

WEEKLY CURRENT AFFAIRS

4th WEEK SEPTEMBER 2022

DVORAK TECHNIQUE

CONTEXT

American meteorologist Vernon Dvorak passed away he was best known for the Dvorak technique which is named after him. The technique is for cyclone forecasting.

VERNON DVORAK

- The National Hurricane Centre of the National Oceanic and Atmospheric Administration named the technique as Advanced Dvorak Technique after updating the software; this technique was developed by Dvorak in the early 1970s.
- The latest update in technique will improve tropical storm forecasts with access to sharper and more detailed images.

LACK OF OCEANIC OBSERVATION MECHANISM

- Ocean observations are limited as compared to land observations
- Vast regions across the oceans have not been fully examined.
- Most observations are taken by deploying buoys or ships, but it is insufficient
- Thus meteorologists depend more on satellite-based imagery.

DVORAK TECHNIQUE

- Forecasters used the available satellite images obtained from polar-orbiting satellites to examine features of developing tropical storms.
- During day time, images in the visible spectrum were used while at night, the ocean was observed using infrared images.
- From the satellite images thus obtained, the Dvorak technique helps forecasters to do a pattern recognition from the observed structure of the storm, locate its eye and estimate the intensity of the storm

- The technique gives the best estimates of cyclone intensity, a vital component of weather warnings.
- Experts claim it cannot help make any predictions or measure wind pressure.
- But it is a guide to estimating the storm's possible intensification which is crucial for local administration in planning evacuation measures.

Curved Band				
Embedded Center				
Shear				

Weaker

TROPICAL CYCLONES

Tropical cyclones originate and intensify over warm tropical oceans. The conditions favourable for the formation and intensification of tropical storms are-

- Large sea surface with a temperature higher than 27°C ;
- Presence of the Coriolis force;
- Small variations in the vertical wind speed
- A pre-existing weak low-pressure area or low-level-cyclonic circulation
- Upper divergence above the sea level system.

The energy that intensifies the storm comes from the condensation process in the towering cumulonimbus clouds, surrounding the center of the storm. With a continuous supply of moisture from the sea, the storm is further strengthened. On reaching the land the moisture supply is cut off and the storm dissipates. The place where a tropical cyclone crosses the coast is called the landfall of the cyclone.

The cyclones, which cross 20°N latitude generally, recurve and they are more destructive.

A mature tropical cyclone is characterized by the strong spirally circulating wind around the center, called the eye.

The diameter of the circulating system can vary between 150 and 250 km. The eye is a region of calm with subsiding air.

Around the eye is the eye wall, where there is a strong spiraling ascent of air to a greater height reaching the tropopause. The wind reaches maximum velocity in this region, reaching as high as 250 km per hour. Torrential rain occurs here.

From the eye wall, rain bands may radiate and trains of cumulus and cumulonimbus clouds may drift into the outer region.

POLAR ORBITS

Almost all the satellites that are in a polar orbit are at lower altitudes. This is because we use them for applications such as

monitoring crops, forests, and even global security.

A polar orbit travels north-south over the poles and takes approximately an hour and a half for a full rotation. As the satellite is in orbit, the Earth is rotating beneath it. As a result, a satellite can observe the entire Earth's surface (off-nadir) in a time of 24 hours

UNITED NATIONS SECURITY COUNCIL(UNSC)

CONTEXT

India is elected to the non-permanent seat of the Security Council for the term 2021-22 with overwhelming support. India gets 184 out of the 192 valid votes polled

CONSTITUTION OF UNSC

- The UNSC is composed of 15 members-five permanent members - China, France, Russian Federation, the United States, and the United Kingdom - and 10 non-permanent members who are elected by the General Assembly.
- The non-permanent members are elected for two-year terms - so every year, the General Assembly elects

five non-permanent members out of the total 10.

- These 10 seats are distributed among the regions of the world- five seats for African and Asian countries, one for Eastern European countries, two for Latin American and Caribbean countries, and two for Western European and Other Countries
- Of the five seats for Africa and Asia, three are for Africa and two for Asia. Also, there is an informal understanding between the two groups to reserve one seat for an Arab country. The Africa and Asia Pacific group takes turns every two years to put up an Arab candidate.
- Elections for terms beginning in even-numbered years select two African members, and one each within Eastern Europe, the Asia Pacific, Latin America, and the Caribbean. Terms beginning in odd-numbered years consist of two Western European and Other members, and one each from the Asia Pacific, Africa, Latin America, and the Caribbean

INDIA AND UNSC

- The presidency of the UNSC was passed to India in Aug 2021 and Ireland will take over the role from India in September. India is set to take over the presidency of the council again in Dec 2022.
- India begins its term at the beginning of 2021 and will hold the position until the end of 2022

- India has earlier been a non-permanent member of the Security Council in 1950-51, 1967-68, 1972-73, 1977-78, 1984-85, 1991-92, and 2011-12
- India was the only candidate for the vacancy from the Asia Pacific. Its candidature for the seat was endorsed unanimously by the Asia Pacific group, which comprises 55 countries, including Pakistan and China, last year.

ASIA PACIFIC SEAT

Besides India, China, and Pakistan the 55-country Asia Pacific group includes Afghanistan, Bahrain, Bangladesh, Bhutan, Brunei, Cambodia, Cyprus, North Korea, South Korea, Fiji, Indonesia, Iran, Iraq, Japan, Jordan, Kazakhstan, Kiribati, Kuwait, Kyrgyzstan, Laos, Lebanon, Malaysia, Maldives, Marshall Islands, Micronesia, Mongolia, Myanmar, Nauru, Nepal, Oman, Palau, Papua New Guinea, Philippines, Qatar, Samoa, Saudi Arabia, Singapore, Solomon Islands, Sri Lanka, Syria, Tajikistan, Thailand, Timor-Leste, Tonga, Turkey, Turkmenistan, Tuvalu, UAE, Uzbekistan, Vanuatu, Vietnam, and Yemen

CRITERIA FOR ELECTION

If a country has been endorsed by its group, it still needs to secure the votes of two-thirds of the members present and voting at the General Assembly session, which is a minimum of 129 votes, if all 193 member states participate

ABOUT UNSC

- The UNSC has 15 members and five of them - the US, UK, Russia, China, and France are permanent members, who have veto rights. The ten elected or non-permanent members have a tenure of two years. At present, the non-permanent members are Estonia, India, Ireland, Kenya, Mexico, Niger, Norway, Saint Vincent, the Grenadines, Tunisia, and Vietnam.
- Non-permanent members of the Security Council, however, do not have veto rights. This, in the eyes of several observers, makes them a toothless grouping because they cannot assert their will on any matter of international concern, merely persuade or dissuade other member states from acting in a certain way.
- The council responds to crises around the world on a case-by-case basis and takes action based on options that do not involve armed force. For instance, economic and trade sanctions, arms embargoes, travel bans, and financial or commodity restrictions.
- However, Chapter VII of the UN charter allows the council to authorize the use of force “to maintain or restore international peace and security”.
- A peace operation by the council is first adopted with a resolution. Each member of the Security Council has one vote. On issues of procedure (about the workings of the council), a

resolution requires the assent of at least nine members. On substantive matters (that have major political consequences), a resolution requires the assent of nine members, including the concurring votes of the permanent members.

- However, any member must abstain from voting if they are involved in the dispute.

Kazakhstan, Kyrgyzstan, Tajikistan, Afghanistan, Pakistan, and India.

- They are Muslim, speak a language close to Turkish, and are culturally and ethnically closer to Central Asia than the rest of China.
- Till recently, they were the majority in Xinjiang, but massive registered and unregistered settlements of Han Chinese and heavy troop deployments have likely changed that situation
- In the early 20th Century, the Uyghurs briefly declared independence for the region but it was brought under the complete control of China's new Communist government in 1949.

UIGHURS

CONTEXT

India has cancelled the visa it had granted to Dolkun Isa, the executive chairman of the Munich-based World Uighur Congress, whom Beijing considers a terrorist. Isa was supposed to visit Dharamsala, the seat of the Dalai Lama.

ABOUT UIGHURS

- The Uighurs live in Xinjiang, the largest and most western of China's administrative regions, which is surrounded by Mongolia, Russia,

XINJIANG PROVINCE

Xinjiang lies in the northwest of China and is the country's largest region. Like Tibet, it is autonomous, meaning in theory; it has some powers of self-governance. But in practice, both regions are subjected to major restrictions by the central government

Xinjiang is a mostly desert region and produces about a fifth of the world's cotton

The region is also rich in oil and natural gas and because of its proximity to Central Asia and Europe is seen by Beijing as an important trade link

CONFLICT AREAS BETWEEN CHINA AND UIGHURS

1. CULTURAL AND ETHNICITY

- Xinjiang has long had a rebellious and autonomous streak, with the indigenous ethnic Uighurs clashing with the authorities.
- There was a spike in demonstrations and demands for independence in the early 1990s as the collapse of the Soviet Union gave birth to new nations, but these were rapidly crushed.

2. ECONOMIC REASONS

- Xinjiang is an important link in China's Belt and Road Initiative a massive development plan stretching through Asia and Europe.
- Beijing hopes to eradicate any possibility of separatist activity to continue its development of Xinjiang, which is home to China's largest coal and natural gas reserves
- As China's development has lifted cities like Kashgar and Urumqi, young, qualified Han Chinese from eastern regions have come to Xinjiang, taking the most lucrative jobs and triggering resentment among the indigenous population

3. RELIGIOUS PERSECUTION

- Uighurs allege the Chinese state has been repressive, clamping down on mosques and religious schools - in 2014, some government departments prohibited fasting during the month of Ramzan.

UIGHURS' ACCUSATION AGAINST CHINA

- Human rights violations- Human rights groups believe China has detained more than one million Uyghurs against their will over the past few years in a large network of what the state calls "re-education camps", and sentenced hundreds of thousands to prison terms. The leading human rights groups Amnesty and Human Rights Watch have published reports accusing China of crimes against humanity
- Human rights groups have voiced concerns that much of that cotton export is picked by forced labour, and in 2021 some Western brands removed Xinjiang cotton from their supply chains, leading to a backlash against the brands from Chinese celebrities and netizens.
- Accuse Beijing of repression- Uyghur and other minority women have reported forced sterilizations and Intrauterine device insertion, and officials have threatened to detain anyone who violates birth-control orders or has too many children.

CHINA'S ACCUSATION AGAINST UIGHURS

- China claims that these groups spreading terrorism and China has announced a campaign against terrorism, and has arrested and, in

some cases, sentenced and executed, leaders of alleged terror groups

- China says the crackdown in Xinjiang is necessary to prevent terrorism and root out Islamist extremism and the camps are an effective tool for re-educating inmates in its fight against terrorism.
- It insists that Uyghur militants are waging a violent campaign for an independent state by plotting bombings, sabotage, and civic unrest, but it is accused of exaggerating the threat to justify repression of the Uyghurs.
- In Beijing's official narrative, much of the Uighur terrorist violence is carried out by the East Turkestan Islamic Movement, a group that seeks to establish an independent East Turkestan state in China

ATTACKS REPORTED

- There were reports of Uighur activists being targeted ahead of the 2008 Beijing Olympics, and in the following year, there was massive rioting in the provincial capital of Urumqi, in which at least 200 people, mainly Han Chinese, were killed.
- The government cracked down, and the circles of resentment only widened, exploding periodically into violent incidents.
- In 2010, the government accused Uighur militants of driving a truck into security forces at Aksu, and of attacking, the following year, a police station at Hotan. In 2012, six Uighurs

allegedly attempted to hijack an aircraft from Hotan to Urumqi.

- In April and June 2013, violent ethnic clashes between Uighurs and Han Chinese killed at least 56 people, and in October of that year, a car bomb went off at Beijing's Tiananmen Square, in which five people were killed. 2014 saw terrorists hacking at people at Kunming railway station, killing 29.

INDIAN AGRI TECH

Context

FSG, a global consulting firm, has launched the Agritech Report 2022, "What's next for Indian agri-tech? Emerging opportunities and the way forward for India's agricultural technology sector".

Key points

- This report presents the current state of Indian agri-tech in India.
- It highlights emerging opportunities in this field.
- It also recommends a way forward for Traditional agriculture companies to succeed across the agriculture value chain Agri-tech start-ups to address the stiff competition ahead.

Agri-Tech startups

- Start-ups are driving India's agri-tech innovations and investment story with significant private equity inflows.
- Start-ups will need an acute focus on profitability to survive an emerging **"battle of platforms"** as several of these players now compete for farmer attention.
- This situation will be exacerbated by a funding slump in the medium term amidst an overall slowdown in global investment activity.
- Innovative global start-ups need to be responsible for addressing systemic barriers and building the critical ecosystem required to scale the agri-carbon market.

Technology

- While the first wave of Indian agri-tech focused on market linkages, several mature, late-stage start-ups are now becoming **"full-stack"** platforms, including value-added services such as agri-fintech in their core offerings.

The next wave of agri-tech growth in India will come from technological advancements in and increased adoption of, sustainable inputs, digital in-farm solutions (Such as farm management software, remote sensing and advisory and farm automation), novel farming systems, traceability and agri-carbon.

- Climate change has intensified the focus on agri-carbon innovations. Technology has irreversibly disrupted the traditional agricultural value chain from how farmers access information and inputs to how they grow and sell their produce.
- Stronger need to adapt to this digital transformation of agriculture.
- Investments in in-farm innovations, including artificial intelligence (AI) and Internet of Things (IoT) solutions, robotics/ drones and farm management software, have been growing exponentially.
- The government is playing a key role in the continued mainstreaming of agri-tech in Indian agriculture, through supportive policies in each of these emerging categories.

Traditional Agriculture companies

- The report highlights that while traditional agriculture companies lag in most categories, large agrochemical players benefit from in-house R&D and a greater investment capacity.
- They are therefore ahead in developing, producing and marketing sustainable and specialized inputs such as bio-fertilizers and organic fertilizers.
- However, traditional agriculture companies focused on the upstream and midstream value chain, including in-farm mechanization solution providers, lag behind start-ups in most other agri-tech innovation categories.

- Traditional agriculture companies must embrace technology to succeed
- Whether they double down on their strengths or expand into adjacencies, they will need to develop a few core digital capabilities such as data analytics and digital farmer networks.

Why agri-tech innovations are required?

- Agriculture accounts for an estimated 43 per cent of India's employment.
- Despite its importance to India's economic and social development, the sector is fraught with challenges.

Indian farmers face increasing cost and margin pressures due to several operational issues and structural barriers, such as rising input and production costs, threats to sustainability due to climate change and intensive cultivation, labour shortage and limited mechanization and a low share of the final price of produce.

- Agri-tech innovations can address many of these challenges by making better information and technology available to farmers.
- This will in turn provide opportunities for farmers to improve their incomes and engage in more sustainable food production.
- India's agri-tech advancements, if utilized correctly, present an excellent opportunity for sustainable and equitable growth, ensuring not only profitability for agribusinesses but also improved livelihoods for farmers.

- Agritech startups have great potential in India highlighting that agritech startups can steer the shift from government-controlled agricultural markets toward more demand-driven digital markets.

Key highlights

- Globally, India is competing with the US and China in the agri-startup space.
- According to AgFunder, India witnessed an increase in funding from \$619 million in H 1 2020 to \$2 billion in H1 2021, behind the US (\$9.5 billion) and China (\$4.5 billion).
- An Ernst & Young 2020 study pegs the Indian agritech market potential at \$24 billion by 2025, of which only 1 per cent has been captured so far.
- Currently, it is estimated that there are about 600 to 700 agritech startups in India operating at different levels of agri-value chains.
- Many of them use artificial intelligence (AI), machine learning (ML), internet of things (IoT) etc, to unlock the potential of big data for greater resource use efficiency, transparency and inclusiveness.
- The pandemic helped them catapult and the 2020 farm laws can give them a further boost by providing a legal framework to work with the farmers through FPOs, co-operatives and other collectives.
- Some startups in the marketing space are empowering farmers and small agrifood operations and giving

consumers a better deal.

Ninjacart, Dehaat and Crofarm (Otipy) are a few of the many startups that are redefining the agrifood marketplace.

- The novelty of startup-led value chain transformation is not limited to empowering farmers but also co-opting local grocery, mom-and-pop and Kirana stores as well as small agrifood businesses that are an integral part of the agrifood ecosystem.
- At the same time, the startup network can leverage the bigger front-end players who demand bulk quality produce and have challenges in directly linking with farmers.
- This is in contrast to the earlier organised retail (big box) wave that emerged in the mid-2000s, wherein the livelihood of unorganised retailers and small businesses was perceived to be threatened.

- Otipy has emerged as one of the popular app-based platforms with nearly 2 lakh customers and more than 8.25 lakh mobile downloads.
- It currently works with 10, 000 plus resellers in Delhi NCR and is also present in UP, Gujarat and Himachal Pradesh. About 70 per cent of the resellers are women.

Impact

- Ninjacart reduced wastage to 4 per cent compared to up to 25 per cent in traditional chains through a demand-driven harvest schedule.
- Logistics optimisation enabled delivery in less than 12 hours at one-third the cost in traditional chains.
- Farmers' net incomes are reported to have increased by 20 per cent.
- Dehaat has enabled up to a 50 per cent increase in farmers' income as a result of savings in input costs, increased farm productivity and better price discovery.

Agritech startups have a growing footprint

- Dehaat is present in Bihar, West Bengal, Odisha and Uttar Pradesh, working with 6, 50, 000 farmers through 1, 890 Dehaat Centres.
- Dehaat Ninjacart sources fresh produce from farmers and supplies to retailers, restaurants, grocery and Kirana stores and small businesses and is operational in nearly 11 cities.
- With a farmer network of 10, 000 plus, Crofarm has served more than 1 lakh consumers and 5, 000 businesses.

Important Terminologies

Agri-tech	Agricultural technology or agri-tech is the use of technology in agriculture based on agricultural science, agronomy and agricultural engineering.
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	Agri-tech innovations could be in the form of products, services or applications, which aim to improve yield, efficiency, profitability and sustainability of agricultural operations.
In-farm and novel farming solutions	Innovations such as artificial intelligence (AI), Internet of Things (IoT), Robotics and data analytics that manage risks and improve farm productivity and quality and novel farming solutions such as vertical farming and aquaculture.
Agri-fintech	It includes digital financial products and services across the agriculture value chain such as input credit, supply chain financing and insurance.
Agri-Carbon	Agri carbon

	includes regenerative farming and soil health practices (Such as no-till farming and crop rotation) which can restore carbon in the soil, biomass for energy and feedstock and the trade of carbon credits.
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KYRGYZSTAN – TAJIKISTAN CONFLICT

CONTEXT

For the past few weeks going confrontations by local communities and skirmishes between security forces on either side. In the Batken region, Osh families are moved out and relocated by the state.

The first large-scale escalation of the conflict took place on April 28, 2021, when the two parties clashed over Tajikistan's decision to install video surveillance near the Ak-Suu/Isfara River.

CAUSES OF DISPUTE

- One of the crucial points of disagreement is the map which should be used for demarcation purposes.
- Both countries share a 1000 km long border, a large part of which is disputed.
- There is a dispute over sharing water and land resources
- The agreement between the two over the utilization of Kyrgyz territory by the Tajik's livestock. The agreement was concluded as Tajik saw an increase in livestock but they have scarce grazing land

BACKGROUND OF THE ISSUE

- The borders of the two republics were demarcated under Joseph Stalin's leadership
- The Kyrgyz and Tajik populations enjoyed common rights over natural resources.



CONTENTIOUS FACTORS

ENVIRONMENTAL ISSUES

Incidents saw groups from either side planting trees in disputed areas.

FERGHANA VALLEY

- The Soviet delimitation of national borders in the Fergana Valley, along with land exchanges and land “loans” up to the very end of the Soviet Union, has produced a complex geography
- Besides the 984-kilometre-long border, of which only 504 km are demarcated, Kyrgyzstan also hosts two Tajik exclaves, Vorukh and Kayragach.
- Both sides have disputed ownership over various territories since independence in 1991 using different

Soviet maps and agreements as the basis for their claims

WATER ISSUE

- The collapse of the Soviet subsequently followed by the dissolution of land and water agreements and the creation of smaller independent multiple farms leading to an increase in water consumption.
- The reason for the conflict was the "Golovnoi Vodorazdel" (main watershed) area. It is from this area that the runoff from mountainous rivers is distributed between three countries the Ferghana valley runs through –Tajikistan, Kyrgyzstan, and Uzbekistan. Intergovernmental agreements developed post 1980 s but they are ignored.
- The problem further escalated because of antiquated water infrastructure and inefficient irrigation methods.
- The undulating trajectories of water channels upset equitable access to water.
- Climate change is also leading to greater stress over water sharing.

ETHNIC ISSUES

Both countries while sharing a loosely intertwined historical past have had different internal dynamics. The instability can be traced to transnational challenges and internal ethnic strife.

NATIONALISTIC POSTURING

- The escalation was preceded by populist moves by the Kyrgyz government regarding border regulation and the resolution of territorial disputes.
- Territorial sovereignty and border security were part of Kyrgyz President Sadyr Japarov's and his ally, head of the State Committee for National Security, Kamchybek Tashiev's electoral campaigns in late 2020.
- Upon coming to power in 2020 and after being elected in early 2021, the government purchased a few Turkish Bayraktar drones and Russian 'Tigers'
- Government officials also boasted that they would resolve border disputes with Tajikistan soon

NONCHALANT ATTITUDE OF INTERNATIONAL GROUPINGS

- The current Tajik incursion happened amid a large regional summit, Uzbekistan's hosting of the leaders of the Shanghai Cooperation Organization.
- The summit, in Samarkand, took place just 350 km away from the area under attack.
- Other than in a sideline meeting between the Kyrgyz and Tajik presidents on September 16, neither president nor the host, Uzbek

President Shavkat Mirziyoyev raised the issue formally within the summit

- While it may be a sign of the lack of real capacity or political will to use the SCO to resolve regional disputes
- The first escalation of the conflict in April 2021 occurred in the middle of the Collective Security Treaty Organization (CSTO) summit, which was taking place in Dushanbe; that organization did not refer to the outbreak of violence along the host country's borders.

CONFLICT RESOLUTION

- First and foremost groups required a consensus building upon a common map
- The international community should not remain indifferent and try to meditate on the issue to pacify the situation.
- The informal small-scale governance mechanisms would have to be strengthened through concerted efforts by respective countries.

CENSUS

Background

- Among the best uses of a census anywhere in the world was perhaps what happened in the United States when, in 1850 and 1860, anti-slavery campaigners used numbers from two

consecutive national censuses to build support for the abolition of slavery.

- They showed the number of enslaved people in the U.S. to be rising contrary to arguments made by pro-slavery politicians.
- There have been numerous instances of such revelations using the census.

A case of the missing census

- India's first Census was held in 1872 and conducted non-synchronously in different parts of the country.
- After that, India held its decadal censuses regularly from 1881 to 2011, **despite diseases, world wars, Partition and other instances of turmoil.**
- Citing COVID-19 as an excuse for its postponement now runs thin, as the Government thought it fit to allow large election rallies in the middle of a deadly second wave of the pandemic was criminally mismanaged.
- But there is no tradition of anyone being answerable and explaining why the largest democracy, once held in awe for its ability to make its people count regularly is not doing so now.
- As there is no official reassurance that India will not skip its decadal Census, we can declare that we have a case of the missing census.
- The best sample surveys find it impossible to beat a census. It carries the promise of counting every Indian.
- The Government could junk for the first time, a survey recording falling

consumption expenditures in 2017-18 and get away with it.

- A census is when the state connects to every individual and it will find it hard to hide or duck from the data.

Finding out age, gender, economic status, religion and languages spoken yields information of another order, making it a treasure trove of findings and providing pathways for planning and resolving problems and fixing deficiencies.

Censuses in India

- Before the term Big Data became commonplace have provided great amounts of reliable numbers over time.
- They enable neat, inter-temporal comparability to where India stands vis-a-vis its record.
- Important metrics such as the sharp decline in the gender ratio in India between the Censuses of 1961 and 1971 alerted Indians to how pre and post-natal factors were reflecting the "**son bias**" and leading people to murder girls, born and unborn.

Total Fertility Rate

- Some unfounded ideas, flowing from bigotry and prejudice, have been slayed by Census headcounts.

- Consider the data-free assertion that India is heading for a population explosion due to Muslim reproductive rates. This has been systematically taken down due to census data.
- The Census established that the Total Fertility Rate (TFR) is coming down at a very rapid pace and is well on its way to stabilisation.
- The fall in TFR among Muslims is faster than in any community.
- The differences in TFR across India have more to do with region and socioeconomic indicators and not religion or caste.

Divorce Rate

- 2011 Census also dispelled the notion of divorce rate differentials between the city and rural India.
- The urban divorce rate (0.89 per cent) is almost equal to the rural rate (0.82 per cent).

Contentious issues

- Well before the novel coronavirus pandemic, the Census was entangled in a battle when thousands took to the streets and bitter protests broke out.
- The turning of the Census into a gateway for a nationwide, contentious National Register of Citizens (NRC), with the names of "**genuine citizens**" of India made a headcount issue to be one of attempting to revisit who was an Indian and who was not.

National Population Register

- The Census, if conducted along with the preparation of a National Population Register, a register of all the usual residents which includes citizens and non-citizens, suddenly began to be seen "as the first step towards the creation of a National Register of Indian Citizens (NRIC) by verifying the citizenship status of every usual resident".
- Along with large sections of the citizenry insecure about their ability to provide the right paperwork, several State Assemblies issued resolutions that they would not conduct a census loaded with questions not asked before.
- That it would be a bad faith exercise till some idea of the right list is eventually arrived at is a valid concern.

Caste Census

- The Census has often been key to the formation and affirmation of identities over time.
- But there is now official squeamishness about recording identities that want to be counted and identified.
- India had its last caste census in 1931. In 2011, a socio-economic and caste census was conducted.
- But while other data were finalised and published, it conveniently

excluded the caste data citing several reasons.

- The disparity between caste groups and the privileges they enjoy versus their numbers in the population may be so stark.

Census in different countries

- The Democratic Republic of the Congo completed the second census in its history this year, the previous census had taken place in 1984.
- The ability to hold a census peacefully and not coercively has been the hallmark of a civilised state and state of affairs.

It would speak volumes if India were to join the ranks of some other countries which have been without a census since 1990. They include Afghanistan (1979), Lebanon (1932), Somalia (1985), Uzbekistan (1989) and Western Sahara (1970).

- Pakistan took nearly 20 years to conduct a census after the one in 1998. It managed one in 2017.
- The gap spoke of its dysfunction and inabilities and also of no desire to hear the truth that the facts are thrown up would convey.

Relentless data gathering

- The Census is vital and precious as it is a repository of complete data about

the country which is gathered openly, voluntarily and with the use of public money, making it a social good.

- It is not as if the government of India does not want data.
- Even as it has made the future of the Census a state secret, its drive to gather and vacuum the data of its citizens for its purposes has been on and without a framework of rules and rights to govern the process of sucking up citizen data.

Gathering Sensitive data

Aadhaar

- A law now allows electoral rolls to be linked with Aadhaar. It may not be compulsory but it potentially allows very sensitive data of citizens to be available to the state.
- The drive to gather data has been relentless.

Criminal Procedure (Identification) Rules 2022

- The Ministry of Home Affairs has just notified the Criminal Procedure (Identification) Rules, 2022, even as two High courts are hearing the challenge to the Act.
- Controversial, these rules outline the procedure for the taking of body measurements. It enables enforcement agencies to collect biological samples, retina scans, biometrics and behavioural attributes of convicted, arrested or detained persons).

- This data hunger sits in perfect contrast to events surrounding the Personal Data Protection Bill 2019.

Right to privacy

- The right to privacy was declared a fundamental right by the Supreme Court of India in 2017.
- But, ironically, the fifth anniversary of this landmark ruling was marked more by delays to a data protection law for citizens, as the draft bill was abruptly withdrawn. That too, after hours of deliberation and suggestions for 81 changes.
- All in all, the missing Census is accompanied by an extensive desire to mine the data of citizens, not in a way that offers them any benefits or security but just goes on making their relationship with the government more asymmetrical.
- The Census is about many things. But, fundamentally, it is how the state, by knocking at all doors, displays its desire to connect with the people who ultimately comprise the nation.
- It must be made a priority and used to affirm a sense of comradeship.
- A Census is not about counting sheep and the Government cannot be allowed to sleep at the wheel.

DEATH SENTENCE EXPLAINED

Background

- Death sentence/Capital punishment, also known as the death penalty, is a **state-sanctioned practice of killing a person as a punishment for a crime.**
- The sentence order that an offender is to be punished in such a manner is known as a death sentence, and the act of carrying out the sentence is known as an execution.
- While the standard applied by the judiciary is that of the rarest of rare principles (however subjective or Judge-centric it may be in its application), the standard applied by the **executive in granting commutation is not known.**
- **In Shankar Kisanrao Khade v. State of Maharashtra ('Khade')**, the Supreme Court of India, while dealing with an appeal on the issue of death sentence, expressed its concern with the lack of a coherent and consistent purpose and basis for awarding death and granting clemency.

History of the death penalty in India

- An early attempt at the abolition of the death penalty took place in pre-independent India when **Shri Gaya**

Prasad Singh attempted to introduce a Bill abolishing the death penalty for IPC offences in 1931.

- However, this was defeated. Around the same time, in **March 1931**, following the execution of **Bhagat Singh, Sukhdev and Rajguru** by the British government, the Congress moved a resolution in its Karachi session, which included a **demand for the abolition of the death penalty.**
- **India's Constituent Assembly Debates between 1947 and 1949** also raised questions about the **judge-centric nature of the death penalty**, arbitrariness in imposition, its discriminatory impact on people living in poverty, and the possibility of error.
- **Pandit Thakur Das Bhargava** complained regarding the errors associated with the death penalty.
- **Dr Ambedkar** was personally in favour of abolition.

Legal backing associated with the death penalty

- The IPC prescribed six punishments that could be imposed under the law, including death.
- In 1955, the Parliament repealed Section 367(5), CrPC 1898, significantly altering the position of the death sentence.
- The Code of Criminal Procedure was reenacted in 1973 ('CrPC'), and several changes were made.

Constitutional and judicial opinions on the Death penalty

- In **Jagmohan Singh v. State of U. P.**, the Supreme Court found that the death penalty was a permissible punishment, and did not violate the Constitution.
- In 1979, the case of **Rajendra Prasad v. State of Uttar Pradesh** ('Rajendra Prasad') discussed what the “**special reasons**” for imposing the death sentence could be.
- A Constitution Bench of the Supreme Court in the case of **Triveniben v. the State of Gujarat** considered the question and held that only executive delay, and not judicial delay, may be considered relevant in an Article 21 challenge.
- In **Bachan Singh**, the Court adopted the ‘**rarest of rare**’ guideline for the imposition of the death penalty, saying that reasons to impose or not impose the death penalty must include the circumstances of the crime and the criminal.
- **Justice Bhagwati (17th Chief Justice of India)** in his dissenting opinion found the **death penalty necessarily arbitrary, discriminatory and capricious.**
- Proponents argue that it represents just retribution for certain crimes, deters crime, protects society, and preserves the moral order.
- Death penalty violates **Articles 14, 19 and 21 of the Constitution of India.**
- It was argued that since the death sentence extinguishes, along with life, all the freedoms guaranteed under **Article 19(1) (a) to (g)**, it was an **unreasonable denial of these freedoms and not in the interests of the public.**
- The discretion vested in judges in deciding to impose a death sentence was **uncontrolled and unguided and violated Article 14.**
- Provisions of the law did not provide a procedure for the consideration of circumstances crucial for choosing between capital punishment and imprisonment for life, it **violated Article 21.**
- The decision of the **US Supreme Court in Furman v. Georgia** in which the death penalty was **declared to be unconstitutional as being cruel and unusual punishment** was also placed before the Constitution Bench.
- Irreversibility, fallibility, and that the punishment is necessarily cruel, inhuman and **degrading a life whose purity is beyond the law.**

Criticism against the Death penalty

- Major arguments against the death penalty focus on its **inhumanity, lack of deterrent effect, continuing racial and economic biases, and irreversibility.**

Conclusion

- A real and abiding concern for the dignity of human life postulates resistance to taking a life through **the law's instrumentality.**

- That ought not to be done save in the rarest of rare cases when the alternative option is unquestionably foreclosed.
- **“Section 364A cannot be dubbed as so outrageously disproportionate to the nature of the offence as to call for the same being declared unconstitutional”**, death sentences would only be awarded in the rarest of rare cases.
- The Court did not address the question of whether the death sentence was an appropriate punishment for a non-homicide offence or applicable international law standards on this issue.

NOTE- FACT OF CONCERNS

- The Chinese government continues to be the world's leading executioner.
- In Iran's death penalty precise totals for executions in Iran can be difficult to obtain, as some 88% of Iranian executions are carried out in secret.

Top 10 Countries that Conducted the Most Executions in 2021 (Amnesty International)

1. China — 1000+
2. Iran — 314+
3. Egypt — 83+
4. Saudi Arabia — 65
5. Syria — 24+
6. Somalia — 21+
7. Iraq — 17+
8. Yemen — 14+
9. United States — 11

10. South Sudan — 9+

Mains Questions

- 1) Discuss the techniques for forecasting tropical cyclones
- 2) Discuss the role of the UNSC in ensuring peace.
- 3) How do non-permanent members are elected in UNSC?
- 4) *What are the highlights of Agritech Report 2022, “What’s next for Indian agri-tech?”*
- 5) Discuss the role of international groupings in pacifying regional disputes?

Prelims Questions

1. Consider the following statements

1. SCO Summit 2022 held in Samarkand, Uzbekistan
2. India assume the presidency of SCO in 2023
3. India joined SCO in Astana summit, 2017

Which of the above statements is /are correct-

- A. 1 and 2
B. 2 and 3
C. 1 and 3
D. 1, 2, 3

2. Consider the following statements

1. The energy that intensifies the storm comes from the condensation process in the towering cumulonimbus clouds, surrounding the centre of the storm
2. On reaching the land the storm dissipates

Which of the above statements is /are correct-

- A. Only 1
- B. Only 2
- C. Both 1 and 2**
- D. Neither 1 nor 2

3. Which of the following statements is/are true with respect to Project 39A often seen in the news?

1. It is a criminal reforms advocacy group in the National Law University of

Delhi.

2. It aims to trigger new conversations specifically only on the issue of the death penalty.
3. It is inspired by Article 39-A of the Indian Constitution.

Which of the above statements is /are correct-

- A. 1 and 2
- B. 2 and 3**
- C. 1 and 3
- D. 1, 2, 3

4. Which of the following is/ are the types of labels used in packaged foods?

1. Daily intake Guide
2. Warning label
3. Traffic light labelling

Which of the above statements is /are correct-

- A. 1 and 2
- B. 2 and 3
- C. 1 and 3
- D. 1, 2, 3**

5. Consider the following Statements

1. As per the estimates, by 2040, the level of plastic pollution could reach 80 million metric tons per year as the plastic particles have now been detected in virtually all spheres of the environment including soil, air and water bodies.

2. The tiny plastic particles can even reach the Antarctic, Arctic and ocean depth via ocean currents and rivers

Which of the above-given Statement is/ are incorrect

Which of the above statements is /are correct-

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2**



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02

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- Aspirants can create notes on the Newspapers provided by upscexamnotes on daily basis, if an aspirant prepares notes for one month from a newspaper it will be their current affairs magazine. It can be saved and downloadable from their profiles



03 Create Questions

Aspirants can create Questions on any particular topic while they reading. It gives a different view for the aspirants to think from an examiner's point of view
It gives an edge in answering the question in the exam



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04

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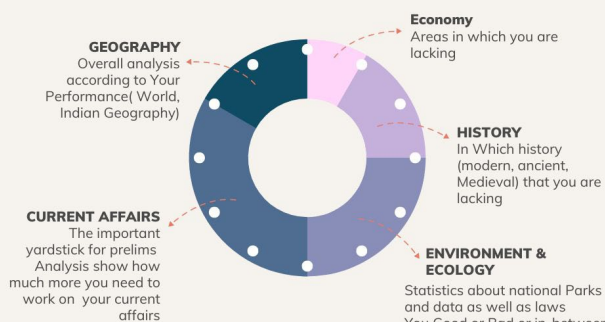
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