensive scheme for Powerloom sector with components relating to Powerloom up-gradation, infrastructure creation, concessional access to credit, etc.
- viii. **Silk Samagra** – An integrated Scheme for development of silk industry with components of research & development, transfer of technology, seed organization and coordination, market development, quality certification and export.
- ix. **Jute ICARE** for increasing the income of farmers by at least 50% through promotion of certified seeds, better agronomic practices, use of microbial reusing of Jute plant, retting to produce quality of jute, increase productivity and to reduce the cost of jute production for the jute farmers.
- x. **North East Region Textile Promotion Scheme (NERTPS)** for promoting textiles industry in the NER by providing infrastructure, capacity building and marketing support to all segments of textile industry.

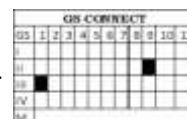
Way Forward

The key to restoring the glory of Indian textile industry lies in its productive workforce, safe work environment and the use of latest technology. According to the 'Vision, Strategy and Action Plan for Indian Textile and Apparel Sector', taking all innovative steps in partnership with industry will create additional 35 million jobs in the textile sector by 2024-25.

The Customs (Administration of Rules of Origin under Trade Agreements) Rules, (CAROTAR) 2020

News Excerpt

The Customs (Administration of Rules of Origin under Trade Agreements) Rules, 2020 (CAROTAR, 2020), notified on August 21, came into force from September 21.



Pre-Connect

- The government has come out with norms for the enforcement of 'rules of origin' provisions for allowing preferential rate of customs duties on products imported under free trade agreements (FTA).
- The new norms have been framed with a view to checking inbound shipments of low quality products and dumping of goods by a third country routed through an FTA partner country.
- The Department of Revenue has notified the 'Customs (Administration of Rules of Origin under Trade Agreements) Rules, 2020' which came into force from September 21, 2020.

Analytica

- The new rules have been implemented particularly to check the unprecedented surge in almost duty-free import of Chinese goods through some of the 10 countries with which India has liberal trade arrangements under the Association of Southeast Asian Nations (ASEAN) FTA.
- India signed the ASEAN FTA in 2009 with Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam.
- The ASEAN FTA allows imports of most of the items at nil or concessional basic customs duty rate from the 10 ASEAN countries and most of the imports are from five members—Indonesia, Malaysia, Thailand, Singapore and Vietnam.

- The benefit of concessional customs duty rate applies only if an ASEAN member country is the 'country of origin' of goods. This means that goods originating from China and routed through these countries will not be eligible for customs duty concessions under the FTA.
- Currently, a 'country of origin' certificate, issued by a notified agency in the country of export, is produced by the importer and there is no additional obligation on them to prove the origin of goods.

Rules

- ✓ New customs rules put the onus on importers to prove that goods enjoying concessional duty must have 35% value addition in the country with which India has a free trade agreement (FTA). If the importer fails, the importer will be denied FTA benefits for future consignments of identical goods.
- ✓ These rules "shall apply to import of goods into India where the importer makes a claim of preferential rate of duty in terms of a trade agreement.
- ✓ The "rules of origin" provision prescribes for the minimal processing that should happen in the FTA country so that the final manufactured product may be called originating goods in that country.
- ✓ Under this provision, a country that has inked an FTA with India cannot dump goods from some third country in the Indian market by just putting a label on it. It has to undertake a prescribed value addition in that product to export to India. Rules of origin norms help contain dumping of goods.
- ✓ The importer has to possess all relevant information related to country of origin criteria, including the regional value content and submit the same to the proper officer on request.

Free Trade Agreement (FTA)

- ❖ A free trade agreement is a pact between two or more nations to reduce barriers to imports and exports among them.
- ❖ Under a free trade policy, goods and services can be bought and sold across international borders with little or no government tariffs, quotas, subsidies, or prohibitions to inhibit their exchange.
- ❖ India has inked FTAs with several countries, including Japan, South Korea, Singapore, and ASEAN members.

Process

- To claim preferential rate of duty under a trade agreement, the importer or his agent, at the time of filing bill of entry, has to make a declaration in the bill that the imported products qualify as originating goods for preferential rate of duty under that agreement; and produce certificate of origin.
- The claim of preferential rate of duty may be denied by the proper officer without verification if the certificate of origin is incomplete or has any alteration not authenticated by the issuing authority or the certificate is produced after its validity period has expired.
- Under the CAROTAR regime, the declaration and verification criteria will become comprehensive for import under PTT. There are some changes in particulars of the bill of entry such as the declaration regarding satisfaction of originating goods (for PRD), CoO details, originating criteria "wholly obtained" (WO) or "Not wholly obtained" (NWO), accumulation or cumulation, back to back CoO or direct transport, etc.
- During the course of customs clearance or thereafter, request for verification of certificate of origin from verification authority where there is a doubt regarding genuineness or authenticity of the certificate for reasons such as mismatch of signatures or seal when compared with specimens of seals and signatures received from the exporting country.

Implications and challenges

- ✚ Identical goods from the same producer or exporter shall be liable to rejection of PTT without any verification due to contravention by the importer.
- ✚ Terms like 'reasonable care about accuracy and truthfulness' of information and documents received from exporter and an officer's 'reason to believe' to doubt such accuracy for further verification, are nowhere defined or explained which may lead to an arbitrary extension of the jurisdiction of the authorities.

- ✚ Strict timelines are expected to be imposed on the submission of information by the importer and on the response by verification authority in the exporting country. Failure to adhere to such timelines may lead to rejection of PTT.
- ✚ No reservations provided on obtaining the proprietary business information from the exporter/ producer.

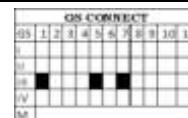
Way Forward

The CAROTAR Rules 2020 can be seen as a motivator for the domestic industry as it aims to cut down on frivolous imports at a preferential rate. It also implicitly boosts the “Aatmanirbhar Bharat” campaign. It will be interesting to see whether this move will achieve its desired objectives by spotting suspicious claims under PTT or end up as another dent to India’s image on ‘ease of doing business’. It may well be a roller coaster ride for the government as well as the industry.

Medical Devices Park

News Excerpt

Kerala is housing one of the first medical device parks in the country, focusing on the high-risk medical device sector to provide a full range of services for the medical devices industry like R&D support, testing, and evaluation.



Pre-connect

- The SreeChitraTirunal Institute for Medical Sciences and Technology (SCTIMST) is along with the Kerala State Industrial Development Corporation (KSIDC) is establishing a medical devices manufacturing facility at the Life Science Park, Thonnakkal, Thiruvananthapuram.
- The facility named ‘**MedSpark**’ seeks to create a support system for research and development and testing and evaluation of medical devices.
- It will also provide manufacturing support for the medical devices industry and a technology business incubation centre for promoting startups and early stage companies.
- It would be the first medical park established in India.

Analytica

- The medical device park will stand out with its emphasis on the high-risk medical device sector involving medical implants and extracorporeal devices, in which SCTIMST scores with its knowledge.
- The Medical Devices Park will create an enabling support system for R&D, testing and evaluation of medical devices, manufacturing support, technology innovation, and knowledge dissemination, all of which are the full range of services that the medical devices industry seeks.
- These services can be utilized by the medical device industries located within the MedSpark as well from other parts of India. This will benefit small and medium-sized medical devices industries, which dominate the medical devices sector.
- The park is being established under the Technical Research Centre for Biomedical devices program of the Department of Science and Technology.

Medical Devices Sector in India

- ❖ The current market size of the medical devices industry in India is estimated to be \$11 bn.
- ❖ Medical device sector is likely to grow to \$ 65 bn industry by 2024.
- ❖ India’s expected export of medical devices will reach ~ \$10 bn by 2025. Overall import dependency of 75 – 80% in India.

Steps taken by the government to ensure the growth of a vibrant ecosystem of medical devices manufacturing in India over the past 5 years:

- ❖ Recognized Medical Devices as a sunrise sector under Make in India campaign, 2014
- ❖ The Medical Devices Rule of 2017
- ❖ The Medical Devices Amendment Rules of 2020 bring all medical devices in India under regulation as drugs
- ❖ A Productions Linked Incentives Scheme for Medical Devices, 2020.
- ❖ Funding for Medical Devices Parks in the country, 2020

- MedSpark can leverage the existing advantage of the Kerala State in the high-risk medical device manufacture and develop it into the most sought after destination for setting up medical device industry in India.
- Currently, Kerala has a number of medical device companies with an annual turnover in excess of Rs. 750 crores, most of them operating with technologies transferred from SCTIMST.

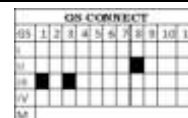
MedSpark will offer

- ✓ A Medical Device Testing & Evaluation Centre accredited to international agencies.
- ✓ An R&D Resource Centre for facilitating R&D in medical device domain, the services of which would be shared by the entities within the Park.
- ✓ A centralised Knowledge Centre for skill up-gradation with facilities for conducting training and providing support on regulatory issues, clinical trials, etc.
- ✓ A Technology Business Incubation Centre for promoting start-ups and early-stage companies.
- ✓ A set of Modular Manufacturing Units for lease by the industries coming to the park or land modules for setting up manufacturing units.
- ✓ The business model for the MedSpark is self-sustaining in which its operational expenses will be generated from its revenue streams. Funding from the state and central governments (both Kerala State and Central) through various schemes will meet the capital expenditure and deficit in income against expenses during the initial stages.
- ✓ It is expected that the project would provide direct employment to 1200 people. Besides, employment generation up to 4000 – 5000 jobs through the supporting industries like OEM suppliers, service providers, and marketing/post marketing support activities.

Development of Powerloom Sector in the Country

News Excerpt

Centre is implementing the Venture Capital Fund for Powerloom and Allied Products and Services (TEX-Fund), as a component under PowerTex India scheme.



Pre-Connect

- The powerloom industry has traditionally been a cornerstone for the Indian economy in terms of foreign exchange earnings and employment.
- Powerlooms contribute around 70 per cent of the total jobs in the textiles industry, employing around 4.4 million people.
- The powerloom industry is equipped with approximately 2.701 million registered looms producing 54,000 square meter fabrics, which are concentrated in clusters across Erode, Salem, Madurai, Ichalkarnaji, Solapur, Bhiwandi, Bhilwara and Malegaon, among others.

Analytica

- The Government is implementing the Venture Capital Fund for Powerloom and Allied Products and Services (TEX-Fund), as a component under PowerTex India scheme w.e.f. 01.04.2017.
- The TEX Fund has a

Powerloom Development and Export Promotion Council

- ❖ The Powerloom Development and Export Promotion Council (PDEXCIL) is the nodal agency for the development and promotion of export of powerloom products.
- ❖ The council undertakes direct promotional activities such as participation in international trade shows, sending and hosting trade delegations, and sustained image-building exercises through advertisements abroad, publications and audio visuals.
- ❖ Under the Group Insurance Scheme for Powerloom Workers, 1182 powerloom workers were enrolled by various nodal agencies under the scheme during January 2020.
- ❖ As of September 2018, there were approximately 2.701 million registered powerlooms in the country.

minimum corpus of Rs.35 crores with Government of India's contribution of Rs.24.50 crores and the Small Industries Development Bank of India (SIDBI) has a minimum contribution of Rs.10.50 crores.

- SIDBI Venture Capital Limited (SVCL) is the Investment Manager of the TEX-Fund.
- The TEX-Fund is aimed at providing equity investment to micro and small enterprises in the powerloom sector to boost innovation in the industry by creation of brands and generation of intellectual property and enable development of the Powerloom Sector and allied activities.

PowerTex India Scheme

- ✓ PowerTex India is an all-inclusive scheme that's made for the development of the power loom sector which further addresses the unheard needs of the power loom sector.
- ✓ The Union Textiles Minister had launched the scheme for developing the knitting and knitwear sector under the PowerTex India Scheme.
- ✓ This scheme aims at boosting the already existing infrastructure and encourage the adoption of modernisation in the power loom sector at an even larger scale.

Components of ThePowerTex India Scheme:

- i. In-situ Upgradation of Plain Power looms.
- ii. Group Workshed Scheme.
- iii. Yarn Bank Scheme.
- iv. Common Facility Centre.
- v. Pradhan Mantri Credit Scheme for Power looms.
- vi. Solar Energy Scheme for Power looms.
- vii. Market Development, Facilitation, IT, Awareness, and Publicity for Power loom Schemes.
- viii. Tex Venture Capital Fund.
- ix. Grant-in-Aid and Modernisation& Upgradation of Power loom Service Centres (PSCs).



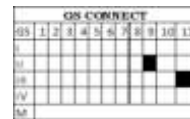
The advertisement features the KSG logo at the top center, with the tagline 'Air Institute For IAS Exam...'. Below the logo, the text 'MAINS DESTINAIRE' is prominently displayed in large, bold, black letters. Underneath, it says 'Online classes Exclusively for Mains followed by Answer Writing' in a smaller font. The website 'testseries.ksgindia.com' is listed below that. At the bottom, there is a red button with a white arrow and the text 'REGISTER NOW'. To the right of the button, the phone numbers '9667779058' and '9811598995' are provided. The background of the advertisement shows a blurred image of students in a classroom setting.

International Relations

The US-India Strategic Partnership Forum

News Excerpt

Prime Minister Narendra Modi delivered a special keynote address at the US-India Strategic Partnership Forum's 3rd Annual Leadership Summit via video conferencing in New Delhi.



Pre-Connect

- The theme of the summit was '**Navigating New Challenges**'.
- The USISPF Board of Directors was represented by 21 US and Indian CEOs whose businesses represent a market capitalisation of USD 1.7 trillion, leading influences of the Indian Diaspora, prominent members of the foreign policy fraternity, and senior diplomats from both governments.
- USISPF announced the formation of its India Executive Leadership Board that was headlined by an address of the Vice President Mike Pence.
- As a result, 17 senior India business leaders join the Board to steer the organization's India strategy and further grow engagement.
- US-India Strategic Partnership Forum (USISPF), a not-for-profit institution that works on boosting partnerships between the two countries, for deeper economic ties around healthcare, defence, hi-tech, and agriculture.

About US-India Strategic Partnership Forum (USISPF)

- The Forum, formed in 2017 under the Chairmanship of John Chambers, is the only independent bi-lateral organization that is committed to creating the most powerful strategic partnership between the U.S. and India.
 - Promoting trade is an important part of USISPF's work, but the organization's mission reaches far beyond this to ensure business and government comes together in innovative ways to create meaningful opportunities that have the power to change the lives of citizens.
 - The Forum actively works on areas such as water, education, immigration, CSR and culture.
 - The USISPF Board of Directors is represented by over 20 Global Fortune 500 CEOs, joined many former senior officials from both governments and other C-level executives and the Forum's advisors include eminent leaders like General David Petraeus, Indra Nooyi and former founding Vice-Chairman of NITI Aayog, Prof Arvind Panagariya.
- PEPPER IT WITH**

G-20, G-8, ASEAN, IMF, World Bank, World Trade Organisation, Organisation for Economic Cooperation and Development, IORA, USAID

PEPPER IT WITH

G-20, G-8, ASEAN, IMF, World Bank, World Trade Organisation, Organisation for Economic Cooperation and Development, IORA, USAID

Highlights

- ✓ 'Atmanirbhar Bharat', Self-Reliant India is about transforming India from being just a passive market to an active manufacturing hub at the heart of the global value chain.
- ✓ The pandemic had also shown the world that the decision of developing global supply chain should not be just based on cost but also be based on trust. Along with affordability of geography, companies are now looking for reliability and policy stability, and India has all these qualities.
- ✓ PM said that, 'As a result, India is becoming one of the leading attractions for foreign investment, be it from the US, the Gulf, the EU or Australia. The world believes in India.'
- ✓ 'Aatmanirbhar Bharat' merges the local with the global. It ensures India's strengths act as a global force multiplier."
- ✓ The discussion focussed on the ease of doing business in India, digitisation & fintech; agriculture, including agricultural infrastructure; private sector participation across all the sectors of the Indian economy; skill development; healthcare; COVID-19 mitigating measures undertaken by the government & possible future course of actions; role of government spending in the infrastructure sector in the coming years; and manufacturing in India, with a special emphasis on the logistics sector in India.

- ✓ Being attended by top corporate leaders, government officials and political personalities, the summit highlights areas of bilateral cooperation; trade and investment; strategic energy ties; India's position in global supply chains, collaboration in fintech, healthcare, and technology.

Conclusion

The Forum is a win-win partnership between the world's largest and oldest democracy. Aggressive and assertive China provides further opportunity for both nations to collaborate and ensure international rule of law prevails.

India-China de-escalation: SCO meeting

News Excerpt

China has made a proposal regarding 'de-escalation' along the line of actual control or LAC that sources said is 'unusual'.

Pre-Connect

- China has unilaterally promulgated its 1959 claim line annexing nearly 1,000 square km of Indian territory.
- A counter-intrusion immediately after multiple encroachments were detected – like a Chumar, after Depsang in 2013 – was feasible but not attempted as New Delhi seriously misread Chinese intention, believing Beijing would honour existing protocols and agreements and ultimately vacate aggression, as in the past. But this time around, restoration status quo ante (RSQA) was never on the Chinese mind.

Highlights

- China is willing to go back to Finger 8 in the North Bank of Pangong Tso area, but India has to move back from Finger 4 to between Fingers 2 and 3.
- The standoff astride the Line of Actual Control in eastern Ladakh is in a stalemate since the stand-still agreement between military commanders.

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Excerpts of the Indian Defence Minister's address to the Combined Meeting of Defence Ministers of Shanghai Cooperation Organisation (SCO), Collective Security Treaty Organisation (CSTO) and Commonwealth of Independent States (CIS) Member States in Moscow:

1. "Peaceful, stable and secure region of SCO member states – which is home to over 40% of global population, demands a climate of trust and cooperation, non-aggression, respect for international rules and norms, sensitivity to each other's interest and peaceful resolution of differences."
2. "We need institutional capacity to deal with both traditional and non-traditional threats – above all, terrorism, drug-trafficking and transnational crime. As you all are aware, India unequivocally condemns terrorism in all forms and manifestations, and condemns its proponents. India values the works of SCO Regional Anti-Terrorism Structure (RATS). We laud RATS' recent work in the cyber domain to prevent the spread of radicalism and extremism. The adoption of anti-terror measures by the SCO Council to counter extremist propaganda and de-radicalisation is a significant decision."
3. "India has vital interests and links of civilisation and culture with all States in the Gulf. We call upon countries in the region – all of which are dear and friendly to India, to resolve differences by dialogue based on mutual respect, sovereignty and non-interference in internal affairs of each other."
4. "Security situation in Afghanistan remains a concern. India will continue to support the efforts of the people and Government of Afghanistan for an Afghan-led, Afghan-owned and Afghan-controlled inclusive peace process. The SCO Contact Group on Afghanistan is useful for exchanging notes among SCO member States."

- There has been no breakthrough in the disengagement and de-escalation process (DDP), which had collapsed soon after the Galwan clash.

Why should India move its troops back?

To move back is a bit difficult for India due to several reasons:

1. India believes its territory extends right up to Finger 8. So, why should it withdraw to behind Finger 3, where there is a military site?
2. There was no restriction on Indian troops in the area before May this year, when the Chinese were at Finger 8. So, why should there be any now.
3. Instead, India has said the Chinese can go back to where they were in early May, to Finger 8. They moved first. They should move back first.
4. There is an enormous trust deficit. Would the Chinese People's Liberation Army (PLA) troops stay at Finger 8 when India moved its troops back? There is no guarantee at all.
5. **There is some talk of a North Bank-South Bank Package Deal:** Of a general withdrawal from both banks as China is concerned about the Indian Army holding on to tactically important positions in the South Bank right from Spanggur to Richin La.
6. What India did in late August, reinforcing its positions in the South Bank has worried the Chinese, leading to their creeping up to Indian positions in the dark and firing in the air. This has happened four times.
7. This could be a face-saver China wants, but after what happened in Galwan, India is not keen on giving any face-saver to the Chinese.
8. **India's position is clear:** China has to go back to its positions to where they were in April this year.

PEPPER IT WITH

Article 51, The Doctrine of Panchsheel, Pangong Tso Lake, Shanghai Cooperation Organisation, Collective Security Treaty Organisation, Afghan Peace Process, SCO Regional Anti-Terrorism Structure (RATS)

Conclusion

It is important to take a long view of the relationship between India and China, which has been "difficult" in more recent times, but has been "good in many parts" as well. While peace must remain an utmost priority, it should be the responsibility of both the sides to ensure that weather at LAC remains calm.

Sino-Pak Nexus: Implication for India

News Excerpt

Gilgit-Baltistan, which is part of the disputed territory of Kashmir region between India and Pakistan, is on its way to become the fifth province of

Pakistan. It is seen as a move to please China.

Pre-Connect

- According to the sources of the Pakistan Government, Imran Khan would soon visit the region and make a formal announcement in this regard.
- After consultation with all stakeholders, the Pakistan government has decided in principle to give "constitutional rights" to the people of Gilgit-Baltistan.
- The intelligence-sharing cooperation between the China and Pakistan has deepened and reports suggest posting of Pakistan's ISI officers, from this March to China's Central Military Commission's Joint Staff Department.



GS CONNECT										
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- The alliance expanded into an economic partnership with the China-Pakistan Economic Corridor. It passes through Gilgit-Baltistan. Pakistan sees the corridor as a game-changer.

No Political Rights for People of Gilgit-Baltistan

- Gilgit-Baltistan for long has been neglected, and has remained in a constitution and administrative limbo, because of the lack of clarity on its status and the deprivation locals have felt because of it.
- When the Kashmir conflict began in 1947, Gilgit-Baltistan was treated as part of Kashmir region, but in the 1970s, the Pakistan's ruling elite decided to carve it out of Kashmir, and make it an administrative unit, directly controlled by Islamabad. Since then, local politics has been sidelined in the region.
- The only indigenous local party was banned in Gilgit-Baltistan, and now only Pakistan-based parties exist in the region.
- Another local political activist, Baba Jan was jailed in 2011 under Pakistani anti-terrorism laws for participating in a protest over the killing of a man and his son. The two were allegedly shot dead by the police in an earlier protest demanding compensation for a landslide incident that had destroyed their village.

PEPPER IT WITH

Baghdad Pact, Manila Treaty, SEATO, CENTO, Belt and Road Initiative, FATF, CPEC, Panchsheel

Demographic Engineering and Shia-Sunni Tensions

- ✓ Islamabad does not just control local politics in Gilgit-Baltistan with an iron-hand. Kashmiri political parties are also not allowed in the region.
- ✓ The policy makers in Islamabad have also been actively changing the demographics by bringing in outsiders to the region.
- ✓ The Pashtuns have been encouraged to settle here. Then a lot of religious groups belonging to Sunni school of thought in Islam that has been pouring in.
- ✓ Demographic re-engineering has led to increase in sectarian and ethnic violence in the area.
- ✓ Recent years have seen a rise in killings of Shia Muslims, and some suspect that the state is complicit in these acts of terror.
- ✓ The first time there were Shia Sunni tensions, it was done by the Pakistani state, during the seventies. This was the same time when Karakoram Highway was being built, that connects Pakistan with China. The state sowed division so that it could move in under the pretext of security.
- ✓ Pakistani dictator General Zia ul Haq also fanned anti-Shia sentiment during his tenure in the eighties because the then military government wanted some villages along the highway to be removed.
- ✓ These villages were occupied by local Shias who did not want to move from there, so Sunni extremists came and attacked them and ransacked the villages.
- ✓ Again then, Shia-Sunni tensions have only exacerbated. In 2012, a bus headed to the region with 20 Shias was stopped by Sunni militants. All were shot dead after being verified as Shias by the attackers.
- ✓ But local intelligence officers downplay these tensions, perhaps in a bid not to worry China, which is heavily invested in this region.

China's Role in the Region

- Earlier, China's involvement was restricted to investing in the mining and transport infrastructure, but now it wants to expand its footprint.
- The China Pakistan Economic Corridor (CPEC) which experts believe is a debt-trap for Pakistan, has a major chunk of its route passing through Gilgit Baltistan region.
- China maybe lobbying in Pakistan to regularize the region so as to protect its investments.
- The western route of CPEC goes through the Gilgit-Baltistan and it seems China is advising Pakistan to move on and accept the status quo with regards to the Kashmir conflict. It wants to consolidate all areas under CPEC to use it productively for the project.
- Pakistan Army can no longer solve the Kashmir issue, which includes Gilgit-Baltistan region, militarily. But there is a caveat though.
- If Pakistan ends up converting Gilgit-Baltistan into a province, then it will no longer have any justification to protest India's move to change the status of Kashmir under its control.

Analytica

- ✚ Pakistan has been on the Financial Action Task Force (FATF) grey list since June 2018 and even though Islamabad is getting its progress report ready, there is little evidence to suggest that its faith in the use of terrorism as a state policy against India will change.
- ✚ Pakistan's growing alliance with China has been a major factor that has alleviated international pressure on FATF, altering its strategic calculus.
- ✚ Beijing's all-out support to Pakistan provided room to shrink Islamabad's reliance on the West, especially the US.
- ✚ Importantly, Pakistan's military build-up has continued with Chinese defence imports despite its economic slowdown and mounting debt.
- ✚ China wants its alliance with Pakistan to serve as an epitome to smaller nations in South Asia and the Middle East to fulfil its boundless strategic and economic ambition.
- ✚ Beijing's diplomatic support to Pakistan has grown significantly after the revocation of Article 370 and China has repeatedly raised the Kashmir issue at the UN Security Council.
- ✚ China's lavish military assistance to Pakistan has been on four critical fronts:
 - Export of Chinese conventional military equipment;
 - Support in Pakistan's nuclear build-up;
 - Assistance to Pakistan's indigenous defence industry and
 - Intelligence sharing.

Conclusion

The Sino-Pak nexus is expected to grow further in the coming years and India needs to be strategically prepared to deal with the implications of the alliance.

75th UNGA Session

News Excerpt

The 75th session of the United Nations General Assembly (UNGA 75) was convened against the backdrop of the coronavirus pandemic. Representatives of the U.N. member states delivered virtual addresses, discussed priority issues which includes long-term sustainable development and the unprecedented loss of global biodiversity.

GSC CONNECT											
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Pre-Connect

- This year marks the UNGA 75 which opened in New York on September 15, 2020. The virtual high-level talks took place between the September 21 and 25.
- The 75th Anniversary was an opportunity for the United Nations to remind member states to stay true to its principles of advancing peace and security, human rights, and sustainable development.
- U.N. Secretary-General António Guterres had called for an extended "people's debate" that "promises to be the largest and furthest-reaching global conversation ever on building the future we want."
- Turkish diplomat Volkan Bozkir assumed charge as the President of the session, succeeding Nigeria's Tijjani Muhammad-Bande.

PEPPER IT WITH

United Nations Environment Programme, UN Biodiversity Summit, UNCCC, Debate around the UN Security Council Reforms

The Big Issue: Pandemic

- Efforts to combat the coronavirus pandemic formed a key part of the proceedings as global cases continue to rise.
- General Assembly passed a sweeping resolution calling for "intensified international cooperation and solidarity to contain, mitigate and overcome the pandemic and its consequences."

Peacebuilding in Afghanistan

- ✓ The General Assembly also included discussions on global peace efforts, including the moves toward peace currently underway in Afghanistan.

- ✓ Representatives of the Taliban and the Afghan government recently began long-awaited talks with each other in an attempt to end their decades-long conflict.
- ✓ In November 2019, the General Assembly passed a resolution welcoming effort by the Afghan government to promote a peace process led by Afghans.

Prime Minister Narendra Modi's Address

- Prime Minister Narendra Modi virtually addressed the annual UN General Assembly in Hindi on 26th September, 2020. Saturday.
- In his pre-recorded video statement to the landmark General Debate, PM said the stability in the United Nations and empowerment of the world body is essential for the welfare of the world.
- He questioned for how long will India, the world's largest democracy and home to 1.3 billion people, be kept out of the decision-making structures of the United Nations, asserting that reform in the responses, processes and in the very character of the global body is the "need of the hour."
- PM said that, India -will not hesitate in raising its voice against enemies of humanity, including terrorism.
- He added that in our journey towards progress, we want to learn from the world as well as share our experiences with the world.
- PM further said that India is moving forward with a vision of 'self-reliant India' that will also be a force multiplier for the global economy.
- PM added that India's vaccine production, delivery capacity will be used to help humanity in fighting against COVID-19.
- While mentioning India's progress in vaccine development for COVID-19, PM informed the global community that India is moving ahead with phase three clinical trials. India will also help all the countries in enhancing their cold chain and storage capacities for the delivery of vaccines.
- PM reiterated the national commitment that India will always speak in support of peace, security and prosperity and will not hesitate in raising its voice against enemies of humanity, including terrorism.
- PM assured the global community that any gesture of friendship by India towards one country is not directed against any third country. When India strengthens its development partnership, it is not with any mala fide intent of making others dependent or hapless.

Conclusion

The world of 1945 was significantly different from today's world. The global situation, sources-resources, problems-solutions; all were quite different. And as a result, the form and the composition of the institution, established with the aim of global welfare, were in accordance with the prevailing situation of those times. Today we are in a completely different era. In 21st century, the requirements and challenges of our present as well as our future are vastly different from those of the past. Therefore, the international community today is faced with a very important question: Whether the character of the institution, constituted in the prevailing circumstances of 1945, is relevant even today? If century changes and we don't, then strength to bring changes becomes weak. Democratisation of international organisations is demand of the time.

MoU between India and Denmark on Food Safety Cooperation

News Excerpt

The Union Cabinet, chaired by Prime Minister, gave subsequent approval to the Memorandum of Understanding between India and Denmark on cooperation in the area of food security. The Memorandum of Understanding was signed on April 16, 2018.

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Pre-Connect

- Food security 'exists when all people at all times have physical and economic access to sufficient, safe and nutritious food that meets their dietary and food preferences for an active life'.

- Food security is also linked with a host of other factors, such as, socio-economic development, human rights and the environment. It has political ramifications as well.
- At the time of Independence, about 70% of India's workforce was employed in the agriculture sector which accounted for around 54% of India's national income. As of 2019-20, 55% of Indians depend on agriculture and related activities which accounted for around 17% of contribution to national output.

Advantage of the MoU

- The MoU will help improve food safety standards by providing access to the best practices and facilitating trade in important commodities.
- The MOU will help deepen bilateral relations, mutual understanding, and trust, and will ultimately strengthen both parties in their capacity-building efforts in food security.
- It will raise awareness of best practices in the areas of food security in both countries and help address food security problems more quickly.

PEPPER IT WITH

National Food Security Act, Mid-Day Meal Scheme, MSP, PDS, TPDS, Ration Card, FCI, DBT, Negotiable Warehouse Receipt System, AAY, APL and BPL families

India's efforts to achieve food security

- ✓ Independent India has overcome the problems of famines and mass deaths due to starvation, thanks to the focus given to the agriculture, mainly, in the production of cereals.
- ✓ The Public Distribution System, which was initially started as a system to manage food scarcity in the 1940s, has evolved into a system for the distribution of food grains at affordable prices, and is an important part of the government's policy for food management.
- ✓ The Indian ration card system, through which the holders establish their identity, makes them eligible and entitled to buy subsidised food and fuel, liquefied petroleum gas, as well as kerosene, both used as fuel for cooking by the poor through the PDS.
- ✓ In June 1997, the central government launched the Targeted Public Distribution System, with the focus on the poor. States were required to formulate and implement arrangements for the identification of the poor and the delivery of foodgrains to them.
- ✓ In order to make the TPDS more focused towards the very poor, a separate category, under the Antyodaya Anna Yojana (AAY), was launched in December 2000 for one crore families.
- ✓ National Food Security Act was passed by parliament on September 12, 2013. The Act converts into legal entitlements the schemes such as the Public Distribution System, the Midday Meal Scheme in schools and the Integrated Child Development Services (ICDS).
- ✓ Broadly speaking, NFSA seeks to provide not only food and nutritional security to the beneficiaries, by ensuring access to adequate quantities of quality food at affordable prices, but also a life of dignity.

Food Corporation of India

The Food Corporation of India was setup under the Food Corporation Act 1964, in order to fulfil following objectives of the Food Policy:

1. Effective price support operations for safeguarding the interests of the farmers.
2. Distribution of food grains throughout the country for public distribution system
3. Maintaining satisfactory level of operational and buffer stocks of food grains to ensure National Food Security.

Conclusion

The major strength of the Indian food security system has been in achieving self-sufficiency in the production of cereals and in setting up the PDS. Amongst India's strengths is also the system of procurement that has been put in place and the capacity built up to hold large buffer stocks. Strengths must be used, weaknesses remedied, opportunities seized and threats overcome if we are to preserve and improve the nation's food security.

Australia-India-Japan Ministers' meeting on Supply Chains

News Excerpt

India's Minister of Commerce and Industry, Australia's Minister for Trade, Tourism and Investment, and Japan's Minister of Economy, Trade and Industry held a ministerial video conference.

KSG CONNECT											
Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12

Pre-Connect

- India, Australia, and Japan are the crucial players in the Indo-Pacific region.
- During 2019, the three countries have the cumulative GDP of \$ 9.3 trillion while cumulative merchandise goods and services trade were \$ 2.7 trillion and \$0.9 trillion respectively.
- With such a strong baseline, it is important that India, Australia, and Japan use this opportunity to work towards enhancing the share of trade and investment in the region.



PEPPER IT WITH

Quadrilateral Security Dialogue, Malabar (Naval Exercise), China Containment Policy Indo-Pacific Region, String of Pearls

Highlights

- The Ministers reaffirmed their determination to take a lead in delivering a free, fair, inclusive, non-discriminatory, transparent, predictable and stable trade and investment environment and in keeping their markets open.
- In light of the COVID-19 crisis and the recent global-scale changes in the economic and technological landscape, the Ministers underscored the necessity and potential to enhance the resiliency of supply chains in the Indo-Pacific region.
- Recognizing the pressing need for regional cooperation on supply chain resilience in the Indo-Pacific, the Ministers shared their intention to work toward the launch of a new initiative to achieve the objective through cooperation. They instructed their officials to promptly work out the details of the new initiative for its launch later this year. The Ministers noted the important role of business and academia in realizing the objective.
- The Ministers called for other countries in the region, which share the afore-mentioned views, to participate in the initiative.

Conclusion

The initiative could not have come at a more opportune time in the post COVID scenario when there is a likelihood of re-churning of supply chains in the Indo-Pacific region and it is incumbent upon the three nations to take the initiative.

Air Bubble Agreements

News Excerpt

India has signed an air bubble arrangement with Ukraine, taking the number of countries under air bubble pact to 17.

KSG CONNECT											
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Pre-Connect

- In view of the ongoing COVID-19 pandemic, there are restrictions on international flight operations to/from India.
- The Indian aviation and health infrastructure are currently trying its best to efficiently handle the large scale Vande Bharat Mission and Air Bubble operations.
- International flights from both sides will fly between two countries. While Kiev, the Ukrainian capital will be the base for flights between the two countries, it's not yet clear about the Indian cities from where flights to and from Ukraine will fly.
- India has already entered into Air Bubble agreements with several countries viz. USA, Canada, France, Germany, UK, Maldives, UAE, Qatar, Afghanistan and Bahrain, Kenya, Bhutan, Oman.
- Government- is in discussion with Italy, Bangladesh, Kazakhstan, and several others for similar arrangements.

About Air Bubble Agreements

The essential details of Air Bubbles agreements are as follows:

1. These are temporary agreements between two countries aimed at restarting commercial passenger services when regular international flights are suspended as a result of the COVID-19 pandemic.
2. They are reciprocal in nature i.e. airlines from both countries enjoy similar benefits.
3. Tickets for the flights are sold through the airlines' website, travel agents and Global Distribution Systems.

PEPPER IT WITH

No fly Zone, Most Favoured Nation, Vande Bharat Mission

How's Air Bubble Pact Different from Vande Bharat Mission?

- Unlike Vande Bharat Mission, the Air Bubble Pact is a bilateral agreement between two countries to allow flyers travel freely without registering with the government.
- In Vande Bharat Mission, one has to register their name with the Indian Embassy in order to fly out of a specific country.
- Also, in Air Bubbles, flights from both the countries are allowed to fly increasing options and reducing prices.
- Mission Vande Bharat is undertaken only in countries from where no flight is allowed to fly.

Is Tourist Visa Applicable for Flights Under The Air Bubble?

- ✓ Yes, certain countries like Dubai, Bahrain, Afghanistan have allowed tourists to fly into country with certain restrictions.
- ✓ However, majority of flights are still bringing out stranded Indian citizens, OCI card holders & diplomats.
- ✓ If the country has not allowed tourist visa, Indian nationals cannot fly to these countries.
- ✓ One needs to have a valid visa to enter countries which are not allowing tourism activities.

Conclusion

Limited quarantine and other related health facilities to be provided by the airlines and the governments are a factor that has to be taken into account before regular commercial scheduled international operations are allowed.

Malabar Exercise: Inviting Australia

News Excerpt

India is planning to invite Australia to join its annual Malabar naval exercise as it seeks to strengthen military cooperation with other Asia-Pacific countries amid rising tensions with China.

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Pre-Connect

- The stage is set for Australia to be part of the next Malabar naval exercise.
- The exercise will bring together the navies of India, Japan, Australia and the U.S. in the Bay of Bengal at the end of the year 2020.
- According to the diplomatic sources, the move would be a logical next step after the virtual summit between the two countries, where they signed the crucial Mutual Logistics Support Agreement (MLSA) for reciprocal access to bases, medical and training facilities, spares and fuel.

Background

- Australia last participated in what was originally an India-U.S. bilateral exercise in 2007.
- Japan's participation was regularized in 2015, but India had been cold toward Australia's wishes to make Malabar a quadrilateral exercise, wary of provoking Beijing. This wariness has now dissipated.
- Last year's bilateral AUSINDEX naval exercises were the largest and most complex since they were established in 2015, with a notable focus on anti-submarine warfare, given China's increasing capabilities in this area.

PEPPER IT WITH

India China Stand-off, Quadrilateral Security Dialogue, Issues in the South China Sea

Australian's interests

- ✓ While Australia may like to project itself as a two-ocean power, in reality the Indian Ocean is Australia's second sea.
- ✓ Australia's population — and export markets — is heavily weighted toward the Pacific and its maritime and security perspectives obviously follow.
- ✓ Australia would also recognize that the Indian Ocean is an increasingly contested geostrategic space, and be wary of China's ambitions and increasing capabilities through the region, as well as the influence it is developing in states of the South Asian littoral.
- ✓ While its own capacities in the Indian Ocean may not be extensive, Australia should be willing to support New Delhi's self-identification as the rightful resident power in the Indian Ocean.

Analytica

- China's recent assertive behaviour is proving to be a major strategic blunder.
- It is hardening the attitudes of other countries toward Beijing, and making it more difficult for China to exploit its growing power.
- One of the clearest examples of this is India being increasingly drawn toward the orbit of the United States and its allies.
- India had already been inching toward this reality, but as its belligerent neighbour makes consistent incursions into its territory, the nation's instinctive drive to remain unaligned to major power blocs is now being seen in New Delhi as no longer serving India's interests.
- The invitation to Australia to become a participant in the annual Malabar Naval Exercise, alongside the United States and Japan, is the latest demonstration of this movement.
- It will generate a formal and practical security application for the long-discussed "Quad" grouping of the four maritime-capable Indo-Pacific democracies.
- China has seen the growing security cooperation between the U.S., India, Japan, and Australia as a containment strategy.
- It is likely that Beijing will object to such a development, but it's also likely that New Delhi has factored these objections into its decision-making.
- The expansion of Malabar is a clear sign of the concerns that India and Australia — as well as Japan and the United States — have about the less secure environment that is emerging in the Indo-Pacific. None of these countries should be shy about admitting this.

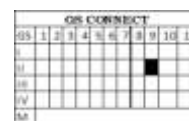
Conclusion

Canberra and New Delhi are gravitating toward maritime cooperation because it is the area where both countries have considerable natural advantages, with significant coastlines as well as well-placed island territories.

Armenia-Azerbaijan war

News Excerpt

The risk of military conflict is escalating in Nagorno-Karabakh, the border region claimed by both Armenia and Azerbaijan, due to the failure of mediation efforts, increased militarization, and frequent cease-fire violations.



Pre-Connect

- The largely mountainous and forested Nagorno-Karabakh, home for some 150,000 people, is at the centre of the conflict.
- Nagorno-Karabakh is located within Azerbaijan but is populated, mostly, by those of Armenian ethnicity, and mostly Christian compared to the Shia Muslim majority Azerbaijan.

Background

- The conflict can be traced back to the pre-Soviet era when the region was at the meeting point of Ottoman, Russian and the Persian empires.
- Once Azerbaijan and Armenia became Soviet Republics in 1921, Moscow gave Nagorno-Karabakh to Azerbaijan but offered autonomy to the contested region.
- In the 1980s, when the Soviet power was receding, separatist currents picked up in Nagorno-Karabakh.

- In 1988, the national assembly voted to dissolve the region's autonomous status and join Armenia. But Baku suppressed such calls, which led to a military conflict.
- When Armenia and Azerbaijan became independent countries after the collapse of the Soviet Union in 1991, the clashes led to an open war in which tens of thousands of people were killed.
- The war lasted till 1994 when both sides reached a ceasefire, they are yet to sign a peace treaty and the border is not clearly demarcated.
- By that time, Armenia had taken control of Nagorno-Karabakh and handed it to Armenian rebels. The rebels have declared independence, but have not won recognition from any country.
- The region is still treated as a part of Azerbaijan by the international community, and Baku wants to take it back.
- Although UN Secretary-General Antonio Guterres, the UN Security Council, and countries like the United States and Russia have called for an end to hostilities, Armenia and Azerbaijan have rejected pressure to hold talks.



Immediate Reason of Recent Clashes

- ✓ In July this year, at least 16 people were killed in the clashes.
- ✓ After the recent violence, Azerbaijan and Armenia blamed each other.
- ✓ Baku said it was forced to respond after Armenian attacks killed and wounded Azeris.
- ✓ Armenia, on the other side, blamed Azerbaijan for launching the "large-scale" attack targeting peaceful settlements.

PEPPER IT WITH
Nations of the Middle East
Geographical Locations of Black
sea and the Caspian Sea

Strategic significance of the region

- The energy-rich Azerbaijan has built several gas and oil pipelines across the Caucasus.
- This includes the Baku-Tbilisi-Ceyhan oil pipeline, with a capacity of transporting 1.2 billion barrels a day, the Western Route Export oil pipeline, the Trans-Anatolian gas pipeline and the South Caucasus gas pipeline.
- Some of these pipelines pass close to the conflict zone, within 16 km of the border.
- In an open war between the two countries, the pipelines could be targeted, which would impact energy supplies.

Interests of the Turkey

- ✚ Turkey has historically supported Azerbaijan and has had a troublesome relationship with Armenia.
- ✚ Turkey has no diplomatic relations with Armenia.
- ✚ The main point of contention between the two was Ankara's refusal to recognise the 1915 Armenian genocide in which the Ottomans killed some 1.5 million Armenians.
- ✚ On the other end, the Azeris and Turks share strong cultural and historical links.
- ✚ Azerbaijanis are a Turkic ethnic group and their language is from the Turkic family.
- ✚ After Azerbaijan became independent, Turkey established strong relations with the country, which has been ruled by a dynastic dictatorship.
- ✚ Reports says that Turkey was recruiting mercenaries from West Asia to fight for Azerbaijan.

- ✚ This fits well into Ankara's aggressive foreign policy, which seeks to expand Turkish interests to the former Ottoman territories.

Russian Stance

- ◇ Moscow sees the Caucasus and Central Asian region as its backyard.
- ◇ But the current clashes put President Vladimir Putin in a difficult spot.
- ◇ Russia enjoys good ties with both Azerbaijan and Armenia and supplies weapons to both.
- ◇ But Armenia is more dependent on Russia than the energy-rich, ambitious Azerbaijan.
- ◇ Russia also has a military base in Armenia. But Moscow, at least publicly, is trying to strike a balance between the two. Like in the 1990s, its best interest would be in mediating a ceasefire between the warring sides.

India's stand on this conflict

India – Armenia

- ▽ Armenia is the only country in the region with which it has a friendship and cooperation Treaty (signed in 1995).
- ▽ Armenia extends its unequivocal support to India on Kashmir issue.
- ▽ The levels of India's trade or investment with Armenia are, however, very low.

India – Azerbaijan

- ▽ Azerbaijan not only supports but also promotes Pakistan's narrative on Kashmir issue.
- ▽ ONGC/OVL have made relatively small investments in an oilfield project in Azerbaijan and GAIL is exploring the possibilities of cooperation in LNG.
- ▽ Azerbaijan falls on the International North South Transport Corridor route, connecting India with Russia through Central Asia; it can also connect India with Turkey and beyond through Baku-Tbilisi-Kars passenger and freight rail link

In light of these interests, India has adopted a balanced and neutral stance and made a politically correct statement in which it has expressed its concern, called for restraint and immediate cessation of hostilities and resolution of the conflict peacefully through diplomatic negotiations. India also do not support involvement of external forces like Turkey in this bilateral conflict.

Conclusion

Without successful mediation efforts, cease-fire violations and renewed tensions threaten to reignite a military conflict between the countries and destabilize the South Caucasus region. This could also disrupt oil and gas exports from the region, since Azerbaijan, which produces about eight hundred thousand barrels of oil per day, is a significant oil and gas exporter to Central Asia and Europe. Russia has promised to defend Armenia, Turkey has pledged to support Azerbaijan, and Iran has a large Azeri minority, which could escalate a crisis and further complicate efforts to secure peace in the region. It is in the interest of all involved parties that the conflict is resolved peacefully.

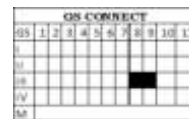


Environment

Green Term Ahead Market (GTAM)

News Excerpt

Union Ministry of Power has launched a pan-India Green Term Ahead Market (GTAM) for buy and sale of Renewable Energy (RE). GTAM is first exclusive product for renewable energy sector in the world.



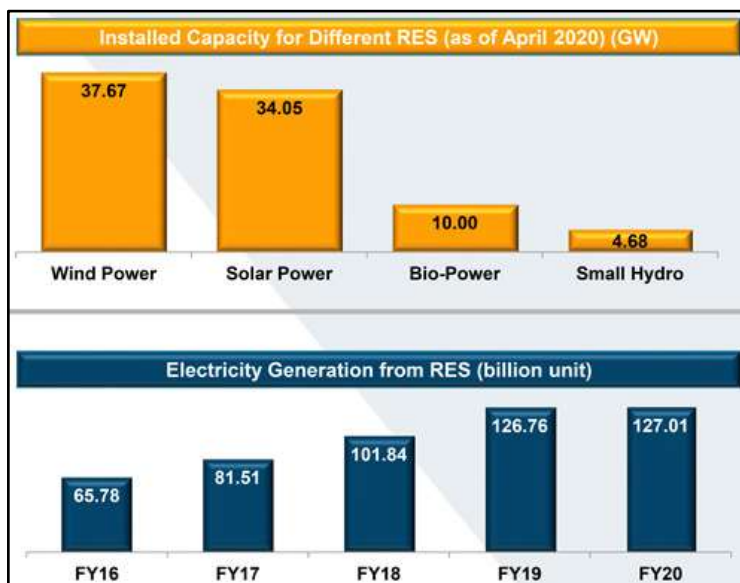
Pre-Connect

Indian Energy Exchange Limited (IEX)

- It is the first and largest energy exchange in India providing a nationwide, trading platform for physical delivery of electricity.
 - It provides Renewable Energy Certificates and Energy Saving Certificates.
 - It enables efficient price discovery and increases the accessibility and transparency of power market in India while also enhancing the speed and efficiency of trade in electricity.
 - IEX is a publicly listed company with NSE and BSE.
-
- | RES Category | Installed Capacity (GW) |
|--------------|-------------------------|
| Wind Power | 37.67 |
| Solar Power | 34.05 |
| Bio-Power | 10.00 |
| Small Hydro | 4.68 |
-
- | RES Category | Electricity Generation (billion unit) |
|--------------|---------------------------------------|
| Wind Power | 10.00 |
| Solar Power | 10.00 |
| Bio-Power | 10.00 |
| Small Hydro | 10.00 |

Some of Renewable Energy initiatives in India

- Government is facilitating developers by allowing FDI through the automatic route.
- Government has taken active steps such as-Green Energy Corridor, Wind-Solar hybrid policy, solar parks and ultra-mega solar parks.
- 42 solar parks of aggregate capacity 23,499 MW have been approved.
- The CPSU scheme aims to promote domestic solar manufacturing, was being run by the Solar Energy Corporation of India (SECI).
- Programs such as PM-KUSUM, solar rooftop phase II etc. have been introduced in the recent past.



About GTAM

- GTAM is a substitute new model introduced for buy and sale of the power produce by the renewable energy sources (RESs) in the open market without getting long term PPAs (Power Purchasing Agreements).
 - GTAM will lead to an increase in the number of participants in the renewable energy sector and benefit buyers of RE through competitive prices and transparent and flexible procurement.
 - GTAM would promote renewable energy merchant capacity and provide open market for competitive buying.
 - Transactions through GTAM will be bilateral in nature with clear identification of corresponding buyers and sellers, there will not be any difficulty in accounting for RPO (Renewable Purchase Obligations).
 - GTAM contracts will be segregated into Solar RPO & Non-Solar RPO as RPO targets are also segregated.
- ❖ Delays in finalization of PPAs and high cost of electricity estimated for the projects are some of the reasons for failure of the PPAs.
 - ❖ The Electricity Act, 2003 de-licensed the power sector and was a major factor for the popularity of PPA.

Issue with PPAs-

- ❖ Delays in finalization of PPAs and high cost of electricity estimated for the projects are some of the reasons for failure of the PPAs.
- ❖ The Electricity Act, 2003 de-licensed the power sector and was a major factor for the popularity of PPA.

- Ministry of Power also mentioned that other products to be introduced in power market for promotion of Renewable Energy are in the pipeline and would be introduced soon.

Analytica

- ✓ GTAM would help in achieving national RE capacity addition targets of the country, e.g.- Government of India has committed to reduce the emissions intensity of GDP by 33% - 35% below the 2005 levels and increase share of non-fossil fuel in total capacity to ~40 % by 2030.
- ✓ India is the fourth largest CO₂ emitter in the world. GHG emission from the new projects can be compensate by RE measures. GTAM has linked the RE to Power transmission grids. So, reliance on thermal and coal-based generation would be less.
- ✓ It delivers the duo benefits. Clean energy that don't cast any externalities and meeting with the energy demand of India, e.g.- India's power demand is expected to reach 15,820 TWH by 2040, renewable energy is set to play an important role. By 2030, renewable sources are expected to meet 40% of India's power needs.
- ✓ It will benefit buyers of RE through competitive prices and transparent and flexible procurement. It will also benefit RE sellers by providing access to the pan- India market.
- ✓ It would insentiving RE producer's rich states like Tamil Nadu and can facilitate supply to the deficient states.
- ✓ GTAM would allow to reduce the burden on RE-rich States and motivate them to develop RE capacity beyond their own RPO.
- ✓ One Nation One Price can prevail as GTAM is pan India Initiative.

PEPPER IT WITH

International Solar Alliance, Paris agreement, UDAY, Wind power policy, Solar power policy, Rewa Solar power plant

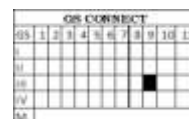
Conclusion

Renewable energy is likely to create a multiplier effect on all stakeholders. And Government is committed to increased use of clean energy sources and is already undertaking various large-scale sustainable power projects and promoting green energy heavily. Renewable energy has the potential to create many employment opportunities at all levels, especially in rural areas.

Low Ozone Over Brahmaputra River Valley

News Excerpt

Researchers at the Aryabhata Research Institute of Observational Sciences (ARIES) have found that the concentration of near surface ozone in Brahmaputra River Valley (BRV) region is low as compared to the other urban locations. This brought the good news for the valley people.



Pre-Connect

- Ground-level ozone or tropospheric ozone, is created by chemical reactions between oxides of nitrogen (NO_x) and Volatile Organic Compounds (VOCs).
- Ground level Ozone usually increases when pollutants emitted by cars, power plants, industrial boilers, refineries, chemical plants, and other sources chemically react in the presence of sunlight, impacting human health.
- ARIES is an autonomous research institute under the Department of Science and Technology (DST), Government of India.

VOCs have a high vapor pressure and low water solubility.

VOCs are human-made chemicals that are used and produced in the manufacturing of paints, pharmaceuticals, and refrigerants.

VOCs are common ground-water contaminants.

Key findings

- Researchers have analyzed the variability of ozone and other air pollutants over Brahmaputra River Valley region with seasonal, day of week and other characteristics.
- Researcher's team the emission source of ozone and its precursors, especially methane (CH₄) and

PEPPER IT WITH

Primary pollutant, Secondary pollutant, VOCs, SAFAR, Air Quality Index, Ambient Air quality, Montreal protocol, Vienna Convention

NMHCs (non-methane hydrocarbons), along with study the relationships between the meteorological parameters, ozone and its precursors in a tropical setting is being done by the team.

- The ozone concentrations in the region shown that it was strongly influenced by local oxides of nitrogen emission sources emit by a nearby national highway vehicles.
- Winter ozone concentrations were observed and cause by local biomass burning providing reactive VOCs that attributed to the formation of ozone.
- During the pre-monsoon season, an impact of insolation on the photochemical formation of ozone was analyzed.

Impacts of Concentration of High Ground level Ozone

<u>Health Effects</u>	<u>Environmental Effects</u>
<ul style="list-style-type: none"> • Exposure is dangerous for those suffering from respiratory problems. • Breathing ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and airway inflammation. • It also can reduce lung function and harm lung tissue. • Ozone can worsen bronchitis, emphysema, and asthma, leading to increased medical care. • In addition, people with certain genetic characteristics, and people with reduced intake of certain nutrients, such as vitamins C and E, are at greater risk from ozone exposure. 	<ul style="list-style-type: none"> • Ozone affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges and wilderness areas. • Ozone harms sensitive vegetation during the growing season. • It can Reduce photosynthesis and slow the plant's growth. • Rural satellites around cities generally experience high level of Ozone, particularly because agriculture production is known to be adversely affected by high ozone concentrations.

Monitoring of Ozone levels In India

- ✓ National Air Quality Monitoring Program (NAMP) is a nationwide program executed by the Central Pollution Control Board (CPCB) to monitor the ambient air quality across the country.
- ✓ Under NAMP, only four air pollutants namely Sulphur dioxide (SO₂), Oxides of Nitrogen (NO_x), Suspended Particulate Matter (SPM) and Respirable Particulate Matter (RSPM) are regularly monitored.
- ✓ Surface ozone is monitored by the CPCB through automatic monitoring stations.
- ✓ The levels are maximum during summer and minimum in monsoon.
- ✓ The levels are maximum during daytime and minimum during night or early morning.
- ✓ In India, surface ozone levels are above the recommended threshold of 8-hour average of 100 µg/m³ for air quality monitoring at various stations.

Way forward

Ozone is not emitted directly. It is a secondary pollutant. Hence, there is need to control the emission of primary pollutant associated with formation of ozone, that would attribute to the decreasing of ground level Ozone formation. The ways to minimize the primary pollutant are-

Ozone for Life: 35 years of ozone layer protection

- ❖ International Day of the Preservation of the ozone layer, held every year on September 16.
- ❖ The theme for this year is "Ozone for life: 35 years of ozone layer protection".
- ❖ The Vienna Convention was the first international treaty to address the depletion of the stratospheric ozone layer by halogenated chemicals.
- ❖ The Vienna Convention and the Montreal protocol also became the first international treaties in history to achieve universal ratification in 2009.
- ❖ The Montreal Protocol has been very successful, and the ozone layer is expected to return to pre-1980 values by the middle of the 21st century, according to the UN.
- ❖ Ozone protection is not only crucial to sustain life on earth, but we must continue to protect the ozone layer for future generations yet to come.

- Mitigate pollution, NO_x vehicular emission by regulating BS-VI norms in strengthen way.
- Increase electric mobility and develop electric infrastructure in order to replace fossil fuel-based emission.
- Increase public transport, control Industrial pollutant and emission by active monitoring and regulation.

First World Solar Technology Summit

News Excerpt

International Solar Alliance (ISA) and Federation of Indian Chambers of Commerce and Industry (FICCI) has organised the first-ever World Solar Technology Summit.

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Pre-Connect

International Solar Alliance (ISA):

- ISA is a treaty-based, actioned oriented and vision based international intergovernmental organization.
- ISA was jointly launched by India and France in the presence of Secretary General of the UN during CoP21.
- The Paris Declaration establishes ISA as an alliance dedicated to the promotion of solar energy among its member countries.
- The major objectives of the organization include deployment of 1000 GW of solar capacity and mobilization of US\$ 1000 billion of investment in solar energy sector by 2030.
- Till now ISA Framework Agreement has been signed by 86 countries, with 68 having also deposited instruments of ratification. The ISA is headquartered at Gurugram in Haryana, India.
- ISA has one target in the Framework Agreement — deployment of 1,000 GW of solar capacity — to mobilise more than \$1,000 billion by 2030, apart from bringing down solar energy cost: from high cost to grid parity, grid parity to kerosene parity, and from kerosene parity to near-zero cost.



World Solar bank:

- The ISA plans to set up a World Solar Bank to help finance the needs of member-countries.

One Sun One World One Grid (OSOWOG):

- India calls for world to be a part of OSOWOG. The vision behind the OSOWOG is 'The Sun Never Sets'. It is basically a cross-border power grid plan seeks to transfer solar power generated in one region to feed the electricity demands of deficient regions.
- With India in the middle, the solar spectrum can easily be divided into two broad zones, which are: Far East including countries like Myanmar, Vietnam, Thailand, Laos, Cambodia etc. Far West covering the Middle East and the Africa Region.

India's Recent Initiatives for Solar Energy

- ❖ **Solar energy** has taken a central place in India's National Action Plan on Climate Change.
- ❖ **National Solar Mission (NSM)** was launched on January 2010 and is in line with India's Intended Nationally Determined Contributions (INDCs).
- ❖ **KUSUM Scheme:** It aims to replace the use of diesel in the farm sector with solar energy with the target of solarisation of irrigation pumps.
- ❖ **Solar Charkha Mission:** It is an enterprise driven scheme and envisages setting up of 'Solar Charkha Clusters' which will have 200 to 2042 beneficiaries. These solar charkhas are operated using solar power.
- ❖ 750 megawatt (MW) solar project which has been inaugurated in Rewa, Madhya Pradesh.

Key Points of the Summit

Focus Areas

- to promote solar technologies, new business models and investment in the solar sector to enhance prosperity.
- to formulate projects and programmes to promote solar applications.
- to develop innovative financial mechanisms to reduce cost of capital;
- to build a common knowledge e-Portal, and
- to facilitate capacity building for promotion and absorption of solar technologies and R&D among member countries.

India's Achievements

- ✓ India pledged to increase its existing clean energy capacity of 134 GW to 220 GW by 2022 and stressed on reducing tariffs further through technological advancements. 134 GW production is about 35% of India's total power generation.
- ✓ India has enhanced its installed renewable energy capacity by 2.5 times and solar capacity by more than 13 times. Globally, India now ranks 4th in terms of renewable power.
- ✓ India is providing capacity building support to ISA member countries through its ITEC training programme. India have set up a Project Preparation Facility to develop bankable solar energy projects in ISA member countries with the help of EXIM Bank of India.
- ✓ The government is actively encouraging the industry, oil and gas companies in particular, to become participants in this transition to solar energy.
- ✓ Five public sector undertakings (PSUs) will be joining ISA's Coalition for Sustainable Climate Action (ISA-CSCA) as corporate partners. Oil and Natural Gas Corporation (ONGC), Indian Oil Corporation Limited (IOCL), Bharat Petroleum Corporation Limited (BPCL), Hindustan Petroleum Corporation Limited (HPCL) and GAIL (India) Limited will be contributing to ISA's Corpus Fund.

Analytica

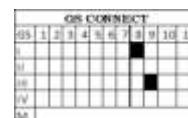
- India's strategic Geo-political location can link East Asian power deficit countries with poor African nations. India can use ISA as an instrument for geopolitical influence. Simultaneously, India can assure its energy security.
- Intercontinental electricity transmission is a powerful idea emerged from India. International community looks India as powerhouse of clean power. India's power diplomacy may yield long term sustainable development goals. It will reduce energy poverty and increase quality of life and human development. It is likely to give boost to India's neighborhood first policy.
- ISA is not only a testament to India's unwavering faith in multilateralism but also a commitment to a better, sustainable and greener future.
- Despite India having one of the lowest per-capita carbon emissions in the world, India has pressed ahead with the deployment of renewable energy at a fast pace for lowering carbon footprints.
- India can give leverage to its demographic dividend by adopting head start measures for training of human resources, Indigenous manufacturing of solar panel etc.

For More Refer KSG CURRENT CONNECT, August-20, World Solar Technology Summit, Page No-76, 77, 78.

Hottest Summer in Northern Hemisphere

News Excerpt

As per the National Oceanic and Atmospheric Administration (NOAA), northern hemisphere faced its warmest summer on record in 2020. WMO has also released a report and stated that Earth may temporarily pass dangerous 1.5°C warming limit.



Key Points

- The northern hemisphere faced its warmest August, with a temperature departure from the 1.19°C average, besting an earlier record set in August 2016.

- The average global land and ocean surface temperature in August was 0.94 °C above the 20th-century average of 15.6°C. This made it the second-warmest August behind August 2016 in the 141-year record of temperatures.
- The Arctic region — a barometer for temperature changes across the world — faced the largest decline in sea ice in the past 41 years due to global warming. The region warmed at twice the rate as the rest of the world because of anthropogenic greenhouse gas emissions.
- The three-month season between June and August this year surpassed both 2016 and 2019 that were earlier tied for the hottest.

Possible Reason

- The increased rate of warming was due to a phenomenon called Arctic amplification trig by increasing GHG emission, where melting ice hastened the process of warming by exposing areas not good at reflecting heat back into the atmosphere, creating a feedback loop between melting ice and rising temperatures.

Concern

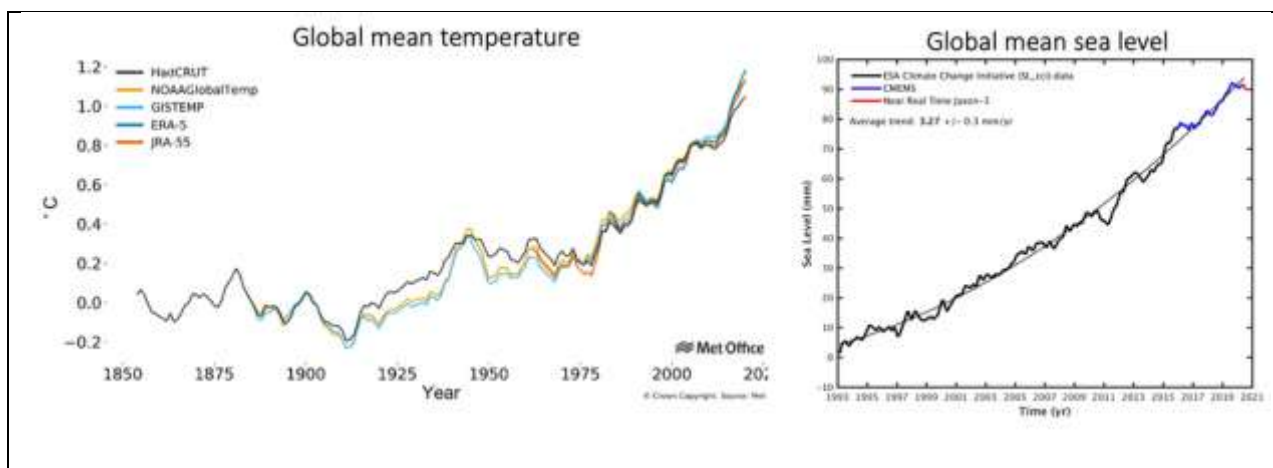
- Human activities emitted 42 billion tonnes of CO₂ in 2019 alone. Under the Paris Agreement, nations committed to reducing emissions by 2030. But report shows a shortfall of about 15 billion tonnes of CO₂ between these commitments, and pathways consistent with limiting warming to well below 2°C (the less ambitious end of the Paris target). The gap increases to 32 billion tonnes for the more ambitious 1.5°C goal.

Impacts on India

- This new record had an imprint of global warming and have impact on India as well, For Instance-Western disturbances resulted in heavy rain in March, April and May and, resulted in locust attacks in Rajasthan which spread as far as Chhattisgarh.

Earth may temporarily pass dangerous 1.5°C Warming Limit

- ❖ **About:** A new report by the World Meteorological Organisation warns that limit global warming to 1.5°C, this century may be exceeded by 2024.
- ❖ The global average surface temperature from 2016 to 2020 is the warmest of any equivalent period on record, and about 0.24°C warmer than the previous five years.
- ❖ Report predicts a continuing warming trend. There is a high probability that, everywhere on the planet, average temperatures in the next five years will be above the 1981-2010 average. Arctic warming is expected to be more than twice that the global average.
- ❖ Sea levels rose by 3.2 mm per year on average over the past 27 years. The growth is accelerating — sea level rose 4.8 mm annually over the past five years, compared to 4.1 mm annually for the five years before that.
- ❖ The past five years have also seen many extreme events, e.g.- record-breaking heatwaves in Europe, Cyclone Idai in Mozambique, major bushfires in Australia and elsewhere, prolonged drought in southern Africa and three North Atlantic hurricanes in 2017.
- ❖ This first overshoot beyond 1.5°C would be temporary, likely aided by a major climate anomaly such as an El Niño weather pattern. However, it casts new doubt on whether earth's climate can be permanently stabilized at 1.5°C warming.
- ❖ **Reason for temperature Increasing:** The report also found while greenhouse gas emissions declined slightly in 2020 due to the COVID-19 pandemic, they remained very high — which meant atmospheric carbon dioxide concentrations have continued to rise.
- ❖ Concentrations of the three main greenhouse gases — carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), have all increased over the past decade. Hence, the threat of global warming amplifies. Current concentrations in the atmosphere are, respectively, 147%, 259% and 123% of those present before the industrial era began in 1750.



Way Forward

- There is a dire need to call for urgent actions that can bring changes in the global trends in the long term.
- The way forward also includes a range of options such as-stabilize GHG emissions, reduce emissions by 2/3 by 2050, improve energy conservation and efficiency, introduce new regulations, Transportation and building codes, raise price of fossil fuels and establish a carbon tax.

FOCUS-Africa launched

News Excerpt

World Meteorological Organisation and partner countries have launched FOCUS-Africa - Fully Optimized User Centric Climate Services Value Chain for Southern Africa - a four-year seven million Euro initiative financed by the European Commission.

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Key Highlights

- FOCUS-Africa initiative aims to deliver tailored climate services to increase resilience and adaptation in the Southern African Development Community (SADC) region in four key sectors: agriculture and food security, water, energy and infrastructure.
- **FOCUS-Africa is one of a number of WMO activities highlighted as-**
 - Building Resilience to High-Impact Hydro-Meteorological Events in Small Island Developing States and South East Asia
 - Polar Prediction Project
 - Sub seasonal-to-Seasonal South East Asia Real Time Pilot Project
 - Improved Coastal Inundation Forecast System
 - Data Exchange Through the South East European Multi-Hazard Early Warning Advisory System-A project
- **Key Objectives**
 - To advance the way in which climate information (from historical records to seasonal forecasts and projections, also exploring decadal forecasts) is processed and used in decision-making, including policy-making for its direct uptake by the regional and national climate services providers.
 - To characterize end-use requirements through regular engagement with stakeholders and active players in the sectors, and ensure that lessons learned are up scaled to other countries in Africa, Europe, and other regions of the world, measured via standard analytics.
 - To contribute to the advancement of the scientific knowledge via publications and reports such as those relevant for the IPCC, through the innovative science developed by FOCUS-Africa in support of improved ways to use climate information such as better identification and characterization of extremes for historical period and calibrated multi-variable approaches to climate predictions and projection.

Analytica

- South African countries are vulnerable to climate variability, change and extremes. Water resources, agriculture, hydropower generation, ecosystems and basic infrastructures are under stress as a result of increasing frequency and intensity of floods, landslides and droughts.
- The development of improved climate information and forecasts of decision-relevant parameters are essential to addressing these challenges. Tailored forecasts such as rainfall onset and cessation are regularly requested by users, along with the associated skill information. Development and delivery of such products and services, and the evaluation of their socio-economic benefits, are central to FOCUS-Africa.
- The project, which embraces 10 partners from Africa and 10 from Europe, will benefit SADC-based users and the European consortium partners who will also greatly enhance their scientific knowledge and climate services provision.
- The project will not only benefit the SADC-based users, but the European consortium partners will also greatly enhance their knowledge in both the science and climate services provision.

Conclusion

There is a dire need to streamline 'adoption measures' to minimize the adverse impact of climate change. This initiative would promote agriculture and food security, water, energy and infrastructure in a calibrated sustained approach.

The G20 Environment Ministerial Meeting

News Excerpt

The G20 Environment Ministers Meeting will take place as part of the Sherpa Track for the G20 Leaders' Summit 2020, which is to be hosted by Saudi Arabia at the end of 2020.

G20 CONNECT											
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Pre-Connect

- The G20 Environment Ministers meet to strengthen policy cooperation towards the reduction of land degradation and habitat loss, and the conservation of coral reefs to safeguard the planet's ecosystems and biodiversity.
- Stressing the importance of preserving the environment and building a more sustainable future, the G20 members discussed issues related to conservation of the earth's environment including land, oceans and natural resources. They addressed protecting marine and terrestrial environments and working towards reducing marine pollution, especially marine plastic littering.

G20 Environment Ministers Promote a More Sustainable Future for All

- Coral reefs are some of the most diverse and valuable ecosystems on Earth, but are under threat from pollution, disease, and habitat destruction.
- The ministers examined how best to conserve coral reefs and ocean ecosystems to ensure the protection of a habitat that 25-50% of marine life depends on and helps protect communities from flooding.

Two programmes launched in the meeting to reduce Land Degradation and Coral Reef program and two documents on climate change related to managing emissions and climate change adaptations under the G20 this year.

- ❖ The Global Initiative on Reducing Land Degradation aims to strengthen the implementation of existing frameworks to prevent, halt, and reverse land degradation within G20 member states and globally, taking into account possible implications on the achievement of other SDGs and adhering to the principle of doing no harm.
- ❖ The Global Coral Reef R&D Accelerator Platform is an innovative action-oriented initiative aimed at creating a global research and development (R&D) program to advance research, innovation and capacity building in all facets of coral reef conservation, restoration, and adaptation, and strengthen ongoing efforts and commitments made to enhance coral reefs conservation and their further degradation.

- G20 ministers also discussed how best to reduce land degradation and conserve biodiversity. Around 12 million hectares of land are lost annually due to the land degradation, causing significant environmental and socioeconomic damage - impacting more than three billion people.
- Ministers acknowledged conservation, cooperation, research and innovation as essential to tackle the current challenges to safeguard the planet and preserve the environment.
- The COVID-19 along with climate challenges demand a commitment to build a more sustainable and prosperous future for all. Aligned with the ambition of the Saudi G20 Presidency to safeguard the planet, Ministers also stressed the central role of sustainable management of natural resources to protect the planet and to restore growth.

❖ **National Coastal Mission** was setup in 2019 under the National Action Plan on Climate Change (NAPCC) to address the impact of climate change on coastal and marine ecosystems.

❖ The Mission aims to address impact of climate change on coastal and marine ecosystems, infrastructure and communities in coastal areas through a combination of adaptation and mitigation measures.

Key Points: India and Meeting

- India is committed to work with G20 nations for a better world.
- India has been taking measures to enhance coral reef conservation. India's steps towards dealing with climate change have been remarkable and stated that the world has to channel its best practices to deal with climate change and to get concrete results.
- The efforts made by National Coastal Mission Programme under which government has taken many steps to protect and sustain coral reefs in the country.
- The efforts made by India towards achieving land degradation neutrality, and towards attainment of global goals of climate change mitigation and adaptation.
- India believes that equity, common but differentiated responsibilities, finance and technology partnerships are key pillars and India is walking the talk on Paris Agreement and its climate commitments. India is taking adequate action to meet Paris Agreement goals and is one of the few countries compliant with it.

World Risk Index 2020

NewsExcerpt

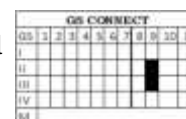
World Risk Index 2020 released stated that all south Asian countries fared poorly on strengthening their abilities to prepare and adapt to extreme events.

Pre-Connect

- The WRI is calculated on a country-by-country basis, through the multiplication of exposure and vulnerability.
- The WRI, released annually since 2011, indicates which countries are in the greatest need to strengthen measures for coping with and adapting to extreme natural events.
- The WRI is part of the World Risk Report 2020 released by the United Nations University Institute for Environment and Human Security (UNU-EHS) and Bundesministerium für Umwelt, in cooperation with the University of Stuttgart in Germany.

Global Highlights

- The index showed that Oceania was the continent most at risk, followed by Africa and the Americas. Vanuatu was the country with the highest disaster risk worldwide. It was followed by Tonga and Dominica.
- Small island states, especially in the South Pacific and the Caribbean, were disproportionately represented among high-risk countries, due to their high exposure to extreme natural events. These also included countries at risk from the rise in sea level as a result of global warming.
- The report identified Africa as a hotspot of vulnerability. More than two-thirds of the most vulnerable countries in the world were located on the continent.



- The Central African Republic was the most vulnerable country, followed by Chad, the Democratic Republic of Congo, Niger and Guinea-Bissau.

India's Performance

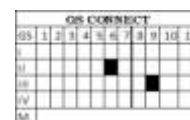
- India is 'poorly prepared' to deal with 'climate reality', due to which it was more vulnerable to extreme natural disasters.
- India ranked 89th among 181 countries on the WRI 2020. The country was fourth-most-at-risk in south Asia on the index, after Bangladesh, Afghanistan and Pakistan.
- Sri Lanka, Bhutan and the Maldives fared better than India in their abilities to cope with extreme disasters.
- India also lagged behind these three neighbours in terms of lack of adaptive capacities or the preparedness to deal with extreme events.
- India and other south Asian nations did improve their ranking marginally in the World Risk Index during the course of a year.
- But all south Asian countries had slipped on their ability to adapt to the reality of climate emergency, a comparison with the World Risk Index, 2019 showed.
- India also slipped on strengthening adaptive capacities. This is worrying given that the country's first comprehensive climate change assessment report has set alarm bells ringing about the impacts of 'climate crisis'.
- Countries with a score above 52.73, were 'very poor' in their capacities to adapt to extreme natural disasters.
- Hence, all south Asian countries fared poorly in the 2020 index (as compared to 2019) on strengthening their abilities to prepare and adapt to extreme events.

Country	Global rank in World Risk Index 2020	Global rank in World Risk Index 2019
Afghanistan	57	53
Bangladesh	13	10
Bhutan	152	143
India	89	85
Maldives	171	169
Nepal	121	116
Pakistan	87	80
Sri Lanka	74	73

O-SMART Scheme

News Excerpt

Ministry of Earth Sciences (MoES) has launched O-SMART (Ocean Services, Modelling, Applications, Resources and Technology) scheme.



Pre-Connect

Blue Economy

- The Blue Economy is concept that encourages better stewardship of our ocean or 'blue' resources. The blue economy is not just about market opportunities; it also provides for the protection and development of more intangible 'blue' resources such as traditional ways of life, carbon sequestration, and coastal resilience to help vulnerable states mitigate the often-devastating effects of climate change.

About Scheme

- It aims at stepping up ocean research and setting up early warning weather systems.
- It addresses ocean development activities and technological background required for implementation of various aspects of Blue Economy.

Following are the main objectives: -

- To generate and regularly update information on Marine Living Resources and their relationship with the physical

Prospect of Blue Economy

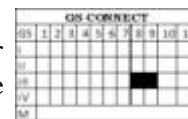
- ❖ The worldwide ocean economy is valued at around US\$1.5 trillion per year.
- ❖ 80% of global trade by volume is carried by sea.
- ❖ 350 million jobs world-wide are linked to fisheries.
- ❖ By 2025 it is estimated that 34% of crude oil production will come from offshore fields.
- ❖ Aquaculture is the fastest growing food sector and provides about 50% of fish for human consumption.

- environment in the Indian Exclusive Economic Zone (EEZ).
- To periodically monitor levels of sea water pollutants for health assessment of coastal waters of India, to develop shoreline change maps for assessment of coastal erosion due to natural and anthropogenic activities.
 - To develop a wide range of the state-of-the art ocean observation systems for acquisition of real-time data from the seas around India.
 - To generate and disseminate a suite of user-oriented ocean information, advisories, warnings, data and data products for the benefit of society.
 - To develop high resolution models for ocean forecast and reanalysis system.
 - To develop algorithms for validation of satellite data for coastal research and to monitor changes in the coastal research.
 - Acquisition of 2 Coastal Research Vessels (CRVs) as replacement of 2 old CRVs for coastal pollution monitoring, testing of various underwater components and technology demonstration.
 - To develop technologies to tap the marine bio resources, to develop technologies generating freshwater and energy from ocean, to develop underwater vehicles and technologies and Establishment of Ballast water treatment facility etc.
 - Submission of India's claim over continental shelf extending beyond the EEZ supported by scientific data, and the topographic survey of EEZ of India.

IFFCO's Nano fertilizers

News Excerpt

Ministry for Chemicals and Fertilizers has lauds IFFCO's Nano experiment for fertilizers. Nano-fertilizers has been cited as game changer for agriculture produce.



Pre-Connect

- Nanotechnology** is a field of research and innovation concerned with building 'things' - generally, materials and devices - on the scale of atoms and molecules. At that level atoms properties are significantly enhanced, even substance can perform reverse changes or radical operation.
- Nanotechnology is being used in developing countries to help treat disease and prevent health issues. It is also being applied to or developed for application to a variety of industrial and purification processes.

About

- Nano fertilizers are 25 to 30% cheaper and give 18 to 35% higher yield and keep the soil in good health.
- A nano-fertilizer refers to a product in nanometer regime that delivers nutrients to crops.
- IFFCO, one of the world's largest fertilizer manufacturing cooperatives, has manufactured products with nano-technology to improve the productivity of farms.
- These products include nano-nitrogen, nano-zinc, and nano-copper. These fertilizers are being tested extensively across the country and have come out well in the trials.
- These three nano products will enhance the quality of soil and are environment-friendly.
- These products will also help farmers to obtain better yielding, reducing the use of traditional fertilizers by up to 50%. This way, it will also reduce the cost of farming.
- IFFCO claims that Nano nitrogen, Zinc, and Copper let the farmers use a lesser amount of fertilizers in their farms and also increase the yield of the crop.

Properties	Nano fertilizers	Conventional fertilizers
Solubility and dispersion of mineral micronutrients	Improve solubility and dispersion of insoluble nutrients in soil, reduce soil absorption and fixation and increase the bioavailability	Less bioavailability to plants due to large particle size and less solubility
Nutrient uptake efficiency	Might increase fertilizer efficiency and uptake ratio of the soil nutrients in crop production and save fertilizer resource	Bulk composite is not available for roots and decrease efficiency
Controlled-release modes	Release rate and release pattern of nutrients for water-soluble fertilizers might be precisely controlled through encapsulation in envelope forms	Excess release of fertilizers may produce toxicity and destroy ecological balance of soil
Effective duration of nutrient release	Nanofertilizers can extend effective duration of nutrient supply of fertilizers into soil	Used by the plants at the time of delivery, the rest is converted into insoluble salts in the soil
Loss rate of fertilizer nutrients	Reduce loss rate of fertilizer nutrients into soil by leaching and/or leaking.	High loss rate by leaching, rain off and drift.

Analytica

Conclusion

Agricultural land is decreasing day by day due to erosion, environmental pollution, unconscious irrigation and fertilization. On the other hand, it is necessary to increase agricultural production in order to meet the needs of the developing industry as well as the nutritional needs of the growing population. Nano-fertilizers in this context can play a significant role to obtain the highest amount and quality of production from the unit area. Hence there is dire need of such innovations and their promotions especially for country like India.

Carbon Tax

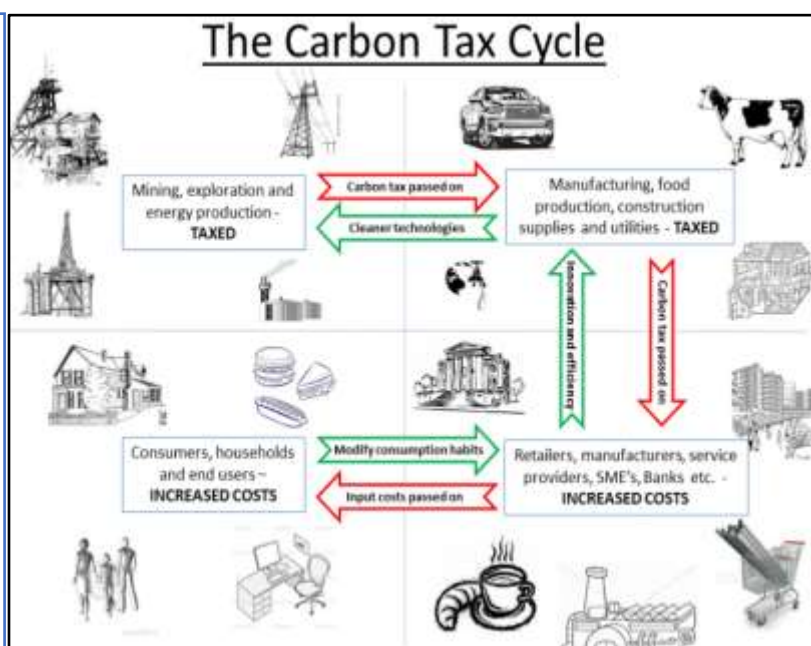
News Excerpt

Experts around the world has reiterated and given push for 'carbon tax' in order to cope with the concern of climate change.

About Carbon Tax

- A carbon tax is a fee that a government imposes on a company that burns coal, oil, gasoline, and natural gas (fossil fuels).

- At the 1992 Rio summit, **'carbon tax'** was incorporated into international law.
- It is designed to internalize the externality, a concept similar to the **"polluter pays principle"**.
- It is based on the concept that whoever is causing environmental costs **must pay the social cost of their actions in full**.
- For instance-A fuel company that releases CO₂ during the production process must have to pay carbon tax that is equivalent to the amount of social damages done by emissions.



- When these carbon-rich fuels are burned, they produce greenhouse gases.

- These gases, such as carbon dioxide and methane, create global warming by heating the atmosphere.
- The resultant climate disruption causes extreme weather such as heat waves, flooding, blizzards, and droughts.
- It is a Pigouvian tax since it returns the cost of global warming to their producers.
- The motive behind carbon tax is to boost lower-carbon behavior to limit GHGs emission and to attract investments into renewable energy and by making polluting production processes more expensive.

Advantages of Carbon Tax	Disadvantages of Carbon Tax
<ul style="list-style-type: none"> • Carbon tax will motivate companies to switch to clean energy solutions. Such as solar energy, wind energy, and hydro-powered sources etc. 	<ul style="list-style-type: none"> • Higher energy prices due to imposition of carbon tax would raise costs for industry and households, resulting in lower profits, wages, and consumption. • Additionally, reduced carbon consumption would lower the real costs of climate change and air pollution.
<ul style="list-style-type: none"> • It will raise revenue that can be spent on mitigation effects of pollution. 	<ul style="list-style-type: none"> • Poorer people will have to pay more or a greater share of their family budget on energy-related services and goods. • Thus, it is not suited for low income countries and poor will be hit harder than high income families.
<ul style="list-style-type: none"> • It will compel polluters to pay the external cost of carbon emission. 	<ul style="list-style-type: none"> • The higher carbon tax can discourage industrial activity. And, thus it may lead to decrease in investment and economic growth. • Administrative expenses would be challenge for carbon tax system.
<ul style="list-style-type: none"> • A carbon tax would encourage innovation in the alternative energy sector. It would motivate everyone to avoid the expenses of a carbon tax. For instance-Some people may walk to work or take their bicycles to avoid fuel costs. 	<ul style="list-style-type: none"> • The carbon tax creates an artificial economic market that isn't always sustainable.
<ul style="list-style-type: none"> • The carbon tax can generate plenty of revenues for local governments. 	<ul style="list-style-type: none"> • Carbon tax would be borne by those who suffer from the effects, such as homeowners, farmers, and ultimately the government.

Concerns with Carbon tax

- Carbon tax will only penalize incremental carbon emissions rather those that have already been emitted into the atmosphere since the Industrial Revolution. A homogenous global carbon tax will, in effect, impose costs on developing countries rather than those that have been responsible for most of the existing stock of pollution.
- It is very difficult to evaluate the level of external cost and how much the tax should be. Thus, there is possibility of tax evasion. Higher taxes may encourage firms to hide carbon emissions.
- If demand is price inelastic, the tax may have to be very high to reduce demand significantly. In the short term, firms may not feel they have many alternatives. Though, over time, demand will become more elastic as more alternatives are generated.
- Consumers dislike new taxes and often don't believe that they will be '**revenue neutral**'. A global carbon tax may curtail economic activity in the poor developing countries.

Carbon tax in India

- India shifted from a carbon subsidization regime to one of significant carbon taxation regime, from a negative price to an implicit positive price on carbon emissions.

- In order to promote clean environmental initiative, India levied clean energy cess on three categories namely coal, lignite and peat.
- Clean Energy Cess is a kind of carbon tax which was introduced with effect from 1st July, 2010. In many countries carbon taxes are levied also on other fossil fuels like petroleum, natural gas etc. However, in India this is applied only on coal and its variants - lignite and peat.

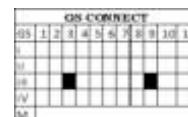
Conclusion

- Climate change is undoubtedly one of the most serious challenges for the entire humanity, and poor countries are at risk. A carbon tax can eventually be an important part of any mitigation strategy—from new technologies to rethinking cities to lifestyle changes. Global cooperation is also needed, since climate change is essentially a global challenge.
- Carbon tax is one of the potent options to nudge the adoption of green tech and, if used wisely, can generate significant results in a short span. A calibrated introduction of Carbon Tax with an effective energy transition measures would definitely pave way for sustainable energy solutions.

Flash Drought

News Excerpt

A study has found that about 10-15% areas under cultivation of rice and maize were affected by flash droughts during the monsoon seasons in India between 1951 and 2018.



Pre-Connect

- Researchers from the Indian Institute of Technology, Gandhinagar identified 39 flash droughts during 1951-2018 and found that 82% of those occurred during the monsoon season.

What is Flash Drought?

- Flash drought refers to relatively short periods of warm surface temperature and anomalously low and rapid decreasing soil moisture (SM).
- Based on the physical mechanisms associated with flash droughts, we classify these events into two categories: heat wave and precipitation deficit flash droughts.

Analytica

Flash Drought's Impacts on Agriculture

- Precipitation deficit and lack of soil moisture during a flash drought can lead to reduction in the yield of rice and maize.
- About 21.5% of median area under rice and maize cultivation was affected by flash droughts during 1951-2018 monsoon season.
- Flash droughts primarily affected rice cultivation in eastern and peninsular India.
- In 1979, a large part of the rice-cultivated region of the Indo-Gangetic Plain and eastern India was severely affected; the 1982 flash drought during the monsoon season was widespread and affected the eastern and north-eastern regions.
- Similarly, the maize-cultivated area (mostly central and peninsular India) was influenced by major flash droughts in 1972, 1976 and 2015.

The researchers divided the Indian region into six regions based on the precipitation distribution to understand regional-scale variability of flash droughts—

1. Central North East (CNE)
2. Himalayan region (HR)
3. North East (NE)
4. North West (NW)
5. Peninsular Region (PR)
6. West Central (WC) —

- ❖ A regional scale assessment of flash droughts showed that four regions — CNE, NE, NW, and WC — that fall in the core monsoon zone, witnessed a majority of flash droughts during 1951-2018.
- ❖ Two regions, HR and PR, experienced more flash droughts during the non-monsoon season than monsoon season during 1951-2018.

- The spatial coverage of soil moisture conditions during the peak of flash droughts showed that the land was extremely dry due to anomalously low precipitation and high temperature.
- These conditions rapidly depleted soil moisture in the rice- and maize-dominated regions during the monsoon season, which affected agriculture negatively.
- This stressed already depleting groundwater levels, a major source for irrigation in north India.

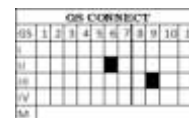
Way forward

- ✓ Investing in new and existing monitoring and observation networks, which would support the development of better indicators to provide early warning.
- ✓ Improving the understanding of the relevant processes that inform forecast models in the region, which could improve seasonal forecasts to enhance drought preparedness.
- ✓ Strengthening observations and monitoring—together with forecasts—would allow decision-makers to better assess their drought risk and determine the actions to be implemented.
- ✓ Improving drought mitigation and response plans that consider trade-offs and actions that benefit both humans and ecosystem health and services should be in place before drought hits.
- ✓ Cultivating the relationships and networks to share information between federal, state/provincial, tribal, and local officials before, during, and after drought would improve the process of drought preparedness and response.

Climate Smart Cities Assessment Framework (CSCAF) 2.0

News Excerpt

Ministry of Housing and Urban Affairs (MoHUA) has launched the Climate Smart Cities Assessment Framework (CSCAF) 2.0, along with the **‘Streets for People Challenge’**.



Pre-Connect

- As the lockdowns lift, cities face many challenges in providing safe, affordable, and equitable modes of transport that enable social distancing. Limited public transport options, narrow, crowded sidewalks particularly in market places and deterioration of mental health, are key issues that must be addressed on priority.
- Pedestrianisation of streets for walking and creating public spaces is a crucial step towards mitigating these issues. Cities around the world, such as Bogota, Berlin, and Milan have responded by transforming streets for walking and cycling, to ensure safe mobility during COVID-19.

Objective of CSCAF

- The objective of CSCAF is to provide a roadmap for cities for combating Climate Change while planning and implementing their actions, including investments.
- The Climate Centre for Cities under National Institute of Urban Affairs (NIUA) is supporting in implementation of CSCAF.

The framework has 28 indicators across five categories:

1. Energy and Green Buildings,
2. Urban Planning, Green Cover and Biodiversity,
3. Mobility and Air Quality,
4. Water Management and
5. Waste Management.

It attempts to address both the mitigation and adaptation sides and evolve the weight of the sectors across both the above in the Indian urban context.

What is the expected outcome of the CSCAF?

- The key outcomes that are expected to emerge are:
- **Status and Benchmarking:** Where do you stand and what to do to improve.
- **Capacity Building and Help:** What you can do and what you need help with
- **Cross Learning:** Who else is in a similar situation and how can you learn from them. Also, the framework is expected to create awareness, citizen engagement, and an environment of KPI-driven spending and circular economy.
- This exercise is also a part of the Ministry's focus and objective on quality of life. The focus is clearly on the community, the neighbourhood and the citizen; and tangible steps that can be taken towards clear impacts.

Streets for People Challenge

- The Streets for People Challenge is the response to the need for making our cities more walkable and pedestrian friendly.
- It aims to inspire cities to create walking-friendly and vibrant streets through quick, innovative, and low-cost measures.
- All cities participating in the challenge shall be encouraged to use the 'test-learn-scale' approach to initiate both, flagship and neighbourhood walking interventions.
- Fit India Mission, under Ministry of Youth Affairs and Sports, along with the India program of the Institute for Transport Development and Policy (ITDP) have partnered with the Smart Cities Mission to support the challenge.

Smart City Mission

Smart Cities focus on their most pressing needs and on the greatest opportunities to improve lives.

In the approach to the **Smart Cities Mission**, the objective is to promote cities that provide core infrastructure and give a decent quality of life to its citizens, a clean and sustainable environment and application of 'Smart' Solutions. The focus is on sustainable and inclusive development and the idea is to look at compact areas, create a replicable model which will act like a light house to other aspiring cities. The Smart Cities Mission is meant to set examples that can be replicated both within and outside the Smart City, catalyzing the creation of similar Smart Cities in various regions and parts of the country.

SMART CITIES MISSION STRATEGY

- ❖ Pan-city initiative in which at least one Smart Solution is applied city-wide
- ❖ Develop areas step-by-step – three models of area-based developments
- ❖ Retrofitting,
- ❖ Redevelopment,
- ❖ Greenfield

PEPPER IT WITH

National Institute of Urban Affairs (NIUA), Institute for Transport Development and Policy (ITDP), Fit India Mission and SMART CITIES

Blue Flag Label

India received the prestigious 'Blue Flag' certification for all its eight beaches that it recommended.

What is blue flag label?

The Blue Flag certification is a globally recognised eco-label accorded by "Foundation for Environment Education, Denmark" based on 33 stringent criteria under four major heads -- environmental education and information, bathing water quality, environment management and conservation, and safety and services at the beaches.

Blue Flag Award

Blue Flag certification has been awarded to eight beaches spread across five states and two union territories by an international jury comprising of eminent members of the United Nations Environment Programme (UNEP), the United Nations World Tourism Organisation (UNWTO), Denmark—based NGO Foundation for Environmental Education (FEE) and the International Union for Conservation of Nature (IUCN).

Beaches awarded:

The beaches which have been awarded the certification are— Shivrajpur in Gujarat, Ghoghla in Diu, Kasarkod and Padubidri in Karnataka, Kappad in Kerala, Rushikonda in Andhra Pradesh, Golden in Odisha and Radhanagar in Andaman and Nicobar Islands.

India has also been awarded the third prize by the jury under the "International Best Practices" for pollution control in coastal regions.

A Blue Flag beach is an eco-tourism model endeavouring to provide the tourists or beachgoers clean and hygienic bathing water, facilities, safe and healthy environment and sustainable development of the area.

Japan, South Korea and the UAE are the only other Asian nations who have been conferred with a couple of Blue Flag beaches, however, in a time frame of about five to six years.

Retreating Monsoon (North-Western Monsoon)

News Excerpt

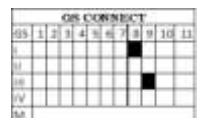
The months of October and November are well known for retreating monsoons. By the end of September, the southwest monsoon becomes weak.

Pre-Connect

- The low-pressure trough of the Ganga plain starts moving southward in response to the southward march of the sun and that attribute to the weakening of southwest monsoon.
- The monsoon retreats from the western Rajasthan by the first week of September. It withdraws from Rajasthan, Gujarat, Western Ganga plain and the Central Highlands by the end of the month.
- By the beginning of October, the low pressure covers northern parts of the Bay of Bengal and by early November, it moves over Karnataka and Tamil Nadu. By the middle of December, the centre of low pressure is completely removed from the Peninsula.

Key Points: the retreating southwest monsoon

- The retreating southwest monsoon season is marked by clear skies and rise in temperature. The land is still moist.
- Owing to the conditions of high temperature and humidity, the weather becomes rather oppressive. This is commonly known as the 'October heat'. In the second half of October, the mercury begins to fall rapidly, particularly in northern India.



- The weather in the retreating monsoon is dry in north India but it is associated with rain in the eastern part of the Peninsula. Here, October and November are the rainiest months of the year.
- The widespread rain in this season is associated with the passage of cyclonic depressions which originate over the Andaman Sea and manage to cross the eastern coast of the southern Peninsula.
- These tropical cyclones are very destructive. The thickly populated deltas of the Godavari, Krishna and Kaveri are their preferred targets. Every year cyclones bring disaster here.
- A few cyclonic storms also strike the coast of West Bengal, Bangladesh and Myanmar. A bulk of the rainfall of the Coromondal coast is derived from these depressions and cyclones. Such cyclonic storms are less frequent in the Arabian Sea.

Cyclones during the Retreating monsoon phase

- ✓ Most severe and devastating tropical cyclones originate in the Indian seas especially in the Bay of Bengal.
- ✓ The highest frequency of the cyclones is in the month of October and the first half of November.
- ✓ More cyclones are born in October and then in November and more cyclones originate in the Bay of Bengal than in the Arabian Sea.
- ✓ In October, the Cyclones of the Bay of Bengal originate between 8°N and 14°N.

PEPPER IT WITH
ITCZ, Summer Solstice, Winter Solstice, Monsoon trough, Pseudo monsoonal tendencies

- ✓ Initially they move in a west or northwesterly direction, but many of them later recurve and move towards the north-east.

- ✓ Near 55 per cent of the Bay storms cross or affect the Indian coast.

- ✓ The area's most vulnerable to these storms include the coastal belts of Tamil Nadu, Andhra Pradesh, Odisha and West Bengal.

- ✓ Many of the cyclones which strike the eastern coast of India, south of 15°N latitude cross the southern Peninsula and enter Arabian Sea.

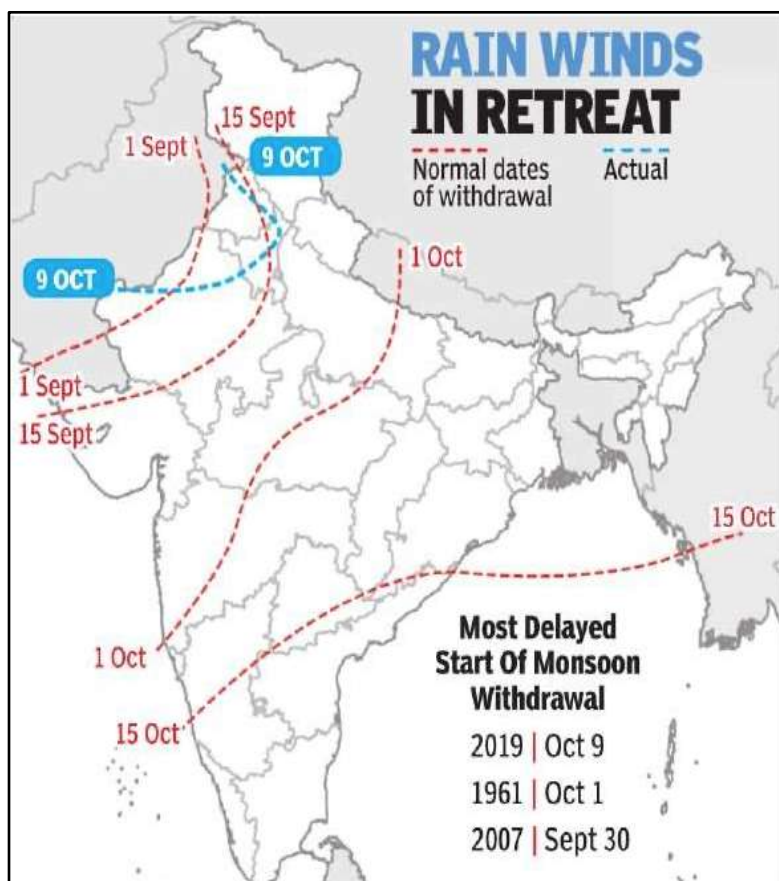
- ✓ During this process, they may weaken, but on re-entry over the Arabian sea they intensify into cyclonic storms.

- ✓ The storms of Arabian sea originate between 12°N and 17°N latitudes in October and between 8° N and 13° N latitudes in November.

- ✓ Generally, they move away from the coast in a north-westerly direction. But about 25% of them later recurve northeast and strike the Maharashtra or Gujarat coast.

- ✓ In north-west India the western disturbances produce clouding and light rainfall in the otherwise fine weather.

- ✓ The precipitation is in the form of snow in higher reaches of Jammu and Kashmir, Himachal Pradesh and in Kumaon Hills.



Mangrove Habitat Loss

News Excerpt

Hundreds of acres of the Sundarbans mangroves-one of the world's largest such forests-are feared to have been lost due to illegal felling carried out for government schemes aimed at providing housing and farmland to the poor.

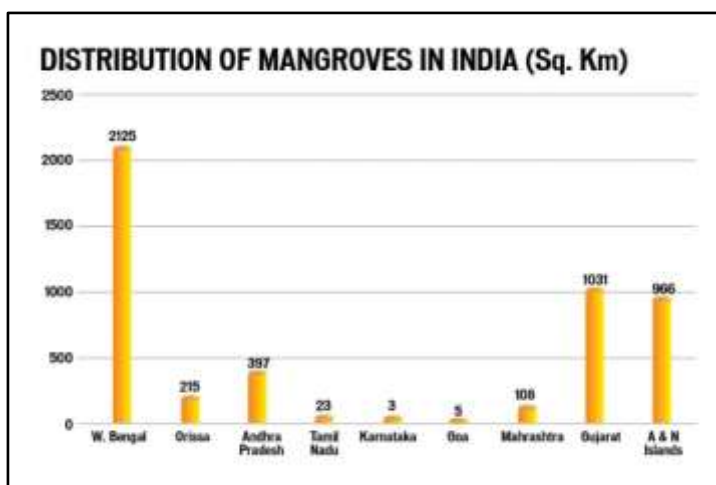
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About Mangroves

- Mangroves are a variety of species of broad-leaved trees (10–40 feet high) lying in muddy creeks and tidal estuaries. They are located on ecotone. They require warm saline water and so they are situated along tropical coastlines.
- Mangroves have a “complex salt filtration system” and complex root system to cope with salt water immersion and wave action. They are also adapted to the low oxygen conditions of waterlogged mud. Mangroves occur worldwide in the tropics and subtropics, mainly between latitudes 25° N and 25° S. They require high solar radiation to filter saline water through their roots. Hence, mangroves are confined to only tropical and sub-tropical coastal waters and they cannot bear freezing temperatures.
- Mangroves grow in areas with low-oxygen soil and in this soil slow-moving waters allow fine sediments to pile up. Mangrove forests serve an important role in stabilizing and reinforcing coastlands. In this way, they protect these coastlands from erosion that results from action of waves and tides that occur regularly. They act as a shield against storms. This capability of the mangrove forests has saved valuable property and countless lives around the world from imminent destruction.

Threats to Mangroves

- Mangroves are immensely beneficial but unfortunately half of the world's mangroves (about 32 million hectares) have already been cleared or destroyed and the remaining ones are also facing grave threat.
- Mangroves are faced with a lot of threats. For example, a large part of land has been cleared for establishing shrimp farms in Latin America and Southeast Asia which have adversely impacted mangroves. Climate change, changing land-use patterns and tourism also affect the future of the mangrove plant.
- A serious impediment to the unhindered growth of mangroves is prompt and mostly unregulated coastal development. Although India has framed laws to protect its coastline, they are breached quite often. According to a research by the Indian Institute of Science, “India has lost 40% of its mangrove area in the last century, mainly due to agriculture, aquaculture, tourism, urban development and overexploitation”.



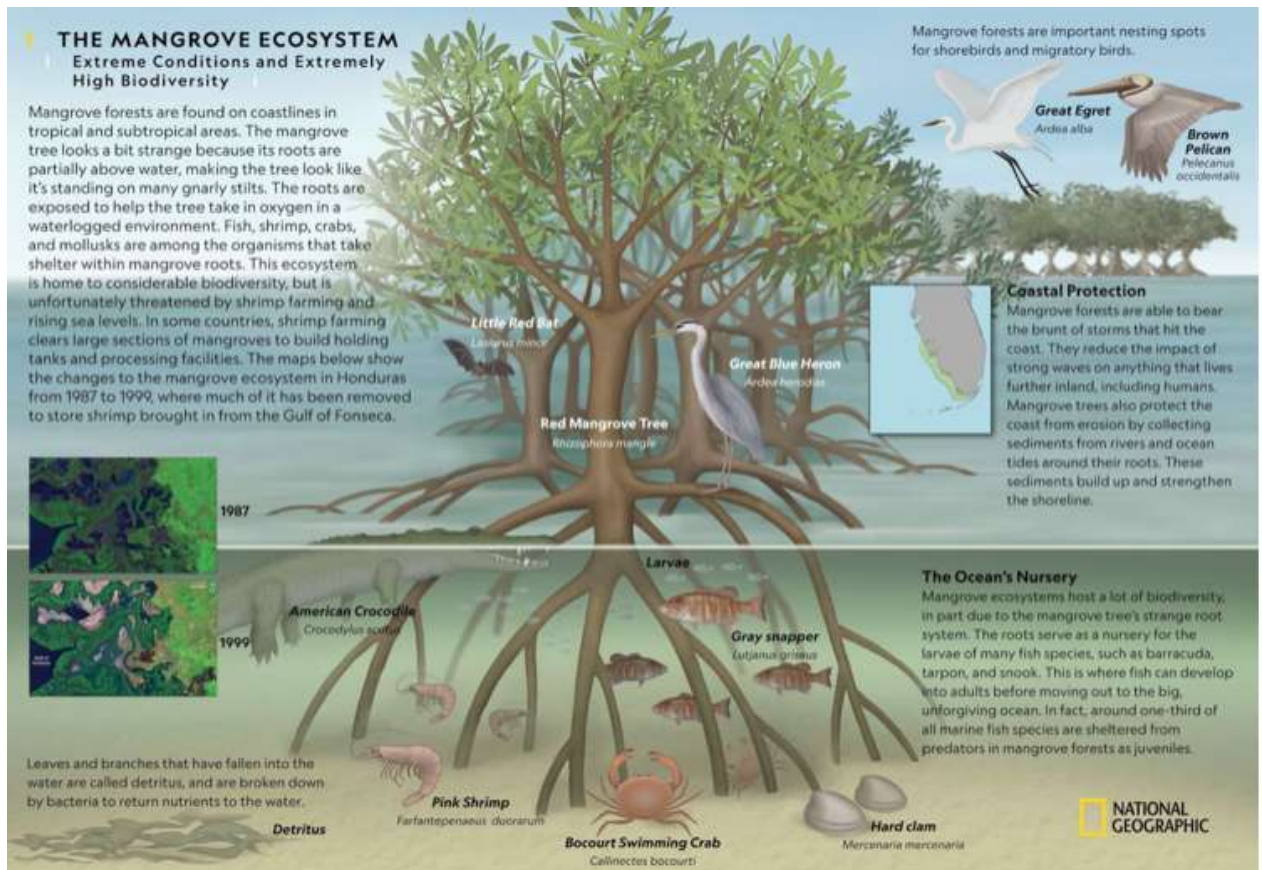
Natural threats:

- Cyclones, typhoons and strong wave actions.
- Trampling and over grazing by wildlife and livestock close to mangrove regions.
- Damage by crabs, oysters and pests to the young seedlings of mangroves.

Anthropological threats:

- **Agriculture:** Many thousands of acres of mangrove forest have been destroyed to make way for rice paddies, rubber trees, palm oil plantations, and other forms of agriculture.
- **Coastal Development:** Coastal development takes many forms but as streams and wetlands are filled by roads and concrete, they can no longer process natural chemicals. Worse still, pollutants that accompany development can damage individual trees or whole tracts of mangroves.

- **Shrimp Farming:** By far the greatest threat to the world's mangrove forests is the rapidly expanding shrimp aquaculture industry. Hundreds of thousands of acres of lush wetlands have been cleared to make room for artificial ponds that are densely stocked with shrimp.
- **Charcoal and Lumber Industries:** Chopping down mangroves for charcoal and timber is an important cottage industry for many coastal communities. Mangrove wood is used for building material, fencing, and fuel. It also yields valuable, high-quality charcoal. In places where fishing has declined below subsistence levels, many people have turned to charcoal



production for their livelihood, which furthers the cycle of habitat loss and fishery decline.

Steps to be taken to Conserve Mangrove

- ✓ Strict implementation of the Environmental (Protection) Act, the Supreme Court's order banning semi-intensive and intensive aquaculture in the coastal areas, and the Coastal Regulation Zone (CRZ) notification
- ✓ Scientific management practices are very much essential for conservation and sustainable management of the precious mangrove forests.
- ✓ Environmental monitoring in the existing mangrove areas should be taken up systematically and periodically.
- ✓ The participation of the local community should be made compulsory for conservation and management. Floristic survey of mangroves along the coast is to be taken up to prepare biodiversity atlas for mangroves.
- ✓ The forest department officials should be trained on taxonomy, biology and ecology of mangrove species.
- ✓ Agro-forestry along the periphery of mangroves in the wastelands can be taken up for providing alternate fodder to the cattle of nearby villages.

Science & Technology

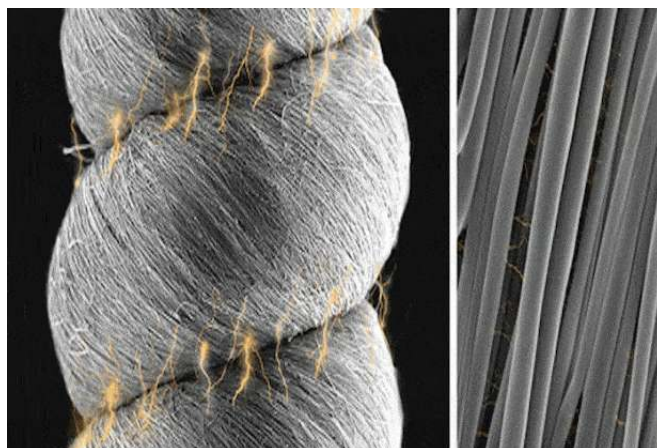
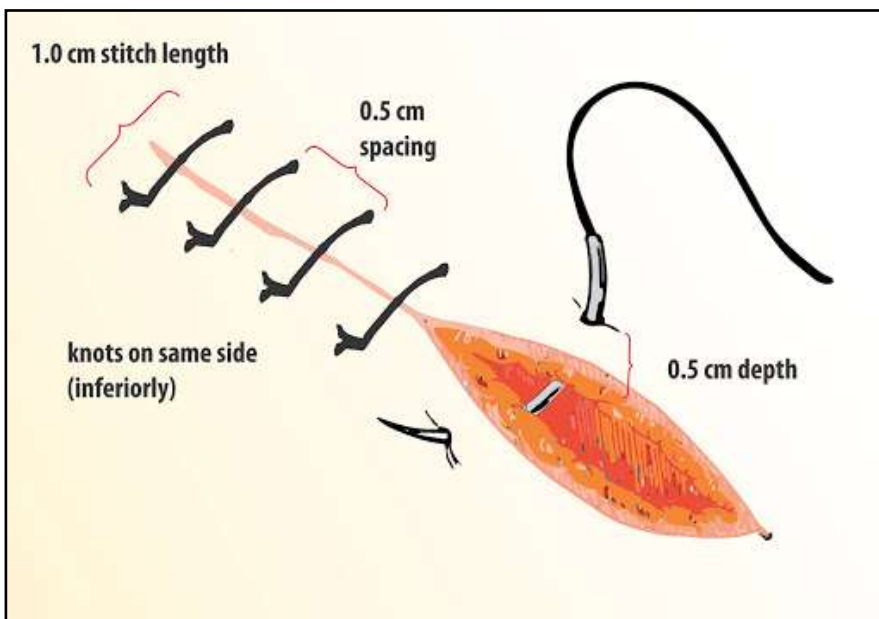
Nano-Fiber Yarn

News Excerpt

A team of researchers at IIT Madras has developed a prototype of suture thread made of nano-fiber yarns that is bio-absorbable and can deliver a higher load of antibiotics and/or therapeutics at the site itself.

Highlights

- Surgical *suture* is a medical thread used to hold body tissues together after an injury or surgery.
- The developed material uses nanofibers woven as yarn using specific techniques, and the strength can be varied depending on the target tissue (skin, muscle, cartilage).
- Each strand has a good tensile strength, besides degrading rapidly and mimics the collagen fibrils of body tissues.
- Several innovations globally in suture material have advanced infection control and achieved in some cases, better recovery among patients, even as other options such as staples, glues and strips have become available.
- Nanofiber yarns are thread-like structures formed by twisting together hundreds of nanofibers, thickness of single strand ranges around 10^{-9} m.
- The way the nanofibers mimicked the collagen fibril sparked the idea in a lab that primarily works on scaffold-based tissue engineering to create thread like structures by twisting nano-fibers together using custom-made machinery.
- Several experiments were done to prove its compatibility, mechanical strength, stem cell interaction, immune responses, and antibacterial property, and they were compatible with prescribed norms in surgical procedure.
- The team also loaded the fibers to deliver drugs at site. It might be more suitable for internal sutures and on soft tissues. The bio absorbability aspect makes sure that the sutures do not have to be removed.
- Initial funding has been received for the project, and the team is looking for further funding to deliver surgery-ready nanofiber yarn at reasonable costs.



PEPPER IT WITH
Buckminsterfullerene, Liposomes,
Graphene, Molecular Machines,
Polymeric micelles

Himalayan Chandra Telescope

News Excerpt

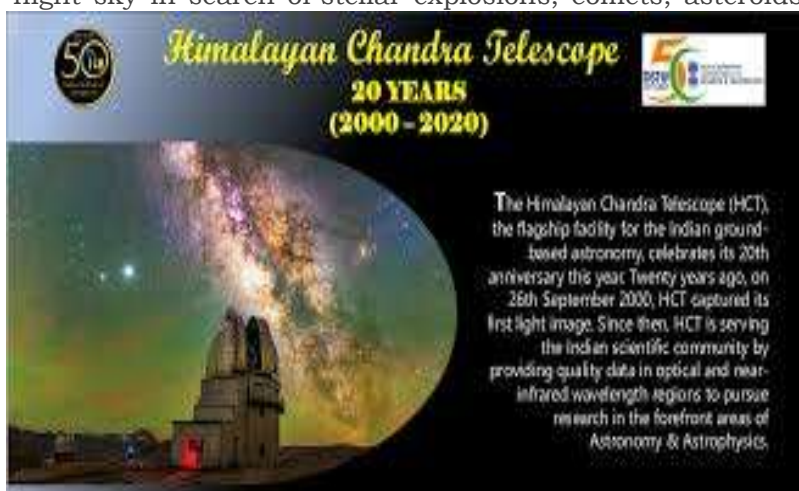
Workshop to mark 20 years of Himalayan Chandra Telescope to highlight the science it produced.

Pre-Connect

- It is situated in the cold, dry desert of Ladakh, 4500 meters above the mean sea level, at the Indian Astronomical Observatory (IAO).
- The telescope remotely operated using a dedicated satellite communication link from the Centre for Research & Education in Science & Technology (CREST), Indian Institute of Astrophysics (IIA), Bangalore.

Highlights

- For two decades, the 2-m diameter optical-infrared Himalayan Chandra Telescope (HCT) has been scanning the night sky in search of stellar explosions, comets, asteroids, and exo-planets.
- To mark the 20 years of the first light event of the 2m HCT, IIA, an autonomous institute of the Department of Science and Technology (DST), has organized a two-day online science workshop during September 29-30, 2020.
- The workshop highlighted the science that the telescope has produced since the commissioning and the future of IAO.
- The area of research covers a wide range of topics, from solar system objects to cosmology.
- Some of the thrust research areas are study of solar system bodies like; comets, asteroids, the study of star formation processes and young stellar objects, study of open and globular clusters and variable stars in them, abundance analysis of elements in the atmosphere of evolved stars, star formation in external galaxies, Active Galactic Nuclei, stellar explosions like novae, supernovae, gamma-ray bursts and so on.
- The telescope has been used in many coordinated international campaigns to monitor stellar explosions, comets, and exo-planets, and has contributed significantly to these studies.



Ultra-Violet Imaging Telescope (UVIT)

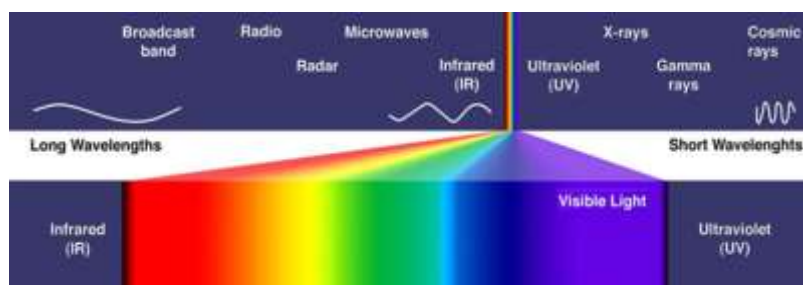
News

Ultra-Violet Imaging Telescope (UVIT) is mounted on India's first multi-wavelength astronomical observatory AstroSat. It has completed five years of astronomical photography in visible, near-ultraviolet, and far-ultraviolet spectrum.

Pre-Connect

AstroSat primarily consists of two telescopes. They are:

- The Ultra Violet Imaging Telescope (UVIT)** performs imaging simultaneously in three channels: 130–180 nm, 180–300 nm, and 320–530 nm.



- In each of the three channels a spectral band can be selected through a set of filters mounted on a wheel; in addition, for the two ultraviolet channels a grating can be selected in the wheel to do slitless spectroscopy with a resolution of ~ 100 . The primary mirror diameter of the telescope is 40 cm.
- **The Soft X-ray Imaging Telescope (SXT)** employs focusing optics and a deep depletion CCD camera at the focal plane to perform X-ray imaging in the 0.3–8.0 keV band.

Highlights

- Weighing 230 kg, the UVIT consists of two separate telescopes.
 - One of them works in the visible (320-550 nm) and the (near-ultraviolet) NUV (200-300 nm).
 - The second works only in the (far-ultraviolet) FUV (130-180 nm).
- It is one of the five payloads onboard India's first multi-wavelength astronomical observatory **AstroSat** and completed five years of operation in the sky by imaging astronomical objects on 28 September 2020.
- It has explored stars, star clusters, mapping of the large and small satellite galaxies nearby to our own Milky Way galaxy called the Magellanic Clouds, an energetic phenomenon in the Universe such as the ultra-violet counterparts to gamma-ray bursts, supernovae, active galactic nuclei, and so on.
- AstroSat was launched by the Indian Space Research Organization (ISRO) and has proved to be an important satellite capable of carrying out simultaneous observations over a range of wavelengths from the far ultraviolet to the hard X-ray band.
- The UVIT project was led by the Indian Institute of Astrophysics (IIA), an autonomous institute of the Department of Science & Technology, Government of India, in collaboration with the Inter University Centre for Astronomy and Astrophysics, Pune, the Tata Institute of Fundamental Research, Mumbai, several centers of ISRO and the Canadian Space Agency.

PEPPER IT WITH

Chandra Observatory, Hubble Telescope, Spitzer Space Telescope, Compton Telescope

Farthest Star galaxies discovered by AstroSat

News

India's first Multi-Wavelength Space Observatory "AstroSat" has detected extreme-UV light from a galaxy located 9.3 billion light-years away from Earth.

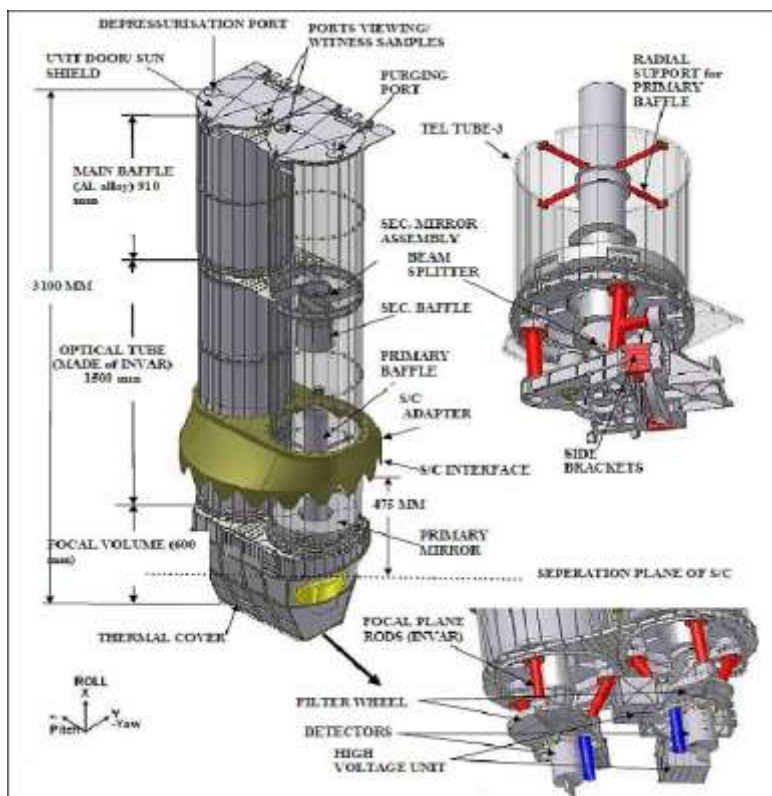
Excerpt

Pre-Connect

- More than halfway across the universe, an enormous blue star nicknamed Icarus is the farthest individual star ever seen.
- Normally, it would be much too faint to view, even with the world's largest telescopes. But through a quirk of nature that tremendously amplifies the star's feeble glow, astronomers using NASA's Hubble Space Telescope were able to pinpoint this faraway star and set a new distance record.
- They also used Icarus to test one theory of dark matter, and to probe the make-up of a foreground galaxy cluster.

Highlights

- The galaxy called



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AUDFs01 was discovered by a team of Astronomers from the Inter-University Centre for Astronomy and Astrophysics (IUCAA) Pune.

- The discovery has been reported in the leading international journal **"Nature Astronomy"** published from Britain.
- India's AstroSat/UVIT was able to achieve this unique feat because the background noise in the UVIT detector is much less than one on the Hubble Space Telescope of US based NASA.
- According to Director of Inter-University Centre for Astronomy and Astrophysics (IUCAA), this discovery is a very important clue to how the dark ages of the Universe ended and there was light in the Universe.
- India's capability in Space technology has risen to a distinguished level from where our scientists are now offering cues and giving leads to the Space scientists in other parts of the world.

PEPPER IT WITH

FarOut, Omuamua, Ultima Thule, Icarus, Ultra-Violet Imaging Telescope (UVIT)

Methane Hydrate deposits in Krishna-Godavari Basin

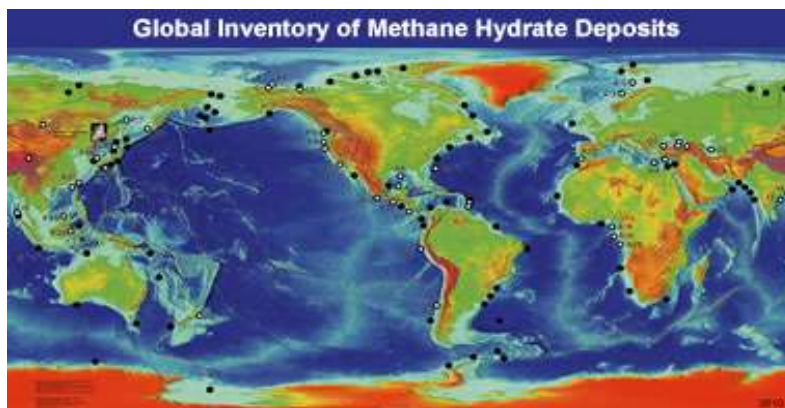
News Excerpt

According to a study at Agharkar Research Institute, Krishna-Godavari (KG) basin has significant methane deposits.

Pre-Connect

- Methane hydrate is a crystalline solid that consists of a methane molecule surrounded by a cage of interlocking water molecules. Methane hydrate is an "ice" that only occurs naturally in subsurface deposits where temperature and pressure conditions are favorable for its formation.
- Methane hydrate is formed when hydrogen-bonded water and methane gas come into contact at high pressures and low temperatures in oceans.
- Methane is a clean and economical fuel. It is estimated that one cubic meter of methane hydrate contains 160-180 cubic meters of methane.

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Highlights

- As the world runs out of fossil fuels and looks out for alternate sources of clean energy, there is good news from the Krishna-Godavari (KG) basin. The methane hydrate deposit in this basin is a rich source that will ensure adequate supplies of methane, a natural gas.
- The study conducted by researchers at the **Agharkar Research Institute (ARI)**, an autonomous institute of the Department of Science and Technology, Govt. of India have found that the methane hydrate deposits are located in the Krishna-Godavari (KG) basin are of biogenic origin.
- The study was conducted as a part of the DST-SERB young scientist project, titled 'Elucidating the community structure of methanogenic archaea in methane hydrate'.
- Even the lowest estimate of methane present in the methane hydrates in KG Basin is twice that of all fossil fuel reserves available worldwide.
- The ARI team has further identified the methanogens that produced the biogenic methane trapped as methane hydrate, which can be a significant source of energy.
- This study using molecular and culturing techniques revealed maximum methanogenic diversity in the KG basin, which is one of the prominent reasons to confirm it to be the extreme source of biogenic methane in comparison to the Andaman and Mahanadi basins.

PEPPER IT WITH
Syngas, Shale Gas, Coalbed Methane

Rocket Launch Port

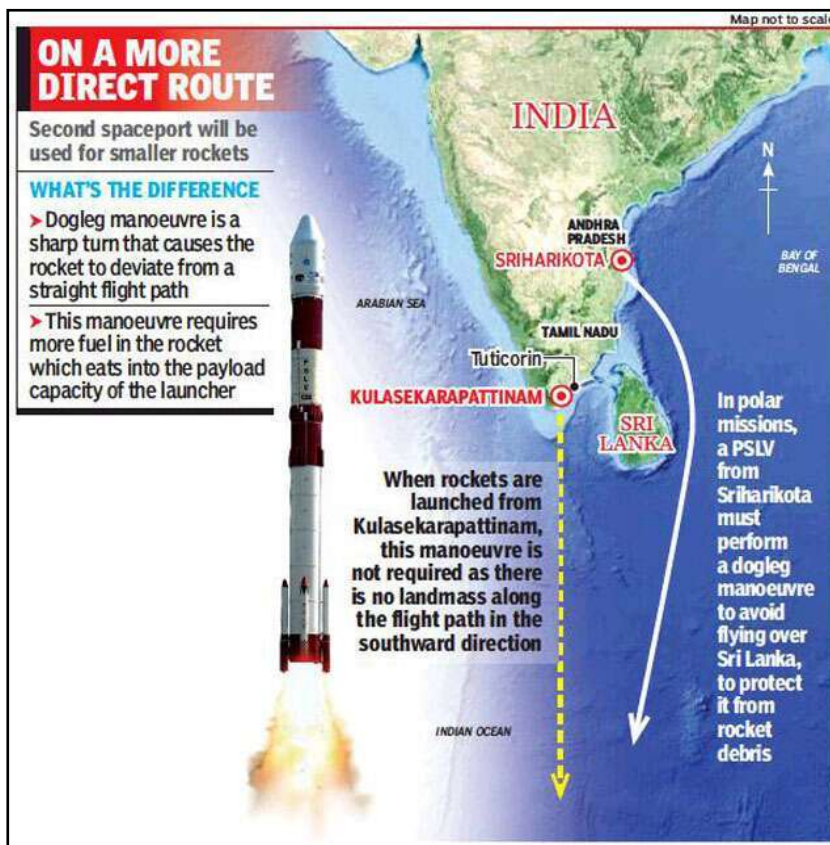
News Excerpt

The government has identified over 961 hectares in Kulasekarapattinam, Thoothukudi district, Tamil Nadu for the country's proposed second rocket launchport.

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Highlights

- At present, rockets are launched from the Indian Space Research Organisation (ISRO's) spaceport at Sriharikota, near Chennai.
- Survey work for balance area is in advance stage. At present, one Launch Pad is being proposed and the second launch port at Kulasekarapattinam, Tamil Nadu.
- On the request of Department of Space, Government of Tamil Nadu has identified 961 hectares in Thoothukudi district.**
- Center's policy decision of opening up of space sector for private players enables them to develop various space qualified subsystems and systems along with building of satellites and launch vehicles.
- They are also permitted to establish facilities and provide launch services and other space-based services.
- Many of these services and products will definitely find global customers, which will increase India's share in the global space sector market.



Neutrino Observatories

News Excerpt

The government will set around 21 Neutrino Observatories across the country.

Pre-Connect

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- Neutrino** is a subatomic particle that is very similar to an electron, but has no electrical charge and a very small mass, which might even be zero.
- Neutrinos are one of the most abundant particles in the universe. Because they have very little interaction with matter, however, they are incredibly difficult to detect.
- The Sun, the stars and the atmosphere produce millions of neutrinos every second.
- Most of the neutrinos pass through our body and we do not realize it.
- They can even pass through the earth and come out on the other side. The reason they can do this is because they interact very less with anything that come in their path.
- In simple words, an interaction is something that changes the property of the particle like its speed, direction etc. e.g., light rays from a torch cannot penetrate a wall because

particles of the light interact with the wall and get scattered before they can get to the other side of the wall.

- Since neutrinos interact very weakly, they are harmless. Neutrinos can also be made artificially. They are produced in radioactive decays and in nuclear reactors.

Highlights

- The observation will help researchers understand more about the properties of neutrino particles, whose main source is the Sun and the Earth's atmosphere.
- India based Neutrino observatory (INO) will observe neutrinos produced in the atmosphere of the Earth.
- The neutrino detector will be a magnetized iron calorimeter, which will be the heaviest one made by any country.
- The present site identified is in Bodi West Hills, in Theni district, Tamil Nadu.

State-wise number of observatories are as follows:

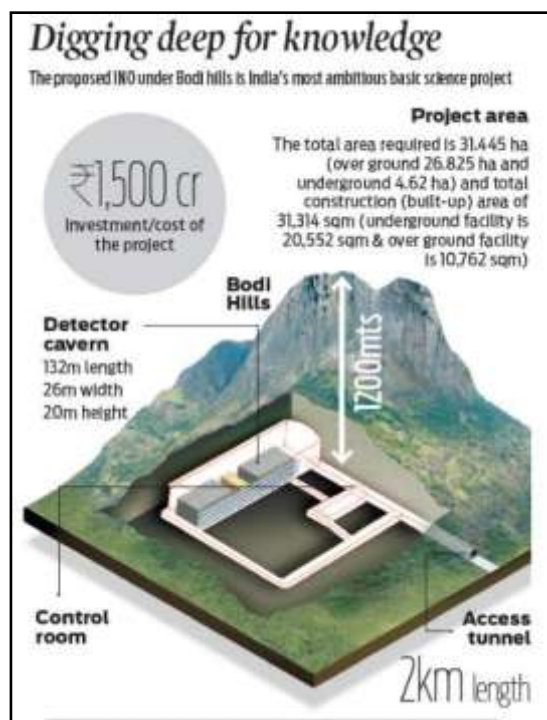
- Karnataka - Six Astronomical observatories.
- Uttarakhand- Four Observatories for study of Astronomy & Astrophysics and Atmospheric Studies.

Indian Institute of Geomagnetism (IIG) operates strategically located Magnetic Observatories across the country as follows:

- Andhra Pradesh - One
- Tamil Nadu - One
- Assam - One
- Meghalaya - One
- Gujarat - One
- Maharashtra - One
- Rajasthan - One
- Jammu & Kashmir - One
- Uttar Pradesh - One
- Andaman & Nicobar Island (UT) - One
- Puducherry (UT) - One.

Benefits

- ✓ **Education and Research:** INO will be a boon to the student community with its active research outreach programs not only for students in and around the laboratory but also for students from all over the country. It allows interactions with international scientists. It will provide an exciting environment for pursuing projects in science and technology.
- ✓ **No occupation of forest land:** The tunnel entrance is expected to be located outside the forest boundary and hence there will be no overground occupation of forest land. The tunnel and the cavern will be deep under the forest land. Hence no disturbance to the flora and fauna is expected.
- ✓ **Employment Opportunities:** During the construction period, there is scope for employment in services and labor. During the operation phase, apart from qualified scientists and engineers, job opportunities exist in administration service and maintenance of the laboratories for suitably qualified people.
- ✓ **No displacement of people:** INO does not need large tracts of land. As there is no local habitation in the site identified for INO, there is no displacement or relocation of people. There will be minimal disturbance to the people living in the nearby villages during construction phase and no disturbance during the operation phase.
- ✓ **No degradation of resources:** INO will not release any harmful radiation, toxic wastes or effluents. Therefore, there will be no degradation of water and air quality. INO will not have any adverse effect on agricultural, forest or any other lands.



Fast Breeder Reactor (FBR)

News

Prototype Fast Breeder Reactor (PFBR) being constructed by BharatiyaNabhikiya Vidyut Nigam Limited (BHAVINI) is expected to get commissioned by October 2022. On completion of commissioning, PFBR will be adding 500 MW of electrical power to the national grid.

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Excerpt

Pre-Connect

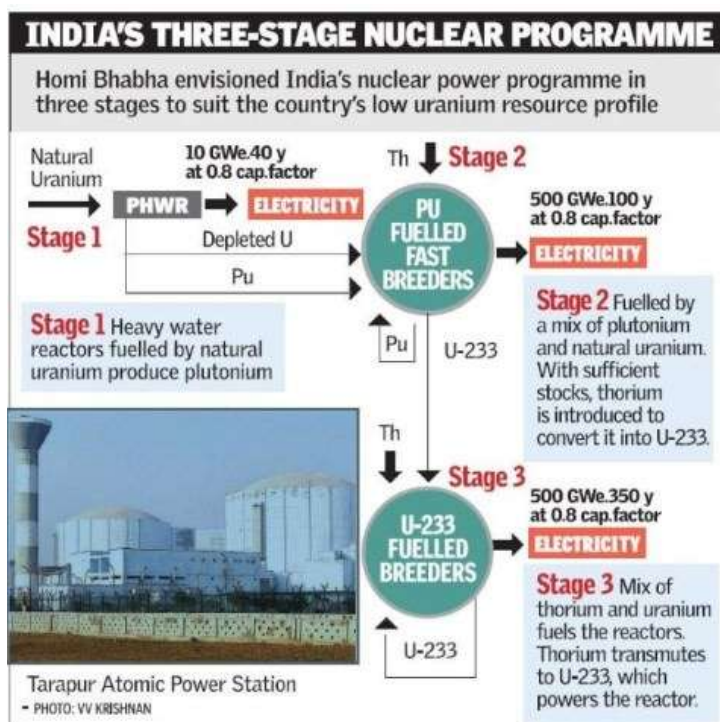
- A Fast Breeder Reactor (FBR) is a nuclear reactor that uses fast neutron to generate more nuclear fuels than they consume while generating power, dramatically enhancing the efficiency of the use of resources.

India's three-stage nuclear power programme

- It was formulated by Homi Bhabha in the 1950s to secure the country's long term energy independence, through the use of uranium and thorium reserves found in the monazite sands of coastal regions of South India.
- India has huge deposits of Thorium in the monazite sands. But it can't be used at the present stage.
- However, if we follow the three-stage plan, in future the Thorium can be used in producing Nuclear energy.
- Stage 1: Pressurized Heavy Water Reactor
Stage 2: Fast Breeder Reactor
Stage 3: Thorium Based Reactor
- The first stage would see the creation of a fleet of 'pressurised heavy water reactors', which use scarce Uranium to produce some Plutonium.
- The second stage would see the setting up of several 'fast breeder reactors' (FBRs).
- These FBRs would use a mixture of Plutonium and the reprocessed 'spent Uranium from the first stage, to produce energy and more Plutonium (hence 'breeder'), because the Uranium would transmute into Plutonium.
- Alongside, the reactors would convert some of the Thorium into Uranium-233, which can also be used to produce energy.
- After 3-4 decades of operation, the FBRs would have produced enough Plutonium for use in the 'third stage'.
- In the third stage, Uranium-233 would be used in specially-designed reactors to produce energy and convert more Thorium into Uranium-233—you can keep adding Thorium endlessly.

Highlights

- The PFBR is a nuclear power reactor currently under construction at the Madras Atomic Power Station in Kalpakkam, Tamil Nadu.
- Fast breeder reactors, or FBRs, in general produce more fissile material than they consume.
- The PFBR in Kalpakkam will use a mixed oxide of plutonium-239 – derived from reprocessed spent fuel from the thermal pressurised heavy water reactors – and uranium-238 as fuel to generate energy in a nuclear reaction.



PEPPER IT WITH
BARC, Criticality of a
reactor, Palindaba Treaty,
NSG, NPT, CTBT

- This reaction will also produce – or ‘breed’ – more plutonium-239.
- This is possible because the reaction converts both uranium-238 in the fuel mix as well as a blanket of depleted uranium surrounding the core into plutonium.
- This plutonium will then be processed and used as nuclear fuel in a chain of commercial FBRs that constitutes stage II of the nuclear programme.
- The stage will also include FBRs that will use thorium-232, mined in India, as a blanket.
- Thorium will get converted to uranium-233, which will serve as the fuel for advanced reactors in stage III.
- Ultimately, these reactors will burn uranium-233 and convert thorium-232 to more uranium-233, creating a self-sustaining cycle of nuclear power generation.

IN-SPACe

News

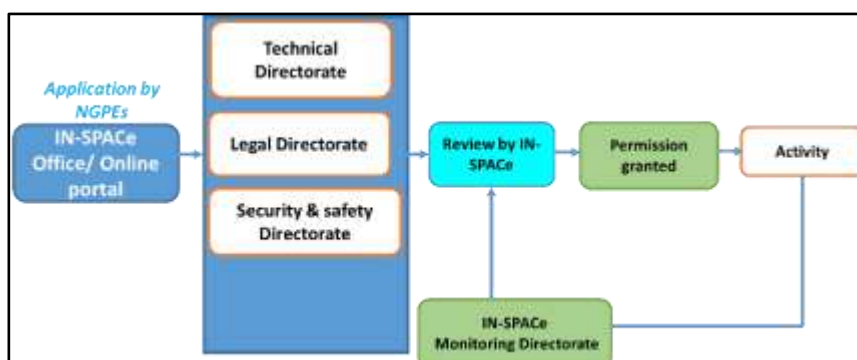
Excerpt

The government approved the creation of a new organization to ensure greater private participation in India's space activities.

Highlights

- The new **Indian National Space Promotion and Authorization Centre (IN-SPACe)**, which is expected to be functional within six months, will assess the needs and demands of private players, including educational and research institutions, and, explore ways to accommodate these requirements in consultation with ISRO.
- Existing ISRO infrastructure, both ground- and space-based, scientific and technical resources, and even data are planned to be made accessible to interested parties to enable them to carry out their space-related activities.

Roles and Responsibilities: IN-SPACe is to be established as a single window nodal agency, with its own cadre, which will permit and oversee the following activities of Non-Government-Private-Entities (NGPEs).



- Space activities: launch vehicles and satellites and providing space-based services.
- Sharing of space infrastructure and premises under the control of ISRO.
- Establishment of temporary facilities within premises under ISRO.
- Establishment of new space infrastructure and facilities, by NGPEs, in pursuance of space activities based on safety norms and other statutory guidelines and necessary clearances.
- Initiation of launch campaign and launch, based on readiness of launch vehicle and spacecraft systems, ground and user segment.
- Building, operation and control of spacecraft for registration as Indian Satellite by NGPEs and all the associated infrastructure for the same.
- Usage of spacecraft data and rolling out of space-based services and all the associated infrastructure for the same.

PEPPER IT WITH
SPACE X, Antrix, New
Space India Limited
(NSIL), Blue Origin

Structure of IN-SPACe: IN-SPACe will have a Chairman, technical experts for space activities, Safety expert, experts from Academia and Industries, Legal and Strategic experts from other departments, members from PMO and MEA of Government of India.

Monitoring and Promotion Directorate of IN-SPACe

- ✓ It will have the oversight of the activities as per IN-SPACe decisions and shall report back to IN-SPACe for corrective actions and resolutions if any.

- ✓ Applicants will be enabled to monitor the progress of their applications through the IN-SPACE online portal.
- ✓ Any disputes in the total process shall be resolved in IN-SPACE and DOS.
- ✓ The unresolved disputes (if any) shall be resolved through an appropriate appellate body.
- ✓ As an interim measure, utilization of TDSAT is suggested.
- ✓ Promotion of space activities by Private entities will also be under the purview of the Directorate.

Why increased Private Involvement?

There are two main reasons why enhanced private involvement in the space sector seems important. One is commercial, and the other strategic.

1. The private industry will also free up ISRO to concentrate on science, research and development, interplanetary exploration and strategic launches.
2. There are a number of ambitious space missions lined up in the coming years, including a mission to observe the Sun, a mission to the Moon, a human spaceflight, and then possibly, a human landing on the Moon.

An advertisement for KSG's 'Essay Advance' program. It features a laptop and a notebook on a desk. The text 'KSG' is at the top right, followed by 'ESSAY ADVANCE' in large bold letters. Below it, 'Learn the Art of Essay Writing.' is written. A 'REGISTER NOW' button is present, along with the website 'testseries.ksgindia.com' and phone numbers '9667779058' and '9811598995'.An advertisement for KSG's 'Mains Destinaire' program. It shows a classroom setting with students. The text 'KSG' is at the top, followed by 'MAINS DESTINAIRE' in large bold letters. Below it, 'Online classes Exclusively for Mains followed by Answer Writing' is written. A 'REGISTER NOW' button is present, along with the website 'testseries.ksgindia.com' and phone numbers '9667779058' and '9811598995'.

Security

Defence India Startup Challenge and iDEX

News Excerpt

Defence Minister has launched the Defence India Startup Challenge (DISC 4) during the iDEX event, featuring the initiatives aimed at expanding the horizons of Innovations for Defence Excellence (iDEX) ecosystem.

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Highlights

- Under Defence India Startup Challenge (DISC) 4, eleven challenges from Armed forces, OFB&DPSUs were thrown open to prospective startups, innovators, MSMEs alike to provide their innovative ideas on technologies which find their application in the defence sector such as Autonomous Underwater Swarm Drones, AI based Satellite Image Analysis, Reduction of RCS of Naval Warships, etc.
- In order to develop a 'right product and the product right', DIO has adopted the Product Management Approach to steer the prototype development to a market ready product.

iDEX4Fauji

- ❖ iDEX4Fauji is a first of its kind initiative, launched to support innovations identified by members of the Indian Armed Forces and will bolster frugal innovation ideas from soldiers/ field formations.
- ❖ There are more than 13 Lakh service personnel working in the field and on borders, handling extreme conditions and equipment and would be having many ideas and innovations to improve such equipment.
- ❖ There was no mechanism to support such innovations.
- ❖ iDEX4Fauji would open this window and allow our Faujis to become part of the innovation process and get recognised and rewarded.
- ❖ Services Headquarters will provide support to the soldiers & field formations all over the country to

Analytica

- The iDEX initiative stands out as one of the most effective and well-executed defence Startup ecosystem created in our country and it would be a decisive step towards achieving self-reliance in the spirit of the AtmaNirbhar Bharat campaign in defense realm.
- For the first time, an atmosphere has been created in the country where different stakeholders have been brought together to push for innovations in the defence sector.

Defence Offsets

- ❖ The defence offset is an obligation by an international player to boost India's domestic defence industry if India is buying defence equipment from it.
- ❖ Since defence contracts are costly, the government wants part of that money either to benefit the Indian industry, or to allow the country to gain in terms of technology.
- ❖ An offset provision in a contract makes it obligatory on the supplier to either "reverse purchase, execute export orders or invest in local industry or in research and development" in the buyer's domestic industry.

Way Forward

- ✓ In order to further strengthen our defence system and make it self-reliant the participation of private sector is also crucial. For this certain steps like partnerships with private sector, technology transfer and FDI through automatic route must be inducted.

Indra Navy 2020

News Excerpt

The 11th edition of exercise INDRA NAVY, a biennial bilateral maritime exercise between Indian Navy and Russian Navy was held in the Bay of Bengal.

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Pre-Connect

- Indra Navy defense exercise was initiated in 2003.

- The exercise is aimed at enhancing interoperability, improving understanding and imbibing best practices between the two navies.
- The last edition of the exercise was conducted off Visakhapatnam in December 2018.

Highlights

- The primary aim of exercise INDRA NAVY-20 is to further consolidate inter-operability built up by the two Navies and epitomizes the long-term strategic relationship between the two Navies, over the years and also to enhance understanding and procedures for multi-faceted maritime operations.
- Exercise INDRA NAVY-20 will help to further boost mutual confidence and cooperation between the two Navies and would reinforce the long-standing bond of friendship between the two countries.

PASSEX

News Excerpt

Royal Australian Navy and Indian Navy warships completed two-day Passage Exercise (PASSEX) in the East Indian Ocean region.

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Pre-Connect

- PASSEXs are regularly conducted by the Indian Navy with units of friendly foreign navies, whilst visiting each other's ports or during a rendezvous at sea.
- In July, the Navy conducted a PASSEX with the U.S. Navy's Nimitz carrier strike group near the Andaman & Nicobar Islands as it was transiting the Indian Ocean.

Highlights

- The exercise aimed at enhancing interoperability, improving understanding and imbibing best practices from each other.
- It involved advanced surface and anti-air exercises including weapon firing, seamanship exercises, naval manoeuvres and Cross Deck Flying Operations.
- This exercise being conducted in the East Indian Ocean region, reflects the growing strength of Indo-Australian bilateral relations as comprehensive strategic partners, particularly in defence cooperation in the maritime domain.

JIMEX

News Excerpt

The 4th edition of India – Japan Maritime bilateral exercise JIMEX, which is conducted biennially between the Indian Navy and Japanese Maritime Self-Defense Force (JMSDF) was held in North Arabian Sea.

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Highlights

JIMEX 20 showcased high degree of inter-operability and joint operational skills through conduct of a multitude of advanced exercises, across the spectrum of maritime operations.

Analytica

- Naval cooperation between India and Japan has increased in scope and complexity over the years.
- Advanced level of operations and exercises planned during JIMEX-20 are indicative of the continued upswing in Indo-Japanese defence relations and continued efforts by both Governments to work closely for a more secure, open and inclusive global commons, in accordance with international regulations.
- JIMEX 20 will further enhance the cooperation and mutual confidence between the two navies and fortify the long-standing bond of friendship between the two countries.

INS Viraat

News Excerpt

Union Minister of State for Shipping and Chemical and fertilizers bid adieu to Ex-INS Viraat in a ceremony at Alang in Gujarat.

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Pre-Connect

- Viraat which was decommissioned from the Indian Navy after 30 years of glorious service, reached Alang for recycling.
- INS Viraat, the second Centaur-Class aircraft carrier in service which has spent 30 years in the Indian Navy and 27 years in the Royal Navy, was decommissioned on 6th March, 2017.
- INS Viraat holds the world record as mentioned in the Guinness Book of records for being the longest serving warship of the world.
- Alang in Gujrat is one of the world's biggest ship recycling yards where around 30% of the global ships (250-280) are recycled annually.

Hong Cong Convention

- ❖ To create bigger markets for ships recycling industry, India has acceded to 'Hong Kong International Convention for Safe and Environmentally Sound Recycling of Ships, and passed the 'The Recycling of Ships Bill, 2019'.
- ❖ Accession to Hong Kong Convention by India and enactment of Recycling of Ships Act, 2019 raised the profile of our ship recycling industry as being environment friendly and safety conscious and would go a long way in consolidating India's position as the market leader.
- ❖ It will also ensure adequate safety of the yard workers, along with boosting employment and business opportunities.

Hypersonic Technology Demonstrator Vehicle

News Excerpt

DRDO has successfully demonstrated the hypersonic air-breathing scramjet technology with the flight test of Hypersonic Technology Demonstration Vehicle (HSTDV).



About

- The Hypersonic Technology Demonstrator Vehicle (HSTDV) is an unmanned scramjet demonstration aircraft for hypersonic speed flight, developed by India's DRDO. HSTDV is not a weapon itself but and is being developed as a carrier vehicle for hypersonic and long-range cruise missiles.
- The HSTDV cruise vehicle is mounted on a solid rocket motor, which takes it to a required altitude. Once it attains certain Mach numbers for speed, the cruise vehicle is ejected out of the launch vehicle. After that, the scramjet engine is ignited automatically.
- With this successful demonstration, many critical technologies such as aerodynamic configuration for hypersonic manoeuvres, use of scramjet propulsion for ignition and sustained combustion at hypersonic flow, thermo-structural characterisation of high temperature materials, separation mechanism at hypersonic velocities etc. were proven.
- The speed and manoeuvrability enable hypersonic missiles to penetrate most missile defences, and further compress the timelines for a response by a nation under attack.

Scramjet Engine

- ❖ A scramjet engine is an improvement over the ramjet engine because the former operates efficiently at hypersonic speeds and allows supersonic combustion.
- ❖ Ramjets, in contrast, operate well at supersonic speeds around Mach 3 but their efficiency drops at hypersonic speeds.
- ❖ The HSTDV has an air-breathing scramjet engine which means that it uses atmospheric oxygen for propulsion.
- ❖ Launch vehicles use combustion of propellants consisting of oxidiser and fuel for deriving energy. Air breathing propulsion systems use atmospheric oxygen, which is available up to about 50 km of earth's surface to burn the fuel stored on-board thereby making the system much lighter, more efficient and cost effective. Air breathing propulsion is a solution for a powered long return cruise flight necessary for reusable launch vehicles.

- The only countries in the world which have hypersonic technology are the United States of America, Russia and China.
- In addition to war applications, India will also use HSTDV for multiple civilian applications including the launching of small satellites at low cost.

ABHYAS

News Excerpt

India successfully conducted the flight test of ABHYAS – High-speed Expendable Aerial Target (HEAT) – from a test range in Odisha.

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Highlights

- ABHYAS has been designed and developed by the Aeronautical Development Establishment (ADE) of the DRDO.
- The air vehicle is launched using twin underslung boosters.
- It is powered by a small gas turbine engine and has an Inertial Navigation System (INS) along with a Flight Control Computer (FCC) for guidance and control.
- The vehicle has been programmed for fully autonomous flight.
- The checkout of the air vehicle is done using laptop-based Ground Control Station (GCS).
- Abhyas is a High-speed Expendable Aerial Target (HEAT).
- It is designed for autonomous flying with the help of an autopilot.

Pinaka Rocket System

News Excerpt

The Ministry of Defence signed contracts with three Indian companies for supply of six regiments of the Pinaka Rocket System to be deployed along borders with Pakistan and China.

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About

- In the battlefield, long range artillery systems like Pinaka are used for attacking the adversary targets prior to the close quarter battles which involve smaller range artillery, armored elements and the infantry.
- It was first used in the battlefield during the Kargil War of 1999, quite successfully.
- The Mark-I version of Pinaka has a range of around 40 kilometres and the Mark-II version can fire up to 75 kilometres.
- The Mark-II version of the rocket has been modified as a guided missile system by integrating it with the navigation, control and guidance system to improve the end accuracy and increase the range.
- The navigation system of the missile is linked with the Indian Regional Navigation Satellite System. In comparison to artillery guns, rockets are less accurate, but with addition of guidance and navigation systems, this aspect is taken care of.
- With its upgrades, the Pinaka Mark-II can be a key element in the “network centric warfare”.

Art & Culture

Chola Era: Rare Inscription

News Excerpt

A rare inscription dating back to the Renati Chola era has been unearthed in Kadapa district that has kindled interest among the fraternity of archaeology and history.

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Pre-Connect

- The Telugu Cholas of Renadu (also called as Renati Cholas) ruled over Renadu region, the present day Cuddapah district.
- They were originally independent, later forced to the suzerainty of the Eastern Chalukyas. They had the unique honour of using Telugu language in their inscriptions belonging to the 7th and 8th centuries.

Key Points

- It has been found engraved on a dolomite slab and shale.
- The inscription was written in archaic Telugu.
- It was assigned to the 8th Century A.D., when the region was under the rule of Chola Maharaja of Renadu.
- The inscription seems to throw light on the record of a gift of six Marttus (a measuring unit) of land gifted to a person Sidyamayyu, one of the Brahmins serving the temple at Pidukula village.
- It says the people who safeguards this inscription for future generations will acquire the status of conducting AswamedhaYaga and those destroying it will incur sin equivalent to causing a death in Varanas.

Chola Dynasty

- ❖ The Cholas are remembered as one of the longest ruling dynasties in the southern regions of India.
- ❖ The reign of the Cholas began in the 9th century when they defeated the Pallavas to come into power. This rule stretched over for over five long centuries until the 13th century.
- ❖ The early periods of the Chola rule saw the onset of the Sangam literature. Kantaman was one of the prominent rulers of this era.
- ❖ The medieval period was the era of absolute power and development for the Cholas.
- ❖ Rajaraj Chola and Rajendra Chola further expanded the kingdom into the Tamil region.
- ❖ This magnificence lasted until the arrival of the Pandyas in the early 13th century.

Swami Sree Narayana Guru

News Excerpt

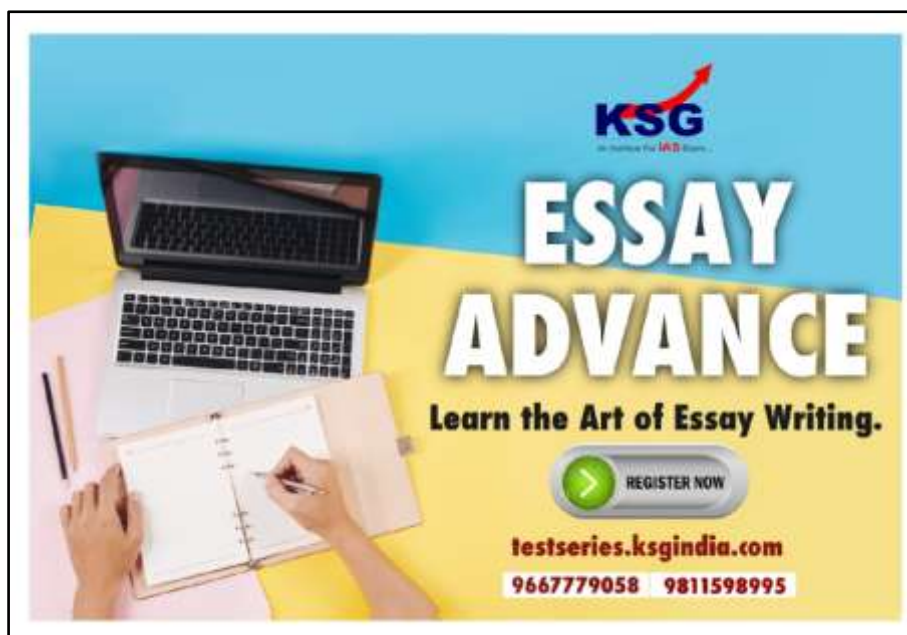
Union Home Minister paid tributes to venerable Swami Sree Narayana Guru ji on his Jayanti. 164th birth anniversary of Sree Narayana Guru was celebrated on 2nd September.

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About

- Narayana Guru was a social reformer. He transformed the social fabric of Kerala and changing the traditional beliefs of Keralites.
- Shree Narayana Guru also known as Shree Narayana Guru Swami, was a Hindu saint & social reformer of India.
- The Guru was born into an Ezhava family, in an era when people from backward communities like the Ezhavas faced social injustice in the caste-ridden Kerala society.
- He led reform movement in Kerala, revolted against caste system and worked on propagating new values of freedom in spirituality and social equality which transformed the Kerala society.

- He installed an idol of siva at Aravippuram in Kerala in his effort to show that the consecration of god's image was not a monopoly of the brahmins. This is popularly known as **Aravippuram movement**.
- He also lent his support to the **Vaikkom Satyagraha** which was aimed at temple entry in Travancore for the lower caste.
- Narayana Guru organized an All-Region Conference in 1923 at Alwaye Advaita Ashram, which was reported to be first such event in India.
- Right from Ramana Maharshi, Rabindranath Tagore, to Mahatma Gandhi, social reformers and spiritual leaders met Narayana Guru to express their shared beliefs in his works



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Miscellaneous

Ambedkar Social Innovation & Incubation Mission

Union Minister for Social Justice and Empowerment recently launched the “Ambedkar Social Innovation and Incubation Mission (ASIIM) under Venture Capital Fund for SCs with a view to promoting innovation and enterprise among SC students studying in higher educational institutions.

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Objectives

- To promote entrepreneurship among the SC Youth with special preference to Divyangs
- To support (1,000) innovative ideas till 2024 through a synergetic work with the Technology Business Incubators (TBIs) set up by Department of Science and Technology
- To support, promote, hand-hold the start-up ideas till they reach commercial stage by providing liberal equity support.
- To incentivise students with innovative mind-set to take to entrepreneurship with confidence.

The budget of ASIIM for the next four years has been kept at Rs 19320lakhs.

Kesavananda Bharati

- Kesavananda Bharati, the head of Edneer Mutt at Kasaragod in Kerala whose petition in the Supreme Court led to the landmark verdict of 1973 that outlined the basic structure doctrine of the Constitution, passed away recently.
- Bharati was the head of Jagadguru Shankaracharya Samsthanam mutt, which belongs to the Shankaracharya tradition. The mutt is believed to have been established by Totakacharya, one of the first four disciples of Adi Shankaracharya.

The case

- He was the petitioner in the His Holiness Kesavananda Bharati Sripadagalvaru and Ors. Vs. State of Kerala and others case.
- It was on March 21, 1970 that Bharati moved the apex court, challenging the Kerala government's takeover of land owned by the mutt as per the land reforms Act of 1969.
- In his petition, Bharati had sought enforcement of rights guaranteed under Article 25 (Right to practice and propagate religion), Article 26 (Right to manage religious affairs), Article 14 (Right to equality), Article 19(1) (f) (freedom to acquire property), Article 31 (Compulsory Acquisition of Property).

The Judgement and its impact

- The ruling is considered among the most consequential decisions by the Supreme Court as it set out the “basic structure” of the Constitution that Parliament cannot amend.
- Politically, as a result of the verdict, the judiciary faced its biggest litmus test against the executive. The Indira Gandhi-led government did not take kindly to the majority opinion and superseded three judges — J M Shelat, A N Grover and K S Hegde — who were in line to be appointed CJI after Justice Sikri. Justice A N Ray, who had dissented against the majority verdict, was instead appointed CJI.
- The supersession resulted in a decades-long continuing battle on the independence of the judiciary and the extent of Parliament's power to appoint judges.
- But the ruling has cemented the rejection of majoritarian impulses to make sweeping changes or even replace the Constitution and underlined the foundations of a modern democracy laid down by the makers of the Constitution

International Day of Clean Air for Blue Skies

The very first International Day of Clean Air for blue skies will be held on September 7th, 2020. The United Nations General Assembly adopted the resolution to hold an International Day of Clean Air for blue skies on December 19, 2019, during its 74th session and invited the United Nations Environment Programme (UNEP) to facilitate the observance of the International Day, in collaboration with other relevant organizations. The Climate and Clean Air Coalition (CCAC) worked with UNEP and the Republic of Korea to advocate for the day in the lead up to the decision.

Aim

- Raise public awareness at all levels—individual, community, corporate and government—that clean air is important for health, productivity, the economy and the environment.
- Demonstrate the close link of air quality to other environmental/developmental challenges such as – most and foremost – climate change and the global Sustainable Development Goals.
- Promote and facilitate solutions that improve air quality by sharing actionable knowledge best practices, innovations, and success stories.
- Bring together diverse international actors working on this topic to form a strategic alliance to gain momentum for concerted national, regional and international approaches for effective air quality management.

The Indian Union Environment Minister also participated and chaired a webinar on the first-ever International Day of Clean Air for Blue Skies on September 7, 2020.

Project DigniTEA

- On the occasion of the 70th birthday of Indian Prime Minister Narendra Modi, the Khadi and Village Industries Commission (KVIC) launched Project DIGNITea in Delhi. Members of Parliament Meenakshi Lekhi and Arun Kumar distributed 6 innovative cycle-mounted tea/coffee selling units to unemployed youth.
- Each cycle-mounted tea/coffee selling unit costs Rs 18,000 and has the provision for gas stove, gas cylinder, an umbrella, utensils and separate containers to keep tea, sugar, cups and snacks properly. The KVIC also distributed 17 such units in different cities like Varanasi, Jaipur and Chandigarh.
- It was conceived keeping in view the welfare of the poor. The KVIC initiative will enable poor to earn their livelihood with dignity. The cycle units are well equipped. It has been designed keeping in mind the logistical requirements and hygiene while selling tea/coffee to public

AICTE-SPICES

A total of 12 faculty members of AICTE-approved institutes received the first-ever Visvesvaraya Best Teacher Awards 2020.

The awards were conferred by Union Minister of Education Ramesh Pokhriyal 'Nishank' on the eve of Engineers Day.

About the Award

The awards have been introduced to identify extraordinary teachers and recognise their excellence, best practice, and innovation in the field of higher technical education at the national level for degree and diploma institutions.

All India Council for Technical Education (AICTE)

All India Council for Technical Education (AICTE) was set up in November 1945 as a national-level apex advisory body to conduct a survey on the facilities available for technical education and to promote development in the country in a coordinated and integrated manner. And to ensure the same, as stipulated in the National Policy of Education (1986), AICTE was vested with:

- ❖ Statutory authority for planning, formulation, and maintenance of norms & standards
- ❖ Quality assurance through accreditation
- ❖ Funding in priority areas, monitoring, and evaluation
- ❖ Maintaining parity of certification & awards
- ❖ The management of technical education in the country

SPICES

- Scheme for Promoting Interests, Creativity, and Ethics among Students (SPICES) was launched to “promote healthy co-curricular activity amongst the students for their all-round development.
- This scheme is aimed to recognise the meritorious faculties on the Engineer's Day every year at the National level and, encourage them to update themselves to the ever-changing needs of higher education at the global level and thereby becoming an effective contributor towards the society.

Concept Clearing Assignment

1. The livestock sector has emerged as a vital sector for ensuring a more inclusive and sustainable agriculture system. List some of the issues plaguing the livestock sector in India. How recently launched e-Gopala App will address some of them?
2. In terms of population size and medals won, India is among one of the worse Olympic performers. What are the factors responsible for this poor show of India in the Olympics? What steps are being taken by the Government to turn the tide?
3. What is "blue flag" certification? Discuss how it will help promote sustainable tourism.
4. Critiques of the recently passed farm bill accuse it of not only being bad in economics but also as a step which is against Constitutional principles. Critically analyze.
5. Armenia and Azerbaijan are locked in conflict over the Nagorno-Karabakh region. Discuss factors which will influence India's response to this conflict.
6. The development of textile, foot ware and leather sector is crucial to boost the Indian labour market and job creation. Discuss the various schemes recently undertaken by the government to boost these sectors.
7. Given the recent GDP contraction, suggest methods to boost country's GDP in post COVID19 period.
8. India can leverage its demographic dividend by adopting indigenous manufacturing of solar panels. Discuss
9. What are the factors responsible for India's consistent poor ranking in the Global Innovation Index?
10. In order to decrease the formation of ground level Ozone, there is a need to control the emission of primary pollutant. Explain.
11. Renewable energy is likely to create a multiplier effect on the Indian Economy. Analyse
12. Discuss contribution of Narayana Guru in promoting social justice to large underprivileged Population of India.
13. What is "Methane Hydrate"? How will it be helpful in making India self reliant? List some of the areas of India where they are found.
14. What is the three stage nuclear power programme of India? Discuss role of fast breeder reactor in these programme.
15. What do you understand by financial inclusion? Underline role of doorstep banking services in increasing financial inclusion.

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P.T Oriented Questions

1. Which of the following is correct about Essential Commodities Act?
 1. There is no specific definition of essential commodities in The EC Act.
 2. Cereals, pulses and face masks are some of the commodities listed as essential commodity.

Select the correct answer using the code given below:

 - (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
2. Which of the following best describes "Mission Karmayogi"?
 - (a) A mission to impart skills to unskilled workers.
 - (b) A scheme to provide social security to all unorganised sector workers.
 - (c) A national programme for capacity building of Civil Servants.
 - (d) None of the above
3. Which of the following are electoral reforms ushered in by the Supreme Court judgments?
 1. MPs and MLAs to be disqualified on date of criminal conviction
 2. All political parties must publish the criminal history of their candidates for Assembly and Lok Sabha elections.
 3. Voter's right to opt for 'None of the above' (NOTA) in election

Select the correct answer using the code given below:

 - (a) 1 and 2 only
 - (b) 2 and 3 only
 - (c) 3 only
 - (d) 1, 2 and 3
4. Consider following statements about US-India Strategic Partnership Forum (USISPF):
 1. It is an intergovernmental organization to ensure a healthy India-US relationship.
 2. The Forum actively works on areas such as trade, water, education, immigration, CSR and culture.

Which of the statements given above is/are correct?

 - (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
5. Consider following statements about India and China:
 1. Both India and China are founding members of Shanghai Cooperation Organization (SCO).
 2. Both countries have border disputes along the Line of Control (LoC).

Which of the statements given above is/are correct?

 - (a) 1 only
 - (b) 2 only
 - (c) Both 1 and 2
 - (d) Neither 1 nor 2
6. Which of the following best describes "Air Bubble Agreements"?
 - (a) Bilateral agreement between two countries to allow flyers travel freely.
 - (b) Agreement to conduct special scientific experiments in air tight labs.
 - (c) Agreement to allow citizens of each others to take part in extreme forms of adventure sports.
 - (d) None of the Above
7. Consider following statements about Pension related rules in India:
 1. Divorced daughters are eligible to receive a family pension.

2. Divyang child is not eligible for a family pension upon the death of his parents.
3. All Pension Disbursing Banks have been instructed to provide doorstep Life Certificate to those pensioners who are unable to visit the bank.
- Which of the statements given above is/are correct?
- (a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 3 only
8. Which of the following are among the dimensions of poverty considered to calculate Multidimensional Poverty Index (MPI)?
1. Health
2. Living Standards
3. Higher Education
- Select the correct answer using the code given below:
- (a) 1 only
(b) 1 and 2 only
(c) 2 and 3 only
(d) 1, 2 and 3
9. Consider following statements related to New Industrial Relations Code 2020:
1. All persons employed in a skilled or unskilled, manual, technical, operational and clerical capacity, supervisory staff are defined as workers.
2. It removes provision of 'fixed term employment' to provide more job security to workers.
3. The Code prohibits strikes and lock-outs in all industrial establishments without notice.
- Which of the statements given above is/are correct?
- (a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 3 only
10. Which of the following is/are correct related to 'Blue Flag' certification to beaches in India:
1. All the beaches of India which are awarded this certification are on the west coast.
2. Certification is accorded by "Foundation for Environment Education, Denmark".
- Select the correct answer using the code given below:
- (a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
11. Consider the following statements regarding India's Initiatives for Solar Energy:
1. National Solar Mission is in line with India's Intended Nationally Determined Contributions.
2. KUSUM Scheme aims to replace the use of diesel in the railways with solar energy.
3. Solar Charkha Mission is an enterprise driven scheme and envisages setting up of 'Solar Charkha Clusters'.
- Which of the Statements given above is/are correct?
- (a) 1 and 2 only (b) 2 only
(c) 1 and 3 only (d) 1, 2 and 3
12. Which one of the following best describes the term "Arctic amplification", sometimes seen in news?
- (a) Accelerating Melting rate of Ice
(b) Rising rate of CO₂ Emission
(c) Increased rate of Warming
(d) None of the above
13. Which of the following is the stated objective of "One Sun One World One Grid (OSOWOG)"?
- (a) A trans-national electricity grid supplying solar power across the globe.
(b) To produce energy from Nuclear fusion reaction like in Sun
(c) Promoting indigenous solar cells across the world.
(d) None of the Above

14. Which of the following is/are the objectives of "FOCUS-Africa"?

1. To advance the way in which climate information is processed and used in decision-making.
2. To characterize end-use requirements through regular engagement with stakeholders and active players.
3. To contribute to the advancement of the scientific knowledge relevant for the IPCC.

Select the correct answer using the codes given below:

- (a) 1 only
- (b) 2 and 3 only
- (c) 3 only
- (d) 1, 2 and 3

15. The term "Suture Thread", often mentioned in the news, is related to:

- (a) Medical Surgery
- (b) A product of Assam with GI tag
- (c) Stellar Explosions
- (d) None of the Above

16. With reference to AstroSat, which of the following statements is/are correct?

1. It has proved to be an important satellite capable of carrying out simultaneous observations.
2. To study black holes is one of its objectives.
3. It was launched by the Indian Space Research Organization in 2015.

Select the correct answer using the codes given below:

- (a) 1 and 2 only
- (b) 2 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

17. Consider the following statements regarding "Methane Hydrate":

1. Methane hydrate is a crystalline solid which consists of a methane molecule.
2. It is an "ice" that only occurs naturally in subsurface deposits where temperature and pressure conditions are favourable.

Which of the Statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

18. The term "AUDFs01", recently mentioned in the news, is related to/ in context of

- (a) An engine technology
- (b) Newly discovered galaxy
- (c) Vaccination for COVID 19
- (d) None of the Above

19. Consider the following statements regarding "Neutrino":

1. A neutrino is a subatomic particle that is very similar to a proton in mass.
2. Neutrinos are one of the most abundant particles in the universe.
3. It interacts only via the strong nuclear force and gravity.

Which of the Statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 only
- (c) 2 and 3 only
- (d) 1, 2 and 3

20. Which of the following is correct about Retreating monsoon in India?

1. Season is marked by clear skies and rise in temperature.
2. It is associated with rain in the eastern part of the Peninsula.

Select the correct answer using the code given below:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

21. Which of the following is correct about tropical cyclones in India?

1. The highest frequency of the cyclones is in the month of June and July when summer is at its peak.
2. More cyclones originate in the Bay of Bengal than in the Arabian Sea.

3. Initially they move in a west or northwesterly direction.
Select the correct answer using the code given below:
(a) 1 and 2 only
(b) 2 and 3 only
(c) 3 only
(d) 1, 2 and 3
22. Which of the following is not correct about Mangroves?
(a) Mangroves have a "complex salt filtration system" and complex root system to cope with salt water immersion and wave action.
(b) Mangrove forests serve an important role in stabilizing and reinforcing coastlands.
(c) Mangroves grow in areas with excessive high-oxygen soil.
(d) None of the above
23. Consider following statements related to a personality:
1. He installed an idol of siva at Aravippuram in Kerala in his effort to show that the consecration of god's image was not a monopoly of the brahmins
2. He was active in temple entry movement.
Identify the personality using the options given below:
(a) Shree Narayana Guru
(b) Dr. B R Ambedkar
(c) E V Ramasamy
(d) None of the Above
24. Consider following statements related to Hong Cong Convention:
1. It is an International Convention for Safe and Environmentally Sound Recycling of Ships.
2. India is not a yet a signatory.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
25. Consider following statements about Scramjet Engine:
1. It operates efficiently at hypersonic speeds and allows supersonic combustion.
2. A major drawback is its need to carry large cylinder to supply oxygen for propulsion.
Which of the statements given above is/are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
26. Which of the following are some important pollutants released by steel industry in India ? (CSE 2014)
1. Oxides of sulphur
2. Oxide of nitrogen
3. Carbon monoxide
4. Carbon dioxide
Select the correct answer using the code given below.
(a) 1, 3 and 4 only
(b) 2 and 3 only
(c) 1 and 4 only
(d) 1, 2, 3 and 4
27. Which of the following constitute Capital Account? (CSE 2013)
1. Foreign Loans
2. Foreign Direct Investment
3. Private Remittances
4. Portfolio Investment
Select the correct answer using the codes given below:
(a) 1, 2 and 3
(b) 1, 2 and 4
(c) 2, 3 and 4
(d) 1, 3 and 4
28. When reference to carbon nanotubes, consider the following statements: (CSE 2020)
1. They can be used as carriers of drugs and antigens in the human body.
2. They can be made into artificial blood capillaries for an injured part of human body.
3. They can be used in biochemical sensors.

4. Carbon nanotubes are biodegradable.
Which of the statements given above are correct?
(a) 1 and 2 only
(b) 2, 3 and 4 only
(c) 1, 3 and 4 only
(d) 1, 2, 3 and 4
29. The experiment will employ a trio of spacecraft flying in formation in the shape of an equilateral triangle that has sides one million kilometers long, with lasers shining between the craft." The experiment in question refers to: (CSE 2020)
(a) Voyager - 2
(b) New Horizons
(c) LISA Pathfinder
(d) Evolved LISA
30. A decrease in tax to GDP ratio of a country indicates which of the following? (CSE 2015)
1. Slowing economic growth rate
2. Less equitable distribution of national income
Select the correct answer using the codes given below.
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2

Answer Key

- | | | |
|-------|-------|-------|
| 1. A | 13. A | 23. A |
| 2. C | 14. D | 24. C |
| 3. D | 15. A | 25. A |
| 4. B | 16. D | 26. D |
| 5. D | 17. C | 27. B |
| 6. A | 18. B | 28. D |
| 7. C | 19. B | 29. B |
| 8. B | 20. C | 30. D |
| 9. D | 21. B | |
| 10. B | 22. C | |
| 11. C | | |
| 12. C | | |



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OUR TOPPERS



KANISHAK KATARIA
(AIR - 1)



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I am highly indebted to Khan Sir and KSG for their guidance and feedback, specially for the interviews. Khan Sir was very motivating and available for one to one interactions. His critical analysis and pinpoint identification of my strengths and weaknesses helped me a lot. I also followed his videos on Youtube which were quite beneficial. Thank You Sir for your support & guidance.

Signature: 




AKSHAT JAIN
(AIR - 2)




TESTIMONIAL

I would like to thank KSG and Khan Sir for their guidance and motivation. The mock interview at KSG was particularly helpful in understanding the intricacies of the interview/personality test. It helped me identify my strengths and weaknesses in a timely manner, and work upon them accordingly.

Signature: 




SRUSHTI JAYANT DESHMUKH
(AIR - 5)



TESTIMONIAL

Thank you so much to the entire team of Khan Study Group! KSG's foundation course has been my starting point. It has helped me a lot. The focus on answer writing from Day-1 really contributed a lot.

A special thanks to Khan Sir, for his motivating aura and good words.

Signature: 



SHUBHAM GUPTA
(AIR - 6)




TESTIMONIAL

Khan Sir,


Thank you so much for always being encouraging and keeping a positive mindset. Your guidance for the personality test has helped me significantly in attaining the success that I have been able to. Your personal interaction with me has always motivated me to keep an inquisitive mindset and optimistic attitude.

Thanks again to you Sir and the entire KSG team.

Signature: 

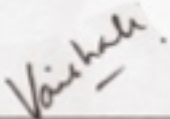


VAISHALI SINGH
(AIR - 8)



TESTIMONIAL

I cannot thank KSG & Khan Sir enough for their guidance throughout the interview process. It was much needed and, it were his words which inspired me to perform well. Thank you so much!

Signature: 



GUNJAN DWIVEDI
(AIR - 9)



TESTIMONIAL

KSG played a very important role in my preparation. The excellent guidance I received from Khan Sir helped me achieve my childhood dream. Thankyou for all the support.

Signature: 

DELHI NORTH	DELHI CENTRAL	JAIPUR TONK ROAD	BHOPAL M.P NAGAR, ZONE II	PATNA EXHIBITION ROAD	INDORE BHAWAR KUAN	BENGALURU KORAMANGALA	BENGALURU CHANDRA LAYOUT	RANCHI SIRAM TOLI CHOWK
2521, 1 st Floor Hudson Lane, Vijay Nagar Chowk, Near GTB Nagar Metro Station Delhi- 110009	56/4, Bada Bazar Marg, Old Rajender Nagar Market, Near Salwan Public School Gate No- 2, Delhi- 110060	403-404, 4 th floor Apex Tower, Lal Kothi, Tonk Road Jaipur- 302015	Plot No. 48, 1 st & 2 nd Floor, Behind Sargam Talkies, Zone II, M.P Nagar Bhopal- 462011	Above Toyota Showroom, CEAT Compound, Exhibition Road, Near Gandhi Maidan, Patna- 800001	232-233, 2 nd Floor, Veda Building, Near Apple Hospital, Bhawar Kuan Square Indore- 452001	116/C-1, 3 rd Floor, behind Airtel office 2nd Cross Road, KHB Colony, 5 th Block, Koramangala Bengaluru- 560095	94, 2 nd floor, Kasabha Hobli, Above Domino's Pizza, 4 th Main Rd., Maruthi Nagar, Chandra Layout, Bengaluru, Karnataka-560040	3 rd floor strawberry Hill New garden Siram Toli Chowk Ranchi - 834001
9717 380 832	9811 293 743	8290 800 441	7509 975 361	7463 950 774	9893 772 941	7619 166 663	7619 136 662	7463 950 774