

CURRENT AFFAIRS

WEEKLY

WEEK: 4

MAY
2022

MAINS

GS-II

- ❑ NHRC flags pollution effect on human rights

GS-II

- ❑ Who are ASHA workers, the women healthcare volunteers honoured by WHO?
- ❑ Foreign Universities in India
- ❑ Need for Parliamentary Oversight on Treaty Making Process of India
- ❑ Quad: Asian NATO or Arc of Democracy?

GS-III

- ❑ National policy on biofuels
- ❑ Ethanol blend in petrol to be raised to 20% in 3 years
- ❑ Disaster Induced Displacement
- ❑ Cabinet lets PSU boards act to divest, close units
- ❑ SC says Centre, States have equal powers to make GST-related laws
- ❑ Poor recovery, increasing delays mar IBC resolution process
- ❑ India may push for permanent food stock rules
- ❑ Global Employment losses
- ❑ Infra projects to be routed through NPG
- ❑ World economic forum
- ❑ What is LOC?

PRELIMS

- HISTORY AND ART & CULTURE ❑ Melattur Bhagavata Mela
- ❑ Ram Mohan Roy 250 years

- GEOGRAPHY ❑ The Sela Tunnel – importance and the strategic edge it promises
- ❑ Discovery of a primitive forest at the bottom of a giant sinkhole in China

- POLITY & GOVERNANCE ❑ Governor is a shorthand for State govt: SC
- ❑ Govt flagged low score in World Bank's governance index
- ❑ Centre reconstitutes Inter-State Council

- ECONOMY ❑ Doda to host lavender festival

- ENVIRONMENT ❑ International Day of Biodiversity
- ❑ New species of venomous snake
- ❑ World Economic Forum launches alliance to supercharge India's climate action
- ❑ World Turtle's Day

- SCIENCE & TECHNOLOGY ❑ HANSA-NG Aircraft successfully completed Engine Relight test in Air

- ❑ What is Sudden Infant Death Syndrome?
- ❑ Respiratory syncytial virus and the toll it takes on young children
- ❑ Skyroot successfully test fires space launch vehicle 'Vikram-1' rocket stage
- ❑ India registers success with BP treatment, control

- MISCELLANEOUS ❑ NikhatZareen wins World Championship

GS SCORE

An Institute for Civil Services

www.iasscore.in

— **Disclaimer** —

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.

CONTENTS

WEEK - 4 (MAY, 2022)

Section - A: MAINS CURRENT AFFAIRS			
Area of GS		Topics in News	Page No.
GS II	POLITY & GOVERNANCE	<ul style="list-style-type: none"> NHRC flags pollution effect on human rights 	02
		<ul style="list-style-type: none"> Who are ASHA workers, the women healthcare volunteers honoured by WHO? 	06
		<ul style="list-style-type: none"> Foreign Universities in India 	07
GS III	ECONOMY	<ul style="list-style-type: none"> Need for Parliamentary Oversight on Treaty Making Process of India 	09
		<ul style="list-style-type: none"> Quad: Asian NATO or Arc of Democracy? 	11
	SCIENCE & TECHNOLOGY	<ul style="list-style-type: none"> National policy on biofuels 	13
		<ul style="list-style-type: none"> Ethanol blend in petrol to be raised to 20% in 3 years 	17
	ENVIRONMENT	<ul style="list-style-type: none"> Disaster Induced Displacement 	20
		<ul style="list-style-type: none"> Cabinet lets PSU boards act to divest, close units 	24
		<ul style="list-style-type: none"> SC says Centre, States have equal powers to make GST-related laws 	27
GS IV	ETHICS	<ul style="list-style-type: none"> Poor recovery, increasing delays mar IBC resolution process 	30
		<ul style="list-style-type: none"> India may push for permanent food stock rules 	33
		<ul style="list-style-type: none"> Global Employment losses 	35
		<ul style="list-style-type: none"> Infra projects to be routed through NPG 	37
		<ul style="list-style-type: none"> World economic forum 	39
		<ul style="list-style-type: none"> What is LOC? 	41
Section - B: PRELIMS CURRENT AFFAIRS			
Area of GS		Topics in News	Page No.
GS I	HISTORY AND ART & CULTURE	<ul style="list-style-type: none"> Melattur Bhagavata Mela 	43
		<ul style="list-style-type: none"> Ram Mohan Roy 250 years 	44
GS II	GEOGRAPHY	<ul style="list-style-type: none"> The Sela Tunnel – importance and the strategic edge it promises 	44
		<ul style="list-style-type: none"> Discovery of a primitive forest at the bottom of a giant sinkhole in China 	45
	POLITY & GOVERNANCE	<ul style="list-style-type: none"> Governor is a shorthand for State govt: SC 	47
		<ul style="list-style-type: none"> Govt flagged low score in World Bank's governance index 	48
		<ul style="list-style-type: none"> Centre reconstitutes Inter-State Council 	49
GS III	ECONOMY	<ul style="list-style-type: none"> Doda to host lavender festival 	50
	ENVIRONMENT	<ul style="list-style-type: none"> International Day of Biodiversity 	52
		<ul style="list-style-type: none"> New species of venomous snake 	53
		<ul style="list-style-type: none"> World Economic Forum launches alliance to supercharge India's climate action 	54

GS III	ENVIRONMENT	• World Turtle's Day	56
GS III	SCIENCE & TECHNOLOGY	• HANSA-NG Aircraft successfully completed Engine Relight test in Air	56
		• What is Sudden Infant Death Syndrome?	57
		• Respiratory syncytial virus and the toll it takes on young children	58
		• Skyroot successfully test fires space launch vehicle 'Vikram-1' rocket stage	60
		• India registers success with BP treatment, control	61
	MISCELLANEOUS	• Nikhat Zareen wins World Championship	62

SECTION: A
(MAINS)

CURRENT AFFAIRS

NHRC FLAGS POLLUTION EFFECT ON HUMAN RIGHTS

CONTEXT

- The National Human Rights Commission (NHRC) had issued an advisory to the Centre and State Governments on preventing, minimising and mitigating the impacts of environmental pollution and degradation on human rights.

◎ BACKGROUND

- A latest Lancet Commission report on Pollution and Health has highlighted the impact of increasing pollution on human health in India.
- Air pollution was responsible for 16.7 lakh deaths in India in 2019, or 17.8% of all deaths in the country that year.
- This is the largest number of air-pollution-related deaths of any country.
- 9.8 lakh were caused by PM2.5 pollution, and another 6.1 lakh by household air pollution.
- Pollution sources associated with extreme poverty (such as indoor air pollution and water pollution): This number has reduced; but, this reduction is offset by increased deaths attributable to industrial pollution (such as ambient air pollution and chemical pollution).
- Worst affected places: Air pollution is most severe in the Indo-Gangetic Plain. This area contains New Delhi and many of the most polluted cities.
- Causes: Burning of biomass in households was the single largest cause of air pollution deaths in India, followed by coal combustion and crop burning.
- Lead: 27.5 crore children are estimated to have blood lead concentrations that exceed 5 µg/dL.
- Economic losses due to modern forms of pollution have increased as a proportion of GDP between 2000 and 2019 in India. It amounts to 1 percent of GDP.

◎ ANALYSIS

Air pollution

Air pollution can be defined as the presence of one or more contaminants such as dust, fumes, gas, mist, smoke or vapour in the outdoor atmosphere which is injurious to human, plant and animal life. Pollution can be man-made or natural. Man-made pollution can be described at 3 levels:

- **Personal Pollution:** It is caused by an individual and is restricted to small area. Example: tobacco

smoke, kitchen smoke.

- **Occupational Pollution:** It is due to an occupation which affects all the workers and some area around them. Example: gem cutting, stone crushing; textile mill. These generally lead to occupational diseases or hazards.
- **Community Pollution:** It affects the whole community or area around the source of pollution. Example: Thermal power plant, automobiles.

Right to a clean environment

- The UN Human Rights Council (UNHRC) has recognized access to a clean and healthy environment as a 'fundamental right' in Geneva, Switzerland.
- The right to a clean environment was centered on the Stockholm Declaration of 1972.
- 'Caring for the Earth 1991' and the 'Earth Summit' of 1992" also declared that human beings are entitled to a healthy and productive life in harmony with nature.
- The right to life (Article 21) has been used in a diversified manner in India. It includes, inter alia, the right to survive as a species, quality of life, the right to live with dignity and the right to livelihood.
- Further the 42nd Constitutional Amendment Act, 1976 incorporated two significant articles viz. Article 48-A and 51A (g) thereby conferring constitutional status to the environment protection.
 - ▶ Article 48-A: The State shall endeavour to protect and improve the environment and to safeguard the forests and wildlife of the country.
 - ▶ Article 51A(g): It is a duty of every citizen to protect and preserve the environment.

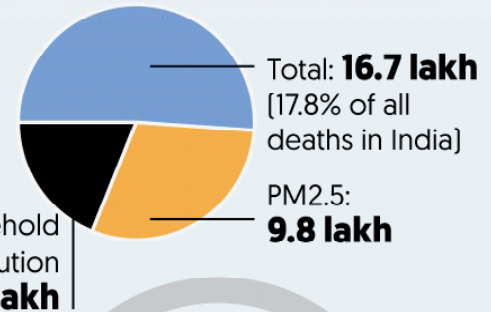
National Human Rights Commission (NHRC)

- It is a statutory body, established in 1993 under a legislation enacted by the Parliament, namely, the Protection of Human Rights Act, 1993.

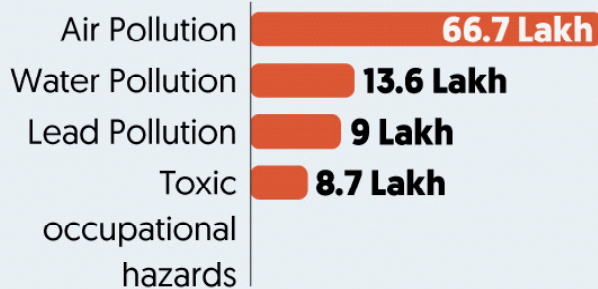
Deaths due to Pollution



Air Pollution related deaths in India (2019):



Global Deaths due to pollution (2019): Total: 90 Lakh



Lost Economic output in India due to Air pollution: \$36.8 billion (1.36% of India's GDP)

Global economic losses: \$4.6 trillion (6.2% of global GDP)

Trend of global deaths due to Ambient Air Pollution:



- In 1993, the UN General Assembly adopted the Paris Principles on Human Rights. This led to the constitution of national human rights institutions in almost every country.
- The commission is a multi-member body consisting of a chairman and four members.
- The commission's headquarters is at Delhi and it can also establish offices at other places in India.
- The Commission has its own investigating staff headed by a Director General of Police for investigation into complaints of human rights violations. Under the Act, it is open to the Commission to utilise the services of any officer or investigation agency of the Central Government or any State Government.

- The Commission has associated, in a number of cases, non – Governmental organizations in the investigation work.

Causes of Air Pollution

- **Growing population:** The pressure and haphazard growth of the population is deteriorating the environment.
- **Industrialisation:** There has been highly haphazard and unplanned development of industries. Studies have revealed that only about 20% of the industrial units are set up in the approved industrial areas whereas the rest of them are in residential and commercial areas.
- **Vehicular Pollution:** There has been a huge rise in the vehicular population, despite the metro

railways, aggravating traffic congestion and increasing air and noise pollution.

- **Fossil-fuel dependence:** There has been too much dependence on fossil fuels like coal-fired power plants, improper use of energy in buildings and the excessive use of biomass for cooking and heating, etc.
- **Burning of Crop Stubble:** Burning of crop residue by farmers in Northern states of Punjab, Haryana and Uttar Pradesh is considered as the prime reason for a spike in air pollution during the winter months in Delhi NCR.

National Clean Air Programme

- The NCAP is an initiative to reduce particulate matter (PM) pollution by 20-30% in at least 102 cities by 2024.
- It is a time bound national level strategy for pan India implementation to tackle the increasing air pollution problem across the country in a comprehensive manner.
- It is launched under Ministry of Environment, Forest and Climate Change.
- **Need:** Today cities occupy just 3% of the land, but contribute to 82% of GDP and responsible for 78% of Carbon dioxide emissions.
- The NCAP will be a mid-term, five-year action plan with 2019 as the first year.
- **Approach:** The approach for NCAP includes collaborative, multi-scale and cross-sectoral coordination between the relevant central ministries, state governments and local bodies.
- **Dynamic:** The NCAP is envisaged to be dynamic and will continue to evolve based on the additional scientific and technical information as they emerge.

WHO's limits for air pollution

The World Health Organization has cut its recommended limits for air pollution, for the first time since 2005. The new recommendations target pollutants including particulate matter and nitrogen dioxide, both of which are found in fossil fuel emissions.

- **NO₂:** The new limit for nitrogen dioxide (NO₂), mainly produced by diesel engines, is now 75% lower.
- **PM 2.5:** Under the new guidelines, the WHO halved the recommended limit for the average annual PM_{2.5} level from 10 micrograms per cubic meter to 5.
- **PM 10:** It also lowered the recommended limit for PM₁₀ from 20 micrograms to 15.

Government initiatives to safeguard the environment

- **Graded Response Action Plan:** Delhi launched a 'Graded Response Action Plan' under directions from the Supreme Court.
- **NCAP:** Launched in 2019, the National Clean Air Programme (NCAP) aimed at a long-term, time-bound, national-level strategy to tackle the air pollution problem across the country in a comprehensive manner with targets to achieve a 20 percent to 30 percent reduction in particulate matter concentrations by 2024, keeping 2017 as the base year.
- **Green Skill Development program:** Launched in 2017 by the Ministry of Environment, Forest, and Climate Change under PM Narendra Modi, the Green Skill Development program aims to introduce innovative skills among the youth working in the environment and forest sector.
- **Compensatory Afforestation Fund Act (CAMPA):** One of the most robust legal acts aiming to hold those, who exploit natural resources and forests for the development of industries, responsible. The Compensatory Afforestation Fund Act was introduced in 2016.
- **Nagar Van Scheme:** Nagar Van Scheme was launched on the occasion of World Environment Day in 2020 (5th June). It aims to develop 200 Urban Forests across the country in the next five years.
- **National Ambient Air Quality Standards:** envisaging 12 pollutants have been notified under EPA, 1986 and 115 emission/effluent standards for 104 different sectors of industries, besides 32 general standards for ambient air have also been notified.
- **Biofuels:** With reference to Vehicular pollution the steps taken include introduction of cleaner / alternate fuels like gaseous fuel (CNG, LPG etc.), ethanol blending, universalization of BS-IV.
- **Thrust to public transports:** ongoing promotion of public transport network of metro, buses, e-rickshaws and promotion of carpooling, streamlining granting of Pollution Under Control Certificate, lane discipline, vehicle maintenance etc.
- **National Air Quality index (AQI):** was launched by the Prime Minister in April, 2015 starting with 14 cities and now extended to 34 cities.

© CONCLUSION

India has a one of the world's best statutory and policy framework for environment protection. The problem lies in its effective implementation. The solution lies in

better coordination among various agencies, robust implementation of the programs. Thrust to renewable energy, massive afforestation, hybrid vehicles, and public transportation is the need of the hour.

PRACTICE QUESTION

Q1: The right to clean, healthy and sustainable environment is a basic human right. Elucidate.

Q2: "Despite having one of the world's best statutory and policy framework for environment protection, India is facing a serious problem of pollution." Discuss why India is unable to curb the rising pollution? Suggest measures to minimise and mitigate the problem of environmental pollution.

WHO ARE ASHA WORKERS, THE WOMEN HEALTHCARE VOLUNTEERS HONoured BY WHO?

CONTEXT:

The World Health Organisation has recognised the country's 10.4 lakh ASHA (Accredited Social Health Activist) workers as 'Global Health Leaders' for their efforts in connecting the community to the government's health programmes.

ASHA workers:

- ASHA workers are **volunteers** from within the community who are trained to provide information and aid people in accessing benefits of various healthcare schemes of the government.
- They act as a **bridge connecting marginalised communities with facilities such as primary health centres, sub-centres and district hospitals.**
- The role of these community health volunteers under the **National Rural Health Mission (NRHM) was first established in 2005.**
- ASHAs are primarily married, widowed, or divorced women between the ages of 25 and 45 years from within the community.
 - ▶ They must have good communication and leadership skills; should be literate with formal education up to Class 8, as per the programme guidelines.
- There are around 10.4 lakh ASHA workers across the country, with the largest workforces in states with high populations – Uttar Pradesh (1.63 lakh), Bihar (89,437), and Madhya Pradesh (77,531).
 - ▶ Goa is the only state with no such workers, as per the latest National Health Mission data available from 2019.

Duties of ASHA Workers:

- They **go door-to-door** in their designated areas creating awareness about basic nutrition, hygiene practices, and the health services available.

- They focus primarily on **ensuring that women undergo ante-natal check-up**, maintain nutrition during pregnancy, deliver at a healthcare facility, and provide post-birth training on breast-feeding and complementary nutrition of children.
- They also counsel **women about contraceptives** and sexually transmitted infections.
- ASHA workers are also tasked with ensuring and motivating **children to get immunised.**
- Other than mother and child care, ASHA workers also provide medicines daily to TB patients under directly observed treatment of the national programme.
- They are also tasked with screening for infections like malaria during the season.
- They also provide basic medicines and therapies to people under their jurisdiction such as oral rehydration solution, chloroquine for malaria, iron folic acid tablets to prevent anaemia, and contraceptive pills.

Debate over status

- There is a strong argument to grant permanence to some of these positions with a reasonable compensation as sustaining motivation.
- The incremental development of a local resident woman is an important factor in human resource engagement in community-linked sectors.
- This should apply to other field functionaries such as ANMs, GNMs, Public Health Nurses as well.
- It is equally important to ensure that compensation for performance is timely and adequate.

FOREIGN UNIVERSITIES IN INDIA

CONTEXT:

Decision taken by Government of India to open the doors of this to country for establishment of Foreign Universities.

◎ BACKGROUND

- It was announced in Budget 2022 by Finance Minister announced that "world-class foreign universities and institutions would be allowed in the planned business district in Gujarat's GIFT City".
- It was stated that these institutions would be free from domestic regulations to facilitate availability of high-end human resources.
- British Prime Minister Boris Johnson during his visit to India had also wished for strengthening of academic collaboration between the United Kingdom and India.

What provisions of New Education Policy, 2020 are related to establishment of Foreign Universities in India?

- The National Education Policy (NEP) 2020 envisions higher education reforms in many areas including the internationalisation of India's education ecosystem.
- The NEP 2020 recommends allowing foreign universities ranked in the "top 100" category to operate in India.

Why Foreign Universities want to open branches in India?

- India is an emerging centre for higher education.
- It "exporter" second largest numbers of students all over the world.
- It also regulates the world's second largest higher education system.
- For the above two reasons it is obvious that universities from foreign countries want to establish their branches in India.

Arguments in favour of establishment of the foreign branches in India

- India's higher education collaboration with other countries will increase India's soft power it will also bring new ideas and institutions from abroad to the shores of India.
- They would encourage competition mainly between existing public and private universities in India and foreign branch institutions.

- The branches could bring new ideas about curriculum, pedagogy, and governance to Indian higher education and contribute to the country's academic growth.

Why is the idea of international collaboration in India's higher education still not executed?

- There are many regulatory hurdles in India with respect to international academic partnerships, which includes the operation of international branch campuses.
- It is pertinent to note that before NEP 2020, India did not allow the entry and the operation of foreign university branch campuses.
- The Finance Minister's budget speech though marked departure from the NEP 2020 recommendations that allow only the "top 100" category to operate in India.
- The Minister of State for Education reply in the Lok Sabha in March also marked departure from the NEP 2020 recommendations.
- The University Grants Commission (UGC) has formed a committee to draft regulations to allow foreign institutions in the "top 500" category to establish campuses in India.
- Streamlining of the policy initiative by taking all stakeholders in confidence and avoiding multiplicity of ideas is necessary.
- There are issues over practicality.
- Investing up front in Education sector of India by Foreign Universities seems highly unlikely.
- The global branches would be aimed at making money for the sponsoring university which is not in India's interests.
- International collaborations have failed. For example, the Yale University and the National University of Singapore partnership (the Yale-NUS) College came to an end recently.

◎ WAY FORWARD

- The top universities that are already engaged overseas would require incentives to set up in India. For example, building facilities and providing necessary infrastructure.

- There are smaller but highly regarded universities outside the 'top 500' category that might be more interested.
- Universities around the world that have academic specialisations focusing on India, or that have NRI in senior management positions etc. may be easier to attract for India.
- India should prevent profit-seekers from entering the Indian market. Instead, the foreign institutions having innovative educational ideas and a long-term commitment should be encouraged.
- The bureaucratic hurdles should be drastically cut to ensure success in attracting branch campuses.
- A new accreditation mechanism, flexible visa rules for foreign students and faculty, and financial incentives to offer programmes should be considered as priority areas.

PRACTICE QUESTION

Q1: What are the potential benefits of allowing foreign universities to operate their campuses in India? What are the associated concerns being expressed by academia in India? Critically examine the issue.

Q2: Discuss how National Education Policy of 2020 aims to overhaul higher education in India.

NEED FOR PARLIAMENTARY OVERSIGHT ON TREATY MAKING PROCESS OF INDIA

CONTEXT:

Treaty making practise followed in India were Parliamentary supervision is lacking has been a cause of concern.

◎ BACKGROUND:

- India is negotiating and signing several free trade agreements (FTAs) which are economically important for India and its economic growth.
- But the lack of discussions in the Parliament or its committees on these treaties has caused the reason to question the democratic deficit in India's treaty making process.
- A greater say of Parliament in treaty negotiations and their signing is therefore something that is desirable according to some experts.

Constitutional Provisions with respect to India's treaty negotiations:

- In the Constitution, entry 14 of the Union list contains the following item — "entering into treaties and agreements with foreign countries and implementing of treaties, agreements and conventions with foreign countries".
- Article 246 of the Indian Constitution states that Parliament has the legislative competence on all matters given in the Union list.
- This therefore gives the Parliament power to legislate on treaties.
- The abovementioned power includes deciding on how India will ratify treaties and thus assume international law obligations.
- It also includes Parliament's competence to give effect to treaties within the domestic legal regime by enacting laws.
- Article 253 provides power to the Parliament to implement treaties by enacting domestic laws that relate to topics which are part of the state list.

What is the process of treaty making in India?

- It is pertinent to note that while Parliament in the last seven decades has passed many laws to implement international legal obligations imposed by different treaties, it is yet to enact a law laying down the processes that India needs to follow before assuming international treaty obligations.
- This legislative void has led to the Centre not just negotiating and signing but also ratifying international treaties and assuming international law obligations without the parliamentary supervision.

- Parliament though has been seen to exercise control over the executive's treaty-making power at the stage of transforming a treaty into the domestic legal regime.
- But this leads to a scenario of ex-post parliamentary control over the executive.
- Parliament at this stage does not debate whether India should or should not accept the international obligations; it only deliberates on how the international law obligations, already accepted by the executive, should be implemented domestically.
- And even if the Parliament does not amend or make domestic laws to transform the treaty, it will continue to be bind India.
- This lack of parliamentary oversight has been flagged by the National Commission to Review the Working of the Constitution.
- But the course of India's treaty-making process has not changed.

What role legislature plays in treaty-making in other liberal democracies?

- When compared to other liberal democracies, the practise in India seems to be at variance.
- In the US, important treaties signed by the President have to be approved by the Senate.
- In Australia, the executive is required to table a "national interest analysis" of the treaty it wishes to sign in parliament, and then this is examined by a joint standing committee on treaties – a body composed of Australian parliamentarians.
- Also in Australian, the Parliament supervises the treaty-making process and acts as a check on the executive's power.
- In Canada, too, the executive tables the treaties in parliament.

◎ WAY FORWARD:

- Indian democracy needs to inculcate these healthy practices.
- Effective parliamentary supervision will increase the domestic acceptance and legitimacy of international treaties, especially economic agreements, which are often critiqued for imposing undue restraints on India's economic sovereignty.

PRACTICE QUESTION

Q1: Do you think the lack of Parliamentary control over the executive's power to sign international treaties erodes the constitutional mandate of parliamentary oversight over executive action? Give reasons for your answer.

Q2: Briefly explain the current mechanism of signing and rectifying international treaties in India. Also, discuss the potential benefits of augmenting Parliament's role in the treaty-making process?

QUAD: ASIAN NATO OR ARC OF DEMOCRACY?

CONTEXT:

Leaders of the four Quad nations met in Tokyo today and discussed wide range of topics from the war in Europe to dealing with China, and their cooperation on non-security initiatives such as tech and infra.

◎ BACKGROUND OF QUAD:

- Following the Indian Ocean tsunami, India, Japan, Australia, and the US created an informal alliance to collaborate on disaster relief efforts.
- In 2007, then PM of Japan, Shinzo Abe, formalised the alliance, as the Quadrilateral Security Dialogue or the Quad.
- The Quad was supposed to establish an Asian Arc of Democracy but was hampered by a lack of cohesion amongst its members and accusations that the group was nothing more than an anti-China bloc.
- The early iteration of the Quad, largely based around maritime security, eventually dissipated.
- In 2017, faced again with the rising threat of China, the four countries revived the Quad, broadening its objectives and creating a mechanism that aimed to slowly establish a rules-based international order.
- In March 2021, the Quad leaders met virtually and later released a joint statement titled 'The Spirit of the Quad,' which outlined the group's approach and objectives.

What is the structure of Quad?

- The Quad is not structured like a typical multilateral organisation and lacks a secretariat and any permanent decision-making body.
- Instead of creating policy along the lines of the European Union or United Nations, the Quad has focused on expanding existing agreements between member countries and highlighting their shared values.
- Also unlike NATO, the Quad does not include provisions for collective defence, instead it focuses on the conduct of joint military exercises as a show of unity and diplomatic cohesion.
- In 2020, the trilateral India-US-Japan Malabar naval exercises expanded to include Australia, marking the first official grouping of the Quad since its resurgence in 2017 and the first joint military exercises among the four countries in over a decade.

What are the Objectives of Quad?

- According to the Spirit of the Quad, the group's primary objectives include maritime security, combating the Covid-19 crisis, especially vis-à-vis

vaccine diplomacy, addressing the risks of climate change, creating an ecosystem for investment in the region and boosting technological innovation.

- Quad members have also indicated a willingness to expand the partnership through a so-called Quad Plus that would include South Korea, New Zealand, and Vietnam amongst others.
- However it is considered that despite the Quad's seeming commitment to a broad range of issues, its raison d'être is still considered to be the threat of China.
- Each of the Quad's member states have their own reasons to fear the rise of China and curbing Beijing's regional advances is in all of their national interests.

What are the issues faced by members of Quad with China?

- Each of the Quad members are threatened by China's actions in the South China Sea and its attempts to extend its sphere of influence through initiatives such as the One Belt One Road Project.
- The US has long been concerned about the global competition with China and successive US presidents have maintained that China aims to subvert the international rules-based order.
- Japan and Australia are likewise both concerned about China's expanding presence in the South and East China Seas.
- Japan and China have been traditional rivals and have competing territorial and maritime claims.
- For Australia in particular, relations with Beijing are at a considerable low after Australia passed foreign interference laws in 2018 which China responded to by restricting trade to Canberra.
- Australia's apprehension about China's rise has grown even more due a defence agreement signed between China and Solomon Islands which allows the former to station its armed forces on the latter which is very close to Australia.
- As the only Quad country to share a land border with China, India is also suitably wary of Beijing but also reluctant to allow tensions to spill over.
- India's territorial concerns with China have grown over the last few years especially after the latter's aggressive posturing in the Ladakh region.
- The Trans-Karakoram highway built by China which

passes through Pakistan Occupied Kashmir is seen by India a challenge to its security which can be answered through a multi-lateral forum.

China's response to Quad:

- China initially opposed the formation of the Quad and in the 13 years since, Beijing's position has not changed.
- In 2018, the Chinese Foreign Minister referred to the Quad as a "headline-grabbing idea" and after the joint statement that was issued Quad members in 2021, the Chinese foreign ministry accused the group of openly inciting discord among regional powers in Asia.
- Beijing sees the existence of the Quad as part of a larger strategy to encircle China and has pressured countries like Bangladesh to avoid cooperating with the group.
- China flying its fighter jets over the Japanese airspace before the recent meeting of Quad was an example of who apprehensive it is about the grouping.
- Though it has to be pointed out that there is no direct reference to China or military security in any statement issued on behalf of Quad.
- This in turn has led experts to speculate that the Quad will refrain from addressing the military threat posed by China and instead focus on its economic and technological influence.
- The Quad's decision to establish working groups on vaccine development and critical technologies can then be viewed as an attempt to constrain China but more importantly, to create a democratic, inclusive blueprint that will encourage other states to work with the Quad.

What were the outcome of the recent Quad meeting?

- The leaders of the United States, Japan, India and Australia have launched a maritime initiative to combat illegal fishing and pledged to invest more than \$50bn in developing infrastructure in

the Indo-Pacific as part of their efforts to counter China's growing influence in the region.

- Quad leaders also discussed climate change, technology and COVID-19, as well as the fallout from Russia's invasion of Ukraine – an issue that has risked division among the group.
- India, which has close ties with Russia, is the only member that is yet to condemn Moscow's war.
- In a joint statement the leaders of member countries said the Quad's latest measures are aimed at demonstrating that the group "is a force for good" and that it is "committed to bringing tangible benefits to the region" at a time of profound global challenges.
- And while the statement did not mention China by name, the leaders said they "strongly oppose any coercive, provocative or unilateral actions that seek to change the status quo" in the Indo-Pacific.
- These include "the militarization of disputed features, the dangerous use of coast guard vessels and maritime militia, and efforts to disrupt other countries' offshore resource exploitation activities" – all accusations that have been levied against China.
- The leaders also announced a new maritime surveillance initiative – the Indo-Pacific Partnership for Maritime Domain Awareness (IPMDA) – that it said will work with regional partners to respond to humanitarian and natural disasters and combat illegal fishing.

IPMDA will support and work in consultation with Indo-Pacific nations and regional information fusion centers in the Indian Ocean, Southeast Asia, and the Pacific Islands by providing technology and training to support enhanced, shared maritime domain awareness to promote stability and prosperity in seas and oceans of the region.

PRACTICE QUESTION

Q1: Discuss the significance of the Indo-Pacific Economic Framework for Prosperity for India?

Q2: China is alarmed by the Quad but its threats are driving the group closer together. Elucidate.

NATIONAL POLICY ON BIOFUELS

CONTEXT

- ❑ The Cabinet has approved amendments to the National Policy on Biofuels which expands the scope of raw material for ethanol blending to allow more feedstock for its production.
- ❑ It aims to advance the blending of ethanol in petrol target of 20 per cent and promote it under the Make in India program.

◎ BACKGROUND

- Biofuels have garnered global attention in recent times and it is imperative to keep up with the pace of developments in the field of biofuels. Biofuels are of strategic importance in India and augers well with the initiatives of the Government.
- India still relies heavily on crude oil imports for its domestic consumption requirements.
- However, **fluctuating crude oil prices** in the world market could affect the developing countries significantly.
- Biofuels program in India has been largely impacted due to the sustained and quantum non-availability of domestic feedstock for biofuel production which needs to be addressed.
- The National Biofuels Draft Policy came to light in 2007 and was launched by 2009.
- The existing National Policy on Biofuels came up in 2018.

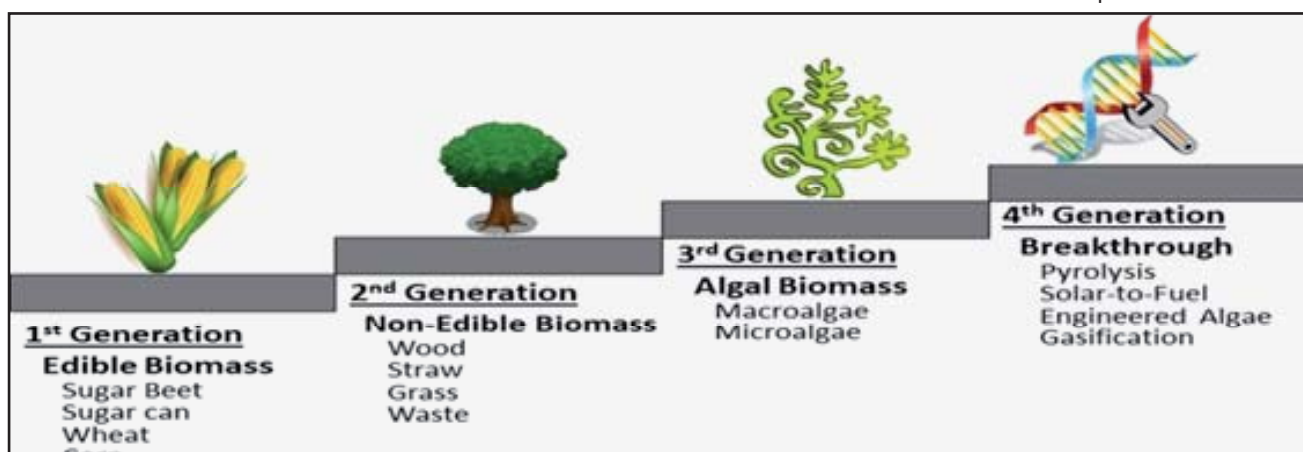
What are Biofuels?

- A hydrocarbon fuel that is produced directly or indirectly from an organic matter is known as Biofuel.
- Biofuels are usually produced through a contemporary process (rather than from a slow geological process) from biomass. They are substitutes for the conventional forms of fuels – **fossil fuels**.

- The word biofuel is usually reserved for **liquid or gaseous fuels, used for transportation**.

How are they categorized?

- **First Generation Biofuels:** These are usually made from food sources containing sugar, starch, vegetable oil, or animal fats. The process utilizes conventional technology. **Eg. Bioether**
 - ▶ These kinds of biofuels usually create an imbalance in the food economy as they tend to use agricultural crops, thus, leading to increased food prices and hunger.
- **Second Generation Biofuels:** these biofuels utilize inedible parts of the plant such as stems and husk to produce biofuel. These fuels usually require biochemical or thermochemical conversions during production. **Eg. Biodiesel**
 - ▶ These biofuels do not affect the food economy however their production process is quite complicated.
 - ▶ These fuels, however, emit fewer greenhouse gases in comparison to the first-generation biofuels.
- **Third Generation Biofuels:** These biofuels are produced using microorganisms such as algae. Micro-organisms like algae can be grown on land and water unsuitable for food production. This in return, reduces the strain on depleted water resources. **Eg. Butanol**
- **Fourth Generation Biofuels:** plants used for the



production of the fourth-generation biofuel, are genetically modified to absorb and store higher amounts of carbon which can be harvested as biomass.

- ▶ This is then converted into biofuels using chemical conversion or thermochemical conversions.
- ▶ The fuel is pre-combusted and the carbon is captured. Then the carbon is geo-sequestered, meaning that the carbon is stored in depleted oil or gas fields or in unmineable coal seams.
- ▶ These fuels are mostly carbon neutral. **Eg. Electrofuels**

Advantages of Biofuels

- **Availability:** since biofuels only require biomass for their production, which is ubiquitous, biofuels are easy to produce.
- **Reduction in waste:** biofuels can also be produced using waste materials such as municipal sewage waste, inedible parts of the crops. This effectively aids in the reduction of waste.
- **Reduce dependency on crude oil** and non-renewable sources of fuels.
- **Economic development:** the production of biofuels can be a labour-intensive process thus resulting in the creation of jobs. This can provide a source of employment. It can aid in the development of rural areas when the second generation biofuel production units are set up there.
- Disadvantages of Biofuels
- **Low Efficiency:** The efficiency of biofuels is much lesser compared to fossil fuels, as fossil fuels produce more energy on burning.
- **Loss of biodiversity:** the genetically modified crops used for the production of fourth-generation biofuels could result in a loss of biodiversity.
- **Less availability of space:** production of biofuels requires land, and in the case of second-generation biofuels, the crops used are mostly non-food crops, thus the production of biofuels requires a lot of space.
- **Food shortage:** The first generation biofuels make use of food sources and there is an imminent threat of facing food shortage if the production of biofuels is carried out extensively.
- **Water usage:** Massive quantities of water are required for proper irrigation of biofuel crops as well as to manufacture the fuel, which could strain local and regional water resources. This is, however, not the problem in case of the third generation biofuel.

◎ ABOUT

National Biofuel Policy

- The policy is aimed at taking forward the indicative target of achieving **20% blending** of biofuels with **fossil-based fuels by 2030**.
- The policy intends to ensure the adequate and sustained availability of **domestic feedstock** for biofuel production, increasing farmers' income, import reduction, employment generation and waste to wealth creation.
- This policy clearly exhibits the Centre's push towards strengthening the energy infrastructure of the country while promoting the agenda of sustainability.

Benefits

- It reduces the country's dependence on imports.
- It promotes a cleaner environment: It results in a reduction in the burning of crops, as the agricultural waste/residue is converted to bioethanol.
- The re-use of cooking oil presents grave health hazards however it's a potential feedstock for biodiesel.
- It also aids in Municipal Solid Waste (MSW) management. There are technologies available that can convert waste/plastic in the MSW to biofuels. One ton of such waste has the potential to provide around 20% reduction in fuels.
- The process of production of biofuels will aid in the creation of jobs.
- The conversion of surplus grains and agricultural biomass can help in price stabilization and thereby provide an additional source of income to the farmers.









◎ ANALYSIS


What are the proposed amendments?

- To allow more feedstocks for production of biofuels,
- To advance the ethanol blending target of 20% blending of ethanol in petrol to ESY 2025-26 from 2030,
- To promote the production of biofuels in the country, under the Make in India program, by units located in Special Economic Zones (SEZ)/ Export Oriented Units (EoUs),
- To add new members to the NBCC.
- To grant permission for export of biofuels in specific cases, and

National Policy on Biofuels 2018

Salient features

 <p>An indicative target of 20% blending of ethanol in petrol and 5% blending of biodiesel in diesel is proposed by 2030.</p>	 <p>With a thrust on Advanced Biofuels, the Policy indicates a viability gap funding scheme for 2G ethanol Bio refineries of Rs.5000 crore in 6 years in addition to additional tax incentives, higher purchase price as compared to 1G biofuels.</p>	 <p>Categorization of Biofuels into Basic Biofuels - First generation(1G) Bioethanol & biodiesel and "Advanced Biofuels"- Second Generation(2G) ethanol, drop-in fuels, algae based Third Generation(3G) Biofuels.</p>	 <p>Increase scope of raw material for ethanol procurement by encouraging Intermediate (B-Molasses), Sugarcane Juice, other Sugar containing materials and damaged as well as surplus food grains.</p>
 <p>Develop National Biomass repository by conducting appraisal of biomass across the Country.</p>	 <p>Bio diesel production to be encouraged from non edible oilseeds, used cooking oil, short gestation crops and development of supply chain mechanisms.</p>	 <p>Thrust on research, development and demonstration in the field of Biofuel feedstock production, advanced conversion technologies from identified feedstock.</p>	 <p>Setting up of National Biofuel coordination committee (NBCC) under Ministry of Petroleum & Natural Gas and Working Group on Biofuels.</p>



- To delete/amend certain phrases in the Policy in line with decisions taken during the meetings of National Biofuel Coordination Committee

What is the need for amending the existing policy?

- Till 2018, only sugarcane was used to derive ethanol. Now, the government has extended the ambit of the scheme to include foodgrains like maize, bajra, fruit and vegetable waste, etc. to produce ethanol.
- This move helps farmers gain additional income by selling the extra produce and also broadens the base for ethanol production in the country.
- As Ethanol is one of the principal biofuels, which is naturally produced by the fermentation of sugars by yeasts or via petrochemical processes such as ethylene hydration.
- Starting with 5% blending, the government has set a target of 10% ethanol blending by 2022 and 20% blending (E20) by 2030.

Challenges associated

- **Availability of sufficient feedstock on a sustainable basis:** Current regulations in the country allow production of ethanol from sugarcane, sugar, molasses, maize and damaged

foodgrains unfit for human consumption.

- Further, surplus rice with FCI is also allowed. Some states have demanded that rice procured by state governments be allowed for ethanol production.
- However, there is the issue of diverting foodgrains from human consumption to ethanol production when hunger and malnutrition are still problems faced by many in the country.
- **Production Facilities:** Ethanol production facilities have to be augmented if the goals of 20% blending by 2030 are to be achieved. Currently, ethanol production is largely confined to the sugar producing states.
- Sugar mills, which are the key domestic suppliers of bio-ethanol to OMCs, were able to supply only 57.6% of the total demand.
- The mills also do not have enough financial stability to invest in biofuel plants.
- **Price uncertainty:** The prices of both ethanol and sugarcane are fixed by the government leading to concerns among investors regarding the price of bioethanol.
- **Availability of Ethanol:** Ethanol is not equally available all over the country. This leads to an increase in transportation and logistics costs.
- Moreover, handling and storage of ethanol are also risky as it is a highly flammable liquid.

- **Challenge for vehicle manufacturers:** Vehicle manufacturers must work with vendors to develop automobile parts compatible with ethanol.
- They should work on engine optimisation for higher ethanol blends.
- **Environmental clearances:** Currently, ethanol production plants/distilleries fall under the "Red category" and require environmental clearance under the Air and Water Acts for new and expansion projects.
- This often takes a long time leading to delays.

◎ CONCLUSION

- In order to promote biofuels in the country, a National Policy on Biofuels was made by Ministry of

New and Renewable Energy during the year 2009. Globally, biofuels have caught the attention in last decade and it is imperative to keep up with the pace of developments in the field of biofuels. Biofuels in India are of strategic importance as it augers well with the ongoing initiatives of the Government such as Make in India, Swachh Bharat Abhiyan, Skill Development and offers great opportunity to integrate with the ambitious targets of doubling of Farmers Income, Import Reduction, Employment Generation, Waste to Wealth Creation. Biofuels programme in India has been largely impacted due to the sustained and quantum non-availability of domestic feedstock for biofuel production which needs to be addressed.

PRACTICE QUESTION

- Q1: Examine the potential and associated challenges of biofuels as a sustainable energy resource.**
- Q2: "A recent report by the NITI Aayog highlighted the immense benefits India could accrue by 20% ethanol blending by 2025." In this context, discuss the significance of ethanol blending for the environment and the Indian economy. What are the challenges in achieving 20% ethanol blending in India?**

ETHANOL BLEND IN PETROL TO BE RAISED TO 20% IN 3 YEARS

CONTEXT

- The Union Cabinet has approved amendments to the National Policy on Biofuels, 2018, to advance the date by which fuel companies have to increase the percentage of ethanol in petrol to 20%, from 2030 to 2025.

◎ BACKGROUND

- The Ethanol Blended Petrol Programme was launched in 2003 with an aim to promote the use of renewable and environmentally friendly fuels and reduce India's import dependence for energy security.
- Starting with 5% blending, the government has set a target of 10% ethanol blending by 2022 and 20% blending (E20) by 2030.
- The programme is implemented in accordance with the National Policy on Biofuels.
- Under this programme, oil marketing companies (OMCs) will procure ethanol from domestic sources at prices fixed by the government.
- Till 2018, only sugarcane was used to derive ethanol. Now, the government has extended the ambit of the scheme to include foodgrains like maize, bajra, fruit and vegetable waste, etc. to produce ethanol.
- This move helps farmers gain additional income by selling the extra produce and also broadens the base for ethanol production in the country.

◎ WHAT IS ETHANOL?

- Ethanol is an organic chemical compound.
- It is a simple alcohol with the chemical formula C_2H_6O .
- Its formula can be also written as CH_3-CH_2-OH or C_2H_5OH , an ethyl group linked to a hydroxyl group. Ethanol is a volatile, flammable, colorless liquid with a characteristic wine-like odor and pungent taste. It is a psychoactive drug, recreational drug, and the active ingredient in alcoholic drinks.
- Ethanol is naturally produced by the fermentation of sugars by yeasts or via petrochemical processes such as ethylene hydration.
- It has medical applications as an antiseptic and disinfectant.
- It is used as a chemical solvent and in the synthesis of organic compounds.
- Ethanol is a fuel source. Ethanol also can be dehydrated and to make ethylene, an important chemical feedstock.

How it is produced?

- The Department of Food and Public Distribution (DFPD) is the nodal department for the promotion of fuel grade ethanol producing distilleries in the country. The Government has allowed ethanol production/procurement from sugarcane-based raw materials viz. C & B heavy molasses, sugarcane juice sugar sugar syrup, surplus rice with Food Corporation of India (FCI) and maize.
- The supply of ethanol under the EBP Programme has increased from 38 crore litres during 2013-14 to 173 crore litres during 2019-20 resulting in an increase in blend percentage from 1.53% to 5.00% respectively.

◎ ANALYSIS

What is ethanol blending?

- An ethanol blend is defined as a blended motor fuel containing ethyl alcohol that is at least 99% pure, derived from agricultural products, and blended exclusively with petrol.
- Ethanol is one of the principal biofuels, which is naturally produced by the fermentation of sugars by yeasts or via petrochemical processes such as ethylene hydration.
- It has medical applications as an antiseptic and disinfectant. It is used as a chemical solvent and in the synthesis of organic compounds, apart from being an alternative fuel source.

What is the present status of Ethanol blending in India?

- India achieved 9.45% ethanol blending as on March 13, 2022, according to the Ministry of Petroleum and Natural Gas.
- The Centre projects that this will reach 10% by the end of financial year 2022.
- The government first announced its plans of advancing the 20% blending target in December 2020.

Need for change in the policy

- **A 2021 report by the NITI Aayog said that 20% ethanol blending by 2025** could accrue immense benefits such as:
 - ▶ Saving ₹30,000 crore of foreign exchange per year
 - ▶ Increased energy security
 - ▶ Lowered carbon emissions
 - ▶ Better air quality
 - ▶ Self-reliance
 - ▶ Better use of damaged foodgrains
 - ▶ Increase farmers' incomes and investment opportunities

Benefits

- The auto fuels we commonly use are mainly derived from the slow geological process of fossilisation, which is why they are also known as fossil fuels. Ethanol in comparison is a biofuel, that is, it is primarily derived from processing organic matter (hence, it is a biofuel). In India, ethanol is largely derived from sugarcane via a fermentation process.
- Since it is a plant-based fuel, ethanol is considered renewable.
- Since ethanol is high in oxygen content, engines using ethanol blends combust fuel more thoroughly reducing vehicular emissions. Hence, this process will also help reduce the country's carbon footprint.
- Mixing 20 percent ethanol in petrol can potentially reduce the auto fuel import bill by a yearly \$4 billion, or Rs 30,000 crore.
- Another major benefit of ethanol blending is the extra income it gives to farmers. Ethanol is derived from sugarcane and also foodgrains. Hence, farmers can earn extra income by selling their surplus produce to ethanol blend manufacturers.

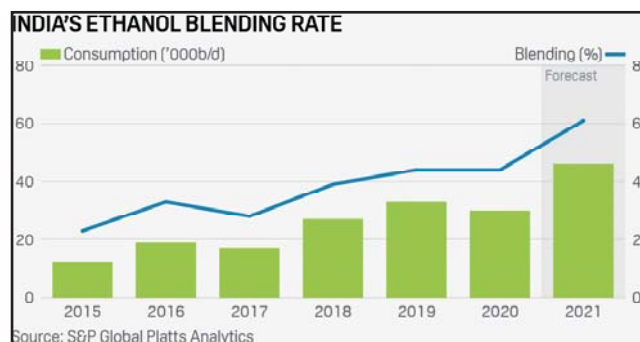
Impacts of Ethanol blending

- **Impact on Environment:**
 - ▶ The use of E20 as fuel reduces carbon monoxide emissions by 50% in two-wheelers and 30% in four-wheeler vehicles.
 - ▶ Hydrocarbon emissions also reduce compared to unblended petrol.
 - ▶ Ethanol blending can thus reduce emissions in vehicles
- **Impact on Consumers:**
 - ▶ The fuel efficiency of vehicles will reduce by:
 - ▶ **6-7% for 4 wheelers designed** for E0 and calibrated for E10

- ▶ **3-4% for 2 wheelers designed** for E0 and calibrated for E10
- ▶ **1-2% for 4 wheelers designed** for E10 and calibrated for E20
- ▶ However, with improvements in engines, the loss in fuel efficiency can be minimised.

- **Impact on Vehicle Manufacturer:**

- ▶ Engines and components will need to be tested and calibrated with E20 as fuel.
- ▶ No major change in the assembly line is required.
- ▶ Vendors need to be developed for the procurement of additional components compatible with E20.



Challenges associated

Although promising, the ethanol blending programme faces several challenges and concerns. Some of them are discussed below:

- **Availability of sufficient feedstock on a sustainable basis:** Current regulations in the country allow production of ethanol from sugarcane, sugar, molasses, maize and damaged foodgrains unfit for human consumption. Further, surplus rice with FCI is also allowed. Some states have demanded that rice procured by state governments be allowed for ethanol production. However, there is the issue of diverting foodgrains from human consumption to ethanol production when hunger and malnutrition are still problems faced by many in the country.
- **Production Facilities:** Ethanol production facilities have to be augmented if the goals of 20% blending by 2030 are to be achieved. Currently, ethanol production is largely confined to the sugar producing states. Sugar mills, which are the key domestic suppliers of bio-ethanol to OMCs, were able to supply only 57.6% of the total demand. The mills also do not have enough financial stability to invest in biofuel plants.
- **Price uncertainty:** The prices of both ethanol and sugarcane are fixed by the government leading to concerns among investors regarding the price of bioethanol.

- **Availability of Ethanol:** Ethanol is not equally available all over the country. This leads to an increase in transportation and logistics costs. Moreover, handling and storage of ethanol are also risky as it is a highly flammable liquid.
- **Challenge for vehicle manufacturers:** Vehicle manufacturers must work with vendors to develop automobile parts compatible with ethanol. They should work on engine optimisation for higher ethanol blends.
- **Environmental clearances:** Currently, ethanol production plants/distilleries fall under the "Red category" and require environmental clearance under the Air and Water Acts for new and expansion projects. This often takes a long time leading to delays.
- **To achieve low carbon emissions:** It can solve the problem of agricultural waste as well as sugar rates plummeting due to excess production, therefore providing security to sugarcane farmers.
 - ▶ It can help accomplish dual goal of strengthening energy security with low carbon emission.
- **To fix the prices of Raw materials:** The procurement of ethanol by OMCs is governed by an administered pricing mechanism that fixes prices every year based on the raw material used.
 - ▶ This fixing of the price of raw materials for production had led to India producing ethanol at prices higher than other countries.
- **Make the process sustainable:** The report highlighted the excessive use of water — estimated at **2,860 litres — for the production of one litre of ethanol from sugar.**
 - ▶ Hence there is a need to move to more environmentally sustainable crops.

◎ WAY FORWARD

- **Enhance Infrastructure:** A majority of the ethanol units are concentrated in 4 to 5 states where sugar production is high but food grain-based distilleries are now being set up across India.
 - ▶ There have been efforts to make ethanol from agricultural waste.
- **Fund allocation in Automobile sector:**
 - ▶ All automobile materials produced after 2009 are compatible with 10% ethanol. However they are not compatible with E20.
 - ▶ The industry body the Society of Indian Automobile Manufacturers (SIAM) has guaranteed that "once a road-map for making E10 and E20 available in the country is notified... they would gear up to supply compatible vehicles in line with the roadmap".

◎ CONCLUSION

The Central Government has resolved to meet the target of 20 percent ethanol blending in petrol by 2025. This will help India strengthen its **energy security, enable local enterprises and farmers to participate in the energy economy and reduce vehicular emissions.** Hence for attaining E100 i.e. cent percent clean mobility, ambitious ethanol blending program is a must. But the emphasis should also be laid on alternative of ethanol like, Methanol with some modifications can also be used for blending and major source of producing ethanol is sugarcane which is a water intensive crop.

DISASTER INDUCED DISPLACEMENT

CONTEXT

- ❑ Latest report on Global internal displacement shows disasters continue to displace more and people are living longer in relief camps.
- ❑ The Geneva-based Internal Displacement Monitoring Centre (IDMC)'s said Assam is the only spot currently in India where people have been displaced due to disaster and are living in camps.



Historical Background

- Archaeological evidence suggests that human settlement patterns have responded repeatedly to changes in the climate.
- There is evidence that the emergence of the first large, urban societies was driven by a combination of climatic and environmental desiccation.
- During the 4th century CE, growing aridity and frigid temperatures from a prolonged cold snap caused the **Hun and German hordes to migrate across the Volga and Rhine into milder Gaul.**
- Similarly, in the 8th century CE, Muslim expansion into the Mediterranean and southern Europe was, to some extent, driven by **drought in the Middle East.**
- **Pastoralist societies** have of course habitually migrated, with their animals, from water sources to grazing lands in response to drought as well as part of their normal mode of life.
- But it is becoming apparent that migration as a response to environmental change is not limited to nomadic societies.
- In short, people have had to move for environmental reasons for thousands of years and the recent statistics point to a sobering picture of such migrants in the coming future.
- Deterioration of the environment on account of climate change is giving rise to climate disasters and extreme weather events that in turn are displacing more human population than **conflicts and disturbances.**
- **The World Migration Report 2022** of the United Nations maps the worsening displacement of people due to **climate-change-related events.**



Present conditions

- As early as 1990, the **Intergovernmental Panel on Climate Change (IPCC)** noted that the greatest single impact of climate change might be on human migration.
- Millions of people are displaced by shoreline **erosion, coastal flooding and agricultural disruption**.
- Over the past 30 years, the number of people living in coastal areas at high risk of rising sea levels has increased from 160 million to 260 million, 90% of whom are from poor developing countries and small island states.
- Hazards resulting from the increasing intensity and frequency of extreme weather events, such as abnormally **heavy rainfall, prolonged droughts, desertification, environmental degradation, or sea-level rise and cyclones** are already causing an average of more than 20 million people to leave their homes and move to other areas in their countries each year.
- As climate change worsens storms and droughts, climate scientists and migration experts expect the number to rise.

About India's disaster induced displacements

- India was the seventh most affected by the devastating impact of climate change globally in 2019 according to the **Global Climate Risk Index 2021**.
- The uneven monsoon across the country and extreme climate change-driven weather events are a matter of serious concern.
- This may force people to migrate internally within the Indian Territory.

Assam's situation:

- There were some 16,370 people living in displacement. It has been nearly 100 days that the monitoring tool constantly shows people living in such camps.
- **In 2021**, disasters displaced 4.9 million people in India, according to the report. This was the highest figure for the country in five years.
- This is the **fourth-highest in the world** and the highest in the South Asia region. Out of this, nearly 0.5 million people were in camps, like the nearly 40,000 in Assam for the last two months.

- At this point of time, when mass migration of climate refugees is imminent, safeguards to the fragile indigenous population become necessary to avoid future conflicts.

- This requires **legislative and policy measures** so that the refugees get their due rights of settlement and rehabilitation.
- Also ensure the rights of indigenous people over the land and resources to avoid future conflicts between the groups.

ANALYSIS

Who are climate refugees?

- There is no international definition of 'climate refugees', however, the concept was first introduced by Lester Brown of the World Watch Institute in the 1970s.
 - ▶ The term '**environmental refugees**' was used to denote the forced migration of people due to environmental degradation and natural disasters.
- In other words, these are the people who are forced to migrate to other places or cross borders due to catastrophic weather and natural events that may be climate-change driven.

What are the implications of such displacements?

- Educational and health care systems have to adjust to a sudden, new population. They need to bear the additional pressure on their resources.
- Unlike traditional refugees, climate refugees may be sent back to their devastated homeland or forced into a refugee camp, leading to livelihood crisis.
- Those climate refugees who are internal migrants (rural and coastal residents who are forced to migrate to urban areas within their country) face numerous problems. Their skills are not relevant in urban areas and thus they face livelihood crises.
- The phenomenon may **hinder development** in the following ways:
 - ▶ Climate refugees may increase pressure on urban infrastructure and services.
 - ▶ An increased population may undermine economic growth.
 - ▶ Lead to worse health, educational and social indicators.
 - ▶ Risk of conflict among migrants themselves.
- Climate change may also trigger conflict amongst the population as climate change may enhance the competition for resources like food, water and grazing lands.

What are the concerns for their existence?

- Although people fleeing from places, where they face risks arising from the impacts of climate

change, are often referred to as "climate refugees", on most occasions they do not fall within the scope of the refugee definition in Article 1 of the 1951 UN Refugee Convention.

- There are no legally binding agreements obliging countries to support climate migrants.
- The UNHCR (United Nations High Commissioner for Refugees) has thus far refused to grant these people refugee status, instead designates them as "environmental migrants," in large part because it lacks the resources to address their needs.
- Regional refugee instruments like the **1984 Cartagena Declaration** and the **1969 OAU Convention** offer a wider definition of protecting refugees fleeing conditions that "seriously disturb public order" but these regional instruments long pre-date when climate change was not a global concern.

What could be done further?

- The global community should endeavour to expand the definition of a "**refugee.**" This may help them in getting access to **financial grants, food aid, tools, shelter, schools or clinics.** Providing legal recognition to them must be the top priority.
- The affected countries and regions may endeavour to adapt to climate change-driven extreme events by making a series of cost-benefit decisions. These adaptation techniques may help them in reducing their vulnerability to climate change events.
- Those countries which are less affected may formulate immigration policies on climate refugees.
- **The UN SDGs (Sustainable Development Goals)** may be of greater help as they address both migration and climate change. Several of the 169 targets established by the SDGs lay out general goals that could be used to protect climate migrants. **These include:**
 - ▶ Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
 - ▶ Integrate climate change measures into national policies, strategies, and planning
 - ▶ Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction, and early warning.
- **Drawing communities into the process of managing ecological resources, processes and services,** could help more effectively mitigate the impact of climate change, forecast need for migration and ease the process, while minimising distress.

Policies in India

- Disaster induced displacement in India is currently looked after by the **National Disaster Management Authority (NDMA)** and their state level counterparts.
 - ▶ These authorities have laid down their respective **preventive, preparedness, capacity building, and rehabilitation plans.**
 - ▶ Compensation in lieu of drought is also provided to farmers out of the disaster relief funds, although the amount currently being provided has often been termed grossly insufficient by various farmers' bodies, NGOs and academicians.
- Current national policies primarily address the short-term and sudden onset of climatic disasters.
 - ▶ They do not adequately consider slow-onset climate change events such as increased aridity and recurrent droughts, desertification, sea-level rise, river erosions, glacial melts, and losses caused by the same.

National Disaster Management Authority (NDMA):

- NDMA was established through the Disaster Management Act, 2005 enacted by the Government of India, and was formally constituted by Dec 2006.
- It is a Statutory Body for disaster management in the country.
- **Mandate:** Its primary purpose is to coordinate the response to natural or man-made disasters and for capacity-building in disaster resiliency and crisis response. It is also the apex body to lay down policies, plans and guidelines for Disaster Management to ensure a timely and effective response to disasters.

Functions:

The National Disaster Management Authority (NDMA) was established to follow the functions mentioned below:

- Implementing policies related to Disaster Management.
- Approving various plans like:
 - ▶ National Plans
 - ▶ Plans by different Ministries & Departments of the Indian Government
 - ▶ Other plans related to the National Plan.
- Laying down guidelines for State Government Authorities in accordance with the State Plan.

► Laying down guidelines for different Government Authorities in order to integrate the preventive measures for the Disaster or attenuation of its effect in their development plans & projects.

- Coordinating with the workforce and implementing the policies/plans necessary.
- Recommending the provision of funds necessary for mitigation.
- Depending on the Central Government, providing aid and support to the countries in need.

- Laying down guidelines and broad policies for the functioning of the NIDM (National Institute of Disaster Management).

◎ CONCLUSION

When the world is grappling with such a burning crisis like climate change, it is difficult to avoid its ramifications. Therefore, formulating policies and plans unitedly to minimise the loss and reduce vulnerability will be the way forward. This will require a multi-pronged and multi-sectoral approach by all the stakeholders.

PRACTICE QUESTION

Q1: "According to the Assam State Disaster Management Authority, over half a million people have been displaced due to floods in Assam." In light of this statement, discuss the social and economic cost of disaster-induced displacement.

Q2: Floods are the most commonly occurring natural disaster in India. What are the reasons for frequent floods in India? Suggest steps that need to be taken for proper flood management.

CABINET LETS PSU BOARDS ACT TO DIVEST, CLOSE UNITS

CONTEXT

The Union Cabinet has approved a proposal to empower the board of public sector undertakings (PSUs) to recommend strategic divestment, minority stake sale, or closure of their subsidiaries and joint ventures.

◎ BACKGROUND

- Disinvestment of public enterprises emerged as a policy option in the wake of economic liberalization, globalization, and structural reforms launched in 1991.
- Initially, disinvestment was not conceived as the privatization of existing PSUs but as limited sales of equity/shares with the objective of raising resources and ensuring market discipline to boost the performance of public enterprises.
- Department of Investment and Public Asset Management (DIPAM) under the Ministry of Finance is the nodal agency for disinvestment in India.
- DIPAM and NITI Aayog jointly identify PSUs for strategic disinvestment.

◎ ANALYSIS

Key Highlights

- At present, PSU boards have the authority to make equity investments, undertake mergers and acquisitions subject to certain ceilings of net-worth.
- However, power for disinvestment and closure of their subsidiaries is not available to PSUs, except for suggesting minority stake sales for some PSUs.
- The process for strategic disinvestment would be open and based on the principles of competitive bidding.
- The guidelines for the same would be laid down by the Department of Investment and Public Asset Management (DIPAM).
- For closure of PSUs, guidelines would be issued by the Department of Public Enterprises (DPE).
- The Cabinet has also empowered alternative mechanism that comprises of Finance Minister Nirmala Sitharaman, Minister of Roads, Transport and Highways Nitin Gadkari and minister of administrative ministry to grant 'in principle' approval for strategic disinvestment, minority

stake sale, closure of subsidiaries, and sale of stake in JVs of parent PSUs

What is disinvestment?

- Disinvestment is selling or liquidating an asset or subsidiary by the government. It is also referred to as 'divestment' or 'divestiture.'
- Disinvestment of an asset is either a strategic move for the company (or government), or used for raising resources to meet general/specific needs.

Disinvestment vs. Strategic Disinvestment

- If the government is selling minority shares in a PSE (less than 50%), it will continue to be the owner of the PSE. This is normal disinvestment procedure.
- But if the government is selling majority shares (50% or more) of PSE to some other entity (mostly to a private sector entity), then this method is called strategic disinvestment or strategic sale. Unlike the simple disinvestment, strategic sale implies some sort of privatization, along with transfer of management control.
- PSEs for strategic disinvestment are selected based on certain criteria.
 - They may be incurring losses
 - Or it may be operationally difficult for the government to continue with the PSE.

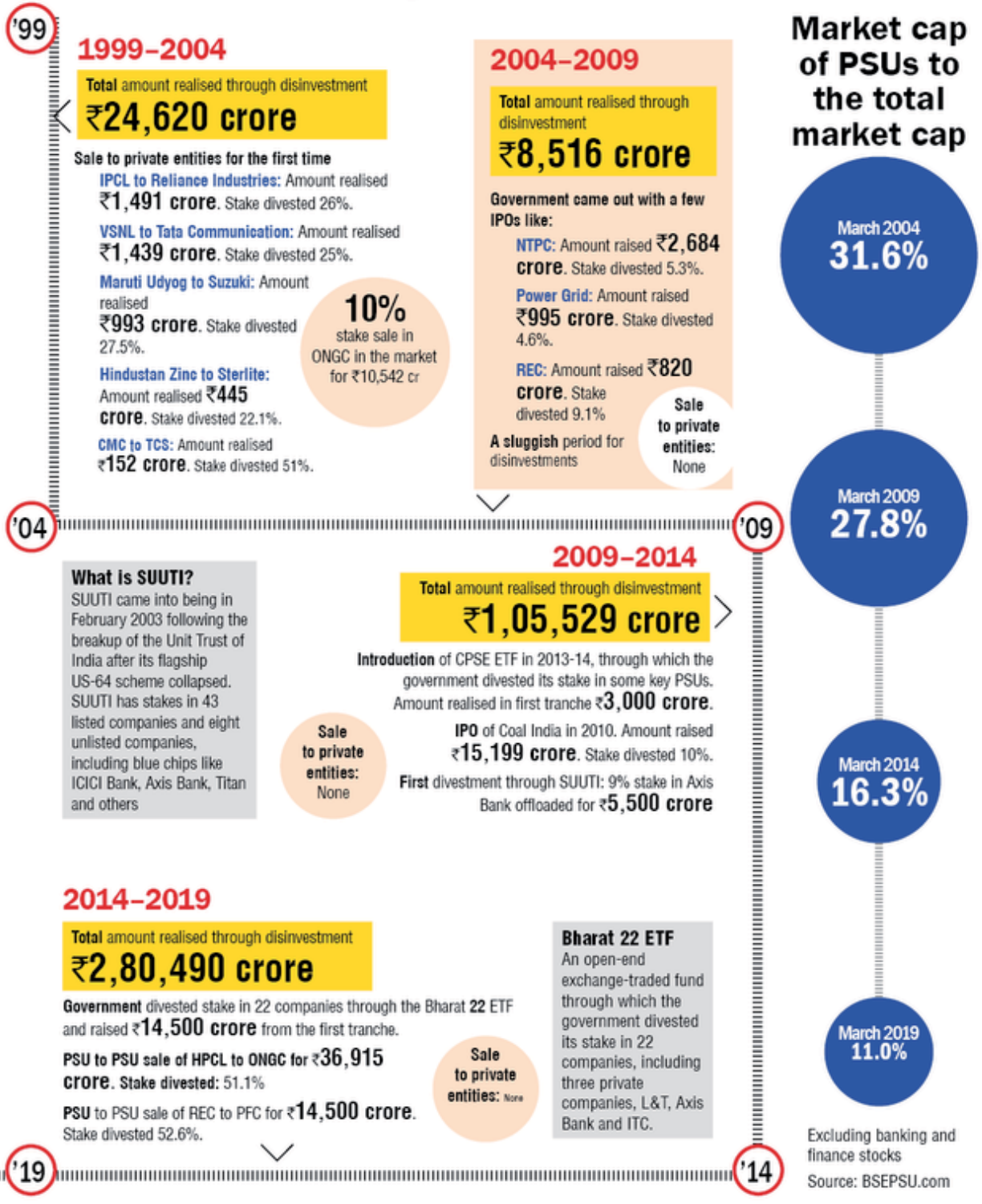
National Investment Fund

The National Investment Fund (NIF) was constituted to channelize the proceeds from disinvestment of Central Public Sector Enterprises. NIF was to be maintained outside the Consolidated Fund of India. At present, the funds under NIF exist as a 'Public Account' which is outside the Consolidated Fund of India. The funds under NIF are permanent in nature.

NIF would be utilized for the following purposes:

- 75% of the annual income of the fund will be used to finance selected social sector schemes, which promote education, health, and employment.

A brief history of disinvestment



- The residual 25% of the annual income of the fund will be used to meet the capital investment requirements.
- Subscribing to the shares being issued by the CPSE on rights basis so as to ensure that 51% ownership of the Government in CPSEs is not diluted.
- Preferential allotment of shares of the CPSE to promoters so that Government shareholding does not go down below 51% in all cases where the CPSEs desire to raise fresh equity to meet their Capex programme.
- Recapitalization of public sector banks and public sector insurance companies so as to strengthen them by further capital infusion.

Importance of Disinvestment

The importance of disinvestment by the government lies in utilisation of funds for:

- To improve public finances and fund increasing fiscal deficit.
- Financing large-scale infrastructure development.
- For investing in the economy to encourage spending and fund growth.
- For retiring Government debt- since a big part of Centre's revenue receipts go towards repaying public debt/interest.
- For expenditure on social programs like health and education.
- To encourage wider share of ownership in an enterprise, and reduce monopoly like enterprises.
- To introduce, competition, market discipline and efficiency.

- To depoliticize non-essential services and move out of non-core businesses, especially ones where private sector has now entered in a significant way.
- It also sends a positive signal to the market and can boost economic activity.

Criticism of Disinvestment

- It has been alleged that shares of PSUs are sold at subpar prices.
- It has been seen as a resource raising exercise rather than a way to reform PSUs.
- There are no evidences that mere sale of PSUs will improve productivity and efficiency.
- It is argued that government is selling profit-making enterprises and is weakening the public sector.
- There are fears of job loss in an already poor job market in India.
- It may lead to emergence of private monopolies.
- It is seen as a policy of diverting attention from the economic slowdown.
- It is skipping the normal channel of parliamentary procedures.

CONCLUSION

Disinvestment assumes significance due to prevalence of an increasingly competitive environment, which makes it difficult for many PSUs to operate profitably. But government should also concentrate on increasing its own-revenue receipts to meet the public finances. It should also take into account the suggestions of the 14th FC in this regard. For example, selling stake in those companies with less than 1% market share.

PRACTICE QUESTION

Q1: What is the difference between disinvestment and strategic disinvestment? Critically examine the policy of disinvestment in India.

Q2: Discuss the objectives of disinvestment in India. Do you think the state should privatise even the profit-making public sector enterprises? Give reasons in support of your answer.

SC SAYS CENTRE, STATES HAVE EQUAL POWERS TO MAKE GST-RELATED LAWS

CONTEXT

The Supreme Court, emphasising on the importance of “cooperative federalism” for the well-being of democracy, held that Union and State legislatures have “equal, simultaneous and unique powers” to make laws on Goods and Services Tax (GST) and the recommendations of the GST Council are not binding on them.

◎ BACKGROUND

- The participation of all States and Centre in the framing of GST laws has led to the strengthening of spirit of cooperative federalism.
- Constitution still provides room for states to levy tariff and non-tariff barriers.
- Article 302 gives Parliament the power to restrict free trade between and within states on grounds of public interest.
- Similarly, Article 304 (b) allows state legislatures to restrict trade and commerce on grounds of public interest.
- The gist of these provisions is that both the Centre and the States have considerable freedom to restrict trade and commerce that hinder the creation of one India.

Analysis

The apex court ruling

- Article 246A of the Indian Constitution treats the Union and the States as equal units, conferring a simultaneous power (on Union and States) for enacting laws on GST.
- Article 279A (constituting the GST Council) envisions that neither the Centre nor the states are actually dependent on the other.
- The recommendations of the GST Council are the product of a collaborative dialogue involving the Union and the states.
- They are recommendatory in nature and only have a persuasive value. To regard them as binding would disrupt the fiscal federalism.

GST Council

- The Council consists of the Union Finance Minister (as Chairman), the Union Minister of State in charge of revenue or Finance, and the Minister in charge of Finance or Taxation or any other, nominated by each State government.
- All decisions of the GST Council will be made by three-fourth majority of the votes cast; the centre

shall have one-third of the votes cast, and the states together shall have two-third of the votes cast.

The GST Council makes recommendations on:

- Taxes, cesses, and surcharges to be subsumed under the GST,
- Goods and services which may be subject to, or exempt from GST,
- The threshold limit of turnover for application of GST,
- Rates of GST,
- Model GST laws, principles of levy, apportionment of IGST and principles related to place of supply,
- Special provisions with respect to the eight north eastern states, Himachal Pradesh, Jammu and Kashmir, and Uttarakhand and other related matters.

Taxes Subsumed Under GST

At the Central level, the following taxes are subsumed:

- Central Excise Duty,
- Additional Excise Duty,
- Service Tax,
- Additional Customs Duty commonly known as Countervailing Duty, and
- Special Additional Duty of Customs.

At the State level, the following taxes are subsumed:

- Subsuming of State Value Added Tax/Sales Tax,
- Entertainment Tax (other than the tax levied by the local bodies), Central Sales Tax (levied by the Centre and collected by the States),
- Octroi and Entry tax,
- Purchase Tax,
- Luxury tax, and
- Taxes on lottery, betting and gambling.

Achievements of GST Regime

- Abolition of interstate check-posts has reduced the impediments to the interstate movement of goods and helped create a national common market.
- It is estimated that the long-distance travel time for goods transportation has reduced by almost 20%.
- The reform has also improved supply-chain management.
- The abolition of interstate sales tax has made the tax destination-based and reduced inequitable interstate tax exportation.
- Compliance mechanisms have improved due to linkage and exchange of information between income-tax and GST departments.
- Cascading (tax on tax) has reduced due to more a comprehensive mechanism to credit input taxes against the taxes on outputs.
- Creation of GST Council is an important innovation in cooperative federalism. It has helped minimize the transaction cost of formulating domestic consumption taxes of the Centre and states.

Challenges that remains

- GST implemented in India has a number of shortcomings which have resulted in erosion of the base and continued distortions: large list of exemptions, multiplicity of rates, exclusion of several items of consumption from the base.
- Multiplicity of tax rates enhance administration and compliance costs, enable misclassification, and cause distortions and in some cases cause inverted duty structure.
- Rates have been varied set according to use of the product and value of the product.
- Items considered as inputs are taxed lower as compared to those judged as outputs.
- High tax rates on automobiles, building and construction material at a time when demand conditions are already weak has caused further slowdown in these sectors.
- By excluding petroleum products, real estate and electricity, 40% of the internal indirect taxes at the Centre as well as states are not in the net.
- The dysfunctional GST technology platform has resulted in arbitrary integrated GST allocation and has caused delays in refunds to the exporters.
- Given that GST comprises nearly 60% of tax revenues of states, falling revenues and default in GST compensation is bringing activities of the States to halt.

- While the Centre has more fiscal manoeuvring space, the decline in tax revenue growth is impacting state cap-ex more directly. States are facing pressure on fiscals, some already resorting to ways and means and even overdrafts.
- State governments have curbed their capital expenditure, a move which will further delay the revival of private investment cycle. Given that roughly two-thirds of the general government cap-ex is contributed by states, the slashing of cap-ex by states can deepen economic slowdown.

Reforms needed

- Simplify and Rationalise:** The full potential of GST reform depends upon further simplification and rationalization.
- Improve tech platform:** In order to improve revenue performance GST council must stabilize the technology platform.
- Reduce multiplicity of rates:** Reducing the number of tax rates should begin by getting rid of the 28% category altogether and transferring them to the 18% slab. At a lower rate, the turnover would be higher due to increased demand and the loss of revenue will be lower.
- Reducing exempted list:** The list of exempted goods and services should be pruned. Only those that are difficult to tax for administrative reasons should be exempted and many of the items under 5% should be moved to 12%.
- GST on petroleum:** There is need to include the petroleum products and electricity in the GST base. Petroleum products contribute about 42% of the revenue from domestic indirect taxes and including it will ensure competitiveness.
- Standard GST rate:** In the next stage, the 12% and 18% categories can also be merged at 15% (or a 14-16% range). This will simplify the tax system. Varying rates as per use and value of the products, rate differentiation for the same group of commodities and rate differences based on the stage of production should be eliminated.
- States' involvement:** Onus of fixing GST should not just be central government's job; states should also focus on the ground issues instead of only focusing on getting compensation.
- Checking ITC frauds:** In order to avert input tax credit (ITC) frauds there is need for increasing development of business intelligence systems to detect such frauds, and setting up dedicated units in each state.

What is cooperative federalism?

Cooperative federalism (marble-cake federalism), is defined as a flexible relationship between the federal and state governments in which both work together on a variety of issues and programs for larger public interest.

Cooperative Federalism in India

- **Schedule 7:** Schedule 7 of the Indian Constitution provides strict delineation of powers between centre and state whereas centre and state cooperates on concurrent list.
- **Zonal Council:** Zonal Councils provide an excellent forum where irritants between Centre and States and amongst States can be resolved through free and frank discussions and consultations.
- **GST Council:** Passing of GST is a shining example of cooperative federalism where States and Centre have ceded their power to tax and come up with a single tax system to realize the dream of one Economic India with 'One Nation, One Market'.
- **NITI Aayog:** The institution provides the central and state governments with relevant strategic and technical advice across the spectrum on key policy elements. It promotes bottom-up approach to development planning.
- **SabkaSaathSabkaVikas:** involves State's as equal partners of development. There is a move towards competitive and cooperative federalism.

Fault lines in the Indian model of Federalism

- **Ambiguity in distribution of Subjects:** At the time of making of the constitution there was no guiding principle that clarified the position as to why an item was placed in the Union, concurrent or state lists. And once the item was placed under a list, there has been little adherence to it. For example, while health is an entry under state list, union government undertakes various initiatives in health.
- **Tussles between the agencies:** Conflict between agencies of central government and state government stress cohesive functioning of centre and states.
- **Overbearing interference:** Institutions like the Supreme Court, RBI, CBI, Election Commission, and academic institutions are pillars of the republic. Overbearing interference in their functioning can disturb their autonomy and create centralist tendencies.
- **Emergency provisions:** Existence of emergency provisions in the constitution, though placed as a safeguard, if misused, can amount to centralisation of power.

- **Inter-state water dispute:** Role given by the Constitution to the Centre in regard to inter-state rivers has not been made much use of to devise effective conflict resolution mechanisms.

How to strengthen federalism in India?

- It is important to have a clear division of labour, functions, responsibilities and regulatory role of various levels of governments.
- There is need to re-look and redistribute entries in the Seventh Schedule.
- The principle of subsidiarity can be used as a relevant guiding principle Which states, what can be done best (with minimum transaction and coordination costs) at a particular level should be done at that level and not at a higher level or lower level. This approach could be the most optimal.
- Sarkaria Commission Recommendation: Union government must consult the states before legislating on items in the concurrent list.
- Punchhi Commission Recommendation: Greater flexibility to states in relation to subjects in the state list and 'transferred items' in the concurrent list.
- Lessons can be learnt from Kerala which realised the operational difficulties in 73rd/74th amendments, and tried to disaggregate the subjects given under schedules XI and XII into activities and sub-activities.
- An activity mapping drive at the state level should be carried out for all tiers of local government, and this democratic bottom-up planning exercise should be taken up as a national goal.
- Autonomy of institutions must not be compromised.
- New mechanisms rather than tribunals should be considered as solution to the problem of Inter-State River Water Disputes in India. Focus should shift from Conflict Resolution to Enabling Cooperation.

◎ CONCLUSION

The implementation of GST in a large and diverse federal country ruled by different political parties is a remarkable achievement. The need of the hour is for centre and state to work together to raise revenue productivity. In the backdrop of economic slowdown and state's tight fiscal space, centre can consider extending GST compensation to the states.

PRACTICE QUESTION

Q1: Despite the impressive milestones achieved by the GST regime, certain issues remain. Examine

Q2: Cooperative federalism is the only democratic way for the smooth functioning of Centre-State interactions. Illustrate.

Or

A fundamental problem in the GST is the erosion of 'trust' between the States and the Centre. Critically evaluate.

POOR RECOVERY, INCREASING DELAYS MAR IBC RESOLUTION PROCESS

CONTEXT

The recovery ratio for creditors through the Insolvency and Bankruptcy Code (IBC) has fallen to its lowest level ever. In Q4 of FY22, the amount to be realised from the resolution process was lower than the liquidation value of assets.

◎ BACKGROUND

- The era before IBC had various scattered laws relating to insolvency and bankruptcy which caused inadequate and ineffective results with undue delays.
- The recovery action by creditors, either through the Contract Act or through special laws such as the Recovery of Debts Due to Banks and Financial Institutions Act, 1993 and the Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest Act, 2002, has not had desired outcomes.
- Similarly, action through the Sick Industrial Companies (Special Provisions) Act, 1985 and the winding up provisions of the Companies Act, 1956 have neither been able to aid recovery for lenders nor aid restructuring of firms.
- Laws dealing with individual insolvency, the Presidential Towns insolvency Act, 1909 and the Provincial Insolvency Act, 1920 are almost a century old.
- Ineffective implementation, conflict in one of these laws and the time-consuming procedure in the aforementioned laws, made the Bankruptcy Law Reform Committee draft and introduce Insolvency and Bankruptcy Law bill.

insolvency proceedings in the country and regulate the entities registered under it.

Four pillars of IBC

- **Insolvency Professionals:** They would play a key role in the efficient working of the bankruptcy process. They would be regulated by 'Insolvency Professional Agencies.
- **Information Utilities:** These would store facts about lenders and terms of lending in electronic databases. This would eliminate delays and disputes about facts when default does take place.
- **Adjudication:** The NCLT will be the forum where firm insolvency will be heard and DRTs will be the forum where individual insolvencies will be heard. These institutions, along with their Appellate bodies, viz., NCLAT and DRATs will be adequately strengthened so as to achieve world class functioning of the bankruptcy process.
- **Insolvency and Bankruptcy Board of India:** This body will have regulatory over-sight over the Insolvency Professional, Insolvency Professional agencies and information utilities.

Objectives of IBC

- Consolidate and amend all existing insolvency laws in India.
- To simplify and expedite the Insolvency and Bankruptcy Proceedings in India.
- To protect the interest of creditors including stakeholders in a company.
- To revive the company in a time-bound manner.
- To promote entrepreneurship.
- To get the necessary relief to the creditors and consequently increase the credit supply in the economy.
- To work out a new and timely recovery procedure to be adopted by the banks, financial institutions or individuals.
- To set up an Insolvency and Bankruptcy Board of India.
- Maximization of the value of assets of corporate persons.

◎ ANALYSIS

What is IBC?

- The Insolvency and Bankruptcy Code, 2016 (IBC) is the bankruptcy law of India which seeks to consolidate the existing framework by creating a single law for insolvency and bankruptcy.
- The bankruptcy code is a one stop solution for resolving insolvencies which previously was a long process that did not offer an economically viable arrangement.
- The code aims to protect the interests of small investors and make the process of doing business less cumbersome.
- The Code establishes the Insolvency and Bankruptcy Board of India, to oversee the

Achievements of IBC

- **Faster Resolution:** By mid- 2021, more than 250 companies had been revived and over 86 percent of bankruptcy resolution processes had passed the 270-day mark in 2020.
- **Improved Ranking:** IBC has also helped India rise from the 130th to the 63rd rank in the global ease of doing business ranking in 2020.
- **Greater Debtor Autonomy:** In the event of pre-packs, the present management retains authority which provides opportunity to MSMEs to restructure their liabilities and start with a clean slate.
- **Prevents fraudulent activities by debtors:** Since the ownership and control of the business entity, its assets and business activities stand transferred from the debtor to an insolvency professional as soon as an application is admitted by the adjudicating authority, the debtor is pre-empted from indulging in any activity to defraud the creditors.
- **Prevents errant promoters from abusing the system:** The PPIR offers financial creditors strong consent rights. For example, before submitting a resolution plan, it must have approval from at least 66 per cent of financial creditors. This prohibits financial creditors from abusing the system.
- **A fair resolution:** The amendment ensures that both debtors and creditors have a role in the resolution process.
- **Certainty and clean title:** When insolvency is resolved through the Code, there is a certainty in the settlement of liabilities and ownership of assets. Since all liabilities including government dues are settled, the resolution applicant is vested with a clean and litigation-free business and assets, etc.
- **Prevents job losses:** PPIR reduces the likelihood of liquidation. As a result, company continuity is ensured, and worker layoffs are reduced.

Issues with IBC

While the IBC's performance has been relatively better than the other recovery mechanisms, it suffers from similar systemic issues.

- **High liquidation:** For instance, of the 2,600 cases that were closed by December 2021, 55% ended in liquidation while only 16% were completed with proper resolution plans approved by the lender.
- **Long delays:** On average, over 700 days were taken in FY22 to complete a resolution process, against the stipulated deadline of 330 days.
- **Haircuts:** Moreover, during the fourth quarter of FY22, the amount to be realised from the resolution process was lower than the liquidation value of assets. Worryingly, the lenders continued to take

steep haircuts. In 100 out of 500 companies that saw proper resolutions, the haircuts were above 90%.

- **Inadequate capacity of tribunals:** The biggest issue is the delays and a lot of it is due to the capacity of tribunals. The functioning of the NCLT during the COVID-19 pandemic has been a setback for the IBC.
- **Delay in approval:** One part of the timeline that isn't looked at so much is the delay in filing of admissions, where the clock starts. Several cases have been pending admission for over a year. And similarly, at the back end, the delay occurs between the approval of the resolution and the approval by the tribunal.
- **Lack of coordination between parties involved:** There is lack of coordination between the parties in the process (creditors, stakeholders) which delays the insolvency proceedings.
- **Inexperienced insolvency professionals:** Since the Code and its prescribed procedures are new, understandably, the insolvency professionals, advocates and adjudicators lack experience, which causes significant delay in resolution proceedings. At times, due to this lack of experience, a company which could have been revived ends up liquidated.
- **Overburdening of courts:** As the number of NCLTs and NCLATs are limited, they are weighed down by a deluge of applications, naturally impeding the timely conclusion of proceedings.

Suggestions to reform IBC process

- There is a need to increase the number of NCLT benches and appoint more competent professionals. This will ensure that the IBC platform is not used as a recovery but more as a resolution tool.
- Further masses should be aware of alternate dispute resolution mechanisms like LokAdalat, Arbitration etc. This can reduce the workload on insolvency tribunals.
- The government can place companies such as construction, electricity (that do not have hard assets) outside the NCLT. This would save resources and time in pursuing IBC for these companies.

CONCLUSION

The IBC, despite its shortcomings, is an impressive substitute to the earlier insolvency resolution process in India. The new Code has not only streamlined the process, but also provided a time-bound one-stop solution to the parties involved. Systematic issues need to be addressed to reap its full potential.

PRACTICE QUESTION

Q1: Critically analyse the progress made in resolving stressed assets since the enactment of the Insolvency and Bankruptcy Code (IBC).

Q2: Despite multiple amendments to streamline IBC, it has failed to achieve its objective. Examine. Also, suggest reforms measure required for its successful implementation.

INDIA MAY PUSH FOR PERMANENT FOOD STOCK RULES

CONTEXT

India may seek a permanent solution to the issue of public stockholding for food security during the 12th World Trade Organization (WTO) ministerial conference in Geneva.

◎ BACKGROUND

- According to current WTO rules, a member country's food subsidy bill should not breach **10% of the value of production based on the base price of 1986-88**.
- WTO rules do not allow export of commodity from public stock because it distorts prices, which affects other countries. However, the same is allowed if exports are done at market prices.
- Currently, the peace clause **agreed in the Bali ministerial meeting** only includes the **government programmes started before 2013**.
- Under this clause, WTO members agreed to refrain from challenging any breach of the **prescribed ceiling of 10% by a developing nation**.
- The developing countries cannot be taken to arbitration as they are protected under the peace clause.
- However, the clause is applicable till a permanent solution is reached.
- India is seeking to add government programmes that were started after 2013 in **the peace clause**.

◎ ANALYSIS

India's standfood stock rules

- India had informed WTO that the value of its rice production in 2019-20 stood at \$46.07 billion and that subsidies worth \$6.31 billion, or 13.7%, were given, above the 10% limit.
- Indian government subsidy to farmers comes in at \$300 per farmer, compared to \$40,000 per farmer in the US.
- India is not the only country looking for a permanent solution to public stockholding programmes. Developing nations such as China and African nation part of the G33 group have also raised this issue at WTO.

What is Agreement on Agriculture?

- The WTO's Agreement on Agriculture (AoA) was negotiated in the 1986-94. It marked a significant

first step towards bringing agricultural subsidies under international disciplines.

- Specific commitments set out in the AoA were implemented over a 6-year period (10 years for developing countries) starting in 1995.

Objectives of Agreement on Agriculture

- To establish a fair, transparent and market oriented agricultural trading system
- To strengthen more operationally effective GATT disciplines.
- The agreement does allow governments to support their rural economies, but preferably through policies that cause less distortion to trade.
- It also allows some flexibility in the way commitments are implemented. Developing countries do not have to cut their subsidies or lower their tariffs as much as developed countries, and they are given extra time to complete their obligations. Least-developed countries don't have to do this at all. Special provisions deal with the interests of countries that rely on imports for their food supplies, and the concerns of least-developed economies.

The Bali's Peace Clause

- Trade negotiators generally refer to **Article 13 of the World Trade Organization's Agreement on Agriculture** as the Peace Clause.
- It is now possible, therefore, for developing countries and nations favouring free trade in agricultural goods.
- Another temporary peace clause was made at the WTO Bali conference in December 2013.
- It stipulated that no country would be legally barred from food security programs for its own people even if the subsidy breached the limits **specified in the WTO Agreement on Agriculture**.

Three Pillars of AOA

- Domestic Support:** It includes the classification of agricultural subsidies into 'boxes' depending on their effects on production and trade.

- ▶ **Amber Box:** It contains all domestic support considered to distort production and trade. All these types of supports are subject to limits which are termed as 'de minimis' levels. The developed countries have to limit their domestic support within 5% and developing countries to limit within 10% of total agriculture production.
 - ▶ **Blue Box:** This is the "amber box with conditions". Such conditions are designed to reduce distortion. Any support that would normally be in the amber box is placed in the blue box if the support also requires farmers to limit production. At present, there are no limits on spending on blue box subsidies.
 - ▶ **Green Box:** It falls under the permitted subsidies that cause minimal distortion, and typically includes those subsidies given to research and development (R&D), environmental protection and animal welfare.
 - ▶ **Market Access:** Market access refers to the reduction of tariff (or non-tariff) barriers to trade by WTO members. The 1995 Agreement on Agriculture required tariff reductions of:
 - ▶ 36% average reduction by developed countries, with a minimum per-tariff line reduction of 15% over six years.
 - ▶ 24% average reduction by developing countries with a minimum per-tariff line reduction of 10% over ten years.
 - ▶ Least developed countries (LDCs) were exempt from tariff reductions, but they either had to convert non-tariff barriers to tariffs or bind their tariffs, creating a ceiling that could not be increased in future.
 - ▶ **Export Subsidies:** The Agriculture Agreement prohibits export subsidies on agricultural products unless the subsidies are specified in a member's lists of commitments. Where they are listed, the agreement requires WTO members to cut both the amount of money they spend on export subsidies and the quantities of exports that receive subsidies.
- while at the same time, it allows rich countries to continue subsidising their farmers.
- ◉ The developed countries have cleverly classified most of the sops as non-trade distorting subsidies (green-box), which supposedly has minimal effect on world trade.
 - ◉ The developed countries also cornered the right to a lion's share in the total trade distorting subsidies (amber box) too.
 - ◉ This is possible as most developed countries have adopted the overall cap on subsidies instead of the product specific one (5%), which helps them better target sops for specific crops.
 - ◉ Most developing countries, on the other hand, cannot risk increasing the amber box subsidies to more than the 10 per cent of their total production value of a specific commodity as they could then be penalised.
 - ◉ This exposes the hypocrisy of the rich nations which highly subsidise their farmers but routinely reprimand countries such as India and China for their 'minimum support price' programmes for poor farmers.
 - ◉ It is unfair that even with low over-all subsidies, India has to worry about breaching the 10 per cent ceiling for rice once the food subsidy programme is fully implemented as it could then get into trouble.
 - ◉ The WTO's push towards globalisation threatens three dimensions of a sustainable and equitable agricultural policy, namely, ecological security, livelihood security and food security. Globalisation will adversely affect producers with low or no capital and investment.

◎ CONCLUSION

The implication of the arrangement was not well understood by countries during its negotiation but now it is seen as a hindrance to food security of developing countries. These unfair rules need to be challenged even if they seemingly have been democratically framed. India needs to keep up the momentum and adopt a more offensive posture by laying bare more such inequities in AoA, which is habitually brushed under the carpet by the powerful.

Issues with Agreement on Agriculture

- ◉ It reduces tariff protection for small farmers, which is a major income source in developing countries,

PRACTICE QUESTION

Q1: What is the peace clause under Agreement on Agriculture? Discuss the issues surrounding the subsidy system at WTO.

Q2: Critically examine the issue of legalising the minimum support price.

GLOBAL EMPLOYMENT LOSSES

CONTEXT

According to the recent report by International Labour Organisation (ILO), says that the number of hours worked globally dropped in the first quarter of 2022.

- It further dropped to 3.8% below the employment situation before the pandemic.

◎ BACKGROUND

- The fresh lockdowns in China, the conflict between Ukraine and Russia, and the global rise in the prices of food and fuel are cited as the main reasons for such findings of the report.
- Financial turbulence, potential debt distress and global supply chain disruption points at a growing risk of a further deterioration in hours worked in 2022.
- The “great and growing divergence between richer and poorer economies” continues to characterise the recovery, which is the cause of concern for the society.
- While high-income countries experienced a recovery in hours worked, low- and lower-middle-income economies suffered setbacks in the first quarter of the year with a 3.6 and 5.7 per cent gap respectively when compared to the pre-crisis benchmark.
- This information shows the need to analyse the reason for its happening, under various global as well as internal factors for India.

◎ ANALYSIS

Global scenario

- After significant gains during the last quarter of 2021, the number of hours worked globally dropped in the first quarter of 2022, to 3.8% below the employment situation.
- Job loss:** About 11.2 crore jobs might have been lost during this period, according to the report.
- The growing divergence between richer and poorer economies:** While high-income countries experienced a recovery in hours worked, low- and lower-middle-income economies suffered setbacks in the first quarter of the year with a 3.6 % and 5.7% gap respectively when compared to the pre-crisis benchmark.
- Reason for reduction of working hours:** The fresh lockdowns in China, the conflict between Ukraine and Russia, and the global rise in the prices of food and fuel.

- Financial turbulence, potential debt distress and global supply chain disruptions are growing risks of a further deterioration in working hours in 2022.

Findings related to India

- Job loss:** For every 100 women at work prior to the pandemic, 12.3 women would have lost their job as an average through the entire period. In contrast, for every 100 men, the equivalent figure would have been 7.5.
 - Hence, the pandemic seems to have exacerbated the already substantial gender imbalances in employment participation in the country.
- Deterioration of the gender gap in work hours:** India and lower-middle-income countries excluding India experienced a deterioration of the gender gap in work hours in the second quarter of 2020.
- Working standards:** The report mentions that there is no decent employment in India. This is because:
 - Most people are on contract without any social security. If there are no decent wages, purchasing power will also come down,
 - The Code on Wages was passed in 2019 but is not yet implemented,
 - The Wage Committee in 1948 asked the government to implement a minimum wage, living wage and a decent wage. But, India did not implement even minimum wage due to pressure from industrialists.

About International Labour Organization

- The International Labour Organization (ILO) is a United Nations agency whose mandate is to advance social and economic justice through setting international labour standards. Founded in October 1919 under the League of Nations, it is the first and oldest specialised agency of the UN. The ILO has **187 member states**: 186 out of 193 UN member states plus the Cook Islands.
- It is headquartered in **Geneva, Switzerland**.
- Working:** Within the UN system the organization has a unique **tripartite structure**: all standards, policies, and programmes require discussion and

approval from the representatives of governments, employers, and workers. This framework is maintained in the ILO's three main bodies:

- ▶ **The International Labour Conference**, which meets annually to formulate international labour standards;
- ▶ **the Governing Body**, which serves as the executive council and decides the agency's policy and budget; and
- ▶ **The International Labour Office**, the permanent secretariat that administers the organization and implements activities.

Challenges for India

- **Social Factors:** In India the caste system is prevalent. The work is prohibited for specific castes in some areas.
- **Rapid Growth of Population:** Constant increase in population has been a big problem in India.
 - ▶ It is one of the main cause of unemployment and a tragedy to job losses.
- **Dominance of Agriculture:** Still in India nearly half of the workforce is dependent on Agriculture.
 - ▶ However, Agriculture is underdeveloped in India.
 - ▶ Also, it provides seasonal employment. Thus job losses will make people deprive of alternatives for other employment.
- **Fall of Cottage and Small industries:** The industrial development had adverse effects on cottage and small industries.
 - ▶ The production of cottage industries began to fall and many artisans became unemployed.
- **Immobility of Labour:** Mobility of labour in India is low. Factors like language, religion, and climate are also responsible for low mobility.
- **Defects in Education System:** Jobs in the capitalist world have become highly specialised but India's education system does not provide the right training and specialisation needed for these jobs.
 - ▶ Thus many people who are willing to work become unemployed due to lack of skills.

Scope of Improvement

- **Promoting Labour Intensive Industries:** There are a number of labour intensive manufacturing

sectors in India such as food processing, leather and footwear, wood manufacturers and furniture, textiles and apparel and garments.

- ▶ Special packages, individually designed for each industry are needed to create jobs.
- **Decentralisation of Industries:** Decentralisation of Industrial activities is necessary so that people of every region get employment.
 - ▶ Development of the rural areas will help mitigate the migration of the rural people to the urban areas thus decreasing the pressure on the urban area jobs.
- **Drafting National Employment Policy:** There is a need for a National Employment Policy (NEP) that would encompass a set of multidimensional interventions covering a whole range of social and economic issues affecting many policy spheres and not just the areas of labour and employment.
- The underlying principles for the National Employment Policy may include:
 - Enhancing human capital through skill development.
 - Creating sufficient number of decent quality jobs for all citizens in the formal and informal sectors to absorb those who are available and willing to work.
 - Strengthening social cohesion and equity in the labour market.
 - Coherence and convergence in various initiatives taken by the government.
 - Supporting the private sector to become the major investor in productive enterprises.
 - Supporting self-employed persons by strengthening their capabilities to improve their earnings.

CONCLUSION

The gender gap in India's employment scenario is mentioned in the report on the "world of work". But we have a chance to improve our position by willing to consider the loopholes with collective efforts of Government and community.

PRACTICE QUESTION

Q1: Discuss the issue of unemployment in India. What India should do to check rising unemployment?

Q2: "Increasing Female LFPR in India is crucial not just to achieve economic growth but also to promote inclusive growth". Comment.

INFRA PROJECTS TO BE ROUTED THROUGH NPG

CONTEXT

The Department for Promotion of Industry and Internal Trade (DPIIT) will make all logistics and connectivity infrastructure projects to route through the Network planning group (NPG).

- NPG was constituted under the PM Gati Shakti initiative.

◎ BACKGROUND

- Traditionally, there was lack of coordination between different Departments.
- For example, once a road was constructed, other agencies dug up the constructed road again for activities like laying of underground cables, gas pipelines etc.
- To address this, efforts were made to increase coordination so that all the work could be done simultaneously.
- Steps have also been taken to address other issues like time-taking approval process, multiplicity of regulatory clearances etc.
- In the last few years, the Government has ensured unprecedented focus on infrastructure through a holistic outlook. This helps to address the past issues through institutionalizing holistic planning for stakeholders for major infrastructure projects.
- Instead of planning & designing separately in silos, the projects will be designed and executed with a common vision.

What are Network Planning Groups?

- NPG consists of heads of the network planning wing of respective infrastructure ministries and it will assist the **empowered group of secretaries (EGOS)**, which is headed by the cabinet secretary.
- EGOS consist of secretaries of **18 ministries as members** and Head of Logistics Division, under the DPIIT, as member convenor.

Key highlights of the initiative

- GatiShakti is a digital platform that will bring **16 ministries** including railways and roadways together for integrated planning and coordinated implementation of infrastructure connectivity projects.
- This will help in removing long-

standing issues such as disjointed planning, lack of standardization, problems with clearances, and timely creation and utilization of infrastructure capacities.

- It will also allow various government departments to track, in **real-time** and at **one centralized place**, the progress of various projects.
- It will help different departments to prioritize their projects through **cross-sectoral interactions**.
- The GatiShakti platform aims to prevent **overlapping of works by addressing** the issue of government departments working in tandem.
- By incorporating infrastructure schemes under various ministries and states, the platform aims at boosting last-mile connectivity bringing down logistics costs with integrated planning and reducing implementation overlaps.
- A project monitoring group under the Department

GatiShakti | myGov
National Master Plan for Multi-Modal Connectivity
गति शक्ति

**Pragati Ki Gati
Bharat Ki Shakti**

**Connecting
Pillars of
New India**

- To cover infrastructure initiatives like Bharatmala, Sagarmala, Ports, UDAN, Economic Zones, Railways etc
- Social infrastructure such as hospitals, universities to be integrated in the next phase
- To develop new possibilities for the creation of future economic zones

of Promotion of industry and Internal trade (DPIIT) will monitor the progress of key projects in real-time.

- ▶ They will also report any **inter-ministerial issues to a group of ministries**, who will then aim to resolve these.

PM Gati Shakti

- **PM Gati Shakti is based on six pillars:**

- ▶ **Comprehensiveness:** It will include all the existing and planned initiatives of various Ministries and Departments with one centralized portal.
- ▶ **Prioritization:** Through this, different Departments will be able to prioritize their projects through cross-sectoral interactions.
- ▶ **Optimization:** The National Master Plan will assist different ministries in planning for projects after identification of critical gaps.
- ▶ **Synchronization:** Individual Ministries and Departments often work in silos. There is lack of coordination in planning and implementation of the project resulting in delays.
- ▶ PM Gati Shakti will help in synchronizing the activities of each department, as well as of different layers of governance, in a holistic manner by ensuring coordination of work between them.
- ▶ **Analytical:** The plan will provide the entire data at one place with GIS based spatial planning and analytical tools having 200+ layers, enabling better visibility to the executing agency.
- ▶ **Dynamic:** All Ministries and Departments will now be able to visualize, review and monitor the progress of cross-sectoral projects, through the GIS platform, as the satellite imagery will give on-ground progress periodically and progress of the projects will be updated on a regular basis on the portal.

Need of the initiative

- To address the wide gap between macro planning and micro implementation due to the lack of coordination and advanced information sharing as departments think and work in silos.
- As per reports, studies estimate the logistics costs in India at about 13-14% of GDP as against about 7-8% in developed economies. With this high logistical cost, the competitiveness of India's exports is greatly reduced.
- It will increase economic activities and create employment on a large scale due to the creation of quality infrastructure for sustainable development.
- The scheme is in synergy with the National Monetisation Pipeline (NMP) which was announced to provide a clear framework for monetization and give potential investors a ready list of assets to generate investor interest.
- A holistic and integrated transport connectivity strategy will greatly support 'Make in India' and integrate different modes of transport.
- Another push for such a scheme was the lack of demand in the post-Covid-19 scenario, which in turn led to a lack of private demand and investment demand.
- Due to land acquisition delays and litigation issues, the rate of implementation of projects is very slow on global standards- issues that the scheme will address.

◎ CONCLUSION

PM Gati Shakti scheme is a move in the right direction, but it needs to address structural and macroeconomic stability concerns arising from high public expenditure. Thus, this initiative must be supported by a stable and predictable regulatory and institutional framework.

PRACTICE QUESTION

- Q1: What is the network planning group envisaged under PM Gati Shakti? Highlighting its function, discuss the concerns associated with it.**
- Q2: What are the six pillars of PM Gati Shakti? Discuss the significance of PM Gati Shakti for the Indian economic growth.**

WORLD ECONOMIC FORUM

CONTEXT:

Nearly 100 CEOs and over a dozen government leaders are attending the rare springtime annual meeting of World Economic Forum (WEF). Indian contingent are attending the meeting to share the story of fighting pandemic and attract more investments.

◎ BACKGROUND:

- It was established in 1971 as a not-for-profit foundation and is headquartered in Geneva, Switzerland.
- It is independent, impartial and not tied to any special interests.
- Formerly known as European Management Forum, in 1987 the name was changed to World Economic Forum.
- This meeting was held under the European Commission and European industrial associations to introduce the European firms to American management practices.
- Later, Klaus Schwab founded the World Economic Fund as a nonprofit organization and conducted the annual meetings to draw European business leaders to Davos.
- Recent geopolitical dynamics and health emergencies imposed the centrality of shared values to work together and restore trust among the nations.
- From supply chain resilience infrastructure to vaccine equitable policy, WEF annual meeting of WEF has involved various stakeholders to curb the potential threats and attain the targets of SDGs.

◎ ANALYSIS:

World economic forum and its role:

- The world economic forum is the international organization for public-private cooperation.
- The forum engages the foremost political, business, cultural and other leaders of society to shape global, regional and industrial agendas.
- The forum strives in all its efforts to demonstrate entrepreneurship in the global public interest while upholding the highest standards of governance. Moral and intellectual integrity is the prime objective of its every actions.
- Activities of the forum are shaped by a unique institutional culture founded on the stakeholder theory, which asserts that an organization is accountable to all parts of society.

- The institution carefully blends and balances the best of many kinds of organizations, from both public and private sectors, international organizations and academic institutions.

Theme and key agendas of 2022

● Working together and restoring trust:

- ▶ Under the theme, 'working together and restoring trust', the annual meeting of world economic forum is taking place at the most consequential geopolitical and geo-economic moment of the past three decades and against the backdrop of a once-in-a-century pandemic.
- Other highlighted agendas:
 - ▶ Climate and nature
 - ▶ Fairer economies
 - ▶ Tech and innovation
 - ▶ Jobs and skills
 - ▶ Better business
 - ▶ Health and health care
 - ▶ Global cooperation
 - ▶ Society and equity
- Other key dimensions which will dominate the five-day events are crypto currencies, role of multilateralism and rising costs across the world.

Key highlights of the meeting:

- Addressing urgent humanitarian and security challenges as they simultaneously advance long-standing economic, environmental and societal priorities – all while reinforcing the foundations of a stable global system.
- Clarity of vision and unity of purpose will be crucial for making progress against the unprecedented complexity of a multipolar world.
- The focus is on setting strategies for impact, building new frontiers, creating viable future scenarios and providing ambitious solutions to the world's biggest issues.
- Pandemic response: while confronting the ongoing pandemic, vaccine and vaccine equity gained the significant highlight to end the pandemic.

- Economic recovery: the economy was also front and centre during discussions at Davos agenda 2022, with world leaders commenting on the impact of the pandemic on economies and the ongoing efforts toward recovery.
- Climate action: building on the momentum from cop26, speakers at 2022 Davos agenda argued for the need for climate action in no uncertain terms.
- Technological innovation: the covid-19 pandemic accelerated many of the digital transformations of the fourth industrial revolution across industries, a trend that will continue in the year ahead. At Davos agenda 2022, has underlined the key role of technology and were optimistic about the potential for tech to help address global problems.
- Global collaboration: underpinning all the conversations at the Davos agenda 2022 was the power of global collaboration, which involves stakeholders from the public, private and civil societies.

India and world economic forum:

- This year, with the world economic forum's 50th anniversary India is also celebrating its 35 years of collaboration with the forum, providing an opportunity for India to showcase its unified presence.
- World economic forum could provide a potential platform to project India as an important and relevant stakeholder in shaping global initiative. Also as an attractive destination in view of its robust

economic growth and stable macroeconomic indicators.

- To mark 75 years of independence, 'Azaadi ka Amrit Mahotsav', DPIIT has taken initiative to have a consolidated presence at WEF, 2022.

Reports by world economic forum and India's status:

- Energy transition index: India ranked at 87th position out of 110 countries.
- Global competitiveness report: India is standing at 68th position in global competitiveness report, 2019.
- Global gender gap report: India ranked at 140th place out 156 countries
- Global risk report: India has ranked 7th position
- Global travel and tourism report: India has been placed at 54th place.

◎ CONCLUSION:

The philosophy of collective action has endured for more than 50 years and it has never been more needed than now. The meeting is the starting point for a new era of global responsibility and cooperation. Over the past two years, the WEF has strengthened its impact initiatives, which deal with issues ranging from COVID-19 and climate change to education as well as technology and energy governance.

PRACTICE QUESTION

Q1: Discuss the key constraints in attracting foreign investors to India? What are the recent initiatives taken by the government to increase the inflow of foreign investment in the country? Examine.

Q2: FDI is crucial for India to realise its goal of \$5 trillion economy but it is not the sole solution for its socio-economic issues. Comment.

WHAT IS LOC?

CONTEXT:

The Punjab and Haryana High Court recently quashing a Look Out Circular (LOC) against the petitioner and passed instructions to the respondents including the Ministry of Home Affairs (MHA) and the Bureau of Immigration (BOI).

What was the order of Punjab and Haryana High Court with respect to Look Out Circular?

- The court asked the affected persons to be served with a copy of the LOC and statement of reasons for issuing the LOC "as soon as possible" and provide a "post-decisional opportunity".
- The court also directed the MHA to include these directions in the "Official Memorandum" or the guidelines that govern the opening of LOCs.

What is LOC?

- Lookout Notices are also known as Lookout Circulars (LOC), which are opened to trace absconding criminals. Also, to effectively prevent and monitor the entry and exit of individuals who may be required by law enforcement authorities.
- Bureau of Immigration (BOI) under the MHA is only the executing agency.
- BOI generate LOCs based on requests by different agencies.

What are the basic guidelines regarding the issuance of LOC?

- The request to issue LOC must be issued with the approval of an officer, not below the rank of Deputy Secretary to the Government of India/Joint Secretary in the State Government/Superintendent of Police concerned at the district level.
- Lookout Notice for all **immigration check posts against any Indian person can be issued only in the format prepared by the Home Ministry.**
- The notice issuing agency must give full identification details of the accused person in an

already prescribed format. LOC will not be issued for less than three identity parameters other than the name of the accused.

- Generally Lookout Notice is valid for one year from the date of issue.
- However, if the originating agency wants to increase the period of this notice, it may do so before the completion of one year.
- **Since 2011** a rule made that if no request is made for the extension of the LOC within the stipulated period of one year, the concerned Immigration officer is authorised to suspend the LOC.
- According to a 2010 official memorandum of the Ministry, details such as First Information Report (FIR) number, court case number are to be mandatorily provided with name, passport number and other details.

How can Modification of LOCs happen?

- The LOCs can be modified; deleted or withdrawn only at the request of the originator. The legal liability of the action taken by immigration authorities in pursuance of LOC rests with the originating agency.

What are remedial measures for individuals against LOCs?

- The MHA has asserted that "LOCs cannot be shown to the subject" at the time of detention nor can any prior intimation be provided. Further, no accused or subject of LOC can be provided with any opportunity of hearing before the issuance of the LOC since it defeats the purpose of LOC.

PRACTICE QUESTION

- Q1: What is a look out circular and who can issue it? What are the prerequisites for issuing a look out circular?**
- Q2: The issuance of look out circular remains highly discretionary, and the exercise of power under it remains questionable. Explain.**

SECTION: B

(PRELIMS)

CURRENT AFFAIRS

To Attempt
Weekly Current Affairs Test, Visit

www.iasscore.in

MELATTUR BHAGAVATAMELA

◎ CONTEXT:

The 82nd year Bhagavata Mela Nataka Mahotsav, organised by Melattur Bhagavata Mela Natya Nataka Sangam, will take place at Sri Varadaraja Perumal Sannidhi, Melattur, near Thanjavur.

About Bhagavata Mela Nataka Mahotsav:

- The little village of **Melattur**, 18 kms from Thanjavur in Tamil Nadu, rises a spurt of feverish activity every mid-summer during the **BhagavataMelaNatakaUtsav**.
- It is organised in the sannidhi of **Lord Sri Varadaraja**, the presiding deity of the village, on the occasion of **Sri Nrusimha Jayanti**.
- The BhagavataMelatradition, is believed to be in existence from the 11th Century.
- The **unique features** of MelatturBhagavataMelanatakams are:
 - It is a pious art.
 - This day, it is the **only surviving link in Tamil Nadu that connects us with our ancient Sanskrit theatre**.
 - It came into being as result of Bhakti movement about 450 years ago.
 - The tradition is still preserved in its pristine purity as a true temple art, in the worship Lord Vishnu.
 - The natakams, **dedicated to Lord Sri Vishnu**, are performed annually with religious fervour in the sannidhi of **Sri VaradarajaPerumal temple at Melattur** on the occasion of Nrusimha Jayanti, as has been the practice for centuries.
 - This art is a **unique blend of Bhakti, music, dance and drama**.
 - The utsav is a **balance between true/pure devotion and aesthetic display of traditional art**.
- **Only male artists portray the female roles.**



Male artists portray female roles

- **Kuchipudi tradition originated as a type of BhagavataMelaNatakam**, a dramatic sadhana dedicated to the worship of Vishnu.
- The structure of the dance-drama follows the **Sanskriticand the Shastric** conventions.
 - There are songs, dances, dialogues and speeches inthe **gradual unfolding** of the play.
 - The **gestures and postures** (angika), **words** (vachika) and the **representation of temperament** (sattvika), **costumes and decorations** and make-up (aharya)- all these elements give Natya its characteristic form.

- The technique of BhagavataMelaNataka incorporates all the three aspects of the histrionic art as expounded in the Natyashastra treatises.
 - **Nritta**(pure dance), **Nritya** (expressional dance) and **Natya** (drama) find sufficient scope in the enactment of the dance-dramas.

RAM MOHAN ROY 250 YEARS

◎ CONTEXT:

Union Culture Ministry will commemorate the 250th Birth Anniversary of Raja Ram Mohan Roy till 22nd of May next year under the aegis of 'AzadiKaAmritMahotsav'.

About Raja Ram Mohan Roy

- Raja Ram Mohan Roy was an Indian religious, social, and educational reformer.
- He was born on May 22, 1772, in Radhanagar in Bengal.
- He is famously known as the "Father of Modern India" or "Father of the Bengal Renaissance".
- He was one of the founders of the Brahma Sabha in 1828, the precursor of the BrahmaSamaj, a social-religious reform movement.
- He crusaded against Hindu customs such as sati, polygamy, child marriage and the caste system.
 - He demanded property inheritance rights for women.
- In 1817, in collaboration with David Hare, he set up the Hindu College at Calcutta.
- In 1830, Ram Mohan Roy traveled to the United Kingdom as an ambassador of the Mughal Empire to ensure that Lord William Bentinck's Bengal Sati Regulation, 1829 banning the practice of Sati was not overturned.
- His most popular journal was the SambadKaumudi.
 - It covered topics like freedom of the press, induction of Indians into high ranks of service, and separation of the executive and judiciary.
- He was given the title of **Raja by Akbar II, the Mughal emperor**.

THE SELA TUNNEL – IMPORTANCE AND THE STRATEGIC EDGE IT PROMISES

◎ CONTEXT:

The strategically-significant Sela Tunnel project in Arunachal Pradesh is nearing completion.

Sela Tunnel project:

- The project, being executed by the **Border Roads Organisation**, includes **two tunnels and a link road**.
- While Tunnel 1 will be 980 metres long single-tube, Tunnel 2 will be 1,555 metres with one bi-lane tube for traffic and one escape tube for emergencies running alongside.
 - The link road between the two tunnels will be 1,200 metres.
- Tunnel 2 will be one of the longest tunnels to have been constructed above an altitude of over 13,000 feet.
- The **total length of the project**, including the tunnels, the approach and the link roads, will be **around 12 km**.

Where is it being constructed?

- Located in **West Kameng** district of **Arunachal Pradesh**, the tunnel project will provide an alternate axis to the **Sela pass**, which is at 13,700 feet.
- It will be on the BCT Road – the **Balipara, Charduar and Tawang axis**, which is more than 300 km long.

Importance of the tunnel:

- **All-weather connectivity to Tawang** and other forward areas in the sector will be the most important advantage that the project promises.
- At the moment, Sela pass stays closed for a few winter months.
- The project will provide a new alignment on the axis towards the LAC, and allow movement of military and civil vehicles all through the year.
 - It will **strengthen national security**.
- This tunnel will work to strengthen the **socio-economic condition of the citizens** by bringing a big change in the transport facility of the local population.



DISCOVERY OF A PRIMITIVE FOREST AT THE BOTTOM OF A GIANT SINKHOLE IN CHINA

◎ CONTEXT:

A cave exploration team has discovered an ancient forest at the bottom of a giant karst sinkhole in Leye County in south China's Guangxi Zhuang Autonomous Region.

About:

- The sinkhole measures 306 metres in length, is 150 metres in width and 192 metres in depth, with its volume exceeding 5 million cubic meters.
- Given these dimensions, the sinkhole can be categorised as a large sinkhole.

- In Mandarin, giant sinkholes are called Tiankeng or “heavenly pit”.

About Sinkhole:

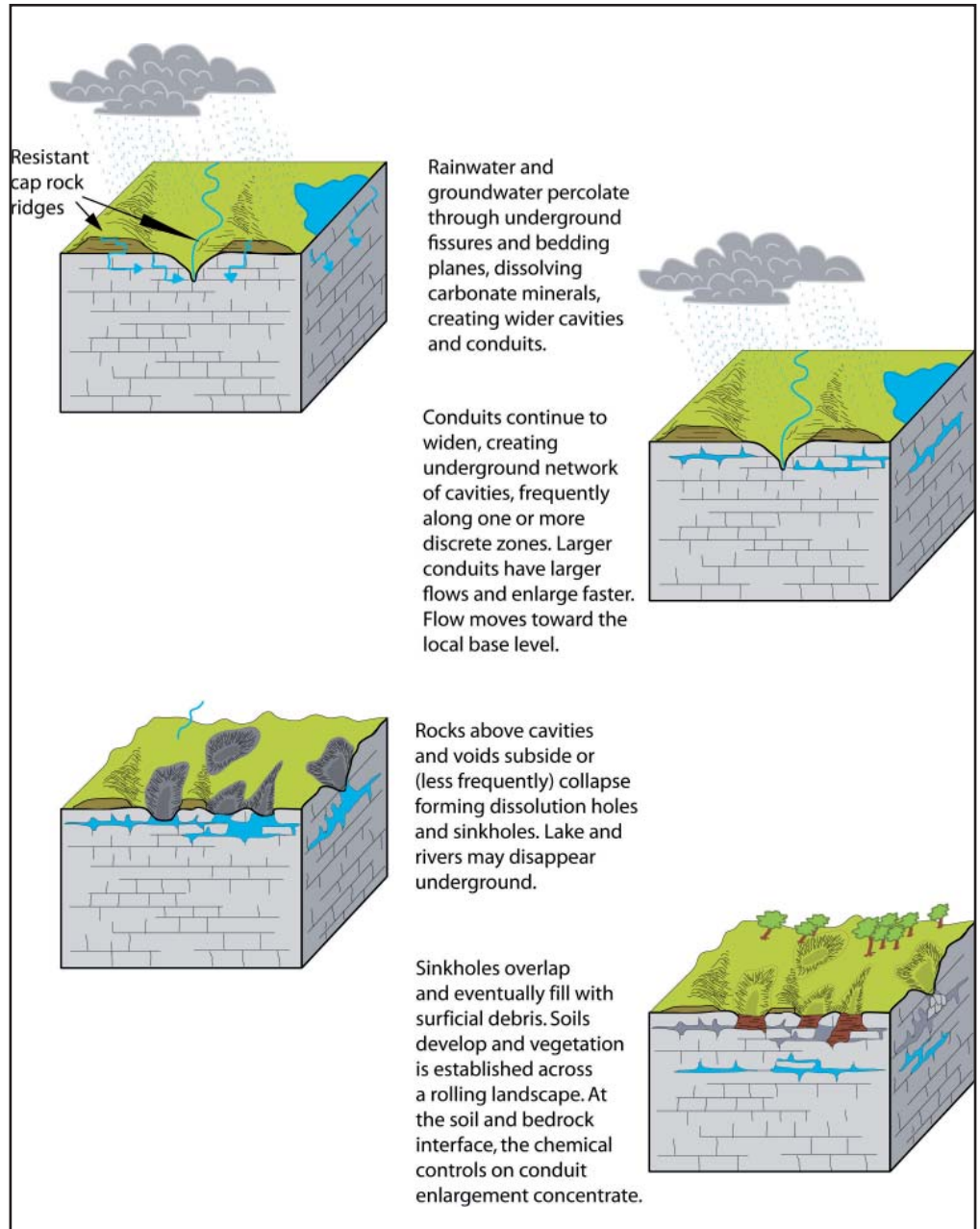
- Sinkholes are depressions formed in the ground when layers of the Earth’s surface start collapsing into caverns.
- They can occur suddenly and without warning, because the land under the surface of the Earth can stay intact for a period of time until the spaces get too big.
- Sinkholes can be formed **due to natural processes or human activity**.
- Typically, sinkholes form in **areas of “karst” terrains**, where the rock below the surface of the Earth can be easily dissolved by groundwater.
- Essentially, this means that when rainwater seeps into the ground, the rock below the surface of the Earth starts dissolving, leading to the creation of spaces.
 - This process is a slow and gradual one and can sometimes take hundreds or thousands of years.
- As per NASA, karst geology covers about 13 per cent of eastern and south-eastern Asia.
- Karst terrain is created from the dissolution of soluble rocks, mostly limestone and dolomite and is characterised by distinctive landforms such as caves, sinkholes and springs.



Karst Landscape:

- Karst is an area of **land made up of limestone**.
 - Limestone, also known as chalk or calcium carbonate, is a soft rock that dissolves in water.
 - As rainwater seeps into the rock, it slowly erodes.
 - Karst landscapes can be worn away from the top or dissolved from a weak point inside the rock.
- Karst landscapes **feature caves, underground streams and sinkholes on the surface**.
 - Where erosion has worn away the land above ground, steep rocky cliffs are visible.
- **Shilin** is a karst formation in southern China. In Chinese, shilin means stone forest.

- Shilin got its name because the tall rocks that formed due to erosion look like stone trees.
- Shilin is part of a larger karst landscape called the South China Karst, which spreads across the Chinese provinces of Guangxi, Guizhou, and Yunnan.



GOVERNOR IS A SHORTHAND FOR STATE GOVT: SC

© **CONTEXT:**

The Governor of a State is “but a shorthand expression for the State government” while exercising powers of clemency under Article 161 of the Constitution, the Supreme Court said in its judgment releasing Rajiv Gandhi assassination case convict A.G. Perarivalan recently.

Key observations made by SC in Perarivalan Case:

- SC highlighted that the Governor's powers are qualified by the constitutional mandate, chiefly requiring them to act in aid and advice of the council of ministers.
- Supreme Court clearly demarcated the spheres of powers of not only the Governor but also that of a state government to dispel the daze, citing the pertinent constitutional provisions.
- The Apex Court further reckoned that the reference made by the Governor to the President was contrary to the scheme of the Constitution.
- The advice of the State Cabinet is binding on the Governor in matters relating to commutation / remission of sentences under Article 161.
- In the instant case, the Governor ought not to have sent the recommendation made by the State Cabinet to the President of India.
 - Such action is contrary to the constitutional scheme elaborated above.
- As per Article 161, the Governor of a State shall have the power to grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or commute the sentence of any person convicted of any offence against any law relating to a matter to which the executive power of the State extends.
- Governor occupies the position of the head of the executive in the State but it is virtually the Council of Ministers in each State that carries on the executive Government.
 - The court also pointed out that the **Council of Ministers is "a hyphen which joins, a buckle which fastens the legislative part of the State to the executive part"**.
- SC observed that Perarivalan was considered to have served his sentence in exercise of their "power under Article 142 of the Constitution" and ordered his release.

GOVT FLAGGED LOW SCORE IN WORLD BANK'S GOVERNANCE INDEX

◎ CONTEXT:

In an analysis of the World Bank's World Governance Indicators, a key input for India's sovereign ratings, a presentation by the Ministry of Finance's Economic Division found that India's scores were "much below" its peers on all counts.

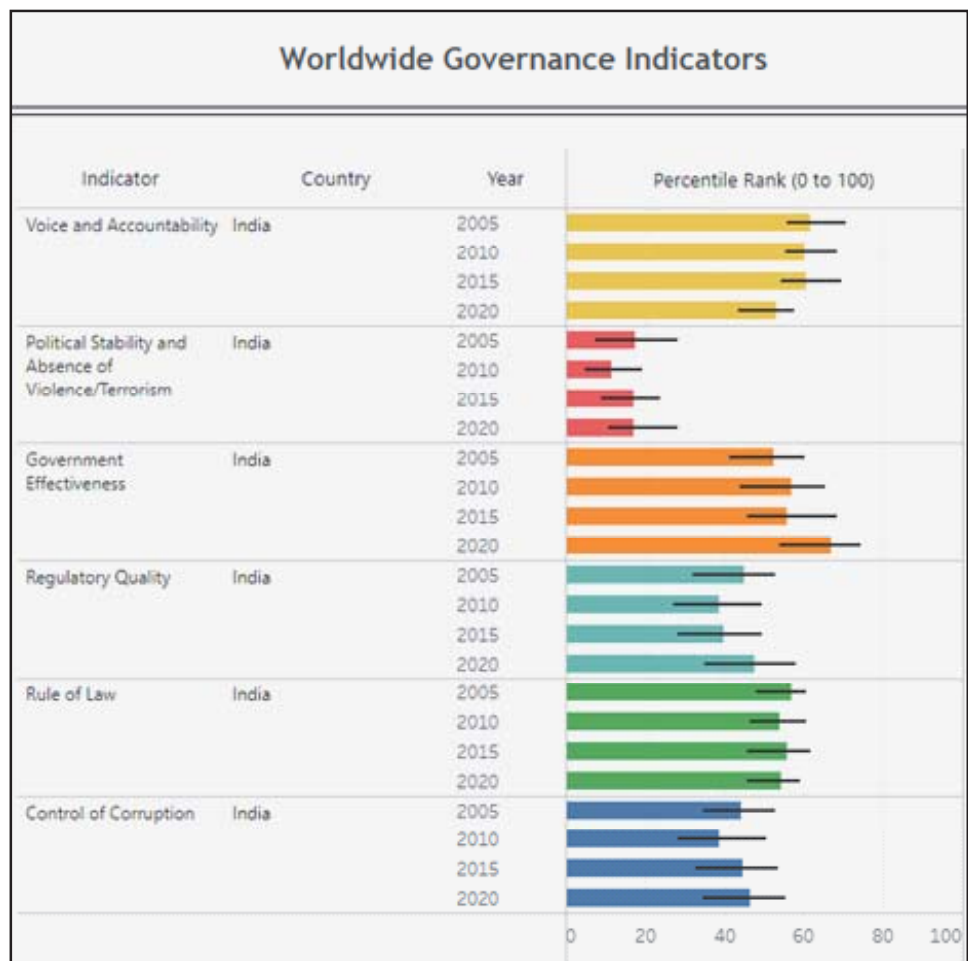
About World Bank's World Governance Indicators:

- The World Bank's World Governance Indicators provide a ranking of 215 countries territories based on **six dimensions of governance**:
 - Voice and Accountability;
 - Political Stability and Absence of Violence;
 - Government Effectiveness;
 - Regulatory Quality;
 - Rule of Law and
 - Control of Corruption.
- These aggregate indicators combine the views of a large number of enterprise, citizen and expert survey respondents in industrial and developing countries.
- **India's WGI score:** It is much below the BBB Median on all six indicators.
 - While BBB is an investment-grade rating issued by global rating agencies such as S&P and Fitch.

- A WGI score below BBB Median would suggest that India falls below the middle when the scores of countries are arranged in a descending order.
- WGI play a key role in deciding sovereign credit rating of any country. India is losing its sovereign credit rating due to low score in WGI parameters.

Governance: (as defined by WGI)

- Governance consists of the **traditions and institutions** by which **authority in a country is exercised**.
- This includes:
 - ▶ the process by which **governments are selected, monitored and replaced**;
 - ▶ the capacity of the government to **effectively formulate and implement sound policies; and**
 - ▶ the **respect of citizens** and **the state** for the institutions that govern economic and social interactions among them



CENTRE RECONSTITUTES INTERSTATE COUNCIL

- ◉ **CONTEXT:** The Centre has reconstituted the Inter-State Council, which works to promote cooperative federalism.

About:

- The government has reconstituted the Inter-State Council, with Prime Minister Narendra Modi as its chairman, Union Home Minister Amit Shah as head of the standing committee, and the Chief Ministers of all states and six Union Ministers as its members.
- The mandate of the council is to create a strong institutional framework to promote and support cooperative federalism in the country, activate the council and zonal councils by organising its regular meetings.
- It also facilitates consideration of all pending and emerging issues of the centre- state and inter-state relations by the zonal councils and inter-state council and develop a sound system of monitoring the implementation of the recommendations of the inter-state council and zonal councils.

About Inter-State Council

- **Article 263** of the Constitution of India provides for the establishment of an Inter-State Council.
- It is a **constitutional body** that has representatives of the Union government as well as chief ministers of states.
- The Council is **not a permanent constitutional body** for coordination between the states and the Center.
 - Instead, the President can establish the council at any time if it appears to him that the public interests would be served by the establishment of such a council.
- **Mandate:** To inquire and advise on interstate disputes and to provide recommendations for better policy coordination.
- **Chaired by:** The Prime Minister.
- **Members:**
 - Chief Ministers of all the States and Union Territories with Assembly,
 - the Administrators of the Union Territories without Assembly,
 - the Governors of the States under the rule of the President,
 - the six Ministers in the Cabinet, including the home minister, to be nominated by the PM, and
 - Five ministers of the cabinet rank are permanent invitees of the council.
- **Meetings and decisions:** The council meeting are supposed to be held thrice a year and its decisions on all questions are decided by consensus.
- **Formation of Standing committee:** A standing committee of the council was set up in 1996 for continuous consultation and processing of matters for the consideration of the council.
 - The chairman of this standing committee is Union Home Minister.

DODA TO HOST LAVENDER FESTIVAL

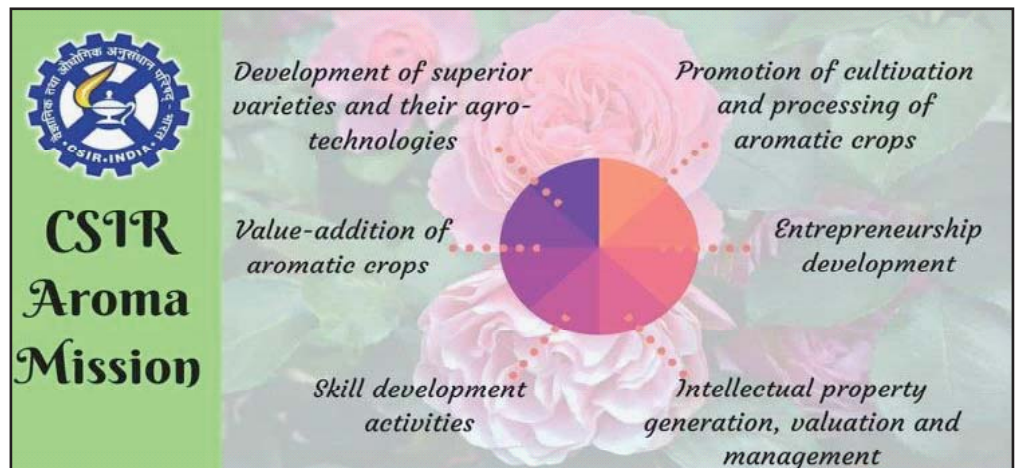
◎ CONTEXT:

The Council of Scientific and Industrial Research-Indian Institute of Integrative Medicine (CSIR-IIIM) will organise a festival to promote lavender in Baderwah (Doda district) of Jammu and Kashmir.

CSIR- Aroma Mission:

- The CSIR-AROMA Mission aims to develop and disseminate the aroma-related science and technology to reach the end users / clients of CSIR: Farmers, industry and society.

- The mission aims to bring additional area under captive cultivation of aromatic cash crops, particularly targeting rain-fed and degraded land across the country besides aiming to provide technical and infra-structural support for distillation and value additions to farmers and growers all over the country.
- The Mission also aims to enable effective buy-back mechanisms to assure remunerative prices to the farmers and growers besides aiming to achieving value-addition to essential oils and aroma ingredients for their integration into global trade and economy.
- It provided free quality planting material and end-to-end technology package on cultivation, processing, value addition and marketing of the Lavender crop to the farmers.



About Lavender:

- A Mediterranean native, **Lavender (Lavandulaspica) is an aromatic and herbal shrub.**
- Highly perfumed and beautiful flowers of the plant come in a variety of colors, for example, violet, blue, pink, mauve, and white can prove an excellent addition to your garden decor.
- The plant is perennial and requires a dry and sunny climate to grow.
- It is usually cultivated in regions with less rainfall.
- The soil for growing these plants needs to be well-draining and rich in calcium carbonate content.

Lavender producing States

- At present, large-scale lavender cultivation is limited to Jammu & Kashmir but governments in Himachal Pradesh, Arunachal Pradesh and Uttarakhand are also encouraging their farmers to take up lavender.
- Small scale farming of the plant is already underway in these states.

Aroma Mission

- In 2016, the Centre launched Aroma Mission to boost cultivation of plants like lavender, rosemary and lemon grass and medicinal plants like ashwagandha and satavar which have aromatic medicinal properties.
- The state of Jammu and Kashmir was chosen for the implementation of the program, due to its peculiar climate, which is complimented by the presence of a growing market for the products of these plants, like aromatic oils.
- The mission was launched with the objective to move from imported aromatic oils to homegrown varieties.

- In February, 2021, Government announced Aroma Mission phase 2 after the success of the first phase.
- The mission is to increase lavender cultivation to 1,500 hectares within three years from now.

About CSIR

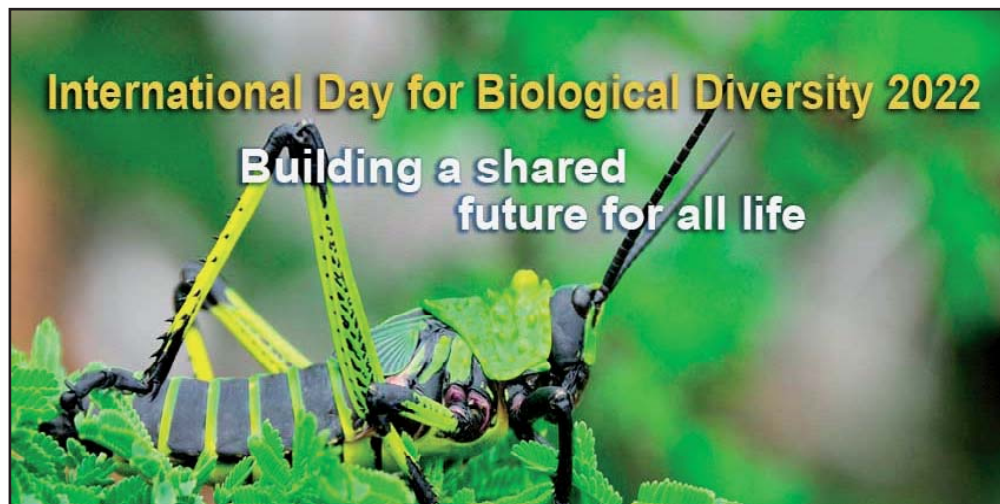
- The Council of Scientific & Industrial Research (CSIR), known for its cutting edge R&D knowledge base in diverse S&T areas, is a contemporary R&D organization.
- **Established:** September 1942
- **Located:** New Delhi
- CSIR is funded by the **Ministry of Science and Technology** and it operates as an autonomous body through the **Societies Registration Act, 1860**.
- CSIR covers a wide spectrum of streams – from radio and space physics, oceanography, geophysics, chemicals, drugs, genomics, biotechnology and nanotechnology to mining, aeronautics, instrumentation, environmental engineering and information technology.

INTERNATIONAL DAY OF BIODIVERSITY

© **CONTEXT:** **International Day for Biological Diversity is an annual event that takes place on May 22.**

The International Day for Biological Diversity (IDB):

- The **United Nations** has proclaimed **May 22** as the International Day for Biological Diversity (IDB) to increase understanding and awareness of biodiversity issues.
- It is an initiative taken by the United Nations **to protect the earth and the variety of lives on it.**
- International Day for Biological Diversity aims at raising awareness about the unprecedented environmental crisis that the world is facing and how to protect the biodiversity on earth.
- When first created by the Second Committee of the UN General Assembly in late 1993, 29 December (the date of entry into force of the Convention of Biological Diversity), was designated 'The International Day for Biological Diversity'.
- In December 2000, the UN General Assembly adopted 22 May as IDB, **to commemorate the adoption of** the text of the Convention on 22 May 1992 by **the Nairobi Final Act of the Conference for the Adoption of the Agreed Text of the Convention on Biological Diversity.**
- This was partly done because it was difficult for many countries to plan and carry out suitable celebrations for the date of 29 December, given the number of holidays that coincide around that time of year.
- **Theme for 2022:** Building a shared future for all life



NEW SPECIES OF VENOMOUS SNAKE

© **CONTEXT:**

The snake has been named *Maya's Pit Viper* after the deceased mother of an Army officer.

- The name of the pit viper, recognised as *Trimeresurus mayae*, is also believed to allude to *maya*, meaning the supernatural powers, or the illusion related to local legends.

About

- **Pit viper**, is the species of viper (subfamily Crotalinae) that has, in addition to two movable fangs, a heat-sensitive pit organ between each eye and nostril which together help it accurately aim its strike at its warm-blooded prey.
- Pit vipers are found from **deserts to rainforests**, primarily in the New World.
- They can be **terrestrial, arboreal, or aquatic**.
- Some species lay eggs and others produce live young ones.
- The snake measuring about 750 mm in length.



Why it is important?

- In a country where around 1.2 million people have lost their lives owing to snakebite and many more have lost their limbs in the last two decades.
- A discovery of a new venomous snake means a lot in the context of public health.
- Venom is a complex protein, mostly typical to a species and thus unravelling a new species will help understanding its venom and its impact on human life and perhaps will help save lives.

Snake bites in India

- The World Health Organization (WHO) estimates that about 5 million snakebites occur each year, resulting in up to 2.7 million envenoming.
 - Published reports suggest that between 81,000 and 138,000 deaths occur each year.
- Snakebite envenoming causes as many as 400,000 amputations and other permanent disabilities.
- Many snakebites go unreported, often because victims seek treatment from non-medical sources or do not have access to health care.
 - As a result it is believed that many cases of snakebite go unreported.
- Snake antivenoms are effective treatments to prevent or reverse most of the harmful effects of snakebite envenoming.
 - They are included in the **WHO Essential Medicines List** and should be part of any primary health-care package where snake bites occur.
- Unfortunately many people either lack access to antivenom, or cannot afford to pay for them.
- Many families sell possessions or go into debt in order to obtain antivenom after someone is bitten.
- WHO added snakebite envenoming to its priority list of **neglected tropical diseases (NTDs)** in June 2017.

Facts:

In India, around 90% of snakebites are caused by the 'big four' among the crawlers

- Common krait,
- Indian cobra,
- Russell's viper and
- Saw scaled viper.

WORLD ECONOMIC FORUM LAUNCHES ALLIANCE TO SUPERCHARGE INDIA'S CLIMATE ACTION

- © **CONTEXT:** The World Economic Forum recently launched Indian CEO's Alliance to supercharge India's climate action and decarbonization efforts which will further aid in realizing Prime Minister Narendra Modi's ambitious five-part 'Panchamrit' pledge.

About:

- Part of the World Economic Forum’s Climate Action Platform, the Alliance will continue efforts to achieve the vision outlined in the white paper released last year, “Mission 2070: A Green New Deal for a Net Zero India”, on India’s low-carbon transition by 2070.
- It will bring together the government, businesses, and other key stakeholders to achieve the Indian Prime Minister’s ambitious five-part ‘Panchamrit’ pledge, which includes the country’s net-zero carbon emission target by 2070.

Need:

- A just transition could generate annual business opportunities worth over \$10 trillion and create 395 million jobs by 2030 worldwide.
 - India alone could create more than 50 million net new jobs and generate over \$15 trillion in economic value.
- The government and business leaders from India have been stressing on the need for moving into the green energy space faster but in a calibrated as well as sustainable way.
- Also, a lot of emphasis is being given on green hydrogen and biofuels, while a number of consumer industries have been also vocal about using green energy sources with the right policy measures.

What are the five commitments PM Modi made at COP26?

- By 2030, India to bring its non-fossil energy capacity to 500 GW
- By 2070, India will achieve net-zero emissions
- Come 2030, India will fulfil 50 per cent of its energy requirement through renewable energy
- Come 2030, India will bring its economy's carbon intensity down to 45%
- By 2030, India will reduce 1 billion tonnes of carbon emissions from the total projected emissions



WORLD TURTLE'S DAY

© **CONTEXT:** World Turtle Day is observed on May 23.

About World Turtle Day:

- The day is celebrated to make people aware of turtle and tortoise and their habitats. This year is the 20th anniversary of World Turtle Day.
- Every year since 2000, American Tortoise Rescue (ATR), a nonprofit organization established in 1990, sponsors the celebrations for World Turtle Day.
- Wildlife enthusiasts can help scientists and conservationists by updating photos and information on turtles on the newly launched Kurma mobile application, launched on the occasion of World Turtle Day.
- A group of leading conservation agencies have come together to launch the citizen-science initiative, named the Indian Turtle Conservation Action Network (ITCAN).
- This provides a platform for the exchange of vital information on turtles, promises to engage the general public in ground data collection and provide assistance to enforcement agencies / forest departments.



HANSA-NG AIRCRAFT SUCCESSFULLY COMPLETED ENGINE RELIGHT TEST IN AIR

© **CONTEXT:** 'HANSA-NG' successfully completed in-flight engine relight test at the aeronautical test range (ATR) facility of Defence Research Development Organisation (DRDO) at Challakere in Karnataka's Chitradurga recently.

About HANSA-NG:

- 'HANSA-NG' is the new generation **two-seater flying trainer aircraft**.
- It is designed and **developed by Council for Scientific and Industrial Research (CSIR)-National Aerospace Laboratories (NAL)**.
- 'HANSA-NG' is designed to meet the Indian flying club needs and it is an ideal aircraft for commercial pilot licensing due to its low cost and fuel consumption.

- **Features:** The unique features of Hansa-NG are:
 - Glass cockpit with cabin comfort
 - Highly efficient digitally controlled engine
 - Electrically operated flaps
 - Long endurance
 - Low acquisition and low operating cost.

About the test:

- The in-flight engine relight test is the **most critical and important milestone towards certification of an aircraft** by the Directorate General of Civil Aviation (DGCA).
- The flight test was carried out at an **altitude of 7,000-8,000 feet** with a speed range of 60 to 70 knots.
- The aircraft handling characteristics and flight parameters were found to be normal during these test flights.

About National Aerospace Laboratories(NAL):

- NAL was established in **1959**.
- It is a constituent of the Council of Scientific and Industrial Research(CSIR).
- It is **India's only government-owned aerospace research and development laboratory in the civilian sector**.

About CSIR

- The Council of Scientific & Industrial Research (CSIR), known for its cutting edge R&D knowledge base in diverse S&T areas, is a contemporary R&D organization.
- Established: September 1942
- Located: New Delhi
- CSIR is funded by the Ministry of Science and Technology and it operates as an autonomous body through the Societies Registration Act, 1860.
- CSIR covers a wide spectrum of streams – from radio and space physics, oceanography, geophysics, chemicals, drugs, genomics, biotechnology and nanotechnology to mining, aeronautics, instrumentation, environmental engineering and information technology.

WHAT IS SUDDEN INFANT DEATH SYNDROME?

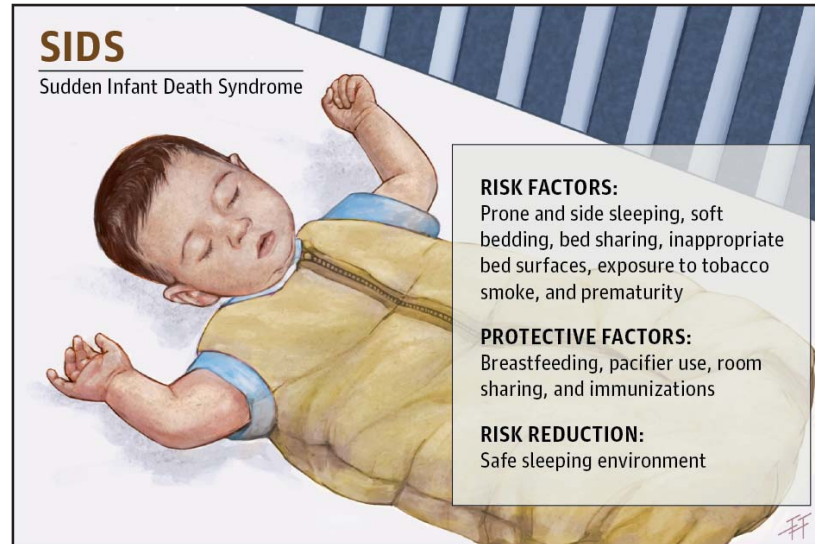
◎ CONTEXT:

A team of researchers in Australia has identified a biochemical marker in the blood that could help identify newborn babies at risk for the Sudden Infant Death Syndrome (SIDS).

Sudden Infant Death Syndrome (SIDS):

- Sudden infant death syndrome is the unexpected death of an apparently healthy infant.
- It usually occurs while the baby is asleep, although in rare cases, it can also occur while the child is awake.
- The condition is also called "cot death".
- Newborn babies delivered prematurely or with low weight at birth are believed to be at a greater risk of SIDS.

- The exact cause of SIDS is unknown, although revelations from the new research look promising.
- According to the NHS website, parents can reduce the risk of SIDS by not smoking while pregnant or after the baby is born and ensuring that the baby is placed on their back when they sleep.



Key findings of the research:

- According to the findings of the research, babies **who died of SIDS showed lower levels of the butyrylcholinesterase (BChE) enzyme** shortly after birth.
- A low level of the BChE enzyme affects a sleeping infant's ability to wake up or respond to their environment.

The role of BChE:

- BChE plays a major role in the **brain's arousal pathway**.
- The researchers believe its deficiency likely indicates an arousal deficit, which **reduces an infant's ability to wake or respond to the external environment**, causing vulnerability to SIDS.
- The enzyme is an important part of the autonomic nervous system of the body and controls unconscious and involuntary functions.

RESPIRATORY SYNCYTIAL VIRUS AND THE TOLL IT TAKES ON YOUNG CHILDREN

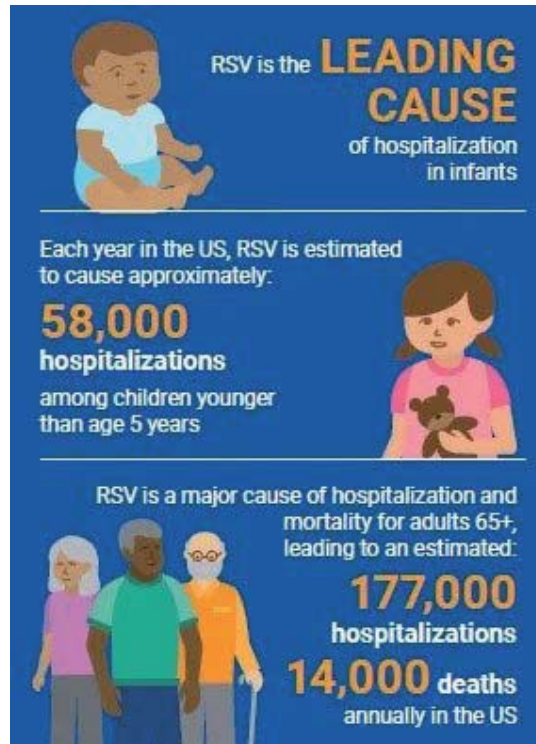
© CONTEXT:

According to a new estimate published in *The Lancet*, Lower respiratory infection attributable to respiratory syncytial virus (RSV) was responsible for more than 1,00,000 deaths in children under five worldwide in 2019.

Respiratory syncytial virus (RSV):

- Respiratory syncytial virus (RSV) is a common respiratory virus that infects the nose, throat, lungs, and breathing passages.
- RSV spreads through contact with respiratory droplets (coughing, sneezing, or kissing) from an infected person or touching surfaces contaminated with the virus and then touching your eyes, nose, or mouth.

- RSV can survive for many hours on hard surfaces such as tables and crib rails.
- The virus typically lives on soft surfaces such as tissues and hands for shorter amounts of time.
- Children are often exposed to RSV outside the home, in school or daycare centers. They can then transmit the virus to other members of the family.



■ **Symptoms of RSV infection usually include**

- Runny nose
- Decrease in appetite
- Coughing
- Sneezing
- Fever
- Wheezing

Severe RSV Infection

- Virtually all children get an RSV infection by the time they are 2 years old. Most of the time RSV will cause a mild, cold-like illness, but it can also cause severe illness such as
 - Bronchiolitis (inflammation of the small airways in the lung)
 - Pneumonia (infection of the lungs)
- One to two out of every 100 children younger than 6 months of age with RSV infection may need to be hospitalized.

Treatment

- An antiviral drug called palivizumab (pah-lih-VIH-zu-mahb) is available to prevent severe RSV illness in high-risk infants (born prematurely or with congenital heart disease or chronic lung disease).

Key findings of Lancet estimates:

- The study is the first to examine RSV disease burden in narrow age brackets.
 - There were over 45,000 deaths in infants under six months old in 2019, with one in five of the total global cases of RSV occurring in this age group.
- Estimates from a 2015 study, placed the number of annual cases of RSV in children up to five years old at 3.3 crore, resulting in 1,18,200 overall deaths.
 - In 2019, there were 3.3 crore RSV-associated acute lower respiratory infection episodes in children under five years old, leading to 26,300 in-hospital deaths, and 1,01,400 RSV-attributable deaths overall.
 - ▶ For children under six months old, there were 66 lakh RSV-associated acute lower respiratory infection episodes globally in 2019 and 45,700 overall deaths.
 - ▶ According to the report the incidence rate in India is 53 per 1,000 children per year (5.3%) and there were an approximate 61,86, 500 episodes of RSV-associated acute lower respiratory infection in children below five years.
 - ▶ 97% of RSV deaths in children under five occurred in low- and middle-income countries.

SKYROOT SUCCESSFULLY TEST FIRES SPACE LAUNCH VEHICLE 'VIKRAM-1' ROCKET STAGE

◎ **CONTEXT:** Space-sector start-up Skyroot Aerospace has successfully conducted the full-duration test-firing of the third stage of the Vikram-1 rocket.

About Skyroot Aerospace:

- Skyroot Aerospace is the national-award winning startup.
- It is building India's first privately built space launch vehicles.
- The firm, founded by former scientists of the Indian Space Research organization (ISRO), is a 150 plus member strong team actively developing their flagship Vikram series of space launch vehicles, named after ISRO founder Vikram Sarabhai.
- Last year, Skyroot successfully demonstrated the country's first privately developed cryogenic engine, Dhawan-1.
 - The engine, which will be the upper stage in the Vikram-2 rocket, was completely 3D printed using a superalloy, with the process reducing the manufacturing time by 95 per cent.

About Vikram-1:

- The small-lift launch vehicle will be capable of putting 225 kg payloads into sun-synchronous polar orbit.
- The Vikram 1 rocket will use four solid fuel-based stages for the launch.
- The rocket stage is named 'Kalam-100' after former President late A P J Abdul Kalam.
- The third stage of Vikram-1 produces a peak vacuum thrust of 100 kN (or ~10Tons) and has a burn time of 108 seconds.
- The rocket stage is built with high-strength Carbon fiber structure, solid fuel, EPDM thermal protection system, and carbon ablative nozzle.
- The rocket stage/engine has no moving parts and a high level of automation in manufacturing.
- The rocket's stage was tested at the facilities of Solar Industries India Ltd, one of the investors in Skyroot.

EXPLORE

VIKRAM SERIES

Vikram, named after Dr. Vikram Sarabhai, the father of Indian Space Program, is a series of launch vehicles especially crafted for the small satellite market. Built on common architecture and covering a wide range of payloads, they offer the most affordable and on demand ride to space.

Launch Vehicles

VIKRAM I

VIKRAM II

VIKRAM III



PAYLOAD

- ▶ 225 kg to 500 km SSPO.
- ▶ 315 kg to 45° inclination 500 km LEO.

ARCHITECTURE

- ▶ Highly reliable solid propulsion stages with proven design heritage.
- ▶ Miniaturized and Modern Avionics.
- ▶ Ultra-Lowshock Pneumatic separation.

FLEXIBLE

Orbital Adjustment Module with re-start capability enables multi-orbit insertions.

ECONOMIC

Lowest cost in the payload segment

RESPONSIVE

Requires Minimal range infrastructure. Can be assembled and launched within 24 hours from any launch site.

VIKRAM I

VIKRAM II

VIKRAM III



PAYLOAD

- ▶ 410 kg to 500 km SSPO.
- ▶ 520 kg to 45° inclination 500 km LEO.

ARCHITECTURE

Advanced Cryogenic Methalox engine replaces third stage of Vikram 1.

FLEXIBLE

Upper stage cryo-engine with re-start capability enables multi-orbit insertions.

ECONOMIC

Lowest cost in the payload segment

RESPONSIVE

Requires Minimal range infrastructure. Can be assembled and launched within 72 hours from any launch site.

VIKRAM I

VIKRAM II

VIKRAM III



PAYLOAD

- ▶ 580 kg to 500 km SSPO.
- ▶ 720 kg to 45° inclination 500 km LEO.

ARCHITECTURE

An Upgrade to Vikram 2 With Additional low cost Strapped on Solid Rocket Boosters

FLEXIBLE

Upper stage engine with re-start capability enables multi-orbit insertions.

ECONOMIC

Lowest cost in the payload segment

RESPONSIVE

Requires Minimal range infrastructure. Can be assembled and launched within 72 hours from any launch site.

INDIA REGISTERS SUCCESS WITH BP TREATMENT, CONTROL

☉ **CONTEXT:**

A project called the India Hypertension Control Initiative (IHCI) finds that nearly 23% out of 2.1 million Indians have uncontrolled blood pressure.

Hypertension:

- Hypertension is defined as having **systolic blood pressure level greater than or equal to 140 mmHg** or **diastolic blood pressure level greater than or equal to 90 mmHg** or/and taking anti-hypertensive medication to lower his/her blood pressure.
- India has committed to a “**25 by 25**” goal, which aims to **reduce premature mortality** due to non-communicable diseases (NCDs) **by 25% by 2025**.
 - One of the nine voluntary targets includes reducing the prevalence of high blood pressure by 25% by 2025.

India Hypertension Control Initiative (IHCI):

- The programme was launched in November 2017.
- In the first year, IHCI covered 26 districts across five States — Punjab, Kerala, Madhya Pradesh, Telangana, and Maharashtra.
- By December 2020, IHCI was expanded to 52 districts across ten States — Andhra Pradesh (1), Chhattisgarh (2), Karnataka (2), Kerala (4), Madhya Pradesh (6), Maharashtra (13), Punjab (5), Tamil Nadu (1), Telangana (13) and West Bengal (5).
- The project districts enrolled almost 21 lakh patients across 13,821 health facilities.
 - In the 26 initial districts, one fifth of the expected patients were enrolled. State wise proportions were Maharashtra (27%), Kerala (22.6%), Madhya Pradesh (18.7%), Telangana (18.6%) and Punjab (14.2%).
- Managing **blood pressure for 2.5 crore individuals can prevent up to five lakh deaths due to cardiovascular disease in the next 10 years.**

Key findings of IHCI:

- Nearly one-fourth of (23%) patients under the programme had uncontrolled blood pressure, and 27% did not return for a follow-up in the first quarter of 2021.
- There were an estimated **20 crore adults with hypertension in the country.**
- To achieve India's target of a 25% relative reduction in the prevalence of raised blood pressure, approximately 4.5 crore additional people with hypertension need Southern States have a higher prevalence of hypertension than the national average, according to the latest edition of the National Family Health Survey.
- While 21.3% of women and 24% of men aged above 15 have hypertension in the country, the prevalence is the highest in Kerala where 32.8% men and 30.9% women have been diagnosed with hypertension.
- Kerala is followed by **Telangana where the prevalence is 31.4% in men and 26.1% in women.**
- About **one-fourth of women and men aged 40 to 49 years have hypertension.** Even at an earlier age, one in eight women and more than one in five men aged 30 to 39 years have hypertension.
- The prevalence of **hypertension is higher among Sikhs** (37% for men and 31% for women), Jains (30% for men and 25% for women), and Christians (29% for men and 26% for women) than the rest to get their blood pressure under control by 2025.

NIKHATZAREEN WINS WORLD CHAMPIONSHIP

◎ CONTEXT:

India's NikhatZareen has won the Women's World Boxing Championships in Turkey, becoming only the fifth Indian woman to be crowned world champion.



About:

- The boxer beat Thailand's Jitpongjutamas 5-0 in the flyweight division of the championship.
- This is India's first gold medal at the championship since Olympic boxer Mary Kom won here in 2018.
 - Kom has been a six-time champion at the tournament.
- Other Indian women to win the gold medal include boxers Sarita Devi, Jenny RL and Lekha KC.

TOP 100
ALL INDIA RANKING
CSE 2020

8	9	12	13	14	16	17	19	20		
24	26	28	30	31	36	38	41	45	50	
51	52	55	56	58	59	67	68	70	71	73
74	76	78	83	84	85	86	89	93	98	100

SUCCESS IS A PRACTICE WE DO!

TOP 100
ALL INDIA RANKING
CSE 2019

3	6	10	11	16	17	21	22	28			
30	33	38	39	42	44	46	53	54	59	66	69
70	72	77	78	80	82	84	86	87	94	97	98

TOP 100
ALL INDIA RANKING
CSE 2018

2	3	5	7	27	36	37	40	44	49		
51	52	56	58	62	74	81	89	92	94	98	100

TOP 100
ALL INDIA RANKING
CSE 2017

3	10	19	31	33	35	40	41	44	45	48		
54	57	63	64	68	71	75	77	80	83	93	97	100