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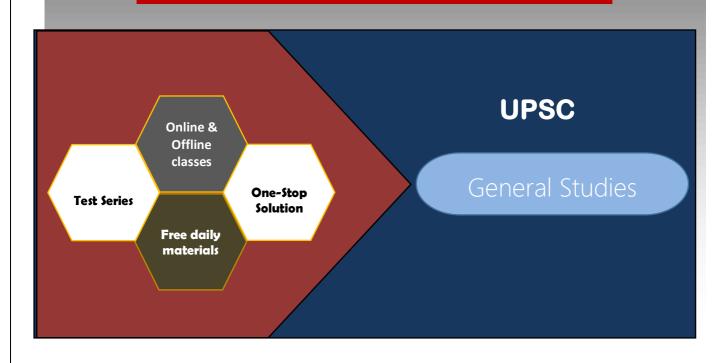
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THE HINDU & INDIAN EXPRESS





THE HINDU

GS 2: Polity, Governance, International Relations

1. Ploughing a new furrow in the agri-regulatory system

Context:

• World Bank's **Enabling the Business of Agriculture (EBA) 2019 report**.

Background:

- The small landholding farmers across India face various constraints in carrying out farming activities. They include **constraints in accessing agricultural inputs**, **markets**, **finance**, **human resources**, **and information**, which are critical for increasing farmers' competitiveness.
- The existing institutional set up that controls farm production often fails to ease these constraints for the farmers.

Enabling the Business of Agriculture index:

- The EBA measures the extent to which government regulatory systems in 101 countries worldwide make it easier for their farmers to operate agricultural activities.
- Enabling the Business of Agriculture (EBA) index is based on eight indicators. The indicators are supplying seed, registering fertilizer, securing water, registering machinery, sustaining livestock, protecting plant health, trading food, and accessing finance.

India's performance:

- Among 101 countries covered, India ranked 49 on the EBA aggregate score.
- Among emerging groups of 20 (EG 20) countries, India has the second least favourable regulatory environment for farming activities after South Africa.
- Notably, India lags behind its close competitors in world agriculture, namely China, Brazil, and the Russian Federation.

Areas of concern:

India has exhibited weak performance on five out of eight indicators. They
are registering fertilizer and machinery, securing water, sustaining livestock,
and protecting plant health indicators.



- Inadequate access to quality agricultural inputs such as fertilizers, water, and mechanical power can cause productivity loss, higher cost of food production and uncertainty, and lower capacity of farmers to produce surpluses, adopt new plant varieties and accept new opportunities to improve their income.
- A vibrant agricultural sector is not just significant for India and its economy but also has **global ramifications** since the future of world agriculture and food production is expected to increasingly depend on middle-income countries such as China, India, Brazil, and Indonesia.

Areas of good performance:

- The comparative score of India on **supplying seed**, **trading food**, **and accessing finance indicators is high**.
 - A robust seed supply system is required for improving yield and adopting new crop varieties.
 - The trading food indicator assesses laws and regulations that facilitate the exporting of farm products by farmers.

Conclusion:

- The EBA results reveal that the strength of **India's agricultural regulatory** environment is weak on the whole and more so with respect to some key performance indicators.
- India needs to put in place an agricultural regulatory system that would make it easier for its farmers to conduct agricultural activities, thereby improving their productivity, competitiveness, and income.
- Governments must enact laws and regulations that influence farmers' access to agricultural inputs, cost of production, farmers' participation in agricultural markets and value chains, the competitiveness of farmers, and private investment in the farming sector.

Additional information:

Warehouse receipts:

- Warehouse receipt operators accept deposits of crops and provide warehouse receipts to farmers as evidence of deposited crops. By **using warehouse receipts as collateral**, farmers can receive credit.
- A robust warehouse receipts system enables the farmers to obtain the credit needed to invest in agriculture.



2. Quad: strategic opportunity or quagmire?

Background of India's engagement with Quad

- India's engagement with the Quad goes back to China's **expanding footprint in South Asia and the Indian Ocean Region** over the last few years.
- China's ambitious Belt and Road Initiative rang alarm bells in India as the projects were viewed as **encroachments into India's strategic space.**
- The U.S.'s focus on the west Pacific due to aggressive Chinese maritime activity gradually pulled India into the ambit of the **Indo-Pacific** that views the western Pacific and the Indian Ocean as an integrated geopolitical space.
- Besides the U.S. navy, India **expanded its maritime ties** with other regional states, the most high-profile of the interactions being the Quad.

Core structural problems with Quad

- The Quad has a core structural problem as well in that it pivots around the U.S.
- The Quad riles China as a hostile grouping, but hardly serves the security interests of its members.
- The U.S. views China's rise as a threat to the world order it has led since the Second World War.
- Despite rhetoric relating to the promotion of a 'rules-based' world order, the Quad neither shares a strategic vision nor is it animated by a shared agenda.
- This is obvious not only from its inability to deter China in the west Pacific, but also by its members' anxiety to maintain close ties with China.

Implications for India

- By affiliating with the U.S.-led maritime coalition, India ignored the principal areas of its security concerns which is an **undemarcated 3,500-km land border with China.**
- From April 2020, Indian and Chinese forces had their latest border face-off in Ladakh, abruptly ending a long period of productive relations.
- In retrospect, this confrontation appears to be China's sharp response to the steady shift in India's regional posture in favour of an alignment with the U.S. and its allies against China.
- The stand-off at Ladakh has been a bitter experience for India: it has affirmed the **limits of India-U.S. security ties**, the folly of Indian involvement in the Quad.
- The stand-off has also underscored need to focus **national attention and resources** in areas of abiding interest for India the border, the neighbours and the Indian Ocean.



Lessons for India

- Ladakh also offers some valuable lessons for India.
- One, the rebuilding of ties with China will have to be a priority concern.
- India need to **dilute its focus on the Indo-Pacific and the Quad** and accept that the borders and the Indian Ocean are where its crucial interests lie.
- Two, the Ladakh experience has highlighted certain deficiencies at home:
- It hardly needs reiteration that India's capacities can only be built by a united people committed to the national cause.
- Finally, foreign policy cannot be a part-time concern of the national leadership; in terms of priority and attention, it should be on a par with domestic affairs.

Conclusion

As the global scenario gets more complex and India's ambitions increase, a cohesive strategic vision would give substance and drive to India's pursuit of its interests over the long term.

3. Panel flags Centre's meagre pensions

Context:

The Parliamentary Standing Committee on Rural Development in its report has said that the Centre must increase the meagre pensions provided for poor senior citizens, widows and disabled people.

Issues:

- The panel also slammed the government's laxity in raising the amount.
- It pointed out that recommendations to increase the sums had been made in the last two years as well.
- The committee said that it was baffled to observe the meagre amount of assistance ranging from ₹200 to ₹500 per month under the different components of the National Social Assistance Programme.
- The panel also slammed the DoRD for delays and disparities in the payment of wages and unemployment allowances under the flagship MGNREGA scheme.
- Another issue it flagged with MGNREGA was the disparity in wages in different States.

Details:



• The panel had previously urged the increase of these minuscule pensions in its reports on the Department of Rural Development's (DoRD) demand for grants in 2019-20 and 2020-21.

National Social Assistance Programme (NSAP):

- National Social Assistance Programme is applicable to elders, widows and physically challenged.
- It is a scheme under the Ministry of Rural Development.

Note:

Article 41 of the Constitution of India (DPSP) directs the State to provide public assistance to its citizens in case of unemployment, old age, sickness and disablement and in other cases of undeserved want within the limit of its economic capacity and development.

4. Over 72% rise in UAPA cases registered in 2019

Context:

According to the data provided by the Ministry of Home Affairs (MHA), there has been over 72% increase in the number of persons arrested under the UAPA (Unlawful Activities [Prevention] Act) in 2019 compared to the year 2015.

Details:

- In 2019, the highest number of such cases were registered in Manipur, followed by Tamil Nadu, Jammu & Kashmir, Jharkhand and Assam.
- The highest number of arrests in the same year was made in Uttar Pradesh, followed by Manipur, Tamil Nadu, Jammu & Kashmir and Jharkhand.
- However, only 2.2 % of cases registered under the UAPA between 2016-2019 ended in convictions by a court.
- The government has declared 42 organisations as terrorist organisations and listed their names in the First Schedule of the UAPA.

Note:

- Cases under the UAPA are investigated by the State police and the National Investigation Agency (NIA).
 - Under the UAPA, getting bail is rare and the investigating agency has up to 180 days to file a charge sheet.



• As far as the NIA is concerned, so far, 48 special courts have been constituted across the country for the speedy trial of terror-related cases.

5. U.S. asks Afghan leaders to consider 'an inclusive govt.'

Context:

U.S.A's latest strategy of regional talks on Afghanistan.

Details:

- Blinken's (US Secretary of State) plan is to ask the United Nations to convene a meeting of "Foreign Ministers and Special Envoys from Russia, China, Pakistan, Iran, India and the U.S." to discuss a unified approach on Afghanistan.
- The inclusion of India in the United States's latest strategy of regional talks on Afghanistan was welcome but it did not remove several misgivings India had about the US policy over the conflict.
- For India, which has protested being left out of regional formulations in the past both in the original Moscow process, and in the United Nation's April 2020 "6+2+1" that included Afghanistan's immediate neighbours only, the U.S.'s suggestion is a relief.

Turkey's role:

- The U.S. also plans to ask the government of Turkey to host a senior-level meeting of both sides in the coming weeks to finalise a peace agreement.
- The new emphasis for an Istanbul process over the current process in Doha, might indicate a greater role for Turkey.
- It also signifies a significant role for Turkish troops as a part of a proposed NATO stabilisation force.
- This could be a matter of concern for India, given close ties between Turkey and Pakistan.

Inclusive Government in Afghanistan:

- The U.S. has also pushed for a road map to a new, inclusive government in Kabul.
- This indicates its desire to replace Mr. Ghani's government with an interim one that would include the Taliban's nominees.



Conclusion:

There seems to be a certain inevitability in these proposals for Afghanistan, as it suggests that the U.S. has decided that the Taliban has a legitimate place in Kabul.

GS 3: Economy, Science and Technology, Environment

6. In need of full-time heads

Context:

• The article expresses concerns over the fact that many Central forces are functioning without regular chiefs.

Details:

Central armed police forces like the Central Reserve Police Force (CRPF),
Border Security Force (BSF), National Security Guard (NSG) and important
national organizations like the Central Bureau of Investigation (CBI) and the
Bureau of Police Research and Development (BPR&D), have been either
functioning without a regular chief or such chiefs have been given additional
in-charge duties.

Concerns:

Adverse impact on the forces:

- The process of appointments is marked by long delays. Since most appointees to the top posts are at the fag end of their service, they are left with just a few months or a year or so to head these organisations. There is little they can do within their short tenures.
- The lack of seriousness in posting the right kind of officers with not only the required skill and experience but also the time could have an adverse impact on the efficiency of these forces.
- Officers holding provisional charge **shy away from taking major policy decisions** and prefer to leave such matters to the next person in charge.

Impact on India's internal security:

• The fact that many Central Forces are functioning without regular chiefs, **could impact their efficiency** which in turn could have a detrimental impact on India's internal security scenario.



- The concerned agencies play a pivotal role in maintaining internal security.
 - The Border Security Force (BSF) is India's primary border guarding organisation on its border with Pakistan and Bangladesh. It is charged with guarding India's land border with Pakistan and Bangladesh during peacetime and preventing transnational crimes. It is also involved in combating militants in Jammu and Kashmir and the Northeast.
 - NSG comprising personnel from the Army and the Central Armed Police Forces come into action in times of crisis such as during the Mumbai attacks of 2008. It is also entrusted with the responsibility of providing security to certain high-risk personalities.

Recommendations:

• The following measures could be taken to speed up appointment decisions and also to ensure effective personnel in the posts which could play a decisive role in enhancing the efficiency of these forces.

Choosing from a reserve list:

- A panel of officers cleared by the Union Public Service Commission could be always kept ready and the officers for the top posts could be chosen from this panel.
- The government could consider announcing the next chief of these organisations at least three months in advance which will help smoothen the transition process.

Mandating prior experience in the organization:

 Preferably, the officers being considered for the top posts should be from among the officers who have served in these organisations earlier. This would help ensure that the chiefs are aware of the organizational challenges before they take up the top post. This would help augment their effectiveness.

Ensuring sufficient tenure:

• The government should consider providing a minimum tenure of two years or till superannuation, whichever is later. This will help ensure sufficient tenure for the chief to implement some reforms.



7. SC questions delay in setting up environment regulator

Context:

The Supreme Court has asked the government to explain why it had not set up an independent environment regulator to oversee green clearances.

Background:

• In the 'Lafarge mining case', the Supreme Court had ordered the setting up of a national environment regulatory body to ensure independent oversight of green clearances, in July 2011.

Details:

- The court had asked the Centre to appoint a national regulator for:
 - Appraising projects
 - Enforcing environmental conditions for approvals
 - Imposing penalties on polluters
- The court had explained the need for an independent regulatory mechanism.
- It had stated that the identification of an area as a forest area is solely based on the declaration to be filed by the user agency [project proponent]. The project proponent was required to undertake EIA by an expert body/institution.
- The court had made it clear that till such mechanism was put in place, the Environment Ministry (MoEF) should prepare a panel of accredited institutions from which alone the project proponent should obtain the Rapid Environmental Impact Assessment (EIA) and, that too, on the Terms of Reference to be formulated by the MoEF.

8. Govt. asks refiners to diversify oil imports after OPEC+ move

What's in News?

India has asked state refiners to speed up the diversification of oil imports to gradually cut their dependence on West Asian suppliers.

• This is in the backdrop of OPEC+ deciding to largely continue production cuts.

Details:



- India, the world's third-biggest oil consumer, imports about 84% of its crude needs with over 60% of that coming from West Asian countries, which are typically cheaper than those from the West.
- Iraq and Saudi Arabia are the two biggest suppliers of crude oil to India.
- India, hit hard by rising oil prices, has urged producers to ease output cuts and help the global economic recovery.
 - In response, the Saudi energy minister told India to dip into strategic reserves filled with cheaper oil bought in 2020.
- India now plans to import oil from new producer Guyana. Indian Oil Corp has also renewed its oil import contract with Russia.

THE INDIAN EXPRESS

GS 2 : Polity, Governance, International Relations

1. TRAI Suspends New SMS Scrubbing Norms

Why in News

The **Telecom Regulatory Authority of India (TRAI)** temporarily suspended the scrubbing of short message service or SMS by telecom service providers (TSP) for seven days.

 The action by TRAI comes after the functioning of several SMS-based services of banks and e-commerce platforms was affected recently, as the TSPs implemented the second phase of SMS regulation.

Key Points

- Telecom Commercial Communication Customer Preference Regulation, 2018:
 - o It was issued to "effectively deal with the nuisance of spam".
 - Rules mandate telcos to verify the content of every SMS with the registered text before delivering it to consumers.
 - As per TRAI norms, the content of all SMSes will now be verified before it is allowed to be delivered on the users' device. This

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- process, **known as scrubbing**, was implemented recently after several delays.
- The new TRAI regulations for principal entities, which will be allowed to send SMSes to customers, seek registration of senders, telemarketers, headers, content, templates, consent templates and subscriber preference.
- The rules prohibit unregistered senders from initiating commercial messages, while registered companies are prevented from sending fraudulent messages to their customers.
- TRAI has released a framework under which telcos could use a distributed ledger technology or blockchain to verify the sender information and content of every commercial SMS before it was delivered on the user's device.
 - **Blockchain** will ensure two things i.e, non-repudiation and confidentiality. Only those authorised to access details will be able to access subscriber details and only when they need to deliver service.
 - According to TRAI, the old technology and platform allowed unscrupulous telemarketers to override the stated preference of the subscriber by claiming consent that may have been surreptitiously obtained.

Recent Issue:

- Even though TSPs implemented the scrubbing norms, some companies did not adopt them, leading to text messages getting dropped and transaction failures.
 - TSPs followed TRAI regulations and activated the due process of content scrubbing to address the issue of **unsolicited commercial communication.**
 - TSPs had sent various communications to the principal entities to register their content template with TSPs.

Blockchain Technology

- Blockchain is a shared, immutable ledger that facilitates the process of recording transactions and tracking assets in a business network.
 - An asset can be tangible (a house, car, cash, land) or intangible (intellectual property, patents, copyrights, branding).
- Virtually anything of value can be tracked and traded on a blockchain network, reducing risk and cutting costs for all involved.
- The initial and primary use of blockchain technology was for monitoring **cryptocurrency** (e.g. bitcoin) transactions. However, other usage and applications have emerged in the last few years.

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- The government of Andhra Pradesh and Telangana have put the land records on the blockchain technology owing to its easy traceability feature.
- Election Commission (EC) officials are exploring the potential of using blockchain technology to enable remote voting.

Telecom Regulatory Authority of India

- It was **established by an Act of Parliament** (Telecom Regulatory Authority of India Act, 1997) to regulate telecom services, including fixation/revision of tariffs for telecom services.
- It provides a fair and transparent policy environment which promotes a level playing field and facilitates fair competition.
- The TRAI Act was amended to establish a Telecommunications Dispute Settlement and Appellate Tribunal (TDSAT) to take over the adjudicatory and disputes functions from TRAI.
 - TDSAT was set up to adjudicate any dispute between a licensor and a licensee, between two or more service providers, between a service provider and a group of consumers, and to hear and dispose of appeals against any direction, decision or order of TRAI.

2. SDG India Index, 2021

The third rendition of India's Sustainable Development Goals (SDG) Index will be launched by NITI Aayog today.

SDG India Index

- The index measures the progress at the national and sub-national level in the country's journey towards meeting the Global Goals and targets.
- It has been successful as an advocacy tool to propagate the messages of sustainability, resilience, and partnerships, as well.
- From covering 13 Goals, 39 targets, and 62 indicators in the first edition in 2018-19 to 17 Goals, 54 targets and 100 indicators in the second; this third edition of the index covers 17 Goals, 70 targets, and 115 indicators.

Aims and objectives

• The construction of the index and the ensuing methodology embodies the central objectives of measuring the performance of States and UTs on the SDGs and ranking them.



• It aims at supporting States and UTs in identifying areas which require more attention; and promoting healthy competition among them.

Methodology and Process

- The index estimation is based on data on indicators for the first 16 goals, with a qualitative assessment for Goal 17.
- The technical process of target setting and normalization of scores follow the globally established methodology.
- While target setting enables the measurement of the distance from the target for each indicator, the process of normalization of positive and negative indicators allows for comparability and estimation of goal wise scores.
- The composite score of a State is derived by assigning each goal the same weight, keeping in mind the indivisible nature of the 2030 Agenda.
- The selection of indicators is preceded by a consultative process undertaken in close coordination with MoSPI, Union Ministries and stakeholders from States and UTs.

Its significance

- The index represents the articulation of the comprehensive nature of the Global Goals under the 2030 Agenda while being attuned to the national priorities.
- The modular nature of the index has become a policy tool and a ready reckoner for gauging the progress of States and UTs on the nature of goals including health, education, gender, economic growth and climate change and the environment.

3. Dandi March to mark 75 years of Independence

PM will flag off a commemorative 'Dandi March' on March 12 to launch the celebrations of the 75th year of Independence.

Dandi March

- The Dandi March was an act of nonviolent civil disobedience in colonial India led by Mahatma Gandhi.
- The twenty-four day march lasted from 12 March 1930 to 5 April 1930 as a direct action campaign of tax resistance and nonviolent protest against the British salt monopoly.



- Another reason for this march was that the Civil Disobedience Movement needed a strong inauguration that would inspire more people to follow Gandhi's example.
- Growing numbers joined them along the way.
- When Gandhi broke the British Raj salt laws at 6:30 am on 6 April 1930, it sparked large scale acts of civil disobedience against the salt laws by millions of Indians.

Followed by Dharasana Satyagraha

- After making the salt at Dandi, Gandhi continued southward along the coast, making salt and addressing meetings on the way.
- The INC planned to stage a satyagraha at the Dharasana Salt Works, 40 km south of Dandi.
- However, Gandhi was arrested on the midnight of 4–5 May 1930, just days before the planned action at Dharasana.
- The Dandi March and the ensuing Dharasana Satyagraha drew worldwide attention to the Indian independence movement through extensive newspaper and newsreel coverage.
- The satyagraha against the salt tax continued for almost a year, ending with Gandhi's release from jail and negotiations with Viceroy Lord Irwin at the Second Round Table Conference.

Its aftermath

- The March to Dandi had a significant influence on American activists Martin Luther King Jr., James Bevel, and others during the Civil Rights Movement for African Americans in the 1960s.
- The march was the most significant organised challenge to British authority since the Non-cooperation movement of 1920–22.
- It directly followed the Purna Swaraj declaration of sovereignty and self-rule by the Indian National Congress on 26 January 1930.
- It gained worldwide attention which gave impetus to the Indian independence movement and started the nationwide Civil Disobedience.

4. Uighur Muslims

Why in News

Recently, several hundred **Uighur Muslim** women in Turkey staged an **International Women's Day** march against the extradition agreement of Turkey



with China and demanding the closure of mass incarceration camps in China's Xinjiang Province.

 Earlier in 2020, the United States House of Representatives approved a legislation calling for sanctions on Chinese officials responsible for oppression of Uighur Muslims.

Key Points

Uighur Muslims:

- The Uighurs are a predominantly **Muslim minority Turkic ethnic group,** whose origins can be traced to Central and East Asia.
 - The Uighurs speak their own language, similar to Turkish, and see themselves as culturally and ethnically close to Central Asian nations.
- The Uighurs are considered to be **one of the 55 officially recognized ethnic minority communities in China.**
 - However, China recognises the community only as a regional minority and rejects that they are an indigenous group.
- Currently, the largest population of the Uighur ethnic community lives in Xinjiang region of China.
 - A significant population of Uighurs also lives in the neighbouring Central Asian countries such as Uzbekistan, Kyrgyzstan and Kazakhstan.
 - Xinjiang is technically an autonomous region within China its largest region, rich in minerals, and sharing borders with eight countries, including India, Pakistan, Russia and Afghanistan.

Persecution of Uighurs:

- Over the past few decades, as economic prosperity has come to Xinjiang, it has brought with it in large numbers the majority Han Chinese, who have cornered the better jobs, and left the Uighurs feeling their livelihoods and identity were under threat.
 - This led to **sporadic violence**, **in 2009** culminating in a riot that killed 200 people, mostly Han Chinese, in the region's capital Urumqi.
- Uighur Muslims for decades, under the false accusation by the Chinese government of terrorism and separatism, have suffered from abuses including persecution, forced detention, intense scrutiny, surveillance and even slavery.
 - However, China claims its camps to be 'educational centres' where the Uighurs are being cured of "extremist thoughts" and radicalisation, and learning vocational skills.

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- China claims that Uighur groups want to establish an independent state and, because of the Uighurs' cultural ties to their neighbours, leaders fear that elements in places like Pakistan may back a separatist movement in Xinjiang.
- China's Extradition Treaty:
 - o In December 2020, **China approved an extradition treaty with Turkey** aimed at strengthened judicial cooperation to facilitate a crackdown on transnational criminals including terrorists.
 - Extradition is the formal process of one state surrendering an individual to another state for prosecution or punishment for crimes committed in the requesting country's jurisdiction.
 - The extradition agreement comes amidst deepening economic and financial ties between Turkey and China.
 - China is also Turkey's leading supplier of **Covid-19** vaccines.
 - Since 1990, the **Uighur** diaspora in Turkey has become more vibrant and has attracted widespread attention globally through demonstrations, conferences, meetings and briefings.
 - Concerns of Uighur Muslims:
 - **If Turkey ratifies the treaty**, this will be the **last nail in the coffin of Uighur culture** as China will silence the biggest Uighur diaspora outside Xinjiang.
 - The treaty will become another **instrument** in the hands of China for the prosecution of its enslaved Uighur minority.
- India's Stand:
 - The Indian government has maintained near silence on the **Uighur** crisis

Way Forward

- All the countries should reconsider their position and **urge China to** immediately stop the persecution of Muslims and the prohibition of Islam in Xinjiang.
- China must close its "Vocational Training Centers," release the religious and political prisoners from prisons and detention camps. It should adopt **multiculturalism** and accept the Uighurs and other Turkic Muslims of China as ordinary citizens equal to native Chinese.



GS 3: Economy, Science and Technology, Environment

5. Vaccine Passports

Why in News

Governments around the world are exploring the potential use of vaccine passports as a way of reopening the economy by identifying those protected against the coronavirus.

Key Points

About Vaccine Passports:

- A vaccine passport is an e-certificate that stores and records jabs and Covid-19 test status.
 - It can be kept in a smartphone app or in other digital formats.
 - Its contents can be flashed at security checkpoints when people travel across borders.
- The idea is modelled on the proof of vaccination that several countries required even before the pandemic.
 - Travellers from many African countries to the USA or India are required to submit proof that they have been vaccinated against diseases such as **yellow fever**.
- o In February 2021, Israel became the first country to introduce a certification system that allows those who have been vaccinated against Covid-19 to access certain facilities and events.

Function of Vaccine Passports:

- o Will **digitise vaccination records** across countries.
- Supposed to **function as proof** that the holder has been vaccinated against Covid-19 and is, therefore, safe.

Potential Beneficiary of the Vaccine Passports:

- The primary benefit will be to the tourism and the hospitality industries, which are both seen as being at the heart of Covid-19 spread and are the worst hit by the pandemic.
- The international air travel, which suffered massively because of the outbreak.
- **Similar Initiative:** Several associations and non-profits have been issuing their own versions for international travel:
 - IATA Travel Pass: The global trade body representing airlines (The International Air Transport Association) is developing an app called IATA Travel Pass that will provide airlines and other aviation industry

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- stakeholders with a common platform to check for the proof of vaccination and its validity.
- CommonPass: Non-profit Commons Project has been trying out an app called CommonPass, which contains a passenger's vaccination record.
- Concerns Raised in Instituting Vaccine Passport:
 - o WHO's Stand:
 - The World Health Organisation (WHO) is against the introduction of Covid-19 vaccination proofs as a requirement for international travel.
 - There are still critical **unknown facts regarding the efficacy of vaccination** in reducing transmission.
 - Lack of Uniformity: The major difficulty in implementation will be the lack of uniformity across jurisdictions in requirement and issuance of proofs of vaccination.
 - o **Inadequate Availability of Vaccines:** Preferential vaccination of travellers could result in inadequate supplies of vaccines for priority populations considered at high risk of severe Covid-19 disease.
 - Introducing a requirement of vaccination as a condition for travel
 has the potential to hinder equitable global access to a limited
 vaccine supply and would be unlikely to maximize the benefits
 of vaccination for individual societies and overall global health.
 - Perpetuate Discrimination and Inequality: Experts argue that vaccine passports, in any form, might make travel inequitable. Adoption of these digital passports can perpetuate discrimination and inequality, increasing the divide between socioeconomic groups.
 - Rich countries that have already bought millions of doses from pharmaceutical companies are ahead in the race. The poorer nations may have to wait for months, if not years, to start inoculations.
 - This means that if vaccine passports become a norm, then these lower-income nations will lose out on the advantage.
 - It will lead to exclusion of the younger generation who would be last in line to be vaccinated.
 - Privacy Concerns: These are mainly digital certificates that are accessed by a particular service provider to check for proof of vaccination, there is a possibility that they would be used by authorities to track the movement of their holders.



6. Glycemic Index in Rice

The Union Minister of Agriculture and Farmers Welfare has provided some useful information about some indigenous varieties of rice.

Indigenous varieties of rice

- Indigenous varieties of rice are being promoted through varieties of programmes.
- 574 indigenous varieties of rice have been propagated and tested at more than 10,000 farmers' fields.
- Nutritional profiling of 300 selected rice varieties has been done for market linkage and better price to the farmers.
- Farmers are also being trained on conservation, improvement and use of traditional/ indigenous varieties through participatory variety selection.
- Further, for access to seeds of these indigenous varieties, community seed banks have been established.

Key varieties

- Lalat and Improved Lalat (GI value: 54) as Low GI
- Swarna, Sambha Mahsuri and Shaktiman (GI value <60) as intermediate GI have been identified

There is no certification for GI (Glycemic Index) in rice in India.

What is Glycemic Index (GI)?

- GI is a number from 0 to 100 assigned to food, with pure glucose arbitrarily given the value of 100, which represents the relative rise in the blood glucose level two hours after consuming that food.
- The GI of a specific food depends primarily on the quantity and type of carbohydrate it contains.
- But it is also affected by the amount of entrapment of the carbohydrate molecules within the food, the fat and protein content of the food, the number of organic acids (or their salts) in the food, and whether it is cooked and, if so, how it is cooked.
- A food is considered to have a low GI if it is 55 or less; high GI if 70 or more, and mid-range GI if 56 to 69.



7. Agriculture Voltage Technology

An Agri-voltaic system of 105 KW capacity has been developed by ICAR-Central Arid Zone Research Institute, Jodhpur.

Agriculture Voltage Technology

- This technology can increase the income of farmers by the generation of electricity and growing cash crops simultaneously on the same piece of land.
- Under component-I of the KUSUM (Kisan Urja Suraksha Utthan Mahabhiyan) scheme, there is a provision for installation of the agri-voltaic system in farmers' fields with a capacity ranging from 500 KW to 2 MW.
- Moreover, the National Solar Energy Federation of India (NSEFI) has also documented 13 operational agri-voltaic systems in the country managed by different solar PV functionaries and public Institutes.

About KUSUM Scheme

- The scheme aims to provide extra income to farmers, by giving them an option to sell additional power to the grid through solar power projects set up on their barren lands.
- It was announced in the Union Budget 2018-19.

Component of KUSUM Scheme

The proposed scheme consists of three components:

Component-A

- Renewable power plants of capacity 500 KW to 2 MW will be set up by individual farmers/ cooperatives/panchayats /farmer producer organisations (FPO) on their barren or cultivable lands.
- The power generated will be purchased by the DISCOMs at Feed-in tariffs determined by respective SERC.

Component-B

- Installation of 17.50 lakh standalone Solar Powered Agriculture Pumps.
- Individual farmers will be supported to install standalone solar pumps of capacity up to 7.5 HP. Solar PV capacity in kW equal to the pump capacity in HP is allowed under the scheme.

Component-C

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- Solarization of 10 Lakh Grid-connected Solar Powered Agriculture Pumps is included in this component,
- Individual farmers will be supported to solarise pumps of capacity up to 7.5 HP.
- Solar PV capacity up to two times of pump capacity in kW is allowed under the scheme.
- The excess available energy will be sold to DISCOM.

8. Air Independent Propulsion for Diesel Electric Submarines

Why in News

The **Defence Research and Development Organisation (DRDO)** has conducted the final development test of **Air Independent Propulsion (AIP) System**, crucial for diesel electric submarines.

Key Points

- Air Independent Propulsion (AIP) System:
 - Submarines are essentially of two types: conventional and nuclear.
 - The conventional submarines use diesel-electric engines, which require them to surface almost daily to get atmospheric oxygen for fuel combustion.
 - If fitted with an Air Independent Propulsion (AIP) system, the submarine will need to take in oxygen only once a week.
 - The indigenously-developed AIP, which is one of the **key missions of the Naval Materials Research Laboratory (NMRL)**, is considered one of the ambitious projects of the DRDO for the Navy.
 - The project aims at **fitting the technology on** India's Scorpene class submarine **INS Kalvari** around 2023.

Advantages of AIP:

- The AIP system based submarines will be required to surface much less frequently, thus increasing their lethality and stealth multifold.
- Diesel-electric submarines require them to come to the surface frequently to charge their batteries, thus their underwater endurance time is less.
 - 'Air-independent' propulsion technology helps to **make the** diesel generator less dependent on surface air.
- While there are different types of AIP systems being pursued internationally, fuel cell-based AIP of NMRL is unique as the hydrogen is generated onboard.
- Fuel Cell Based AIP system:



- In a fuel cell based AIP, an electrolytic fuel cell releases energy by combining hydrogen and oxygen, with only water as the waste product ensuring less marine pollution.
- The cells are highly efficient, and do not have moving parts, thus ensuring that the **submarine has a low acoustic emissions of sound.**

Naval Materials Research Laboratory

- Naval Materials Research Laboratory (NMRL) is one of the laboratories functioning under DRDO, pursuing basic research as well as applicationoriented technology development in several areas viz. Metallurgy, Polymer, Ceramics, Coating, Corrosion and Electrochemical Protection, Marine Biotechnology, Environmental Sciences.
- It's mission:
 - To develop Air Independent Propulsion (AIP) systems for Naval Submarine & Fuel Cell technologies.
 - To provide scientific solutions for all categories of materials & related technologies for Indian Navy.
 - o To undertake research projects on strategic materials for Indian Navy.

Nuclear Submarines versus Conventional Submarines

- The main difference between conventional submarines and nuclear submarines is the power generation system. Nuclear submarines (e.g INS Arihant, INS Akula) employ nuclear reactors for this task and conventional submarines (e.g Project-75 and Project-75I Class Submarines) use dieselelectric engines.
- While nuclear-powered submarines are considered as key assets for deep sea operations, the conventional diesel electric ones are vital for coastal defence and operations close to the shore.



Prelims Practice Questions

- 1. Which of the following states has proposed to prepare a Gender Budget which would make it the first Indian state to do so?
 - a. Andhra Pradesh
 - b. Maharashtra
 - c. Kerala
 - d. Karnataka

Answer: a

Explanation:

- Andhra Pradesh Chief Minister has said that the state would become the first State to come up with a gender budget in the current financial year. This budget would clearly list out the expenditure on welfare schemes for women.
- Such a budget would be a significant step towards addressing gender inequality.
- 2. Consider the following statements regarding the Chabahar Port:
 - 1. It is an Iranian port located in the Persian Gulf.
 - 2. India, Iran and Afghanistan signed a tripartite agreement for the development of Chabahar port in 2016.

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

Answer: B

Explanation

• The Chabahar Port is located on the **Gulf of Oman** and is only 72 km away from the Gwadar port in Pakistan which has been developed by China. **Hence, statement 1 is not correct.**



- It is the only Iranian port with direct access to the Indian ocean and consists of two separate ports named Shahid Beheshti and Shahid Kalantari.
- **Afghanistan, Iran and India** signed a tripartite agreement on developing Chabahar port and setting up a trilateral transport and transit corridor in 2016. **Hence, statement 2 is correct.**
- Chabahar Port is a key element in India's Indo-Pacific strategy that also includes Eurasia's connection with the Indian Ocean Region.
 - Central Asian countries like Uzbekistan and Kazakhstan view Chabahar Port as their gateway to the Indian Ocean Region.

3. What are the advantages offered by the air-independent propulsion systems as compared to the conventional diesel operated submarines?

- 1. Will help increase the operational range
- 2. Better stealth character

Options:

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

Answer: c

Explanation:

- The Project 75I-class submarine is a follow-on of the Project 75 Kalvariclass submarine for the Indian Navy. Under this project, the Indian Navy intends to acquire six diesel-electric submarines, which will also feature advanced air-independent propulsion systems.
- Air-independent propulsion (AIP), or air-independent power, is any marine
 propulsion technology that allows a non-nuclear submarine to operate
 without access to atmospheric oxygen (by surfacing or using a snorkel). AIP
 can augment or replace the diesel-electric propulsion system of non-nuclear
 vessels.
- The air-independent propulsion systems enable the submarines to stay submerged for a longer duration and substantially increase their operational range as compared to the conventional diesel operated submarines.
- Modern non-nuclear submarines are potentially stealthier than nuclear submarines; a nuclear ship's reactor must constantly pump coolant,



generating some amount of detectable noise. Non-nuclear submarines running on battery power or AIP, on the other hand, can be virtually silent.

• While nuclear-powered designs still dominate in submergence times and deep-ocean performance, small, high-tech non-nuclear attack submarines are highly effective in coastal operations and pose a significant threat to less-stealthy and less-manoeuvrable nuclear submarines.

4. 'Pre-pack framework' is sometimes seen in the news, related to which of the following?

A Declaration of health emergency.

B Resolution of the debt of a distressed company.

C Management of disease transmission in wildlife.

D Uniform standards for drug delivery.

Answer: B

Explanation

- Recently, a sub-committee of the Insolvency Law Committee (ILC) has recommended a pre-pack framework within the basic structure of the Insolvency and Bankruptcy Code (IBC), 2016.
- A pre-pack is an agreement for the **resolution of the debt of a distressed company** through an agreement between secured creditors and investors instead of a public bidding process. **Hence, option B is correct.**
- This system of insolvency proceedings has become an increasingly popular mechanism for insolvency resolution in the UK and Europe over the past decade.
- In India's case, such a system would likely require that financial creditors agree on terms with potential investors and seek approval of the resolution plan from the National Company Law Tribunal (NCLT).

5. Which of the following countries border the Mediterranean Sea?

- 1. Morocco
- 2. Algeria
- 3. Tunisia
- 4. Libya
- 5. Egypt



Options:

- a. 1, 2, 3, 4 and 5
- b. 2, 3, 4 and 5 only
- c. 2, 4 and 5 only
- d. 1, 4 and 5 only

Answer: a

6. Korku, Nihali, Kolami, Vadi and Halpati are?

- a. Tribal Languages
- b. Mountain Ranges
- c. Indus Valley Cities
- d. GI tagged Products

Answer: a

Tribal Festival, Research, information and Mass Education

- Under the Financial Assistance for support to Centres of Excellence of the scheme "Tribal Festival, Research, information and Mass Education", financial assistance is provided to repute Institution for carrying out research study programmes including documentation of tribal languages.
- In this regard, Ministry has sanctioned projects to Bhasha Research and Publication Centre during 2018-19 and 2019-20 which inter- alia covered activity of identification and documentation of threatened/dying languages.
- The organization has carried out documentation of Korku, Nihali, Kolami, Vadi, Halpati, Dungra Bhili, Dhavadi, Dhatti, Thali, Nahal and Seheriya languages.



Mains Practice Questions

1. Explain the significance of the Eastern Ghats for India. Suggest steps that can be taken to conserve the biodiversity of the region (250 Words).

Approach

- Introduce by giving general information (like location, biodiversity) about the Eastern Ghats.
- Explain the significance of the Eastern Ghats for India.
- Write about increasing threat to the Eastern Ghats and degrading forest cover and biodiversity.
- Suggest steps that can be taken to conserve the biodiversity.
 Conclude suitably in brief.
- 2. How will the melting of Himalayan glaciers have a far-reaching impact on the water resources of India?

Approach

- Start the answer by briefly discussing the importance of the Himalayas.
- Discuss the effect of melting Himalayan glaciers on water resources.
- Conclude suitably.