CURRENT AFFAIRS
WEEKLY

Mains

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— NOTE —

The current affairs articles are segregated from prelims and mains perspective, such separation is maintained in terms of structure of articles. Mains articles have more focus on analysis and prelims articles have more focus on facts.

However, this doesn't mean that Mains articles don't cover facts and PT articles can't have analysis. You are suggested to read all of them for all stages of examination.

CURRENT AFFAIRS ANALYST
WEEK- 2 (JULY, 2020)

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SECTION: A
(MAINS)

CURRENT AFFAIRS

IMPACT OF COVID-19 PANDEMIC ON GLOBALISATION

- Globalization refers to international trade and investment flows among economies often enabled by technological developments. But today the globalization stands at a crossroads.

- From Brexit to protectionist policies by the USA, from western against immigrants to new snags in the world's path to free trade, this era of world politics is being called de-globalization today.

- The global order is regularly facing a challenge as we've never seen before. All multilateral institutions in the world are today collapsing from the burden of their contradictions.

- The shock of the coronavirus to the global economy, which was already struggling, has also eroded the possibility of increased inflows of money, goods, and people around the world.

De-Globalization Trend

- Since the global economic crisis of 2008-09, the world was constantly moving in this direction and stood at the turn of the current global economic turmoil. This can be understood through the following data:

Category	Before Globalization	After Globalization (1991)	After the global economic crisis of 2008-09
Trade as a percentage of global GDP	39%	61%	59% (in 2018)
Net Foreign Direct Investment inflows	Under 1% of global GDP	4%	1.4%
Net international energy trade	1.5 billion tonnes of oil equivalent	2.5 billion	2.8 billion
Similarly, personal remittance flows, previously on the rise, flattened to around 0.75% of global GDP.			

- There are several causes for the great stagnation in the globalization of goods and capital. It became increasingly apparent that not all countries, societies, and people were benefitting equally from globalization, and that soon began to be reflected in national and international politics.

COVID19 Pandemic and Globalization

- **Disrupting global supply chains and international trade**

  ➤ According to an analysis by the United Nations Department of Economic and Social Affairs (UN DESA), the Coronavirus (COVID-19) epidemic is disrupting global supply chains and international trade. The World Trade Organization (WTO) has estimated that in a worst-case scenario, global trade could dip as much as 32%.

- **Restricted movement of people and the pace of tourism**

  ➤ During the past month, about 100 countries have closed their national border, which has completely stopped the movement of people and the pace of tourism, which has hampered global growth. Developed countries as well as many in the Asia Pacific economies that are highly dependent on tourism and commodities trading will shrink.

- **Job crisis and stimulus packages**

  ➤ According to DESA, "millions of workers in almost all countries of the world are facing a job crisis. Besides, various governments are considering large stimulus packages to deal with the outbreak of coronavirus, which may further affect the global economy."

- **Import substitution**

  ➤ Countries are facing difficulties in getting medical supplies; some find their manufacturing can't run as value chains are linked with China.

  ➤ Countries will reconfigure their economies to look at import substitution with greater clarity now, as the perils and pitfalls of overdependence on foreign supplies become clear.

- **Disillusion with the role of multilateral institutions**

  ➤ Trade rules have worked best when the global economy is booming and isn't facing a crisis. Position of Multilateral Institutions like WTO is

going to get worse because if countries need to bring their domestic industries back, they would need space for policy flexibility and WTO will be redundant there — for instance, on the issue of subsidies for small industries, no country will like the WTO to be telling them what to do or what not to do.

- **Indian Context**
  - ➤ The world is becoming fragmented every day, the challenge of reviving support for globalisation will be bigger. This is a major problem for countries like India, which have benefited greatly from the vigor of globalisation. Because of the free flow of information, ideas, jobs, and people has given Indian citizens an unprecedented opportunity to prosper.
  - ➤ But, now that the world scenario is changing rapidly, India's policy-makers will have to find a way to make the most of the new emerging opportunities in India. Because today the old global supply chains are being disrupted and replaced by a new system of trade and investment.

Way Forward

- ◉ The impact of the severity of coronavirus (COVID-19) on the global economy will depend primarily on two factors: a period of restriction on people's movement and economic activity in major economies; and the real size and effectiveness of fiscal measures for the crisis.

- ◉ According to analysts, there is a need for a properly designed fiscal stimulus package to mitigate the impact of the virus on the global economy, which includes prioritizing health expenditure to prevent the spread of the virus and providing financial assistance to families affected by the epidemic.

- ◉ According to the Secretary-General for Economic and Social Affairs, all nations need some immediate policy measures that not only work towards preventing epidemics and saving lives but also help protect the weakest person in society from the economic crisis and maintain economic growth and financial stability.

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DHAMMACHAKKA PRAVATAN

CONTEXT

Recently, the Dalai Lama addressed the Dhammachakka Pravartan celebration hosted by the Culture Ministry at the Rashtrapati Bhavan via video call, to celebrate his birthday. The event saw Buddhist monks from 52 countries including a significant number from Japan and Taiwan.

Dhammacakkappavattana Sutta

- It is considered to be a **record of the first teaching given by the Buddha after he attained enlightenment.** According to the Buddhist tradition, the Buddha gave this teaching in Sarnath**,** to the five ascetics (his former companions with whom he had spent six years practicing austerities).

The Dalai Lamas in Tibetan Buddhism

- All of the Dalai Lamas are thought to be **Manifestations of the Bodhisattva of Compassion, Avalokitesvara.**

- For Buddhists, the **ultimate goal is enlightenment, or "nirvana"** – liberation from the cycle of birth and death. East Asian and Tibetan Buddhists, as part of the Mahayana sect, believe bodhisattvas have reached this highest realization.

- Furthermore, Mahayana Buddhists believe bodhisattvas choose to be reborn, to experience the pain and suffering of the world, to help other beings attain enlightenment.

- **Tibetan Buddhism** has developed this idea of the bodhisattva further into **identified lineages of rebirths called "tulkus."** Any person, who is believed to be a rebirth of a previous teacher, master, or leader, is considered a tulku**.** Tibetan Buddhism has hundreds, if not thousands of such lineages, but the most respected and well-known is the **Dalai Lama.**

Dalai Lama

- It is the title given by the Tibetan people for the foremost spiritual leader of the **Gelugpa or "Yellow Hat" school of Tibetan Buddhism**.

- The name Dalai Lama, meaning **Ocean of Wisdom,** was not conferred until the third reincarnation in the form of Sonam Gyatso in 1578.

- The first and second Dalai Lamas were given the title posthumously. Buddhists believe that the first tulku in this reincarnation was Gedun Drub, who lived from 1391-1474 and the second was Gendun Gyatso.

- The Dalai Lama is a highly influential figure. The 14th and current Dalai Lama is Tenzin Gyatso.

The 14th Dalai Lama, Tenzin Gyatso

- He was born on 6 July 1935, to a farming family, in northeastern Tibet.

- At the age of two, the child, then named Lhamo Dhondup, was recognized as the reincarnation of the previous **13th Dalai Lama, Thubten Gyatso**.

- In 1989 he was awarded the **Nobel Peace Prize** for his non-violent struggle for the liberation of Tibet.

Tibetan Buddhism

- Tibetan Buddhism combines the essential teachings of **Mahayana Buddhism** with **Tantric and Shamanic, and material from an ancient Tibetan religion called Bon**.

- Although Tibetan Buddhism is often thought to be identical with Vajrayana Buddhism, they are not identical - Vajrayana is taught in Tibetan Buddhism together with the other vehicles.

- **Groups within Tibetan Buddhism**

  - **Nyingmapa:** Founded by Padmasambhava, this is the oldest sect, noted in the West for the teachings of the Tibetan Book of the Dead.

  - **Kagyupa:** Founded by Tilopa (988-1069), it is headed by the Karmapa Lama. Important Kagyupa teachers include Naropa, Marpa, and Milarepa.

  - **Sakyapa:** Created by Gonchok Gyelpo (1034-1102) and his son Gunga Nyingpo (1092-1158).

  - **Gelugpa:** (The Virtuous School) Founded by Tsong Khapa Lobsang Drakpa (also called Je Rinpoche) (1357 - 1419), this tradition is headed by the Dalai Lama.

  - **New Kadampa Tradition:** One of the major Buddhist schools in the UK, founded by the Tibetan-born Geshe Kelsang Gyatso. Some Buddhists and non-Buddhists regard it as outside the mainstream tradition.

- **Special features of Tibetan Buddhism**

  - The status of the teacher or "Lama"

  - Pre-occupation with the relationship between life and death

➤ An important role of rituals and initiations

➤ Rich visual symbolism

➤ Elements of earlier Tibetan faiths

➤ Mantras and meditation practice

China, India and Dalai Lama

◉ China views the Dalai Lama as a separatist, while Dalai Lama says that his fight is for the autonomy of Tibetans.

◉ Chinese communist government under Mao Zedong carried out the invasion of Tibet in 1950.

◉ Evading the People's Liberation Army of China, the Dalai Lama fled to India in 1959.

◉ Prime Minister Jawaharlal Nehru permitted him to form **The Tibetan Government in Exile in Dharamsala in India**. This has been a major irritant for China.

◉ China in 2017 objected to Dalai Lama's visit to Arunachal Pradesh's Tawang district. It was seen by China as a "provocation" by India.

◉ The successor to the Dalai Lama is traditionally located by senior monastic disciples, based on spiritual signs and visions. In 2011, however, the Chinese Foreign Ministry declared that only the government in Beijing can appoint the next Dalai Lama and no recognition should be given to any other succession candidate.

◉ Because of the threat from China, the 14th Dalai Lama has made many statements that would make it difficult for a Chinese appointed 15th Dalai Lama to be seen as legitimate.

➤ For example, he has stated that the institution of the Dalai Lama might not be needed anymore. However, he has also said it was up to the people if they wanted to preserve this aspect of Tibetan Buddhism and continue the Dalai Lama lineage.

➤ Another option the Dalai Lama has proposed would be for him to appoint his reincarnation before he dies. In this scenario, the Dalai Lama would transfer his spiritual realization to the successor.

➤ A third alternative Tenzin Gyatso has stated is that if he dies outside of Tibet, his reincarnation would be located abroad, most likely India.

➤ Lastly, he has mentioned the possibility of being reborn as a woman but added that he would have to be a very beautiful woman. He believes that appearance is important in transmitting Buddhist teachings.

Buddhism

◉ It was founded by Gautama Buddha. He was born **as Prince Siddhartha at Lumbini near Kapilavastu** (in present Nepal) in 566 BC.

◉ His parents were Suddhodhana and Mahamaya. Suddhodhana was the chief of the **Sakya clan.** Due to this, Buddha was also known as **'Sakyamuni'.**

◉ He was married to Yashodhara and had a son, Rahula.

◉ He left his home at the age of 29 to become an ascetic. This event is called **Mahabhishkramana.**

◉ Gautama attained **Bodhi (enlightenment)** under a pipal tree at **Bodhgaya a village in Bihar**.

◉ Buddha gave **his first sermon in the village of Sarnath in Banaras**. This event is known as **Dharmachakra Pravartana/ Dhammachakkappavattana** (turning of the wheel of law).

◉ He died in 483 BCE at **Kushinagar**. The event is known as **Mahaparinibban.**

● **Teachings**

➤ Gautama taught that a person should avoid the excess of both luxury and austerity. He prescribed the middle path (Madhyam Marg). The Buddha also laid down a code of conduct for his followers on the same lines as was done by the Jaina teachers. The main items of this social conduct are

• Do not covet the property of others,

• Do not commit violence,

• Do not use intoxicants,

• Do not speak a lie,

• Do not indulge in corrupt practices.

➤ The Four Noble Truths:

• The world is full of sorrow

• People suffer on account of desires.

• If desires are conquered, nirvana will be attained, that is, man will be free from the cycle of birth and death.

• Desire can be conquered by following the **eight-fold paths (Ashtangika Marga).**

➤ Buddhism does not recognize the existence of God and the soul (atman).

Eight-fold paths-Ashtangika Marga

• Right Understanding
• Right Intent
• Right Speech
• Right Action
• Right Livelihood
• Right Effort
• Right Mindfulness
• Right Concentration

Three Jewels/Tri-Ratnas

• These are the Buddha, the Dharma which is the teaching of the Buddha, and the Sangha, which is the community who follow the teaching.

WMO CERTIFIES MEGAFLASH LIGHTNING EXTREMES

CONTEXT

A World Meteorological Organization (WMO) committee of experts has established two new world records for the longest reported distance and the longest reported duration for a single lightning flash in, respectively, Brazil and Argentina.

⦿ **BACKGROUND**

- The first megaflash event, which set the record for longest-distance flash, was more than seven times larger than the minimum criteria for a megaflash and was twice as large as the previous record-holder.

- The flash developed in spring 2018 in southern Brazil north of Porto Alegre, then spread both east and west simultaneously, stretching more than 440 miles from west to east as the crow flies.

- The previous record for the longest recorded distance for a single megaflash event was just under 200 miles across, set in Oklahoma in June 2007.

⦿ **ANALYSIS**

The mechanism behind lightning

- Lightning is an electrical discharge caused by imbalances between storm clouds and the ground, or within the clouds themselves. Most lightning occurs within the clouds.

- "Sheet lightning" describes a distant bolt that lights up an entire cloud base. Other visible bolts may appear as bead, ribbon, or rocket lightning.

- During a storm, colliding particles of rain, ice, or snow inside storm clouds increase the imbalance between storm clouds and the ground, and often negatively charge the lower reaches of storm clouds.

- There are three categories of lightning-

  ▶ **intracloud (IC),** which is flashes within a cloud

  ▶ **cloud to cloud (CC),** where lightning jumps from one cloud to another

  ▶ **cloud to ground (CG),** where lightning strikes from the ground. This is the most well understood kind of strike and the riskiest to life.

- Lightning is extremely hot—a flash can heat the air around it to temperatures five times hotter than the sun's surface.

⦿ **Thunder:** This heat causes surrounding air to rapidly expand and vibrate, which creates the pealing thunder we hear a short time after seeing a lightning flash.

How does this current reach the Earth from the cloud?

- While the Earth is a good conductor of electricity, it is electrically neutral. However, in comparison to the middle layer of the cloud, it becomes positively charged.

- As a result, about 15%-20% of the current gets directed towards the Earth as well. It is this flow of current that results in damage to life and property on Earth.

- There is a greater probability of lightning striking tall objects such as trees, towers or buildings. Once it is about 80-100 m from the surface, lightning tends to change course towards these taller objects.

- This happens because air is a poor conductor of electricity, and electrons that are travelling through air seek both a better conductor and the shortest route to the relatively positively charged Earth's surface.

The new records

- The new records for "megaflashes", verified with new satellite lightning imagery technology, more than double the previous values measured in the United States of America and France.

- The findings were published by the American Geophysical Union's Geophysical Research Letters ahead of International Lightning Safety Day on 28 June.

- WMO's Committee on Weather and Climate Extremes, found that:

  ▶ World's greatest extent for a single lightning flash is now 440.6 miles. The world's greatest extent for a single lightning flash is a single flash that covered a horizontal distance of 709 ± 8 km (440.6 ± 5 mi) across parts of southern Brazil on 31 October 2018.

➤ The greatest duration for a single lightning flash is 16.73 seconds from a flash that developed continuously over northern Argentina on 4 March 2019.

Megaflashes

- Megaflashes, refers to a name given to lightning discharges that reach hundreds of kilometers in length.
- Ideal conditions for a megaflash occurrence involve large electrified clouds with low flash rates that are attached to more active thunderstorm cells.

Lightning around the world

- At any given time, there are about 2,000 thunderstorms raging across the globe and 100 lightning strikes to earth per second.
- Lightning is more common at higher altitudes and near the equator.
- Brazil recorded a lightning strike that travelled a distance of 709 kilometres, while Argentina recorded a strike that lasted for 16.73 seconds.

Lightning strikes in India

- Lightning strikes during the June-September annual monsoon are fairly common in India.
- As a whole, India sees 2,000-2,500 lightning deaths every year on average. Lightning is the biggest contributor to accidental deaths due to natural causes.
- More than 2,300 people were killed by lightning in India in 2018, according to the National Crime Records Bureau and at least 2,000 people have died in lightning strikes every year since 2005.
- One of the reasons cited for the high number of deaths is the large number of people working outdoors in India compared to other parts of the world, which makes them more vulnerable.

Tracking of lightning events in India

- Lightning remains among the least studied atmospheric phenomena in the country. Just one group of scientists, at the Indian Institute of Tropical Management (IITM) in Pune, works full-time on thunderstorms and lightning.
- Occurrences of lightning are not tracked in India, and there is simply not enough data for scientists to work with.

- Often, safety measures and precautions against lightning strikes do not receive as much publicity as other natural disasters such as earthquakes.

Monitoring of lightning across the world

- Historically, lightning has been monitored on ground-based networks, which are limited in coverage in much of the world.
- Lightning monitoring changed drastically in 2016 and 2017 when GOES-16 was launched into space and became operational and offered a new tool, the Global Lightning Mapper (or GLM).
  - ➤ The GLM monitors flashes of light emitted by lightning day and night and over much of the Western Hemisphere.
  - ➤ It detects flashes from both cloud-to-cloud lightning and cloud-to-ground flashes.

Listing of weather extremes

- The WMO Archive of Weather and Climate Extremes maintains official records of the world, hemispheric and regional extreme records associated with a number of specific types of weather.
- Presently, the Archive lists extremes for temperature, pressure, rainfall, hail, wind, and lightning as well as two specific types of storms, tornadoes and tropical cyclones.

World Meteorological Organization (WMO)

- It is an intergovernmental organization with a membership of 193 Member States and Territories.
- The organization is headquartered in Geneva, Switzerland.
- As a specialized agency of the United Nations, WMO is dedicated to international cooperation and coordination on the state and behaviour of the Earth's atmosphere, its interaction with the land and oceans, the weather and climate it produces, and the resulting distribution of water resources.

◉ CONCLUSION

Lightning is a major hazard that claims many lives every year. The findings highlight important public lightning safety concerns for electrified clouds where flashes can travel extremely large distances

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INDIA MUST WAKE UP TO THE DIRE NEED FOR POLICE REFORMS

CONTEXT

Given the current situation in India and most importantly with the newest episode of sensational brutality, it is more than time that India, woke up to the crying need for 'police reform' in our country.

⊙ BACKGROUND

- The deaths of Jayaraj and Bennix in Sathankulam town near Thoothukudi in Tamil Nadu triggered massive outrage across the country and renewed a debate about police brutality.

- On June 19, the Thoothukudi Police took Jayaraj and his son Bennix into custody for interrogation as they had kept their mobile accessories shop open during the coronavirus-induced lockdown.

- A case was filed against them for not following the curfew under lockdown. They were later sent to the Kovilpatti sub-jail.

- Relatives of the two victims accused the police of assaulting them in custody.

- On June 22, Bennix complained of breathing problems and was admitted to a local government-run hospital. He later died at the facility. Jayaraj, who had also been admitted due to an illness, died the next day.

> ### Custodial deaths
> - Between April 2017 and February 2018, India recorded a staggering 1,674 custodial deaths, a rate of five custodial deaths per day, according to statistics placed by the Home Ministry before the Rajya Sabha.
> - Uttar Pradesh topped the list, with 374 deaths reported in this period of under a year.

⊙ ANALYSIS

Understanding the structure

- The Police force in the country is entrusted with the responsibility of maintenance of public order and prevention and detection of crimes.

- Each state and union territory of India has its own separate police force.

- **Article 246 of the Constitution of India** designates the police as a **state subject**, which means that the state governments frame the rules and regulations that govern each police force.

  ➤ These rules and regulations are contained in the police manuals of each state force.

- The Police force in the state is headed by the **Director General of Police/Inspector General of Police.**

- **Ranges:** Each State is divided into convenient territorial divisions called **ranges.** Each police range is under the administrative control of a **Deputy Inspector General of Police.**

- A number of districts constitute the range. District police is further sub-divided into police divisions, circles and police-stations.

- Besides the civil police, states also maintain their own armed police and have separate intelligence branches, crime branches, etc.

- Police set-up in big cities like Delhi, Kolkata, Mumbai, Chennai, Bangalore, Hyderabad, Ahmedabad, Nagpur, Pune, Bhubaneswar-Cuttack etc. is directly under a **Commissioner of Police** who enjoys magisterial powers.

- All senior police posts in various states are manned by the Indian Police Services (IPS) cadres, recruitment to which is made on all-India basis.

- The Central Government maintains Central Police forces, Intelligence Bureau (IB), Central Bureau of Investigation (CBI), Institutions for training of police officers and forensic science institutions to assist the state in gathering intelligence, in maintaining law and order, in investigating special crime cases and in providing training to the senior police officers of the state governments.

Analysing the myriad deficiencies in the existing system

- **Inappropriate control & direction:** The superintendence and control of the police is a debatable issue. As per the police laws, both the Central and State police forces come under the superintendence and control of political executives. This has resulted in the lack of democratic functioning and appropriate direction.

- **Political influence:** Police priorities are frequently altered based on the will of political executives. It seems that the police force has become a puppet in the hands of its political masters.

- **No check on police misconduct:** There is no mechanism for registering a complaint

against erring police officials. Both the **Second Administrative Reform Commission** and the **Supreme Court** have accepted the need for having an independent complaint authority to inquire into the cases of police misconduct.

◎ **Weak investigation:** Over 50% of cases filed by the police (nearly 80% in rape cases) end up in acquittals. While there could be many reasons for this, a weak investigation by the police frequently recurs as the cause for cases being thrown out of court limiting the ability of citizens to get justice.

◎ **Rising of unlawful power:** Unwarranted arrests, unlawful searches, torture and custodial rapes are becoming the normal things of the system.

Other side of the coin

◎ **Overburdened & underpaid:** There is no denying in the fact that the police force is overburdened and underpaid.

◎ **Lack of manpower:** India had (in 2017) 131 police officers per 1,00,000 people; that is lower than the sanctioned number (181), and much lower than the number recommended by the UN (222).

◎ **More workload, less efficiency:** Clearly, "an average policeman ends up having an enormous workload and long working hours, which negatively affects his efficiency and performance".

◎ **Dying motivation:** Add to this poor working conditions and compensation, and it is, in fact, creditable that our police are as motivated as they are.

◎ **Medieval recruitment process:** The Indian policing system also suffers from its century-old recruitment process. The recruitment process of police personnel, especially from lowest constabulary level to Sub-Inspector level, is medieval.

◎ **No growth:** 86% of the police force are constables, who have no growth path other than a single promotion (to Head Constable) before they retire.

◎ **Obsolete and outdated weapons:** Similarly, when it comes to weaponry, the police machinery is still using obsolete and outdated weapons. **The Comptroller and Auditor General (CAG) in its report also highlighted that the force continues to depend on outdated and unserviceable weapons.**

◎ **Police mobility:** Police mobility is another issue, which has been hampered by the shortage of police vehicles.

◎ **Poor communication network:** Another problematic area relates to the communication networks. In an era of ICT, the police system is still struggling to get proper communication network.

◎ **Lack of funding:** Police infrastructure is perennially underfunded, and, with some notable exceptions, there are few efforts to build public/police relations.

Supreme Court's view on the issue

◎ The Supreme Court has observed that there is a need to have an **independent complaints authority** to inquire into complaints of police misconduct

◎ The Model Police Act, 2006 requires each state to set up an authority (akin to the Civilian Complaint Review Board in New York City) with five members:

   ➤ a retired High Court Judge, a retired police officer of the rank of DGP from another state cadre

   ➤ a retired officer with public administration experience from another state

   ➤ a civil society member

   ➤ a person with at least 10 years of experience as a judicial officer or lawyer or legal academic.

In 2018, the Supreme Court passed a slew of directions on police reforms in the country.

   ➤ The court had recommended separation of police functions of investigation and maintaining law and order. It had ordered setting up of a **Police Establishment Board** to decide and make recommendations on transfers, postings, promotions and other service-related matters of police officers of and below the rank of DSPs.

   ➤ It had also ordered setting up of a **Police Complaints Authority** in each state to look into complaints against officers of and above the rank of SP in cases of serious misconduct, including custodial death, grievous hurt or rape in police custody.

   ➤ A **National Security Commission** needed to be set up at the Union level to prepare a panel for selection and placement of chiefs of the Central Police Organisations with a minimum tenure of two years, the apex court had ordered.

Major Committees for Police reforms

◎ From time to time, several commissions have looked into the reform processes.

◎ Till now, the following committees, including the National Police Commission, have been set up by the government. These committees made recommendations in favour of major police reforms. These include-

   ➤ the Gore Committee on Police Training (1971-73)

Committee	Year	Notes
National Police Commission (NPC)	1977-81	Established after the Emergency, the NPC produced 8 reports suggesting major reforms across a range of police issues.
Ribeiro Committee	1998	Established by the Supreme Court to review the lack of action taken to implement NPC recommendations and to re-frame a new police act
Padmanabhaiah Committee	2000	Dealt with the issues of politicization and criminalization of the police and police accountability.
Malimath Committee	2002-03	Suggested changes to the Indian Penal Code and outlined ways of improving judicial proceedings
Police Act Drafting Committee 1	2005	Drafted a new model Police Act to replace the 1861 Police Act.
Supreme Court	2006	SC issued seven directives to state police forces including setting up State Security Commissions, Police Establishment Boards and a Police Complaints Authority
Second Administrative Reforms	2007	Noted that police-public relations were unsatisfactory and suggested a range of reforms to change this
Justice Thomas Committee	2010	Highlighted the total indifference of state governments to police reforms
Supreme Court Directives	2018	New directives on police reforms and reviewed states progress in the implementation of the 2006 directives

- ➤ the Ribeiro Committee on Police Reforms (1998)
- ➤ the Padmanabhaiah Committee on Police Reforms (2000)
- ➤ the Group of Ministers on National Security (2000-01)
- ➤ the Malimath Committee on Reforms of Criminal Justice System (2001-03)
- ◉ Despite recommendations from these committees, no substantial changes have been seen.

The panacea to the problems

- ◉ **Addressing prejudice:** Though addressing prejudice is a long and painstaking road—each of us needs to confront our own prejudices, address them as best we can, and continuously put the word out in our families and wherever we have any influence that there is really no fundamental difference between people, and that we are all citizens and one under the law. This effort can never stop.
- ◉ **Strengthening institution:** In parallel, the government needs to work on the institutional side. The **Model Police Act of 2006** was circulated to all the states; that very year, 17 states passed new laws or amended their existing laws in light of this new model law. There have been further evolutions since then, but many of its fundamental principles remain unfulfilled.
- ◉ **Specialised team:** The police need to have specialised teams for each type of activity.
- ◉ **Important areas:** The area which needs urgent attention include
  - ➤ police accountability
  - ➤ the need to separate law and order from investigation
  - ➤ poor working conditions and an overburdened police force
  - ➤ constabulary related issues
  - ➤ police infrastructure
  - ➤ public-police relations

◉ CONCLUSION

No doubt the situation is worse in India, but it can be corrected with strict measures. The country should now adopt few safeguards, such as accountability of the police to the political executive, internal accountability to senior police officers, and independent police oversight authorities. Increased accountability to the political executive can theoretically constrain **operational freedom and flexibility**, which, in the Indian context, is a serious concern. The time has come to transform the Police from 'Ruler's Police' to 'People's Police.

SAMPARK: REACHING OUT THROUGH SCHOOL STUDENT HELPLINE IN ODISHA

Sampark was started by the **Department of School and Mass Education in Odisha**. The helpline service was initiated to provide relief to the students in distress through timely action. It allows any individual or students **(between the classes of I and IX)** to call up the toll-free number 1800 345 6722 to seek information or voice concerns, views, and ideas on school education. The project **is innovative as** it covers almost all issues ranging from sexual abuse to education and the management system. Importantly, **the identity of the caller is kept confidential.**

The Need for such a Project

Avenues of redressal were limited to increased cases of dropouts, cases of negligence and violation of rules, or the non-availability of entitlements as per the mandate of the RTE Act. Similarly, issues related to the needs of special and disadvantaged children, complaints of corporal punishment, and incidents of sexual abuse of students needed redressal. It was primarily because no direct contact mechanism existed between the officials and citizens to address their complaints that issues seldom reached higher authorities, and suitable action was rarely taken.

Objectives of the Project

- ⦿ The specific objectives of the helpline are
  - ➤ To listen to the concerns of students
  - ➤ Ensure a safe and child-friendly environment that is free from punishment and exploitation
  - ➤ To understand the perspective of students on the school education and management system.
- ⦿ Besides, the helpline has also been sensitising parents, students, and teachers about their

rights and duties under the RTE Act. This has also resulted in highlighting issues of concern in schooling and education that require urgent attention of the state.

Key Stakeholders

- **Implementation Agency**
  - ➤ The school student's helpline is operated by the Grievance Redressal Cell of School and Mass Education Department, at Odisha Primary Education Programme Authority, Bhubaneswar.
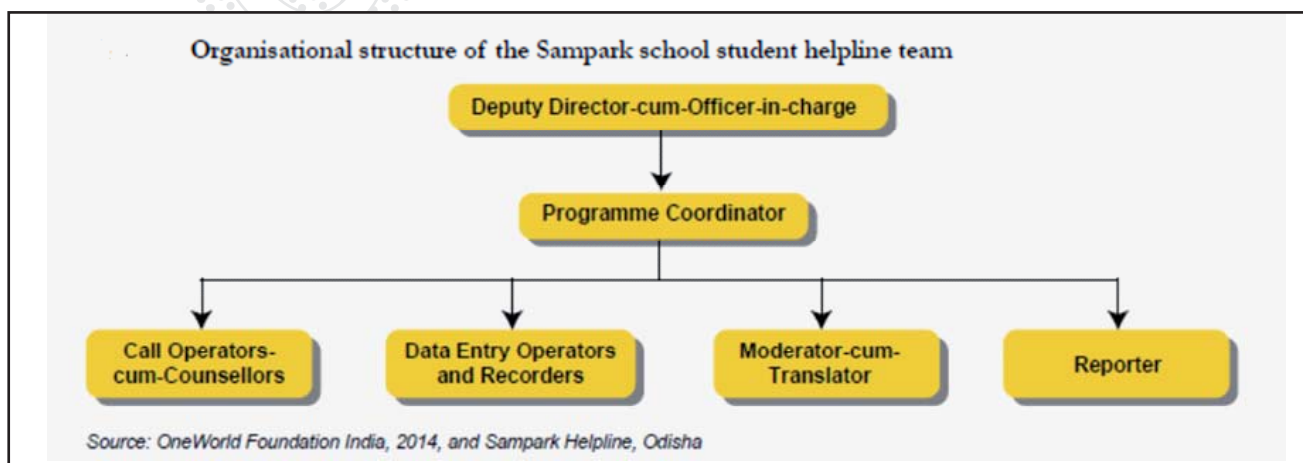
- **Funding Agency**
  - ➤ The programme is funded by the School and Mass Education Department, Government of Odisha under the Sarva Shiksha Abhiyan (SSA).

- **Beneficiaries**
  - ➤ The programme covers all the students going to school of age 6-16 years; (classes I – X) and who are in or out of school, parents, guardians, community members, and teachers.

Implementation Strategy

- ⦿ The student helpline is based on the **principle of freedom of expression** where any student whose right to education is violated or who wants to share a suggestion or lodge a complaint can dial the toll-free number. Students can also send an e-mail to place their concerns before the authorities.
- ⦿ The helpline has a well-defined functioning grievance redressal mechanism. The cell has a

Organisational structure of the Sampark school student helpline team

Deputy Director-cum-Officer-in-charge

Programme Coordinator

Call Operators-cum-Counsellors | Data Entry Operators and Recorders | Moderator-cum-Translator | Reporter

Source: OneWorld Foundation India, 2014, and Sampark Helpline, Odisha

designated person who listens to phone calls and enters call details in a register. **The identity of the caller is kept confidential.** The information obtained is written down in a register for record-keeping. The information is then entered into the computerised database under a suitable category. Letters received through the helpline are also scanned and sent through an e-mail to the concerned authority for further investigation and verification within a deadline.

◉ The case is then investigated by the concerned officer or Headmaster, Block Resource Person, or District Project Coordinator, depending upon the nature of the case. Cases that need urgent attention are given priority and are presented to the Commissioner-cum-Secretary for immediate redressal and action.

Impact

◉ The Sampark student helpline is the only helpline in Odisha to help children in distress by counseling and by providing accurate information over telephone about their rights and entitlements. The helpline has:

➤ Brought accountability in the education system

➤ Reduced teacher absenteeism

➤ Sensitised school authorities to issues concerning children's rights

➤ Facilitated the provision of solutions to children in distress

➤ Increased mobilisation among field officers

➤ Established an effective redressal and feedback mechanism

◉ The school student helpline has been able to open a channel of communication between the students and education authorities. The helpline has proved effective in reducing the incidence of corporal punishment.

◉ Special provisions have been made for complaints relating to sexual harassment by employing women employees to address grievances from girl students and help them out with other concerns.

◉ After the installation of the helpline, significant improvement in the teacher-student relationship has been observed in schools.

Key Challenges

◉ The project implementers faced challenges during the initial stage, but with time they overcame these to enhance the effectiveness of the helpline. Some of the challenges that the helpline faced include the:

➤ Use of unparliamentary language by callers

➤ Misuse of the helpline by people making false calls and arguing with call attendants.

➤ Scores of cases have been found to be false after verification, resulting in loss of government resources.

➤ Due to the growing number of cases, field-level officers are overburdened with the inquiry and reporting of cases.

➤ Some of the callers expect higher authorities, such as state-level officers, to resolve their matters which may not be possible in each case.

◉ On the other hand, some challenges have to be dealt with care such as cases of sexual abuse or corporal punishment. At the same time, collecting accurate details and verification from people is difficult as officials face resentment and opposition in such situations.

◉ A lot of the above challenges were dealt with through training and capacity building of teachers and counselors who have to attend the calls and resolve cases. They are trained to be patient and deal with complainants in a very friendly manner, and assure them of a speedy and appropriate resolution of cases.

◉ CONCLUSION

The Sampark helpline provides a unique service as it provides children with a mechanism to express their concerns over email and through telephone in anonymity. In Odisha, the helpline has managed to create a positive impact on students and parents by restoring their faith in the school education system. Active feedback and redressal mechanisms by government officials have played an important role in this. The helpline has made a mark beyond the education system as well, by raising the issues of students for open discussion in the community. The helpline has been introduced across the state, in all schools including private and government run schools. Other states can also adopt this approach of providing help to students and their parents as well as providing them with a chance to participate in improving the school education system.

****

PLASMA BANK

CONTEXT

Delhi gets its first plasma bank for Covid-19 treatment.

⊙ BACKGROUND:

- Delhi Chief Minister Arvind Kejriwal has inaugurated India's first plasma bank at the Institute of Liver and Biliary Sciences (ILBS) to ease access to plasma that is being used as a trial to treat Covid-19 patients.

- A healthy person between the age group of 18-60 years with no co-morbidities could be a donor.

- The reason for setting a plasma bank is that people were finding it difficult to get plasma and the situation in Delhi was turning chaotic.

- The therapy is still at a trial stage and only seven hospitals, like Lok Nayak Hospital and Max Super Specialty, Saket, have permission to administer it.

Similar trends

- Maharastra has launched 'Project Platina' for plasma therapy trials.

- Similarly, states like Kerala and Punjab have similar plans to set up a plasma bank.

- Countries such as China, South Korea, the US, and the UK have been trying Convalescent Plasma Therapy (CPT).
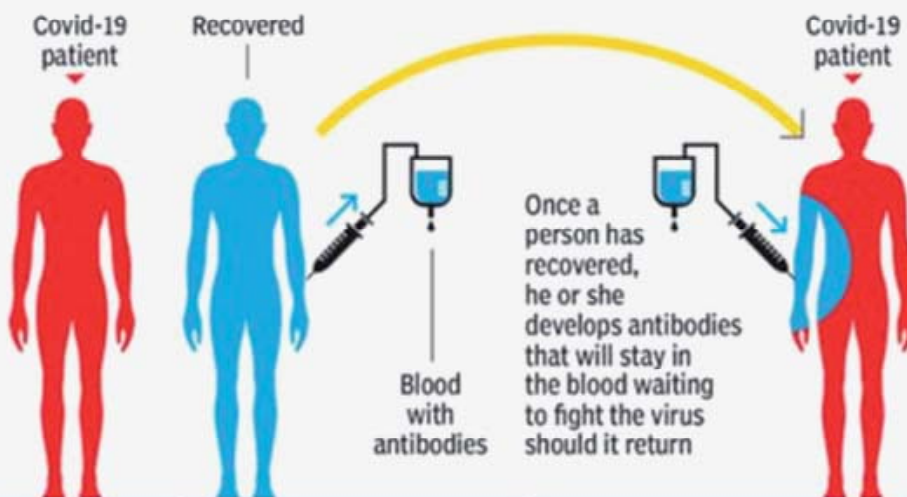
Significance of Plasma Therapy

- Convalescent Plasma Therapy may be helpful for people with COVID-19 who are not helped by other treatments. Some people with COVID-19 become very sick and do not respond to other treatments or drugs. These people often develop Acute Respiratory Distress Syndrome (ARDS) — a severe lung condition. They often require mechanical assistance, such as a ventilator, to breathe. These people also are in danger of developing organ failure.

- It could also help other people who may have a higher risk of serious illness, such as people with chronic medical conditions, for example, heart disease or diabetes, or those who have weakened immune systems. Convalescent plasma could help these people from getting sicker if they get COVID-19.

- Convalescent plasma might also be considered for family members or health care workers who have been exposed to someone with COVID-19 to potentially prevent them from getting COVID-19..

- Plasma donation does not cause any weakness in an individual. A person can donate plasma again in a gap of 10 days.

WHAT IS CONVALESCENT PLASMA THERAPY?

It involves transfusing plasma retrieved from the blood of people who have recovered from Covid-19 into people suffering from the disease

How does it work?

As people fight the Covid-19 virus, they produce antibodies that attack the virus. These antibodies are secreted by immune cells known as B lymphocytes, found in plasma or liquid part of blood, which helps the blood clot when needed and supports immunity

Covid-19 patient

Recovered

Covid-19 patient

Blood with antibodies

Once a person has recovered, he or she develops antibodies that will stay in the blood waiting to fight the virus should it return
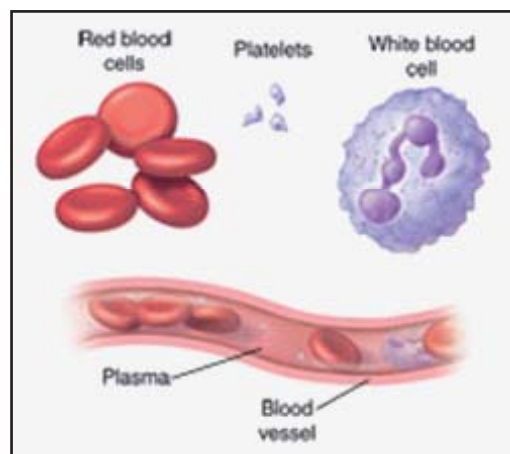
- Trials with Plasma Therapy conducted to date have shown positive results. The patients suffering from the virus at the second stage have either a decline in oxygen levels or the respiration levels have increased.

Risks associated with Plasma Therapy

- Blood and plasma have been used to treat many other conditions, and they're usually very safe. The risk of contracting COVID-19 infection from receiving convalescent plasma therapy has not been tested yet.

- The risk of these infections is very low because donated blood must meet certain requirements outlined by the health authority. Before donated blood can be used, it must be tested for safety. It then goes through a process to separate blood cells so that all that's left is plasma with antibodies. However, convalescent plasma therapy carries the risk of:

  ➤ Allergic reactions

  ➤ Lung damage and difficulty breathing

  ➤ Transmission of infections, including HIV and Hepatitis B and C

What Is Plasma?

- Blood plasma is a 'yellowish liquid' component of blood that holds the blood cells of whole blood in suspension. It is the liquid part of the blood that carries cells and proteins throughout the body.

- Plasma is the largest part of blood. It makes up more than half (about 55%) of its overall content. When separated from the rest of the blood, plasma is a light yellow liquid. Plasma carries water, salts, and enzymes.

Red blood cells   Platelets   White blood cell

Plasma

Blood vessel

How does plasma keep a person healthy?

- Plasma is a critical part of the treatment for many serious health problems. This is why there are blood drives asking people to donate blood plasma.

- Along with water, salt, and enzymes, plasma also contains important components. These include antibodies, clotting factors, and the proteins albumin and fibrinogen. When a person donates blood, healthcare providers can separate these vital parts from plasma. These parts can then be concentrated into various products. These products are then used as treatments that can help save the lives of people suffering from burns, shock, trauma, and other medical emergencies.

- The proteins and antibodies in plasma are also used in therapies for rare chronic conditions. These include autoimmune disorders and hemophilia. People with these conditions can live long and productive lives because of the treatments. Some health organizations call plasma "the gift of life."

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SECTION: B
(PRELIMS)

CURRENT AFFAIRS

NEW FUNGI SPECIES DISCOVERED IN CHINA

◉ **CONTEXT:** **A subterranean expedition by a group of researchers in China has led to the discovery of new novel fungal species on bat carcasses.**

◉ **ABOUT:**
- In total, seven species were found across two carcasses.
- The four new species are
  - Mortierella rhinolophicola
  - M multispora
  - M yunnanensis
  - Neocosmospora pallidimors.
    - Neocosmospora pallidimors is particularly important as the Neocosmospora genus is known to contain numerous aggressive pathogens that can infect mammals.
- Three out of the four new species belong to Mortierella, a genus of well-known saprophytic fungi (meaning they obtain nutrients through dissolving organic matter).
- Fusarium incarnatum, Mucor hiemalis and Trichoderma harzanium comprised the final three species.

Why Bats are important for research?

- One bat can host many different viruses without getting sick. They are the natural reservoir for the Marburg virus, and Nipah and Hendra viruses, which have caused human disease and outbreaks across different countries.
- Their tolerance of viruses, which surpasses that of other mammals, is one of their many distinctive qualities.
- They are the only flying mammals, they devour disease-carrying insects by the ton, and they are essential in the pollination of many fruits, like bananas, avocados and mangoes.
- They are also an incredibly diverse group, making up about a quarter of all mammalian species.
- But their ability to coexist with viruses that can spill over to other animals, in particular humans, can have devastating consequences when we eat them, trade them in livestock markets and invade their territory.

Significance of the study

- The study highlighted the importance of understanding relationships between fungal species and other cave organisms, for they may have serious ecological and economic implications.
- Greater research into the interactions of these fungal species is required. Currently, there is renewed urgency to understand cave ecosystems as reservoirs of biological diversity and frontiers of scientific exploration.
- It is hoped that the discovery could trigger a wave of research on fungal species in bats as it did in the case of the White-nose syndrome.

BIO FUEL

◉ **CONTEXT:** **Researchers at the Indian Institute of Technology Hyderabad are using computational methods to understand the factors and impediments in incorporating biofuels into the fuel sector in India.**

⊙ **ABOUT:**
- Bioenergy is energy derived from biofuels. Biofuels are fuels produced directly or indirectly from organic material – biomass – including plant materials and animal waste.
- **Making of biofuels:** Biofuels is derived from
  - agricultural crops, including conventional food plants or from special energy crops
  - forestry, agricultural or fishery products or municipal wastes
  - agro-industry, food industry and food service by-products and wastes
- **Advantages:**
  - Unlike fossil fuels, biofuels are produced from renewable resources.
  - There are less pollutant emissions from biofuels. Ethanol reduces carbon monoxide emissions as it ensures complete combustion.
  - Biofuels do not contribute to global warming as carbon dioxide released, is taken up by their feedstocks.
  - Biofuels are cost-effective when compared to fossil fuels.
  - Unlike other alternative energy sources like wind and solar energy, a relatively small amount of biofuels can produce a significant amount of energy, which is best suited for transport applications.

The current target

- India's Ethanol Blended Petrol program, launched in 2013, has been growing over the years.
- It is now mandatory in India to blend fuel grade bioethanol with petrol (gasoline) to reduce the burden of crude oil import.
- The current target is to blend bioethanol to levels close to 20 per cent with gasoline. In a move towards green energy, the government also hopes to replace 20 per cent of fossil-fuel derived diesel by biodiesel.

ACCELERATE VIGYAN

⊙ **CONTEXT:**
To provide a single platform for research internships, capacity building programs, and workshops across the country, the Science and Engineering Research Board (SERB) has launched a new scheme called 'Accelerate Vigyan' (AV).

⊙ **ABOUT:**
- The primary objective of this inter-ministerial scheme is to give more thrust on encouraging high-end scientific research and preparing scientific manpower, which can lead to research careers and knowledge-based economy.
- The vision is to expand the research base, with three broad goals, namely-
  - consolidation/aggregation of all scientific programs
  - initiating high-end orientation workshops
  - creating opportunities for research internships for those who do not have access to such resources/facilities

How will it work?

- The AV will work on mission mode, particularly with respect to its component dealing with consolidation/aggregation of all major scientific events in the country.
- Thus, an Inter-Ministerial Overseeing Committee (IMOC) involving all the scientific ministries/departments and a few others have been constituted for the purpose of supporting SERB in implementing the AV scheme in a successful manner.

- The database of skilled manpower developed across different disciplines so generated and the final outcomes captured in the process through all the sub-components of the AV will serve the cause of all stakeholders in respect of capacity building in the country.

- The scheme also seeks to garner the social responsibility of the scientific community in the country.

Major Components under the Scheme

- **'ABHYAAS' programme**

    ◉ As for the 'ABHYAAS' programme, it is an attempt to boost research and development in the country by enabling and grooming potential PG/PhD students by means of developing their research skills in selected areas across different disciplines or fields.

    ◉ It has two components:

        ➤ High-End Workshops ('KARYASHALA')

        ➤ Research Internships ('VRITIKA')

- **SAMMOHAN**

    ◉ Another new component under AV is 'SAMMOHAN' that has been sub-divided into 'SAYONJIKA' and 'SANGOSHTI'.

        ➤ SAYONJIKA is an open-ended program to catalogue the capacity building activities in science and technology supported by all government funding agencies in the country.

        ➤ SANGOSHTI is a pre-existing program of SERB.

PM FORMALIZATION OF MICRO FOOD PROCESSING ENTERPRISES (PM FME)

◉ **CONTEXT:**   **The Government has launched the 'PM Formalization of Micro Food Processing Enterprises (PM FME) scheme' as a part of "Atmanirbhar Bharat Abhiyan" to provide financial, technical and business support for upgradation of existing micro food processing enterprises.**

◉ **ABOUT:**
- **Details of the PM FME scheme**

    ◉ The Centrally Sponsored PM Formalisation of Micro Food Processing Enterprises (PM FME) scheme will be implemented over a period of five years from 2020-21 to 2024-25 with an outlay of Rs 10,000 crore.

    ◉ The scheme aims to bring in new technology, apart from affordable credit to help small entrepreneurs penetrate new markets.

    ◉ It will generate investment of Rs 35,000 core, generate 900,000 jobs and help 800,000 units.

    ◉ The expenditure under the scheme would to be shared

        ➤ in 60:40 ratio between Central and state governments

        ➤ in 90:10 ratio with North Eastern and Himalayan states

        ➤ in 60:40 ratio with UTs with legislature and 100% by Centre for other UTs.

- The scheme would directly benefit farmers and micro-entrepreneurs who contribute significantly to the Indian economy.

One District One Product (ODODP)

- The scheme adopts ODODP approach to reap benefit of scale in terms of procurement of inputs, availing common services and marketing of products.

- The states would identify food product for a district keeping in view the existing clusters and availability of raw material.

- The ODOP product could be a perishable produce based product or cereal based products or a food product widely produced in a district and their allied sectors.

- Illustrative list of such products includes mango, potato, litchi, tomato, tapioca, kinnu, bhujia, petha, papad, pickle, millet based products, fisheries, poultry, meat as well as animal feed among others. Preference would be given to those producing ODOP products. However, units producing other products would also be supported.

'Extended Operation Greens'

- The government has also extended Operation Green from tomatoes, onions, and potatoes (TOP) to all fruits and vegetables (TOTAL).

- Under the 'Extended Operation Greens' scheme, all varieties of fruits and vegetables have been included now.

- This scheme would help in price stability and fair returns to the farmers.

- 50% subsidy for transportation of fruits and vegetables would be provided under this scheme.

PROJECT STARS

⊙ **CONTEXT:** **The World Bank has approved a new project worth $500 million to improve learning outcome and governance of government schools in six Indian states.**

⊙ **ABOUT:**
- The project, named **STARS (Strengthening Teaching-Learning and Results for States Program),** will be implemented through the **Samagra Shiksha Abhiyan**, the flagship central scheme, in partnership with-

    ◉ Himachal Pradesh

    ◉ Kerala

    ◉ Madhya Pradesh

    ◉ Maharashtra

    ◉ Odisha

    ◉ Rajasthan

- The STARS program builds on the long partnership between India and the World Bank, since 1994, for strengthening public school education and to support the country's goal of providing **'Education for All'.**

- Among other things, the World Bank initiative will focus directly on the delivery of education services at the state, district and sub district levels by providing customized local-level solutions towards school improvement.

- Prior to STARS, the Bank had provided a total assistance of more than $3 billion towards this goal.

Samagra Shiksha Abhiyan

- Samagra Shiksha - an Integrated Scheme for School Education has been launched throughout the country as a Centrally Sponsored Scheme with effect from the year 2018-19.
- This programme subsumes the three erstwhile Centrally Sponsored Schemes of
  - ➤ Sarva Shiksha Abhiyan (SSA)
  - ➤ Rashtriya Madhyamik Shiksha Abhiyan (RMSA)
  - ➤ Teacher Education (TE)
- It is an overarching programme for the school education sector extending from pre-school to class XII and aims to ensure inclusive and equitable quality education at all levels of school education.
- It envisages the 'school' as a continuum from pre-school, primary, upper primary, secondary to senior secondary levels.

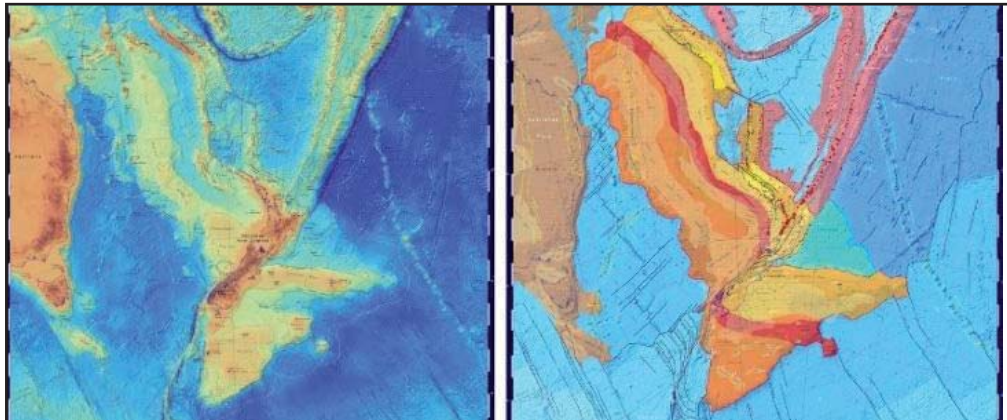### The need of such initiative

- India has, over the years, made significant strides in improving access to education across the country; between 2004-05 and 2018-19, the number of children going to school increased from 219 million to 248 million, according to the multilateral agency.
- However, learning outcomes across age groups remain below par.
- In a recent report, UNESCO had said that countries including India need to focus on inclusion of students from underprivileged background in crisis times like the current covid-19 pandemic.
- India's human capital needs to be strengthened via foundational learning for children.
- STARS will support India's renewed focus on addressing the 'learning outcome' challenge and help students better prepare for the jobs of the future – through a series of reform initiatives.

NEW MAPS REVEAL DETAILS OF THE LOST CONTINENT OF ZEALANDIA

⊙ **CONTEXT:** New Zealand recently published two new maps which cover the shape of the ocean floor and Zealandia's tectonic profile, which collectively help tell the story of the continent's origins.

⊙ **ABOUT:**
- Considered to be a lost 'eighth continent' that got submerged underwater millions of years ago, the land mass is called Zealandia.
- Researchers from GNS Science in New Zealand have now mapped the shape and size of the continent with utmost detail.
- For the mapping, the researchers analysed the bathymetry — the shape and depth of the ocean floor — around Zealandia.
- In addition, they studied its tectonic profile to accurately locate Zealandia across tectonic-plate boundaries.
- The newly created maps bring to light previously unknown information about the formation of Zealandia.

Lost eighth continent of earth

- Till 2017, Zealandia was classified as a "microcontinent," much like the island of Madagascar.

- The landmass has "clearly defined boundaries, occupies an area greater than 386,000 square miles (1 million square kilometers), is elevated above the surrounding ocean crust, and has a continental crust thicker than that oceanic crust

- Zealandia's total area has been mapped to be nearly 2 million square miles (5 million square kilometers).

- At this measure, Zealandia is about half the size of Australia, however, only 6% of the continent is above sea level.

How did the continent sink?

- The idea of a potential continent in this area has been around for some time, and the name "Zealandia" was first coined by geophysicist Bruce Luyendyk in 1995.

- The dedicated study of this area, stretching about 5 million square kilometers (about 1.93 million square miles), has since determined it is not just a group of continental islands and fragments, but a continental crust large and separate enough to be officially declared a separate continent.

- Zealandia used to be part of Gondwana, the supercontinent that once held many of the continents such as Africa and South America.

- About 85 million years ago, Zealandia split off from Gondwana. The drifting, shifting land mass, about half the size of Australia, was home to dinosaurs and lush rainforest.

- Then, millions of years later, the world's tectonic plates pieces of the Earth's crust began reorganizing themselves, in a period of dramatic geological change that also created the Pacific "Ring of Fire," a belt in the Pacific where the world's most active volcanoes are located.

- During this time, the Pacific Plate the world's largest tectonic plate is believed to have sank below the continental crust of Zealandia.

- This process, called subduction, caused the root of the continent to break off and sink as well

The present scenario

- About 94% of Zealandia is now submerged underwater -- but some parts of the continent are still above land, making up New Zealand and other small islands.

- The highest point of Zealandia is Aoraki--Mount Cook at 3,724 meters (12,218 feet).

- There is still much unknown about the continent and whether the discovery of Zealandia could change historical climate models.

- As more research emerges, the interactive website and maps will be updated to reflect what we know.

SC REFUSES TO REVIEW ITS JUDGMENT WHICH DECRIMINALISED ADULTERY

⊙ **CONTEXT:**

In a recent development, the Supreme Court refused to review its 2018 judgment which decriminalised adultery.

What is 'Review Petition'?

- A judgment of the Supreme Court becomes the law of the land, according to the Constitution. It is final because it provides certainty for deciding future cases.

- However, the Constitution itself gives, under Article 137, the Supreme Court the power to review any of its judgments or orders.

- This departure from the Supreme Court's final authority is entertained under specific, narrow grounds.

- So, when a review takes place, the law is that it is allowed not to take fresh stock of the case but to correct grave errors that have resulted in the miscarriage of justice.

- The court has the power to review its rulings to correct a "patent error" and not "minor mistakes of inconsequential import".

- In a 1975 ruling, Justice Krishna Iyer said a review can be accepted "only where a glaring omission or patent mistake or like grave error has crept in earlier by judicial fallibility".

Grounds for seeking review of an SC verdict

- In a 2013 ruling, the Supreme Court itself laid down three grounds for seeking a review of a verdict it has delivered —

  ⊚ the discovery of new and important matter or evidence which, after the exercise of due diligence, was not within the knowledge of the petitioner or could not be produced by him

  ⊚ mistake or error apparent on the face of the record

  ⊚ or any other sufficient reason

    ➤ In subsequent rulings, the court specified that "any sufficient reason" means a reason that is analogous to the other two grounds.

SC's 2018 Judgement

- A five-judge Review Bench led by Chief Justice of India Sharad A. Bobde upheld a September 2018 Constitution Bench which had struck adultery out of the penal statute book.

- The original judgment was by a Constitution Bench led by then chief justice Dipak Misra who found that Section 497 (adultery) of the Indian Penal Code cannot "command" married couples to remain loyal to each other for the fear of penal punishment.

- Two individuals may part if one cheats, but to attach criminality to infidelity is going too far, Justice Misra had observed in his separate opinion.

- The court had reasoned that there was no data whatsoever to support claims that abolition of adultery as a crime would result in "chaos in sexual morality" or an increase of divorce.

- Section 497 treats a married woman as the commodity of her husband, the Bench had held. The provision is a reflection of the social dominance of men prevalent 150 years ago.

- Adultery is not a crime if the cuckolded husband connives or consents to his wife's extra-marital affair.

- The Bench had also held that Section 198 (2) of the CrPC, which gave the cuckolded husband the exclusive right to prosecute his wife's lover, was manifestly arbitrary.

- Adultery can however be a ground for civil remedy like dissolution of marriage

What if a review petition fails?

- As the court of last resort, the Supreme Court's verdict cannot result in a miscarriage of justice.

- In Roopa Hurra v Ashok Hurra (2002), the concept of a curative petition was evolved

- Curative petition can be heard after a review is dismissed to prevent abuse of its process.

- A curative petition is also entertained on very narrow grounds like a review petition, and is generally not granted an oral hearing.

SCIENTISTS IDENTIFIES NEW 'RE-ASSORTED' INFLUENZA VIRUS WITH PANDEMIC POTENTIAL

⊙ **CONTEXT:**

Scientists have identified a new 're-assorted' influenza virus from pigs in China that has pandemic potential. The virus has shown 'increased human infectivity' in swine industry workers.

Key-highlights of the Study

- The study was based on extensive surveillance done among pig populations in 10 provinces of China from 2011-2018.

- The serological exercise showed that the new gene of the H1N1 virus has efficient infectivity and transmissibility in ferret models.

- The viruses fell into six different genotypes, with the G4 strain becoming predominant since 2016.

- They found that the G4 strain is a blend of three lineages-

  ◎ one similar to those found in European and Asian birds

  ◎ one linked to the 2009 H1N1 pandemic virus

  ◎ a North American H1N1 triple-reassortant virus that has genes from avian, human, and swine sources

- When they tested the G4 virus in the lab, they found that it had features similar to the 2009 H1N1 virus.

About the new flu strain

- The virus, which the researchers call **G4 EA H1N1**, can grow and multiply in the cells that line the human airways.

- Tests also showed that any immunity humans gain from exposure to seasonal flu does not provide protection from G4.

- It possesses "all the essential hallmarks of being highly adapted to infect humans".

- Current flu vaccines do not appear to protect against it, although they could be adapted to do so if needed.

- The new flu strain that has been identified in China is similar to 2009 swine flu, but with some new changes.

2009 swine flu

- The last pandemic flu the world encountered - the swine flu outbreak of 2009 - was less deadly than initially feared, largely because many older people had some immunity to it, probably because of its similarity to other flu viruses that had circulated years before.

- That virus, called A/H1N1pdm09, is now covered by the annual flu vaccine to make sure people are protected.

- The bad new strain of influenza is among the top disease threats that experts are watching for, even as the world attempts to bring to an end the current coronavirus pandemic.

- So far, it hasn't posed a big threat, but it is one to keep an eye on.

INDIA DECLARES KHALISTANI TERRORISTS IN DESIGNATED TERROR LIST UNDER UAPA ACT

⊙ **CONTEXT:** **India has declared nine Khalistani terrorists in designated terror list under the provisions of the Unlawful Activities Prevention, UAPA Act to strengthen national security.**

⊙ **ABOUT:**
- The Unlawful Activities (Prevention) Act, 1967 aims at the effective prevention of unlawful activities across India and abroad.

- Its main objective was to provide powers to central agencies and states to deal with terrorist activities.

- Unlawful activity "refers any action taken by individual or association whether by committing an act or by words, either spoken or written, or by signs to questions, disclaims, disrupts or is intended to disrupt the territorial integrity and sovereignty of India."

- The UAPA has been amended on multiple occasions to incorporate the changing techniques of terrorism, from shifting the burden of proof to making extra-territorial arrests.

- The most recent amendment that came was the Unlawful Activities (Prevention) Amendment Act, 2019 (UAPA, 2019) which dealt with expanding the definition of "terrorist" to include individuals under Section 35 and 36 of Chapter VI of the Act.

  ⊙ It allows the DG of NIA seizure of property from proceeds of terrorism under Section 25 and the powers of officers with the rank of inspectors and above to investigate cases under UAPA Section 43.

  ⊙ A Review Committee to 'denotify' the individual notified as a terrorist is also constituted by the Central Government thus removing all the chances of any institutional mechanism for judicial review.

Extent and Application of this Act

- It is applicable across the entire country.

- Any Indian or foreign national charged under UAPA is liable for punishment under this Act, irrespective of the location of crime / offense committed.

- UAPA will be applicable to the offenders in the same manner, even if crime is committed on a foreign land, outside India.

- The provisions of this Act apply also to citizens of India and abroad.

- Persons on ships and aircrafts, registered in India, wherever they may be are also under the ambit of this act.

Does the Act check on Fundamental Rights?

- The National Integration Council, the **Constitution (16th Amendment) Act, 1963**, has empowered Parliament to impose (by law) reasonable restrictions in the interests of sovereignty and integrity of India, on the;

  ⊙ Freedom of Speech and Expression.

  ⊙ Right to Form Associations or Unions.

  ⊙ Right to assemble peaceably and without arms.

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MISCELLANEOUS

CURRENT AFFAIRS

COVAXIN: INDIA'S FIRST CORONAVIRUS VACCINE

- The country's 'first' indigenous COVID-19 vaccine COVAXIN, developed by city-based Bharat Biotech in collaboration with ICMR and NIV, has got the nod for human clinical trials from the Drug Controller General of India

- The indigenous and inactivated vaccine has been developed at Bharat Biotechs BSL-3 (Bio-Safety Level 3) high containment facility.

- The Drug Controller General of India CDSCO (The Central Drugs Standard Control Organisation), Ministry of Health & Family Welfare granted permission to initiate Phase I & II Human clinical trials after the company submitted results generated from pre-clinical studies, demonstrating safety and immune response.

- Human clinical trials are scheduled to start across India in July 2020.

- The vaccine is planned to be launched by August 15, 2020.

GOVERNMENT RECONSTITUTES CENTRAL ZOO AUTHORITY

The Environment Ministry has reconstituted the Central Zoo Authority (CZA) to include an expert from the School of Planning and Architecture, Delhi, and a molecular biologist.

About Central Zoo Authority (CZA)

- The CZA is a statutory body chaired by the Environment Minister and tasked with regulating zoos across the country.

- It is created under the provisions of the Wildlife (Protection) Act, 1972

- Apart from the chairman, it consists of 10 members and a member-secretary. Almost all of them are officials in the Environment Ministry and non-government experts are those who are wildlife conservationists or retired forest officers.

- The authority lays down guidelines and prescribes rules under which animals may be transferred among zoos nationally and internationally.

- It regulates the exchange of animals of endangered category Listed under **Schedule-I and II of the Wildlife Protection Act** among zoos.

GLOBAL E-WASTE IS ON INCREASE: UNITED NATIONS UNIVERSITY (UNU) REPORT

- Global e-waste — discarded electrical and electronic equipment — will increase by 38 per cent in the decade between 2020 and 2030, according to a new United Nations University (UNU) report.

- There was 53.6 million tonnes (MT) e-waste in 2019. That is a nearly 21 per cent increase in just five years.

  ➤ Asia generated the greatest volume of e-waste in 2019 — some 24.9 MT, followed by the Americas (13.1 MT) and Europe (12 MT).

  ➤ Africa and Oceania generated 2.9 MT and 0.7 MT respectively.

GYNANDROMORPHS

- In 2019, a peculiar dragonfly, the Scarlet Skimmer (Crocothemis servilia), in the Puzhakkal area of the Kole wetlands in Thrissur was discovered.

- During the discovery, researchers did not know that they were documenting a very rare biological phenomenon.

- But now, a rare biological phenomenon i.e. Gynandromorphism has been spotted in the Scarlet Skimmer (Crocothemis servilia).

What is Gynandromorphs?

- Gynandromorphs are chimeric individuals having both male and female tissues, and are viewed by the scientific community as a genetic aberration.

- Even though common in some arthropod taxa such as Crustacea and Arachnida, it is very rare in Odonates and only 30 individuals from seven families have been reported with the condition worldwide.

- The spotted individual showed bilateral gynandromorphism of only the thorax, half of which showed blood red colouraton as in males, and the other half had the pale yellow characteristc of females.

- The base of the wing of the red half was marked with rich amber, in contrast with the other wing base, which was paler.

- The head, legs and abdomen showed typical female morphology.

- The individual had a mix of male and female external characters, ranging from almost entirely female to about equally divided.

HUL DIVAS

- Hul Divas is observed annually on June 30 in memory of tribals — Sidho and Kanhu Murmu — who led the Santhal hul (rebellion) on June 30, 1855, at Bhognadih in Sahebganj district.

- While people, mostly Santhals from Jharkhand and neighbouring states, gather large number to celebrate what they think was the first people's action against the British, the leaders such as the chief minister also attend the function to pay tribute to the tribal leaders and also to woo the Santhals whose vote matter a lot in the state politics.

Santhal Hul Rebellion

- Just two years before the revolt of 1857, there was another revolt in North India against the British

- The Santhal rebellion of 1855 CE was called Hul, which in the local language means a movement for liberation.

- On one side were Santhals tribes and on the other were Britishers and their agents, the Zamindars.

- The Santhals are a tribal community inhabiting large parts of Jharkhand, West Bengal, Bihar and Odisha.

INDIAN NAVY TO BE EQUIPPED WITH 'MAREECH' ATDS

- 'Mareech,' the Advanced Torpedo Defence System (ATDS) has been included in the Indian naval ships and submarines, to locate and destroy the torpedoes fired at them.

- This system developed by the Defence Research and Development Organisation (DRDO) will prove vital for the Indian Navy.

- The inclusion of Mareech, in the Indian Navy, when the activities of the Chinese submarines are on the rise in the Indian Ocean, is entirely relevant.

- Mareech ATDS is an entirely indigenous system developed by Indian Navy and DRDO in collaboration.

- DRDO has been working on the development of the Mareech ATDS since 2016, given the increasing threat to Indian warships.

INDIA'S TRADE DEFICIT WITH CHINA FELL TO $48.66 BILLION IN 2019-20

- India's trade deficit with China fell to $48.66 billion in 2019-20 on account of the decline in imports from the neighbouring country

- The trade deficit stood at $53.56 billion in 2018-19 and $63 billion in 2017-18.

- China accounts for about 14 per cent of India's imports and is a major supplier for sectors like mobile phones, telecom, power, plastic toys, and critical pharma ingredients.

- Foreign Direct Investment (FDI) from China in India has dipped to $163.78 million in 2019-20 from $229 million in the previous fiscal, according to the data.

What is a trade deficit?

- A trade deficit is an amount by which the cost of a country's imports exceeds its exports.

- It is one way of measuring international trade, and it's also called a negative balance of trade.

- This deficit occurs when a country does not produce everything it needs and borrows from foreign states to pay for the imports. That's called the current account deficit.

P.C. MAHALANOBIS LIFETIME ACHIEVEMENT AWARD

- Former Reserve Bank of India Governor C. Rangarajan has been conferred the P.C. Mahalanobis Lifetime Achievement Award in recognition of his contribution to official statistics on the Statistics Day on June 29.

- In 2019, the Ministry of Statistics and Programme Implementation instituted a new award, namely, the **Prof. P.C. Mahalanobis National Award** in Official Statistics for recognizing outstanding achievement of official statisticians in Central Government, State Governments and Institutions.

Professor P.C. Mahalanobis (1893-1972)

- Professor P.C. Mahalanobis was a highly distinguished statistician who made extensive contributions to methodology, applications, statistical development, and public policy.

- He founded the Indian Statistical Institute and served as an advisor to the Government of India.

PRADHAN MANTRI GARIB KALYAN YOJANA (PMGKY)

- The Government has declared the extension of Pradhan Mantri Garib Kalyan Yojana (PMGKY) till November.

- This extension means, that citizens in poorer sections of the society will continue to receive relief, in the form of foodgrains and more for the next five months.

- For the next five months, citizens will be able to avail 5 kg rice or wheat over what they were getting on ration. In addition to this, 1 Kg Chana will be made available for each family per month.

What Is PM Garib Kalyan Anna Yojana?

- In the wake of the ongoing economic and social crisis due to the coronavirus pandemic, the government rolled out a special economic relief package worth Rs 20 lakh crore to help the industry, middle class, micro, small and medium enterprises and the large industries.

- The package focusses on land, labour, liquidity and law, while helping small business, labourers, and farmers.

- The scheme has benefited as many as 80 crore people to get free rations during the crucial lockdown months.

- This scheme entails the distribution of 5 kg of wheat or rice to each family every month.

PROPOSAL TO DECLARE SHIVALIK FOREST INTO A TIGER RESERVE

- The Uttar Pradesh government is actively considering the proposal to declare the **Shivalik forest** in the Saharanpur circle into a tiger reserve to reduce the increasing man-animal conflict.

- If accepted, it would be the fourth tiger reserve in Uttar Pradesh after Amangarh in Bijnor, Pilibhit and Dudhwa in Lakhimpur-Kheri.

- The forest constitutes the northern tip of the State and the 33,220-hectare-long corridor, located at the foothills of the Shivalik range, connects four States — Himachal Pradesh, Uttarakhand, Haryana and Uttar Pradesh.

What is Tiger Reserves?

- A protected area statutorily designated for the conservation of the striped big cats is referred to as **Tiger Reserve**.

- However, a tiger reserve may also be a national park or wildlife sanctuary.

- **Typical zonation:** A Tiger Reserve consists of a

  ➤ 'Core' or 'Critical Tiger Habitat', which is to be managed as an inviolate area

  ➤ 'Buffer' or Peripheral area immediately abutting a Core area, which may be accorded a lesser degree of habitat protection

STRIPED HAIRSTREAK AND ELUSIVE PRINCE DISCOVERED IN ARUNACHAL PRADESH

- Lepidopterists in Arunachal Pradesh have helped add two species to India's expanding list of butterflies.

  ➤ **Striped Hairstreak: One of them, the Striped Hairstreak**, was first recorded by Japanese entomologists in Hainan province of China.

    • The Striped Hairstreak (Yamamotozephyrus kwangtugenesis) was located in Vijaynagar bordering Myanmar

  ➤ **Elusive Prince:** The other, Elusive Prince (Rohana tonkiniana), has a Vietnamese connection and was thought to be the more familiar Black Prince found in the Eastern Himalayas.

    • The Elusive Prince was found in Miao on the periphery of the Namdapha National Park.

- India now has 1,327 species, up from 1,318 in 2015

WORLD BANK APPROVES FRESH FUNDS FOR GANGA CLEANING MISSION

The World Bank has approved a five-year loan to the Namami Gange project worth ₹ 3,000 crore ($400 million) to develop and improve infrastructure projects to abate pollution in the river basin.

Funding

- The Namami Ganga or the National Mission for Clean Ganga (NMCG) has already received ₹ 4,535 crore ($600 million) from the World Bank until December 2021 as part of the first phase of the National Ganga River Basin project.

- So far, 313 projects worth ₹ 25,000 crore have been sanctioned under the mission.

What is Namami Ganga Project?

⊙ Initiatives to clean the Ganga began with the Ganga Action Plan I in 1986. Till 2014, over Rs 4,000 crore had been spent. But the river has remained dirty.

⊙ So the Namami Gange was launched in mid-May 2015. It was the biggest-ever initiative—over Rs 20,000 crore was allotted.

⊙ Namami Gange is being implemented by the National Mission for Clean Ganga (NMCG), and its state counterparts—State Programme Management Groups.

　▸ NMCG would establish field offices wherever necessary. The National Ganga Council (NGC) was created.

　▸ And to give it utmost importance the Prime Minister was made the head of it. This council replaced the National Ganga River Basin Authority (NGRBA).

　▸ NGC would have on board the chief ministers of five Ganga basin states—Uttarakhand, Uttar Pradesh (UP), Bihar, Jharkhand and West Bengal—besides several Union ministers and it was supposed to meet once every year.

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