9 PM Compilation

28th Aug to 3rd Sep, 2022

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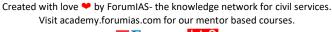
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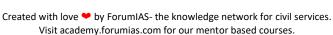
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General

Studies

Paper – 1

General Studies - 1

1. CAG report on abysmal state of heritage conservation

Source: The post is based on the article "CAG report on abysmal state of heritage

conservation" published in the Indian Express on 1st September 2022.

Syllabus: GS 1 – Salient aspects of Art Forms, literature and Architecture from ancient to modern times.

Relevance: About challenges in heritage conservation.

News: Recently, the Archaeological Survey of India (ASI) declared Anang Tal as a monument of national importance.

About Anang Tal and Anangpal II

Read here: Anang Tal lake declared monument of national importance

The CAG's performance audit on Preservation and Conservation of Monuments and Antiquities revealed Anang Tal as being "in the last stage of disappearance".

About the CAG reports on the state of India's heritage conservation

After 2007, there has been no internal audit of the ASI conducted by the ministry. So, the CAG reports are the most comprehensive public document on the institutional malaise that dogs the conservation of our monuments and antiquities.

These documents range from those relating to museums in 2011 to CAG findings on the ASI in 2013.

What are the key highlights of CAG reports on heritage conservation?

The report notes that a) There is no national policy on archaeological exploration, excavation and antiquities, b) Some 58 lakh plus antiquities all over India, but there is no database or inventory in its possession, c) The ASI budget for exploration and excavations is less than 1%. But the Public Accounts Committee (PAC) showed its intention to raise the allocation to 5% of the total budget, d) The budget of the ASI in 2021-2022 has been reduced by more than Rs 200 crore, e) The ASI, in many cases, has been working in violation of the provisions of the Monuments (AMASR) Act. At Humayun's tomb, a CAG inspection revealed commercial construction being undertaken in the prohibited area by an "agency other than the ASI", f) The poor state of conservation at ASI-protected sites and the lack of follow-up in many places also highlighted by the report. For instance, Buddhist stupa site of Kanaganahalli in Karnataka precious carved panels were still lying scattered in the open. The cement beds created at the open shed for placing artefacts had cracked.

Read more: Monuments and antiquities are part of our heritage and culture, they should be protected adequately

What are the other challenges persisting in heritage conservation?

- a) There is no synergy between the different agencies involved in heritage conservation, b) The National Culture Fund, established in November 1996, to bring in individuals and corporate groups to fund conservation, has utilised only 14% of its funds because of the lack of coordination with the ASI.
- c) National Monuments Authority, a statutory body for implementing heritage by-laws and site plans for each monument, has only finalised and notified 31 monuments. This is only a fraction of the 3,693 monuments on the list of Centrally Protected Monuments.

This snail's pace is the consequence of the Centre's proactively plan to reduce the prohibited and regulatory area around monuments and its plan to amend the act.

Read more: What are the steps taken at global level to conserve Geo heritage sites?

Modern keepers of ancient material have to act quick to ensure proper heritage conservation of Indian history.





2. Supertech demolition and the Noida problem

Source: The post is based on the article "Supertech demolition and the Noida problem" published in the Indian Express on 2nd September 2022.

Syllabus: GS 1 – Urbanization – problems and their remedies.

Relevance: About the fall of Noida as a satellite town and the rise of the Noida problem.

News: The Supreme Court ordered the demolition of the twin towers in Noida in August 2021 after a long legal battle between the residents and the developer.

About the development of Noida as a satellite town

An acronym for New Okhla Industrial Development Authority, Noida was envisaged in the early 1970s. In 1972, the Uttar Pradesh government marked the rural area consisting of 50 villages as "Yamuna-Hindon-Delhi Border Regulated Area" to regulate land dealings in the area close to the national capital. In April 1976, 36 out of these 50 villages were notified as Noida.

The main objective of Noida was a) To decentralise economic activity from Delhi to Noida, b) To reduce migration in the megacity, c) To provide affordable suburban housing for the people of Delhi.

Why did Noida as a satellite town fail, and what led to the Noida problem?

Within the NCR Plan, Noida's population was projected to be 5,50,000 by 2001 and 1.1 million by 2011. The population that the town achieved, however, was only 3,05,058 in 2001 and 6,42,381 in 2011. This is because,

a) Urban planners in India have worked on the strong assumption that the growth of cities can be perfectly predicted based on population projections, But planners failed to understand growth is not so deterministic, b) Planners cannot decide a geographical distribution of densities or economic classes of people in a city, c) Large parts of Noida were marked as housing lands with high FSI. But Noida lacked the infrastructure that could have supported commercial activities and authoritarian land-use plans prevented the organic development of any new nodes of the market, d) The opening of the Delhi Noida Direct (DND) Flyway in 2001 made the region fail to attract the service sector, e) The region lacks essential elements of urbanity like trade and commerce, institutions.

All this resulted in housing projects have not enough buyers, crashing rents and existing facilities rapidly deteriorating. This is often called the Noida problem.

How do ensure proper urban development?

The Noida problem highlights the unpredictable nature of urban development. So the urban plans can be made implementable only when they are flexible enough to let a city grow around emerging markets. The solution is not more government control, but less control.

3. Our concept of a family should embrace liberty

Source: The post is based on an article "Our concept of a family should embrace liberty" published in The Live Mint on 2nd September 2022.

Syllabus: GS 1 – Society and its features
Relevance: issues associated with LGBTQI+

News: This article discusses about the problems related to LGBTQI+ and recent SC decision on it.

Recently, the Supreme Court gave a landmark ruling in a case involving dispute over maternity benefits. In this case, a nurse in a government hospital was denied maternity leave because she had taken leaves earlier to care for her husband's children from a previous marriage.





What was the Supreme Court's ruling?

The court rejected the argument that her "atypical" family doesn't qualify for the benefits what others are getting under the Maternity Benefit law. SC held that Familial relationships may take the form of domestic, unmarried partnerships or queer relationships. The court equated all such familial relationships to traditional family relations and ruled that "they are equally deserving not only of protection under the law but also of the benefits available under social welfare legislation".

SC had already decriminalized same sex relationship in 2018.

What is the significance of the judgment?

The conservatism in society, culture and law do not recognizes other forms or relationship and they tend to follow the same old pattern.

The Centre has strongly opposed a petition seeking registration of same-sex unions under the Hindu Marriage Act of 1955, arguing that "our values" are opposed to it.

Recently passed laws continue to discriminate against queer couples (or even single men), by denying them the right to raise children through adoption or surrogacy.

All these restrictions take away the fundamental rights granted to all by the Constitution.

The lack of marriage recognition makes it hard for same sex partners to take care of loved ones. They also face issues in buying family health insurance cover, opening a joint bank account among others.



General

Studies

Paper – 2

General Studies - 2

1. PIN code @50 years

Source: This post is based on the article "PIN code @50 years" published in The

Hindu on 29th August 2022.

Syllabus: GS 2 – e-governance applications, models, successes, limitations, and potential.

Relevance: About the achievements of the postal code.

News: India Post introduced a six-digit Postal Index Number (PIN) code on August 15, 1972. The idea was to give a unique identity to all physical addresses of the country in terms of the delivery jurisdiction of the post offices.

It is time to analyse the system's progress in achieving its purpose in the last 50 years.

Postal code in other countries

The postal code is known differently in different countries. For example, postcode, zip code, etc. It is an alpha-numeric or numeric number that is included in the postal address for easy identification of the sorting district and the addressee's delivery post office.

The codes were introduced nationwide in Germany in the year 1944, Singapore (1950), Argentina (1958), the U.S. (1963), Switzerland (1964), India (1972), and the U.K. (1974).

The <u>Universal Postal Union</u> says that 160 countries of the world have so far introduced postal codes.

Postal code in India

Must read: Explained: History of the PIN code, which turns 50 this Independence Day

The PIN code helps in taking a piece of mail to the addressee's post office. The delivery jurisdiction of the post office is normally divided into beats and there is a postman assigned to each beat. What are the advantages of the postal code?

- a) The postal code **revolutionised the system of manual postal sorting** as the sorters are not required to keep in memory the locations of thousands of post offices.
- **b)** PIN-coded mails in India started improving after the introduction of **computerised billing by utility service** providers and the launching of KYC norms by banks, where providing complete and accurate addresses is mandatory.
- **c)** Though the code was originally designed to help postal operations, today it is **used by couriers, e-commerce players and various other service providers** as a means of locational identification of a person.

What are the concerns surrounding the postal code?

The government made efforts to educate the citizens to write the PIN code of the addressee in the mail. Even after five decades, a) a substantial volume of mail in India is not PIN-coded, b) beat sorting at the post office is done manually in India.

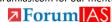
The code may not be operationally relevant in the new role of a post office. This includes, 1) **Personal mail has almost vanished** after the revolution of mobile telephony in the last two decades, 2) The postal system at present transport only documents and e-commerce parcels, but it is facing stiff competition from couriers.

What should be done to improve the postal code system?

Integrating the beat code with the six-digit PIN code: This can facilitate the PIN code not only identifying the addressee's post office but also the concerned beat.

Improve connectivity with postman: The post office makes the mobile number of the delivery person of the beat available. This can facilitate citizens to leave instructions regarding their convenience in taking delivery.





The utilisation of machines: The letter sorting machines, flat sorting machines (handling packets) and parcel sorting machines have a tremendous capacity for sorting in a day. This has to be utilised effectively.

Centralise the parcel delivery centres and mechanise the beats: The logistic system associated with the e-commerce parcels is intrinsically different from that of handling personal mails. The postman does not need a vehicle for delivery of fewer e-commerce parcels. This should be done with centralised parcel delivery centres.

2. The concerns around Aadhaar-Voter ID linkage

Source: The post is based on an article "The concerns around Aadhaar-Voter ID linkage" published in "The Hindu" on 29th August 2022.

Syllabus: GS 2 Important Provisions of the Constitution of India

Relevance: Right to Privacy; Aadhaar-Voter ID linkage

News: Recently, the Election Commission (EC) has been organizing a campaign to promote the linkage of Voter ID and Aadhaar. As a result, the block level officers (BLOs) have been asking individuals to link their Aadhaar with their Voter IDs, failing which their Voter IDs could be cancelled.

Is the Aadhaar-Voter ID linkage mandatory?

Section 23(4) of the Representation of the People Act, 1950 which was inserted through the Election Laws (Amendment) Act, 2021 requires the citizens already enrolled, to furnish their Aadhaar numbers.

Rule 26B, added to the Registration of Electors Rules, 1960 requires "every person whose name is listed in the roll to voluntarily intimate his Aadhaar number to the registration officer". However, Form 6B issued under the new Rule 26B does not give the impression of voluntariness in linkage. It mandates that the voter should either submit their Aadhaar number or any other listed document if the voter is "not able to furnish their Aadhaar number because they do not have an Aadhaar number".

Why do state and private sectors use Aadhaar for verification and authentication?

First, at the end of 2021, 99.7% of the adult Indian population had an Aadhaar card. This coverage exceeds that of any other officially valid document such as a driver's licence, ration cards, PAN cards etc.

Second, Aadhaar allows for **biometric authentication**. Therefore, Aadhaar-based authentication and verification is considered more reliable, quicker and cost-efficient when compared to other IDs.

What are the benefits and concerns associated with the Aadhaar-Voter ID linkage?

Read here: 'Forcible' Aadhaar-voter ID linking

Why mandatory Aadhaar-Voter ID linkage is an issue?

As per the **Puttaswamy judgment**, the Court observed that the mandatory linking of Aadhaar with bank accounts fell afoul of **the test of proportionality**, as it deprived a person of their **right to property** for non-linkage.

In **Lal Babu Hussein** (1995), the SC had held that the Right to vote cannot be disallowed by insisting only on **four proofs of identity**, i.e., voters can rely on any other proof of identity and obtain the right to vote.

What are the operational difficulties in Aadhaar-Voter ID linkage?

First, the preference to Aadhaar for the purposes of determining voters is puzzling as Aadhaar is only a proof of residence and not a proof of citizenship.





Second, as per the Unique Identification Authority of India in 2018, Aadhaar based biometric authentication had a 12% error rate.

Third, linking of the two databases of electoral rolls and Aadhaar could lead to the linkage of Aadhaar's "demographic" information with voter ID information. Therefore, it can lead to some sort of **state surveillance** and violation of the right to privacy. Therefore, any other officially valid document should be used to verify or authenticate the identity of the voter in India.

What should be done?

There should be a **data protection law** that pacifies concerns about the unauthorised processing of personal data held by the government.

In the meantime, the government should clarify by making a correction in Form 6B that the linking is not mandatory.

Read more: Keep it simple: On Aadhaar-voter ID linking

3. <u>Clean and clear: Government, Twitter must reassure the public that user data has not been compromised</u>

Source: The post is based on an article "Clean and Clear: Government, Twitter must reassure the public that user data has not been compromised" published in "The Hindu" on 29th August 2022.

Syllabus: GS 2 Significant Provisions and Basic Structure.

Relevance: Fundamental Rights of the Citizens

News: Last Month, the whistle-blower Peiter 'Mudge' Zatko, a cybersecurity expert, disclosed to the U.S. government agencies and congressional committees that there were deficiencies in the working of Twitter.

What is the relevance of this Whistleblowing for India?

In this **whistle-blower's disclosure**, it has come to the notice that the Indian government forced Twitter to hire a specific individual(s) who were government agents. Due to Twitter's basic architectural flaws, they got access to the platform's user data and vast amounts of Twitter's sensitive data.

However, it is not clear whether the agent referred here is the **grievance officer** that **social media networks** operating in India are required to recruit, as per the **new laws** framed in 2021. **How this will impact free speech?**

In recent years, the Government of India has been part of efforts to block its critics on social platforms. Therefore, unfettered access to sensitive user data on the social media platform can kill free speech.

What should be done?

The Government of India as well as Twitter must come up with an official response to the recent disclosure.

Further, the Government of India should also assure everyone that it is indeed batting for the individual's rights of free speech and privacy.





4. Privacy Protection has been far too long to wait

Source: The post is based on the article "Privacy Protection has been far too long to wait" published in The Live Mint on 29th August 2022.

Syllabus: GS 2 - Fundamental Rights

Relevance: Privacy and issues associated with it

News: This article discusses the issues associated with the facial recognition system and the efforts taken by the Supreme Court to address privacy issues.

The Internet Freedom Foundation filed a series of Right To Information (RTI) appeals to ask for details on facial recognition technology being used in our public spaces.

The reply to RTI shows that 124 such systems are currently in use across India. Many such closed-circuit cameras are deployed at airports, railway stations, and public thoroughfares.

What are the issues with Facial Recognition Technology and similar systems?

This facial recognition is being done in the absence of data protection laws.

The consent of citizens is also not taken before using this system.

All around the world, there is discomfort over the use of facial recognition system because it is unreliable and there is a threat of misuse of this system.

Some cities in the US have banned its use, and there are similar demands in the EU.

It is against the SC ruling in the **Puttaswamy case**, which upheld the right to privacy as a fundamental right.

What are the other similar concerns?

A recent circular issued by the Unique Identification Authority of India has created confusion among the public. The circular recommended citizens to not give out photocopies of Aadhar cards.

SC panel report on the use of Pegasus spyware by the Government was kept private and remained inconclusive. There was also a lack of clarity over allegations of military-grade spyware used against Indian journalists, politicians, judges, etc.

The lawmakers in India are letting people as well Constitution down by not putting invasive surveillance tech to the test of our right to privacy.

5. A neglected contributor to the country's crisis of public health

Source: The post is based on an article "A neglected contributor to the country's crisis of public health" published in The Live Mint on 29th August 2022.

Syllabus: GS 2 - Issues related to health

News: This article discusses the reasons and concerns associated with malnutrition in India and poor public health services.

What are the reasons behind the high rates of child malnutrition in India?

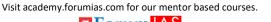
The study of recent research has found that it is not poverty but the low social status of women that was responsible for India's poor record on nutrition.

Studies have highlighted that gender equality plays a significant role in tackling malnutrition.

Why has India failed to improve the basic social and well-being indicators of its population? Caste system

The dual principles of purity and pollution of caste have very serious implications on public sanitation. A certain caste excluded from society is considered ritually impure, and they are forced into sanitation work.

Therefore, even the most progressive and scientific-minded individuals who are socialized in caste do not define existing manual scavenging in our society as their enemy.





However, due to the lack of mutual trust and fellowship in society, the caste system affects the elite classes also. The elite classes cannot help themselves in bringing sanitation revolution and eliminating communicable diseases, getting open spaces, clean air, etc.

The covid pandemic also made a realization to the elite classes it is impossible to completely insulate themselves from the larger society.

Gender inequality

B.R. Ambedkar argued that control over women was central to maintaining caste purity. Even today, women have limited control over decisions regarding their choices in marriage or childbirth.

Violence against women has taken various forms. Honor killings are equally associated with caste/clan as they are associated with gender.

India has one of the lowest female labor force participation rates in the world. The New York City Board of Health declared racism a 'public health crisis, and India stands in a similar situation.

6. Shambuka to Indra Meghwal, inequality hurts it all

Source: The post is based on an article "Shambuka to Indra Meghwal, inequality hurts it all" published in The Indian Express on 30th August 2022.

Syllabus: GS 2

Relevance: Inequality and concerns associated with it

News: This article discusses about the issues associated with the caste system in India. What are the problems associated with Caste system?

Even today, caste determines a person's occupation. It makes the Labour an obligation, instead of a choice.

The work is divided on the basis of caste. A caste is often associated with a particular kind of work. Low castes mostly do low profile work.

This segregation stands in the way of creating holistic knowledge. It prevents knowledge creation and kills imagination and innovation.

The monetary value of labour is determined by the caste of the labourer and not on the social need for labour.

Caste discrimination makes our democracy full of problems.

B.R. Ambdedkar rightly stated "political democracy has been achieved by the freedom struggle and take over from the British, but social democracy is far away"

7. Online gaming needs a synchronized policy framework

Source: The post is based on an article "Online gaming needs a synchronized policy framework" published in **The Live Mint** on **30**th **August 2022**.

Syllabus: GS 2 - Government policies for various sectors

Relevance: benefits and challenges associated with online gaming

News: This article discusses the issues associated the online gaming and its economic benefit to India.

What is the current situation of online gaming in India?

- 1) This industry is valued at about \$2 billion currently and is expected to reach \$5 billion by 2025.
- 2) Foreign investors have invested more than \$1.6 billion in just the last 18 months.





- 3) Industry estimates suggest that the industry provides 50,000 jobs directly and many more jobs indirectly.
- 4) The Union ministry of electronics and information technology has been holding consultations to bring in positive and comprehensive regulations for online gaming.
- 5) Our Prime Minister called for making games in India and gave slogan of 'Create in India' and 'Brand India'.

What are the problems associated with online gaming?

Indian online gaming firms are facing difficult problems, like

First, the group of ministers (GoM) suggested a crippling goods and services (GST) regime on casinos, horse racing and online gaming.

The GST structure is such that players will pay GST not only for the service provided to them but also for their own money that goes into creating prize pools.

Reports suggest that this situation has arisen as the GoM may have equated games of skill with gambling for taxation purposes.

What is the difference between online gaming and gambling?

Supreme Court and various high courts have held that games that have a **predominance of skill** involved in their outcomes are classified as games of **skill**, while games based on the **predominance of chance** are gambling.

Online games of skill are protected under the Constitution while gambling is outlawed in most states.

To avoid such confusion, the central government has thought to bring uniform regulations for online gaming.

What can be the further course of action?

This industry needs a rational and synchronized framework under which our tax policy is consistent with a positive vision for online gaming.

There must be a convergence of government policies across domains to support and incubate any new and innovative industry.

8. The return of the Nuclear Weapons on the global platform

Source: The post is based on an article "The return of the Nuclear Weapons on the global platform" published in **The Indian Express** on **30**th **August 2022**.

Syllabus: GS 2 - India's Nuclear policy

Relevance: Nuclear Energy and its implications on India.

News: The article discusses the changing scenario of the global nuclear order and its implications on India.

An international conference to review the Nuclear Nonproliferation Treaty concluded at the United Nations in New York last week. There was no consensus on the treaty.

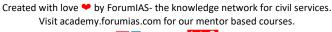
History of the development of Nuclear Program in India

One of the immediate consequences of the Cold War was that the US attempted to reduce the influence of India's nuclear and missile programmes.

India conducted a **nuclear test in May 1998** and tried to manage the global consequences of the test

The **India-US civil nuclear initiative of July 2005** finally produced a framework that brought to an end to India's extended conflict with the NPT system.

The completion of India-US nuclear deal a few years later gave India the freedom to develop its nuclear arsenal and resume civilian nuclear cooperation with the rest of the world.





It was blocked since India's first nuclear test in May 1974.

Today, India's independent foreign policy appears to be growing as it has not bought a single reactor from the US nor has it become a much feared "junior partner" to the US.

What are new challenges being faced by the global nuclear order after the failure of the Tenth Review Conference?

First, it is the deepening divide between America and Russia which are the main sponsors of NPT. Even at the height of the Cold War there was always one major area of cooperation between the US and the Soviet Union, strong support for the NPT.

The Ninth Review conference in 2015 was ended without an agreement. It was because of major differences over establishing a Middle East zone free of weapons of mass destruction.

Second, the non-nuclear state parties usually complained about the lack of progress in implementing the disarmament provisions of the NPT.

The major powers now put greater emphasis on the strategic utility of nuclear weapons rather than reducing their number.

Third, the invasion of a non-nuclear weapon state (Ukraine) by a nuclear weapon power (Russia) has generated a whole series of new questions.

- There are real fears that China might decide to show its nuclear power while seizing the territory of its neighbours.
- America's Asian allies worry about the US's ability to reinforce the "nuclear umbrella".

Fourth, China's political campaign against the AUKUS arrangement has found some importance in South East Asia. China argued that the AUKUS agreement violates the provisions of the NPT.

- China continued with the campaign against the AUKUS even though the NPT permits non-nuclear states to develop nuclear naval propulsion.
- Indonesia and Malaysia also raised concerns about the implications of the AUKUS deal for the NPT.

Fifth, nuclear power is coming back into the consideration around the world amidst the growing challenge of climate change.

- A draft noted that nuclear technologies can contribute to addressing climate change, mitigating and adapting to its consequences, and monitoring its impact.
- A group of 12 countries emphasised the importance of nuclear power in meeting the Sustainable Development Goals set by the UN.

What kind of implications does the unfolding global nuclear discourse present for India?

India must find ways to end the current halt in its civilian nuclear power generation. India commissioned Asia's first nuclear power station more than 50 years ago is stuck today with a total generating capacity of barely 7,000 MW.

India's historic civil nuclear initiative was meant to open up international collaboration to boost the production of atomic electric power.

Civil Nuclear Liability Act, 2010 has made impossible for private players whether internal or external to contribute to the India's nuclear program.

The law needs to be revisited as it is of urgent need for India's strategy to rapidly raise the contribution of nuclear power to India's energy.





9. Curing the patriarchal mindset of the legal system

Source: The post is based on the article "Curing the patriarchal mindset of the legal system" published in the "The Hindu" on 30th August 2022.

Syllabus: GS 2 – Important Provisions of the Constitution of India; and Functioning of the Indian Judiciary

News: Recently, The Kerala High Court stayed the order of the sessions court in Kerala in a case of alleged sexual harassment.

Observations of the Session Court

The Session court granted **anticipatory bail** to an accused in a case of alleged sexual harassment. The court observed that **Section 354A of the Indian Penal Code(IPC) would not be used** for the offense, as the *de facto* complainant was **dressed in sexually provocative dresses**.

Section 354A of the IPC covers the offenses; "Assault or criminal force to woman with intent to outrage her modesty"

What are the major issues in the observations made by the session court?

As per the **author Faisal C.K., Under Secretary (Law) Kerala government**, the following are the issues with the observations:

- (1) The Sessions Court's *ratio decidendi* (reason) is a **reflection of the patriarchal mindset**. Therefore, the observation violates a woman's constitutional right to dignity, life and personal liberty, and privacy.
- (2) The Sessions court judge's comment is a **violation of the guideline given by the Supreme Court.** The Supreme Court in **Aparna Bhat vs The State Of Madhya Pradesh** (2021) held that "the use of reasoning/language which diminishes the offense and tends to trivialize the survivor [in gender violence cases] is especially to be avoided under all circumstances."
- (3) Further, these **reasons cannot be ground for granting bail** or other such relief to the accused person.
- (4) The award-winning author, Githa Hariharan, points out that **It is not easy for women to approach the cour**t. The process is hard for women. It is even harder when women do not have financial or emotional support from their family, custom, or the present reading of the law.
- (5) Further, the **representation of women in the Indian judiciary** too is poor. Since the inception of the Supreme Court in 1950, the apex court has seen only 11 women judges.

What should be the course of action?

There should be the inclusion of **feminist jurisprudence** in the curriculum for law students. This would act as a remedial measure to cure the **patriarchal mindset** of the socio-legal system. This is because the feminist philosophy of law identifies the pervasive influence of patriarchal norms on legal structures and demonstrates their effects on the material conditions of women. Further, these are aimed to introduce reforms to correct gender injustice, exploitation, or restriction.

There should be sensitization of legal practitioners and judicial officers about feminist jurisprudence.

In a liberal democratic state, the choice of dress is a 'self-regarding act' over which the individual's will is sovereign. It is an integral part of an individual's freedom of privacy and dignity. Therefore, a person's dress or the dressing style of a woman cannot be a license to outrage her modesty.

There should be the **inclusion of more and more women at all levels of the judiciary** to ensure that the decision-making process is more responsive, inclusive, and participatory at all levels.





10. The Real Crime

Source: The post is based on an article **"The Real Crime"** published in **The Times of India** on 30th August 2022.

Syllabus: GS 2 Functioning of the Indian Judiciary; Social Justice etc.

News: Recently, the National Crime Record Bureau (NCRB) released its latest Crime in India report for 2021 which provides the dismal story of justice delivery in India.

From 2020 to 2021, kidnapping and abduction cases increased by 20% and crimes against women, children, and senior citizens increased by 15%, 16%, and 5% respectively.

What are the issues in India's criminal justice system?

A rise in serious crimes hasn't been accompanied by proportionate systemic upgrades.

Nearly **20% of sanctioned policing posts are vacant**, according to the Bureau of Police Research and Development.

The **conviction rates are very poor** in murder, sexual offenses, rioting, and kidnapping. For example, the conviction rate is just 28% in rape and 42% in murder cases.

There is **high pendency of cases** at the level of the judiciary. More no. cases come to the court than disposed-off by the courts during the year. For example, violation of Covid-related social distancing norms prompted a deluge of such cases. Courts disposed of 4 lakh cases in 2020 and 2021, but another 5lakh are pending trial.

What should be the course of action?

As per statistical analysis, there is a need for more and better-trained police and judges.

Governments must withdraw all those cases which are not very serious and important at present, like covid-related cases, thousands of cases relating to possession of small amounts of marijuana, etc.

The process of **prosecution** and **investigation** of offenses should be reformed. Further, the government must undertake efforts like a serious review of criminal codes.

11. Towards the centenary of Independence

Source: The post is based on an article "Towards the centenary of Independence" published in the Business Standard on 30th August 2022.

Syllabus: GS 2 Important Provisions of the Constitution of India

News: The prime minister in his Independence Day speech spoke about the priorities for the next 25 years leading up to the centenary of independence.

Five things focussed: an India (1) that becomes a developed country, (2) that is free of a colonial mindset, (3) that is proud of its heritage, (4) that is united and integrated, and (5) whose citizens place duty above rights.

What are the challenges to the achievement of the above-mentioned focus areas?

- (1) The PM's five-point priorities for the next 25 years, do not focus on **nurturing democracy**, or on **social harmony** and **respect for diversity of religion and language** prevalent in India.
- (2) Some surveys showed India's democracy is considered to be in danger. This is being considered not just by outside observers, but also by India's population, as depicted by some surveys.
- (3) According to the latest report of the **Varieties of Democracy Project**, which rates democracies in the 0 to 1 range, India's performance has dropped from 0.67 or higher from 1990 to 2013 to 0.41-0.44 in 2020 and 2021. The index registered a sharp dip to 0.40 between 1975 and 1976, because of the Emergency.





(4) As per some experts, India has moved from a vibrant democracy, which refers to a greater restraint in the use of police powers particularly against political opponents, to an **electoral autocracy.**

What should be other focus areas in the next 25 years?

- (1) India has huge social diversity. This social diversity underlies the **wide variety of cultures** that is hosted by India. Therefore, the Union government policies must respect this **social** and **cultural diversity**.
- (2) The Central and state governments work to strengthen our democracy like opposition parties must not be threatened with police power, etc. This vibrant democracy would support social harmony.
- (3) Every Indian should not only respect but also take **pride** in the **diversity of Indian society** in terms of the variety of languages, religious practices, and social norms.
- (4) The government **should focus on the prevalent economic diversity** across India. For instance, Kerala has plantation agriculture, the northeast has different agriculture, and Punjab and Haryana have different. Therefore, all of these areas cannot have the same policies for agricultural marketing.
- (5) The government must close the **growing gap in per capita income** between the states. For example, in 2019-20, the per capita income in the north-western, southern, and western states was 2.6 times larger than in the northern, central, and eastern states. This has happened because a large proportion of the fruits of liberalization have accrued to the western, southern, and north-western states.
- (6) The **employment generation** should also be **another key priority** because close to 90% of the increase in the number of people of the working age in the next 25 years will take place in the populous northern states. There should be a focus on **human resource development**, particularly in the **slow growth states**. This can be done with a focus on the quality of education and health care.
- (7) India should take advantage of the **changing trends of globalization, technology development,** a **promising environment for small start-ups,** and so on. These are far more important to attain than attaining the status of a developed country or gross domestic product growth targets.

12. The many ways of helping Sri Lanka

Source: The post is based on the article **"The many ways of helping Sri Lanka"** published in the **"The Hindu"** on 31st August 2022.

Syllabus: GS 2 International Relations, Bilateral Relations

Relevance: India-Sri Lanka Relations

News: Recently, Sri Lanka's economy has been hit by one of the worst economic crises in its history. In this context, India has tried to help out Sri Lanka in a number of ways

India's Assistance so far and Sri Lanka's Public Perception of India's response to the country's economic crisis

Till now, the Indian government has provided assistance of nearly \$4 billion to its neighbor. The support is greatly valued by the various sections of Sri Lankan society like

(1) A Sinhalese farmer said that he has received a normal yield this time thanks to "the supply of chemical fertilizers from India."





(2) A veteran Sri Lankan government official pointed out that even "certain fringe groups," which are widely known for their anti-India rhetoric, have stayed silent when the rest of Sri Lankan society was "tremendously appreciative" of what India did.

Scope of more engagement

- (1) In Sri Lanka, agriculture and allied activities are the priority areas where India can make a difference.
- (a) In Sri Lanka, a considerable quantity of milk powder, dairy products, and other such products are imported. India's **National Dairy Development Board of India** can help Sri Lanka in attaining **self-sufficiency** in dairy production. This would help it to save precious foreign exchange.
- (b) Likewise, the poultry sector, which is also in a state of crisis, deserves special treatment. In this, India can help with veterinary medicines, and domestic production of maize used as feed. In this area, Indian agricultural universities can share their knowledge to increase both production and productivity.
- (c) Further, agricultural machinery is another area where Sri Lanka needs a helping hand.
- (2) Sri Lanka has faced problems on the energy front, which exploded into a major political crisis. Therefore, India's participation in energy projects will be desirable.
- (3) Sri Lanka's Micro, Small and Medium Enterprises (MSMEs) have not achieved their potential for various reasons, one of which is the low adoption of technology, among others. India can help through its programs like the '**Digital MSME**' and '**RAMP**' (Raising and Accelerating MSME Performance) which can provide leads to the MSME sector.
- (4) India can establish **smart classrooms and modern computer labs** in Tamilian areas. Indian universities can set up satellite campuses in Sri Lanka and so on.
- (5) **On the cultural front,** India can arrange for greater numbers of Buddhist monks to visit places of religious importance here.
- (6) The Indian government could extend liberal loans, share **technical expertise** or **knowledge**, as well as help Sri Lankans upgrade their skills in different areas of economic activity.

What should be the future course of action?

India must ensure that the proposed development program is equitably distributed in coverage. For example, **The Northern** and **Eastern Provinces**, where the Tamil and Muslim ethnic minorities live, and which were badly hit by the civil war, should be more focused on.

Sri Lanka's **political class** and **civil society** should facilitate the success of the program. They should prevent the anti-India rhetoric of a few groups, which may go against these programs.

13. Drop the phone checking, draft surveillance curbing orders

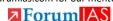
Source: The post is based on an article "Drop the phone checking, draft surveillance curbing orders" published in the "The Hindu" on 31st August 2022.

Syllabus: GS 2 Important Provisions of the Constitution of India; GS 3 Indian Security **Relevance:** Surveillance and Intelligence Reforms in India

News: Recently, the Supreme Court has looked into the findings of the apex court-appointed committee which probed into the allegations raised in the Pegasus Case.

There are allegations that the personal communication devices of a range of people in India, including journalists, civil society activists, and politicians, were targeted illegally using Israelimade spyware.





Surveillance-related issues in India

There are allegations that the Centre and the States operate like a **police state** when it comes to surveillance. Further, there are allegations that the corporate houses are also involved in surveillance or snooping on activists and competitors at will and collect huge dossiers on "persons of interest".

There is a **lack of checks and balances** in the legal framework related to surveillance and intelligence gathering in India. For example, the law allows police officers to authorize interception (rather than the Court).

Various technologies are being used in India for surveillance. For example, **facial recognition technology** (like "PacketShaper software"). Surveillance software called "FinFisher" has also been used by law enforcement and intelligence agencies.

The UN General Assembly "Report of the Special Rapporteur" 2013 mentioned that the Indian Government will install a centralized monitoring system. It will route all communications to the central security agencies. This was meant to bypass the service provider and also to take surveillance out of the realm of judicial authorization. It will also eliminate the accountability on the part of the Central government.

In 2013, *The Guardian* placed India at 5th rank among countries where the largest amount of intelligence was gathered. For instance, the Delhi police issued a tender inviting a technology company to supply Internet monitoring equipment in 2014.

In 2018, the **Justice B.N. Srikrishna Committee** submitted a report to the Government which said that much intelligence gathering in India does not happen under the remit of the law. Further, there is **little meaningful oversight** over surveillance in India.

What are the issues with state surveillance?

As per the **European Court of Human Rights**, "a **secret surveillance system** can undermine or even destroy democracy under the cloak of defending it".

International legal regime for surveillance -Check and Balances

In 1978, the US Congress enacted the Foreign Intelligence Surveillance Act (FISA). Consequently, **the United States Foreign Intelligence Surveillance Court** was established.

In 1986, the Wiretap Act was enacted in the US to prohibit private agencies from engaging in surveillance. Further, the government must apply to a Federal Court to seek permission to do surveillance.

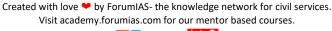
The Patriot Act 2001 (or Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001) was enacted to counter international terrorism in the US. The act required court approval.

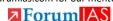
The **New South Wales Law Reform Commission, 2005** established the office of the privacy commissioner. The office had dedicated inspectors to investigate complaints.

The United Nations contributed to the development of a legal framework evolving the "no secret" rules. The governments cannot do surveillance only in the name of the "national interest".

As per the **Venice Commission Report**, **2015**, independent control and oversight are necessary over the executive, parliamentary oversight, judicial review, and oversight of expert bodies.

The **UN Good Practices on Oversight Institutions** requires the setting up of a civilian, independent institution that can carry out an investigation and have unhindered access to information. Further, individuals are empowered to complain to a court.





14. Focus on nutrition: PM's appeal in 'Mann Ki Baat

Source: The post is based on an article "Focus on nutrition: PM's appeal in 'Mann Ki Baat" published in The Business Standard on 31st August 2022.

Syllabus: GS 2

Context: This article discusses the issues associated with malnutrition and its mitigation strategies.

Prime Minister has recently pleaded to make malnutrition eradication a people's movement. He stressed on the use of technology for creating awareness

What steps have been taken by the government to address malnutrition?

India has made noticeable progress in alleviating starvation but malnutrition is still prevalent. It is evident from the high occurrence of anemia and obesity.

The government has also made some sensible moves to utilize anganwadis for this purpose by equipping them with mobile devices and extending their services to adolescent girls.

What are the reasons for existing malnutrition?

The country's vast public-distribution network has failed to deliver to its potential.

Its focus is on supplying primarily the belly-filling cereals rather than the whole range of food items to take care of the nutritional needs.

Another cause of malnutrition is **consumption of cheaper cereals** rather than the nutritious coarse grains like millets.

What are the findings of the UN report?

The United Nations (UN) report titled "State of Food Security and Nutrition 2022" has indicated that:

Even though the number of undernourished people in India has declined, the number of anaemic children and women including overweight people is still high.

The Fifth National Family Health Survey had shown that over half the children and women were anaemic. The incidence of obesity was on the rise among both men and women.

What should be the further course of action?

The prime minister stressed on increasing the consumption of millets.

A recent study points out that regular consumption of millets can improve hemoglobin levels and reduce anemia-causing iron deficiency.

The ultimate objective should be to make millet products part of the modern food platters to combat malnutrition in a cost-effective manner.

15. Is Devas Ruling A Pyrrhic Win?

Source: The post is based on an article "Is Devas Ruling A Pyrrhic Win?" published in The Times of India on 31st August 2022.

Syllabus: GS 2 - International issues

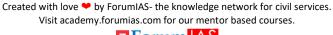
Context: The articles discuss the issues related to arbitration awards and various steps taken by the government.

What is the history associated with Devas arbitration award?

Antrix Corporation and Devas Multimedia entered into a transaction for leasing of S-Band spectrum in 2005, and which came to be cancelled by Antrix following the "2G scam".

Devas sued and secured an award in an India seated ICC arbitration (domestic award) of over Rs 10,000 crore.

CBI initiated an investigation into the transaction and filed an FIR alleging that the transaction has been made to defraud the state of its resources.





Antrix filed a petition before the National Company Law Tribunal for winding up of Devas on grounds of fraud.

This petition was filed with the authorisation of GoI. The petition was allowed and upheld by the apex court. SC said the entire transaction was in conflict with the public policy of any country.

What steps have been taken by Delhi High Court?

Delhi HC has set aside the ICC award.

It will lead to an automatic stop on all seizure orders passed by foreign courts in pursuance of enforcement proceedings initiated by Devas.

However, Devas shareholders initiated another BIT arbitration against GoI, which is yet to be concluded.

Thus, setting aside the ICC will not be sufficient. The BIT awards were passed in separate and independent proceedings, and are not automatically void by the setting aside of the ICC award.

What lies ahead?

The seizure proceedings in enforcement of two Bilateral Investment Treaty (BIT) awards may not become void like ICC award.

A BIT is a reciprocal sovereign-to-sovereign guarantee that protects investors and investments of one country in the territory of the other.

Devas's shareholders may allege that setting aside of the ICC award will deprive them of their rights to the money.

GoI can argue that the outcome of a judicial proceeding is not same as to state action and therefore it is not acceptable to treaty arbitration.

It will also lead to India's image of going against treaty claims.

India's reluctance to return to negotiation in the matter also negates the positive steps the present dispensation had taken in settling the retrospective taxation disputes with Cairn and others.

16. Kendriya Vidalayas: It has long been clear that the state can run schools well

Source: The post is based on the article "It has long been clear that the state can run schools well" published in the Livemint on 1st September 2022.

Syllabus: GS 2 – Issues relating to development and management of Social Sector/Services relating to Education.

Relevance: About the success of Kendriya Vidalayas (KVs)

News: There are 1,252 Central Schools or Kendriya Vidalayas with over 1.4 million students. Despite the more expensive private schools, KVs are regarded as good schools.

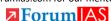
About Kendriya Vidalayas

Kendriya Vidalayas (KVs) were set up in 1963. They ensured that the children of Union government employees, such as the armed forces, Indian Administrative Service and police officers, among others, had good schools available to them even if their parents were transferred across the country.

What is the performance of Kendriya Vidalayas?

a) They have maintained high-quality standards and delivered on their mandate across hundreds of cities and towns, b) Extra and co-curricular activities: Theatre, debate, sports, picnics and a lot more usually happen outside the classrooms, c) Diversity in classrooms: The schools educate children of IAS and IPS officers and also Class IV employees, d) Per student expenditure in a KVs is two to three times that in an average state-run public school.





What are the lessons that should be learnt by Kendriya Vidalayas?

The six decades of KVs set clear examples of how public schools can be run well. KVs are proven examples of higher capital expenditure results in better facilities. So, the government should increase public expenditure on education.

17. Electricity Amendment Bill 2022: A mixed bag

Source: The post is based on the article "Electricity Amendment Bill 2022: A mixed bag" published in the Indian Express on 1st September 2022.

Syllabus: GS 2 – Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Relevance: About Electricity Amendment Bill 2022

News: Recently, the government introduced the **Electricity Amendment Bill 2022** in the Lok Sabha.

What are the progressive steps mentioned in the Electricity Amendment Bill 2022?

States revoking power purchase agreements (PPAs): The Bill states that if PPAs are renegotiated, the affected party has to be compensated within 90 days from the date of submission of the petition.

Applicability of new tariffs: New tariffs often come into force in the middle of the financial year. The Bill states that new tariffs have to be made applicable from the beginning of the financial year.

Reduction in processing time: The Bill has proposed a reduction in the time for processing tariff petitions from 120 days to 90 days.

Suo motu powers to regulators: Regulatory commissions have been given suo motu jurisdiction if tariff petitions are not filed within 30 days of the stipulated time.

A much-needed payment security mechanism: the Bill talks about ensuring a payment security mechanism before dispatch. This will ensure that dues to generators do not swell up to unmanageable levels.

Does the Bill encroach on State's domain on power sector governance?

The Bill facilitates the Centre to give additional distribution licences in an area already serviced by a distribution company (discom). This is considered an encroachment on the state's power. But this is not because, a) The licence will be deemed to have been granted if the state electricity regulatory commission (SERC) does not take any action within the stipulated time. b) **Power is a Concurrent subject**.

Read more: Explained: Electricity amendment bill 2021 —why are states such as WB opposing it?

What are the various concerns raised by states on the Electricity Amendment Bill 2022?

Firstly, according to the Bill, for the applicants seeking a distribution licence in more than one state the Central Electricity Regulatory Commission (CERC), and not the SERC, will grant a licence for additional distribution.

SERC is likely to be more aware of the field-level conditions in a state than the centre.

Secondly, till now, the CERC received instructions from the Centre and the SERCs. But the Bill has a provision empowering the Centre to give directions directly to the SERCs. This will enable the Centre to bypass state governments.

Thirdly, the Bill has made a small change in the composition of the committee for the selection of Chairman/members of the SERCs. It facilitated a nominee of the central government at the level of additional secretary as the third member.





What should be done to improve the Electricity Amendment Bill 2022?

- 1) CERC and SERC agencies should consult each other while granting licences for discoms seeking licenses for more than one state. The agency that grants the licence should also administer it.
- 2) The government had declared the Railways to be a deemed distribution licensee in 2014 under the third proviso of Section 14 of the Electricity Act 2003. The exception made for the railways had led to demands for a similar licence from entities such as the metro rail and ports.

Since the railways were never transmitting, distributing or trading in electricity but were bulk consumers, they should not be qualified to be a deemed distribution licensee.

18. Personal data protection: Firms need to do more

Source: The post is based on an article "Personal data protection: Firms need to do more" published in The Business Standard on 1st September 2022.

Syllabus: GS Paper 2 - Fundamental Rights

Relevance: data protection and concerns associated with it

Context: This article discusses the issues associated with data and the ways to tackle it.

What is the current issue with personal data protection?

Lack of legislation protecting personal data allows Indian organizations to collect data as they want, often needlessly.

The data is often sold, or monetized in other ways, and is frequently held in insecure servers.

It opens the door to widespread misuse of data and to cybercrime, potentially targeting every Indian.

It is also a barrier to efforts to set up data centers for overseas clients.

It is a serious problem and is only expected to increase in scale as more segments of the economy get digitized.

However, one of the reasons why Indian firms may not be investing enough in this area is because of a lack of regulatory compulsion.

What provisions can be included in a data protection law?

It should **lay down clear, broad definitions** of what constitutes private data. Those definitions should be open to review and updates as technology develops.

There must be norms that data will not be collected needlessly.

The data that is collected should be a small detail clearly stating purposes, keeping the dataowner informed and seeking his or her permission at every stage.

There should also be clear norms for the security of any data collected and stored with the collector and storage center should be held liable for breaches with huge penalties.

Victims should be in a position to easily bring class-action civil suits seeking damages in such cases.

Data-owners should also have the "right to forget".

Once the purpose of the data has been served, the data-owner should have the option to ask for deletion.

There should be a transparent process for granting clearance to any agency to launch a data collection-cum-surveillance exercise against an individual or organisation.





19. Level playing field: UGC must give Indian universities the same freedoms it's planning to give foreign universities

Source: The post is based on an article "Level playing field: UGC must give Indian universities the same freedoms it's planning to give foreign universities" published in The Times of India on 1st September 2022.

Syllabus: GS 2 - Issues linked with education

Relevance: Higher education reforms

Context: This article discusses about the problems faced by Indian Universities compared to foreign universities.

UGC and the education ministry are reportedly finalising regulations for foreign universities' India campuses.

The plan is to offer "near full freedom" on determining academic course structure and curriculum, faculty hiring and salaries, and even fees.

Why should Indian universities in India not enjoy these freedoms?

Foreign universities are concerned with over-regulation.

However, Indian universities have to actually function under the restrictive regime.

If UGC wants to reform the system it must apply the changes to all players – domestic and foreign.

What are the problems associated with Indian Universities?

Indian universities, both public and private, have to negotiate their way through a bulk of rules and regulations, framed by UGC, AICTE, NMC, BCI, state governments.

These rules apply for starting new courses, sanctioning student intake, and various academic and administrative operations.

No Western country or even China makes its education institutions subject to so many rules and regulations.

The parliamentary standing committee on education has found **UGC** and other regulators to be overregulating in their approach.

There's a growing demand-supply gap in quality higher education.

20. <u>Playing Chinese Checker: PLA's big aim at LAC is to get India to accept China's hegemony.</u> We must see this & prepare

Source: The post is based on an article "Playing Chinese Checker: PLA's big aim at LAC is to get India to accept China's hegemony. We must see this & prepare" published in The Times of India on 1st September 2022.

Syllabus: GS 2 - India and its neighborhood

Relevance: India and China bilateral relation

Context: The article discusses the bilateral relation between China and India and the steps that India can take to counter China.

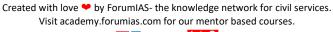
It has been just over two years since Galwan. Since then, India-China relations have deteriorated significantly.

What are the differences between Galwan and earlier clashes between China and India?

The earlier clashes were accidental in nature but in Galwan the Chinese side has undertaken the operation in a planned, pre-determined, well thought out way.

The number of troops involved on both sides was much higher than in the earlier cases.

By bringing such large military strength to the India-China border areas, PLA has violated all preceding agreements by bringing such large military strength to the India-China border areas.





What were the reasons behind Galwan clash?

There were two reasons: tactical and strategic.

The tactical reason was that China wanted to have actual control over the territory which they were claiming.

They have also been able to eliminate the situation where both armies would patrol areas of overlapping claims.

The strategic reason was that China wanted to show India, to other Asian countries and to nations across the globe that China is the most powerful nation in Asia.

What steps can be taken by India to counter China?

India needs to urgently enhance defence spending especially over the next three to five years. India cannot accept the change in status quo in eastern Ladakh and if there is no peace on the border, the rest of the India-China relationship cannot continue.

Few steps taken by India against China are – Chinese firms were kept out of 5G trials, Chinese apps were banned and FDI rules were changed for neighbouring countries.

Can China disengage and de-escalate at the LAC in eastern Ladakh?

There has been disengagement in certain sectors but not yet in all sectors of the border in Ladakh.

China has not indicated any desire to de-escalate.

What can be the further course of action for India?

India has to be strategically patient and build up strength.

A fast-paced GDP growth will reduce the asymmetry between India and China.

India must continue balancing Chinese power by further beefing up our strategic partnerships with Japan, France, the US, Australia and other similar countries.

21. About the Crime in India report: A revert to the mean

Source: The post is based on the article "A revert to the mean – Increase in violent crimes, suicides in 2021 points to indirect consequences of pandemic" published in The Hindu on 2nd September 2022.

Syllabus: GS 2 – Criminal Justice System.

Relevance: About the recent findings of the Crime in India report.

News: According to the annual report, "Crime in India" released by the NCRB, the registration of violent crimes such as rape, kidnapping, atrocities against children, robberies and murders increased in 2021 to levels set before the pandemic.

Note: The drop in 2020 seemed to be an anomaly, either due to lowered registration or a partial decrease in occurrence as there were extensive lockdowns and office shutdowns.

What are the key findings of the recent Crime in India report?

The overall crime rate (per one lakh people) decreased from 487.8 in 2020 to 445.9 in 2021.

Domestic violence: "Cruelty by husband or his relatives" constituted 31.8% of crimes against women, up from 30.2% in 2020, indicating that domestic violence continued to be a major issue.

Law enforcement was less responsive: While violent crimes increased, the charge sheeting rate fell from 75.8% in 2020 to 72.3% in 2021, as did the conviction rate (57% from 59.2% in 2020).

State-wise violent crime data: Assam (76.6 violent crimes per one lakh people), Delhi (57) and West Bengal (48.7) had the highest numbers while Gujarat, Andhra Pradesh and Tamil Nadu registered the lowest numbers.





Suicide rate: Suicide rate in the population in 2021 was 12 per one lakh people. This was the highest in the last five years. Domestic problems (33.2%) and illnesses (18.6%) were reported as the main reasons.

Most victims are daily wage earners (25.6%) and housewives (14.1%). This reveals the severity of the pandemic and its indirect consequences on people.

Cybercrime: These cases registered a 5.9% jump over 2020. This increase was more so in rural areas. Cyber crime in metropolitan cities (with a population of more than two million people) registered a decline of 8.3% compared to 2020. This indicates the increasing use of digital devices and the related challenges.

Read more: Suicide of Businessmen: Limited liability could save some Indian lives

The Government must educate people about risks in cyber activities and ensure better law enforcement to curb various crimes.

22. Academia, research and the glass ceiling in India

Source: The post is based on the article "Academia, research and the glass ceiling in India" published in The Hindu on 2nd September 2022.

Syllabus: GS 2 - Issues relating to development and management of Social Sector/Services relating to Education.

Relevance: About the glass ceiling of women

News: Gender inequality and discrimination in academia relating to higher education still persist in India.

Two well-known examples of the glass ceiling of women in pre-independence India

Kamala Sohonie: Sir C.V. Raman rejected her request for pursuing research in physics under his guidance only because she was a woman. After satyagraha, she was admitted for one year under certain conditions.

Bibha Chowdhuri: Professor D.M. Bose was reluctant to include her in his research group on the ground that he did not have suitable research projects to assign to women. After a prolonged struggle, she had been included. Her work on cosmic rays in determining the mass of mesons is legendary.

Some well-known examples of Women who broke the glass ceiling

Donna Strickland was awarded the Nobel Prize in Physics, for her work on lasers in 2018. She became the third woman to win a physics Nobel, after Marie Curie in 1903 and Maria Goeppert **Mayer** in 1963.

How glass ceiling of women impacts women's growth in STEM?

Women are still an under-represented population globally in hardcore science, technology, engineering, and mathematics (STEM).

UNESCO findings

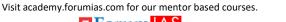
According to available UNESCO data on some selected countries, India is at the lowest position, having only 14% female researchers working in STEM areas.

But India is not very far behind many advanced countries in this aspect. For example, Japan has only 16% female researchers, the United States 27% and the United Kingdom 39%.

The highest number of female researchers are in Tunisia, Africa (55%) followed by Argentina (53%) and New Zealand (52%).

Education and faculty

About 43% of women constitute the graduate population in STEM, which is one of the highest in the world. But a) Only 14% of women join academic institutions and universities, b) The total





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number of women fellows in the three science academies of India is 7% for the Indian Academy of Sciences (IAS); 5% for the Indian National Science Academy (INSA) and 8% for the National Academy of Sciences India (NASI) and **c)** The more prestigious the institute, the lower the number of women employees. For example, in IIT Madras only 31 out of 314 professors.

In the corporate world

Participation of women in leadership and decision-making positions in private enterprises (the corporate sector) is increasing. a) The number of women in senior management positions in the corporate sector in India is 39%, b) According to a forecast made by Deloitte, the number of female board members in the management of private enterprises have been growing from 15% (2016) to 19.7% in 2022. At this pace, near parity will be reached by 2045.

What are the government incentives for breaking the glass ceiling of women?

Some of them are, a) Gender Advancement for Transforming Institutions (GATI), Knowledge Involvement in Research Advancement through Nurturing(KIRAN), Vigyan Jyoti Programme, etc.

Some institutions are setting up crèches so that scientist mothers can carry on with their research work uninterrupted. Universities too are trying their best to be equal opportunity employers.

Read more: India's innovation potential and initiatives

What can the government learn from the corporate sector in breaking the glass ceiling of women?

1) Mechanism of selection and promotion of personnel in the private sector based on competence or merit, 2) Private sector's adoption of various schemes: Such as flexi-hour work time, rejoining the workforce after an interim break, sections operated only by women, etc. So, gender equality or parity will happen only when there is a change in mindset and institutions consider women as assets rather than simply a diversity of rectification issue.

23. The NPT is beginning to look shaky

Source: The post is based on the article "The NPT is beginning to look shaky" published in The Hindu on 3rd September 2022.

Syllabus: GS 2 – Effect of policies and politics of developed and developing countries on India's interests.

Relevance: About the present state of the Non-Proliferation of Nuclear Weapons (NPT) Treaty.

News: Recently, the Tenth Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) concluded. After four weeks of debate and discussion, the delegates failed to agree on a final document.

What is the Non-Proliferation of Nuclear Weapons (NPT) Treaty?

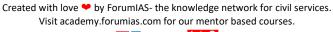
Read here: 50 years of Nuclear Non-Proliferation Treaty(NPT)

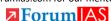
The NPT was negotiated during the 1960s to reconcile three competing objectives 1) Controlling the further spread of nuclear weapons beyond the P-5 countries that had already tested; 2) Committing to negotiating reductions of nuclear arsenals leading to their elimination; and 3) Sharing benefits of peaceful applications of nuclear science and technology.

What are the successes of NPT?

The first objective was strongly supported by the nuclear-haves; the other two were demands made by the nuclear have-nots.

Achievement of the non-proliferation objective: This objective has been achieved in large measure. In the last 50 years, only four more countries have gone on to test and develop nuclear arsenals. These are India, Israel, North Korea and Pakistan.





Note: **South Africa** developed nuclear weapons, but the apartheid regime destroyed them and joined NPT in 1991.

Non-proliferation post-1991: After the end of the Cold War, non-proliferation remained a shared priority for the major powers and the **International Atomic Energy Agency**, set up originally to promote international co-operation became better known as the non-proliferation watchdog.

Read more: The role of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) in preventing the spread of nuclear weapons

What are the failures of NPT?

Progress on the other two objectives took a back seat.

No meaningful discussions or negotiations on nuclear disarmament have ever taken place in the NPT framework. For instance, since 1970, when the NPT entered into force, only four of the 10 review conferences have concluded with a consensus document.

Unity of P5 against universal condemnation: When the nuclear have-nots suggested a universal condemnation of all threats of nuclear use, all five nuclear haves joined together to resist such moves.

Halt in progress between US and Russia: Arms control talks between the U.S. and the U.S.S.R./Russia did bring down their collective arsenals from a high of nearly 65,000 in the early 1980s to less than 12,000 warheads. But this process has been halted.

For example, the U.S. withdrew from the 1972 **Anti-Ballistic Missile (ABM) Treaty** in 2002 and from the 1987 <u>Intermediate-Range Nuclear Forces (INF) Treaty in 2019</u>.

The only surviving arms control treaty between Russia and the U.S. is the New START Treaty which imposes a ceiling on operational strategic nuclear weapons of 700 launchers and 1,550 warheads each. It expires in 2026 and there are no signs of any follow-on discussions.

Rising China and associated nuclear threats: While withdrawing from INF, the US stated that China's missile developments created new security threats that needed to be addressed. The US even invited China to join in the arms control process. But the requests were rejected. Analysts suggest that China may be on track to expand its arsenal from current levels of approximately 350 warheads to over 1,000 by 2030.

Read more: Weapons of Mass Destruction (WMDs) and India's Stance - Explained, pointwise

What is the status of other treaties on nuclear non-proliferation?

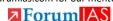
Treaty on the Prohibition of Nuclear Weapons (TPNW): It is also called Ban Treaty. Frustrated by the absence of progress on nuclear disarmament, the nuclear have-nots successfully negotiated this Treaty in 2017.

All 86 signatories are nuclear have-nots and parties to the NPT. The TPNW creates a new legal instrument. But the nuclear-haves and their allies ignored the Vienna meeting.

Comprehensive Test Ban Treaty (CTBT): It was concluded in 1996 but has yet to formally enter into force because two major powers, the U.S. and China, have yet to ratify it.

1985 Reagan-Gorbachev declaration states that 'a nuclear war cannot be won and must never be fought'. The statement remains valid. Nobody wants a breakdown of the NPT but sustaining it requires facing up to today's political realities. Without addressing the new challenges, the NPT will weaken.





24. Stop the stalker: Plug legal loopholes, tell cops to adopt zero tolerance

Source: The post is based on an article "Stop the stalker: Plug legal loopholes, tell cops to adopt zero tolerance" published in The Times of India on 3rd September 2022.

Syllabus: GS 2 - Criminal Justice System

Relevance: stalking and problems associated with it

Context: This article discusses about the problems related to stalking and police in India. Since 2013, Stalking has been a clearly defined criminal offence. However, stalking incidents are still taking place.

Recently two stalking incidents took place – one in Jharkhand where a schoolgirl was burnt to death by a young man. In another such incident, in Delhi, a schoolgirl was shot despite a complaint to the police.

What are the issues associated with stalking?

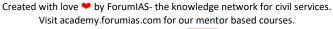
The cases of stalking have increased from 1,091 in 2014 to 9,285 in 2021 and there are many cases with pending trial.

Section 345D of IPC criminalizes stalking but the problem with the law is that it is bailable. Stalking should be made non-bailable like Sections 354 and 506 of IPC. The police should adopt zero tolerance against stalkers.

What are the problems faced by the police?

The police are exhausted due to the large amount of work. The ratio of police to population is also very less.

There are fewer women police compared to men police.





General

Studies

Paper – 3

General Studies - 3

1. James Webb telescope: Light on dark matter

Source: The post is based on an article "James Webb telescope: Light on dark matter"

published in the Indian Express on 29th August 2022.

Syllabus: GS 3: Awareness in the fields of Space.

Relevance: Space Exploration of James Webb Space Telescope(JWST)

News: In 2021, the James Webb Space Telescope was commissioned into space to probe the universe. It has replaced the Hubble Space Telescope.

About the James Webb Space Telescope

Read here: James Webb Space Telescope (JWST)

What are the previous findings on space science?

In 1543, the Polish astronomer Nicolaus Copernicus professed that the Earth is not at the centre of the universe. Earth is just another planet revolving around the Sun. Although, at present, the broad contours of the universe are fairly well established, but details are still missing:

- (a) At the "beginning" of time, all the energy was concentrated in a **primeval fireball** of extremely high temperature and density.
- (b) Thereafter, the universe started expanding, due to a massive explosion, which is termed **the Big Bang** about 14 billion years ago.
- (3) In the last few decades, it has been established that most of the universe is a combination of a mysterious kind of matter called dark matter and an even more mysterious unknown substance called dark energy.

What is the importance of the James Webb Space Telescope (JWST)?

It provides a unique opportunity to fill the gaps in knowledge with the help of understanding the **electromagnetic radiation waves**, emitted from cosmic objects.

Due to the expansion of the universe, electromagnetic radiation waves are stretched. In other words, visible light could be stretched into the longer **infrared part** of the spectrum. The JWST will study this Infrared radiation. Further, these radiations have the advantage of passing through dust clouds more easily than visible light.

The JWST will give an insight into how the first stars and galaxies formed from the primaeval soup of matter and radiation.

It will also allow us to compare the earliest galaxies (those that are furthest) to those that we observe today in our own cosmic neighbourhood.

Since it operates in the infrared, it can see through the dust clouds that obscure regions where star and planet formation is taking place.

The Webb produces a huge amount of **spectroscopic data** which can help reveal the chemical composition of the region producing the radiation. Studying the chemical composition of exoplanets would also determine whether life as we know it is possible in these extra-terrestrial worlds.

What are some important JWST observations made so far?

In July, the JWST released its first images of galaxies that might date back to almost 13 billion years ago. For Example, the cosmic cliffs of the Carina nebula, the Cartwheel galaxy, and Stephan's quintet.

It has also provided an analysis of the atmosphere and indicated the presence of water in a giant gas planet orbiting a star about a thousand light years away.

Read more: What is the relevance of the recently released images from the James Webb Space Telescope?





Over its lifetime, the JWST would provide us with a powerful window to help us understand the cosmos better and comprehensively.

2. How to make in India-and protect economy from supply shocks

Source: The post is based on an article "How to make in India and protect economy from supply shocks" published in the Live Mint on 29th August 2022.

Syllabus: GS 3 Issues and Challenges pertaining to growth and development of the Indian Economy.

Relevance: Global Supply Chain Disruption; Extern Sector; Atma Nirbhar Bharat

News: In the last few weeks, there has been a global decline in commodity prices. Such a trend of decline in India's domestic inflation rates was also seen. In India, the Wholesale Price Index has fallen from a peak of 16.6% in May to 13.9% in July 2022.

Background

Globally, inflation had reached levels not seen in decades. Initially, it was due to a boom in demand during the Covid-19 pandemic as well as global supply chain disruption due to lockdowns. Later, it was due to the Ukraine war, and the consequent rise in prices of oil and food grains.

What are the challenges?

The global supply chain disruption remains an important challenge in the future ahead. For example, according to IHS Markit, the **global semiconductor industry** is facing acute supply shortages. The shortage in semiconductors is at six times high. This shortage can have multiplier effects on other sectors like automobile companies.

What are the causes of supply chain disruption during the Covid and the Ukraine War?

Backward, forward linkages: Now, the global production of goods works in 'fragment due to falling transport costs, information technology improvements and falling barriers to global trade. This fragmentation is part of the global value chains (GVCs). For example, the developed west has done '**off-shoring'** of production to countries such as China, Vietnam and India, having lower labour costs.

This changed the dynamics of how the trade worked. Therefore, a shutdown in one country will disrupt production in another country and supply in another country.

Case of India's participation in the global value chain and vulnerability

Export Pattern: Since the 1990s, India's trading pattern shows a pattern common to emerging markets. In its export basket, the **share of finished consumer goods** has risen by about five percentage points, while the **share of intermediate goods** and **raw materials has fallen**.

Import Pattern: India is importing more intermediate goods than before. This shows that the bulk of its processing happens somewhere along the middle of the value chain, rather than at the beginning, or towards the tail end where assembly happens.

This means India is affected by shocks to the global value chain for a product, and this can affect production in countries further up the value chain. Therefore, India is prone to global supply chain shocks.

What should be done?

Make India less vulnerable to 'global supply shocks: India should carry out reforms to immune itself from the problems present in the underlying structure of the global economy.

The government must focus on the idea of 'reshoring' key inputs like the **Production Linked Incentive (PLI) scheme** aimed at developing a domestic manufacturing base in a range of key sectors.





Prioritize sectors: These should be those sectors that are the most affected by the non-availability of critical imports and would impact the rest of the economy significantly. For example, basic metals, fabricated metals, chemicals and non-metallic minerals

Therefore, the **focus must be on the inputs or critical inputs** used in these sectors. Further, diversify existing imports of inputs among a number of countries to reduce vulnerability to external shocks.

3. New regulations for the Credit Rating Agencies (CRAs): Reforming ratings

Source: The post is based on an article "Reforming ratings" published in the Business Standard on 31st August 2022.

Syllabus: GS 3 – Changes in industrial policy and their effects on industrial growth.

Relevance: Credit Rating Agencies (CRAs) Regulations

News: Last week, the Securities and Exchange Board of India (Sebi) released a circular modifying the **credit-rating system** in ways that would aid in transparency.

The changes would be applicable to already listed debt securities, and also to those proposed to be listed.

What are these new regulations for the Credit Rating Agencies (CRAs)?

- (1) **Criteria for "sharp rating actions"**: It would refer to a drop of three notches or more in two consecutive rating releases. The CRAs must standardise the methodology for "**sharp rating action**". Further, these changes will be applicable from the first half of the Financial Year 2022-23
- (2) CRAs will highlight **non-cooperating issuers**, which refers to non-submission of quarterly financial results within prescribed timelines, non-disclosure of current and past operational details about CAPEX plans, debt obligations and repayment details, among others, and any other issue felt appropriate by a CRA.
- (3) CRAs should frame detailed policy regarding methodology to assess the non-availability of information from **non-cooperative issuers**. CRAs should also consider the steps to be taken under various scenarios of non-cooperation. CRAs should follow a uniform practice of tagging such ratings within 7 days of **3 consecutive months** of **non-submission of the no-default statement (NDS).** The changes related to not cooperating will come into force by March 31, 2023 (4) CRAs have been empowered to put in place a framework for **rating withdrawal** of **perpetual debt securities**. If a CRAs withdraws any credit rating, a CRA should mention the reasons for withdrawal and will also have to assign a **final credit rating** to such security, in its press release, except where there are no outstanding obligations, or the company is being merged or wound up.

Read more: Sebi tightens disclosure rules for rating agencies

All the new measures or regulations of Credit Rating Agencies (CRAs) would aid in transparency and improve borrower compliance with CRAs.





4. <u>Fallty towers: Lesson from the Supertech demolition: reduce the risk borne by homebuyers, improve Rera</u>

Source: The post is based on an article "Fallty towers: Lesson from the Supertech demolition: reduce the risk borne by homebuyers, improve Rera" published in The Times of India on 29th August 2022.

Syllabus: GS 3 - Government policies for various industries

News: This article discusses the issues associated with real estate in India and about Real Estate (Regulation and Development) Act, 2016.

The demolition of Supertech Twin Towers in Noida cheered many, and it was the news that was seen throughout the media.

What are the issues with real estate?

Indian households hold about 77% of total assets in real estate. It's the largest single investment most families make.

This makes homebuyers, disproportionately, vulnerable to real estate sector risk.

The tripartite agreement between builder, bank, and buyer requires the buyer to pay a part of the project cost in advance. The bank covers the residual cost and the builder underwrites EMIs, till possession is handed over.

There are a number of cases in this tripartite agreement where builders default and banks chase the hapless buyer despite the agreement detailing the obligations of all sides.

In one such case, the Delhi high court this year ordered interim protection to buyers against threat of action by banks. But there are many such cases.

Despite e-governance initiatives, there is hardly any change on the ground.

So, any meaningful reform has to address the spread of risks among stakeholders.

What is the Real Estate (Regulation and Development) Act, 2016?

It was enacted in 2016.

The advantages of RERA are:

- It brings about the standardization of contracts.
- It reduces the information asymmetry between buyers and other stakeholders by making relevant information public.
- It also minimizes misuse of advance payments made by buyers.

What are the issues associated with RERA?

It can't address older problems like that of the Supertech towers.

It cannot resolve the issue of corruption at the level of urban bodies.

It also suffers from the general weakness in state capacity as each state needs to establish a regulatory body.

However, RERA is the best available solution today. It will require state governments to invest in enhancing its capacity because a better system will benefit the buyers.





5. A major test looms for our real estate reforms

Source: The post is based on an article "A major test looms for our real estate reforms" published in **The Live Mint** on **30**th **August 2022**.

Syllabus: GS 3 - Industries and industrial policies

News: This article discusses about the provisions under Real Estate (Regulation and Development) Act, 2016 and various steps taken by the government in the real estate.

According to an estimate by a realty consultancy firm, the construction of about 240,000 homes remains stalled in the National Capital Region (NCR).

What are the steps taken by the Government in real estate sector?

The Centre set up a special fund to complete stalled affordable housing projects across the country.

The National Buildings Construction Corp Ltd and developers with proven track records also took over unfinished projects.

Real Estate (Regulation and Development) Act, 2016 had a blueprint for the sector's regulatory architecture.

What are different provisions under Real Estate (Regulation and Development) Act, 2016? First, All builders had to register their projects with a state's Real Estate Regulatory Authority (RERA)

Second, they have to be clear on other undertakings and keep the funds pooled from homebuyers of one project in an escrow account so that none of it could be diverted.

Third, they had to abide by clear delivery timelines failing which they had to refund buyers or pay interest on their money for delays.

Fourth, Customers could also approach consumer courts under RERA which was given the power to crack down on builders with fines or prison terms.

The judiciary classified advance paying homebuyers as creditors, letting them to form a group and to drag corrupted builders to bankruptcy courts.

6. Challenges of sub-national fiscal correction

Source: The post is based on an article "Challenges of sub-national fiscal correction" published in the "The Hindu" on 30th August 2022.

Syllabus: GS 3 – Budgeting

News: Recently, the RBI released data on the **States' outstanding debt,** which has registered an upward movement.

There has been an increase in the Debt-GSDP ratio (gross state domestic product) between 2013 and 2022.

They could be partly due to increased public expenditure due to the implementation of the Ujjwal DISCOM Assurance Yojana (UDAY), farm loan waivers, other freebies, etc. Further, the revenue mobilization efforts have failed.

What are the arguments for the grant of the freebies?

States push back on this issue on the grounds of welfare provisioning and protection of the vulnerable sections of the population.

What are the different federal issues between the state and central governments?

(1) **First,** There have been a set of issues related to Goods and Services Tax (GST) such as the rate structure, inclusion and exclusion of commodities, revenue sharing from GST, and associated compensation.





- (2) **Second**, **State-level expenditure patterns**, especially related to the welfare schemes of States. This is a key issue related to the quantity and quality of public expenditure by the State governments.
- (3) **Third,** the conception and the implementation of central schemes.

However, the most pressing issue at hand is the State-level expenditure patterns. There are two kinds of public expenditures: 1) Mandatory spending: governed by formulas or criteria set forth, and 2) **Discretionary spending**: governed by annual or other periodic appropriations. Center is pushing for more fiscal discipline by reducing the scope for discretionary spending and limiting States to focus on mandatory expenditures. Whereas, states are looking for more fiscal space for increasing discretionary spending.

What are the issues associated with discretionary spending?

- (1) Once started, some of the discretionary expenditure, used to increase demand in the economy, continues for longer periods leading to fiscal stress. This is because it is hard to decrease government spending, especially due to the resistance from the public.
- (2) In a federal system, States' fiscal stress gets spilled over to the Centre, leading to a situation of overall magnified fiscal slippages.
- (3) As the economy is recovering from the crisis, there exists a need to adhere to the path of fiscal correction both by the Centre and by the States.
- (4) Many States indulge in higher levels of expenditures towards maintaining what they call their 'models of welfare provisioning'.
- (6) Sustained increase in welfare expenditure by the States leads to fiscal expansion, which necessitates additional resource mobilization. However, limited success in additional resource mobilization forced the state governments to resort to borrowing. Fiscal expansion financed through debt and the resultant debt accumulation have important impacts on the economy.

What should be the course of action?

The **funds raised** through borrowings must be used for **capital formation**. This would contribute to the real income of future generations and add to the repayment capacity of the government as well.

There is a need for **fiscal correction** or fiscal consolidation at the State level. This can be done by raising additional resources at the sub-national levels, and simultaneously, ensuring expenditure prioritization.

The Central government must demonstrate its commitment to fiscal discipline in order to ensure a cooperative federal structure.

7. The new facets of terrorism

Source: The post is based on an article "The new facets of terrorism" published in the "The Hindu" on 30th August 2022.

Syllabus: GS-3, Security Challenges and their Management in Border Areas – Linkages of Organized Crime with Terrorism.

News: Recently, two acts of terror were carried out in the U.S. and Russia. In the US, an attempt was made to murder Salman Rushdie, the famous author of the controversial 'The Satanic Verses'. In Russia, Darya Dugina, a nationalist leader and one of the supporters of Vladimir Putin's invasion of Ukraine, died in a car bomb explosion.

What are the causes of worry?

The fanaticism of religious fundamentalists has no expiry date: Salman Rushdie was attacked for the words that he had written 34 years ago. Thereafter, Iran's Ayatollah Ruhollah





Khomeini issued a fatwa against him in 1989. Terrorists driven by **religious fanaticism** are daring, suicidal, and vengeful individuals.

It is very difficult to protect a target because terrorists **integrate** into the **maze of ethnicities** of the United States and emerge only to kill. Here, the attack was made by a **24-year-old "sleeper"**, an offender who was not on the **FBI records** as a **terror suspect.**

Democracies and **autocracies** are known to use the **same tools of** intelligence gathering etc. But the recent attacks have made a mockery of **all security drills and knowledge** that has been accumulated by security agencies over the years. In the last decade, **technology**, **software**, and **tools** are used to tackle **infiltration**.

U.S. agencies gather and go through volumes of personal data of citizens and people around the world and deploy tools such as Artificial Intelligence (AI) to identify terrorists or their sympathizers. However, these new-age tools offer no guarantee of pre-emption and early detection.

Similarly, the Moscow incident puts a question mark on the **efficacy of Russian intelligence** and **law enforcement agencies**.

Russia also apprehended a suspect recently, who had allegiance to an Islamic terror group. He is alleged to have been preparing to enter India and harm an **unnamed dignitary** or high-value person. Therefore, threats are real to India as well.

8. Floods and foes

Source: The post is based on articles "Floods and foes" published in the "The Hindu" "Floods in Pakistan bear similarities to those in India. It's time for a collaborative mechanism to deal with extreme weather events" published in the Indian Express on 31st August 2022.

Syllabus: GS 3 Disaster Management; GS 2 International Relations

Relevance: Flood Management and India-Pakistan Relations

News: In recent days, Pakistan has been hit by the worst natural disaster(flood). The Prime Minister of India has expressed condolences to the victims of the flooding in India's neighborhood.

Implications of flooding in Pakistan

As per the official statements, due to flooding, one-third of Pakistan is underwater, more than 1,100 people have died, and over 33 million people have been affected. Homes, roads, and infrastructure have been damaged, amounting to a loss of about \$10 billion.

Further, standing crops have been affected. There are fears of disease as well as food shortages.

What are the causes behind Pakistan's Flood 2022?

Pakistan experienced a monsoon in 2022, which is unusually wet, called **"monsoon on steroids"** by UN Secretary-General.

It is an imprint of a global-warming-induced extreme weather event.

In several parts of Pakistan, river embankments have not been repaired for years. Therefore, rivers caused havoc in surrounding places.

Pakistan's city drainage systems have not received adequate attention from the country's planners.

Global Response to Pakistan's Flood, 2022

Various countries such as the U.K., the U.S., China, the UAE, Qatar, and Turkey have already dispatched aid to Pakistan, and many others have promised help.





The IMF announced a \$1.1 billion bailout tranche, as part of ongoing negotiations with Pakistan.

Significance for India-Pakistan Relations

There are indications that India will join the growing number of countries and international bodies that have responded to Pakistan's appeal for help to deal with the ravages of the worst floods.

The Pakistan Finance Minister has proposed to **lift the trade ban** imposed on India after the Jammu-Kashmir reorganization in 2019. This would enable the import of Indian vegetables and essential commodities.

In the past, both sides have provided assistance to each other in times of **humanitarian crisis**. For example, Pakistan extended help after the Gujarat earthquake of 2001, India did likewise when large swathes of Pakistan were flooded in 2010, and both cooperated during the Kashmir earthquake of 2005.

Similarities between India's floods and Pakistan's flood experiences

The same southwest monsoon that brings the bulk of India's annual rainfall causes rain in Pakistan as well. Both countries are the victims of weather vagaries.

The two countries have shared colonial legacies in both urban planning and flood management.

Further, both countries receive water from the melting glaciers in the Himalayas, which do not respect borders.

What should be the course of action?

South Asia's ecological continuities make the case for regional cooperation on climate-related matters. Therefore, India and Pakistan must come together during negotiations at the UNFCCC. The Subcontinent could learn from ASEAN's initiative to draft a State of Climate Report on the eve of COP-26 last year, which promotes cooperation and collaboration in the region.

There should be **data sharing mechanisms** on rainfall, river flows, as well as flood alert systems. There can be a **common renewable energy-dominated electricity grid,** which could substantially reduce the climate vulnerability of people in South Asia.

Both India and Pakistan must seize the moment (flood 2022) to help those stranded in the flooding in Pakistan. India considers itself the "first responder" in the neighborhood. India has helped Nepal, Sri Lanka, the Maldives, and Afghanistan during a such humanitarian crises.

9. An intellectual property regime must boost innovation

Source: The post is based on an article "An intellectual property regime must boost innovation" published in the Live Mint on 31st August 2022.

Syllabus: GS 3 – Intellectual Property Rights

News: Two weeks ago, the Economic Advisory Council to the Prime Minister of India released a report on the current status of India's Intellectual Property (IP) regime.

Patents were designed to offer **inventors a monopoly** over their inventions for a limited duration so that they had time to recover their investments in research and development (R&D) and make some profit to boot.

The Findings of the report

The number of patents filed in the country has increased from only 39,400 patents filed in 2010-11 to as many as 66,440 in 2021-22, over the past decade.





There has also been a steady increase in patents filed by Indian residents, accounting for nearly 44% of all patents filed last year.

All this has resulted in India rising from 81st in the **Global Innovation Index** in 2016 to 46th last year.

What are the causes behind the innovation boost in India?

The government has undertaken a series of reforms that have been implemented over the past

There has been a progressive simplification of procedures, the electronic delivery of certificates, and expedited examination for certain categories of applicants.

What are the issues that are still causing problems in innovation boost in India?

- (1) Despite these reforms, India lags far behind countries that set global benchmarks in innovation. For example, the total number of patents filed in India last year was less than 5% of those filed in China and 10% of those filed in the US.
- (2) India lags in patents granted, with just under 27,000 in 2020 compared to 530,000 obtained in China and 350,000 in the US.
- (3) The **time taken to process** a **patent application** is problematic, i.e., on average 58 months are taken to process the patent application in India as compared to 20 months in China and 23 in the US.

(4) Problems in Digital Innovation

India's patent system was designed before the age of digital innovation, and the duration of this monopoly was set at a generous 20 years.

Such a long period makes sense for more traditional inventions, but it is disproportionately long in the digital context. It does not encourage digital inventors to innovate and invent new ways to remain competitive. Instead, they rely on patent protection over a period of 20 years to stay ahead in the market.

What are the underlying causes behind various issues that plague the innovation ecosystem in India?

India's patent office is poorly staffed. Around 860 people are working in the Indian patent office, 13,704 examiners and controllers are working in the Chinese office, and, 8132 employees are working in the US Patent offices.

What are the recommendations in the report?

- (1) The report has recommended the addition of 2,000 more staff at India's patent office over the next two years to address this.
- (2) Various procedural reforms, like the introduction of fixed timelines at various stages in the patent process, must be introduced to improve the efficiency of the patent application process.
- (3) The onerous compliance obligations, such as the requirement to submit information on the prosecution of foreign patent applications even though this information can be easily accessed from the PCT portal, must be eliminated.
- (4) The **utility model patents** for minor innovations must be introduced. This would allow for a less stringent process. The innovations emerge from projects under the country's Atal Innovation Mission.

Other reforms required -Not mentioned in the report

- (1) Reforms in Judiciary and Enforcement Machinery: This would ensure that patent holders can easily enforce their patents once granted.
- (2) Different periods of protection: This should be awarded based on the nature of the innovation which is sought to be protected. For example, Drugs and pharmaceuticals could





continue to enjoy 20 years of protection, while patents for digital innovation could be limited to 5 years or less.

10. <u>Killer on the road: Road fatalities are going up because users don't take basic precautions and road design is poor</u>

Source: The post is based on an article "Killer on the road: Road fatalities are going up because users don't take basic precautions and road design is poor" published in The Times of India on 31st August 2022.

Syllabus: GS 3 - Infrastructure

Context: This article discusses about the issues associated with road accidents and ways to reduce it.

What is the current situation of road accidents?

2021 marked the highest ever road accidents and numbers are expected to increase in the coming years.

Two-wheelers accounted for 44.5% of deaths, up from 35% in 2018, and pedestrian deaths have doubled to 12% of deaths since 2018.

What does the data say?

NCRB report blames over-speeding for 60% deaths and dangerous/careless driving for 26% deaths.

Union Ministry of road transport and highways (MoRTH) data shows that 70% of two-wheeler travellers killed in 2020 weren't wearing helmets. 84% of car travellers who died weren't wearing seatbelts.

What has led to such accidents?

The predictable and uniform design of medians, intersections, lanes, shoulders, and pedestrian paths are absent in most urban centers.

Most **highways still lack enough safe crossing facilities** for motorists and pedestrians while illegal openings in medians are big concerns.

Techniques like **rumble strips** aren't employed adequately.

How road accidents can be minimized?

The Motor Vehicles Act amended in 2019 has made seat belts and helmets compulsory but there is lack of enforcement.

A study from IIT Delhi has suggested that more **focus should be made on street and highway design** and enforcement rather than the current overwhelming focus on motor vehicle safety.

11. Supertech buildings' demolition is a cinematic distraction from nexus between state and builders

Source: The post is based on an article "Supertech buildings' demolition is a cinematic distraction from nexus between state and builders" published in The Indian Express on 31stAugust 2022.

Syllabus: GS 3 – Industries and industrial policies

Context: This article discusses about the nexus between state and private players in real estate and issues associated with urban areas.

The recently-demolished Supertech buildings in Noida shows the new relations between land, private real estate players and the state.

How the relationship between private companies and state has changed?





The market for land during the 20th century in NCR rose due to the actions of the government.

The Delhi Improvements Trust and the Delhi Development Authority had a land monopoly in the post-independence decades. Their actions led to huge inflation in land prices which prevented people from buying land in Delhi.

The government's actions as a land monopolist in the Delhi region led private players to look beyond its boundaries.

Areas in Haryana and UP that bordered Delhi emerged as important nodes of urbanization.

The private house market started growing from the mid-1980s, with the availability of new sources of home loans and the expansion of the middle class.

Since the 1980s, a new urbanisation in India came up. It helped in forming new relationships between government mechanisms and private players. It helped in alteration of the approved lands.

As land values increased, it became profitable to convince government regulatory authorities to allow changes in the plans that were actually approved.

What are the issues arising out of the nexus between private players and state?

The approved **plans can easily be altered** and those plans are approved that benefit all parties. This requires collaboration between different levels of government, politicians, real estate companies, land surveyors and brokers of different kinds.

The complex system of land measurement and planning procedures made it almost impossible to institute mechanisms of transparency.

There is an increase in the state-real estate complex where it is has become difficult to calculate where the state ends and private interests begin. This is the Indian version of the military-industrial complex.

What are the issues associated with the urban areas?

Demolishing can lead to depriving rights of urban dwellers and cruelty towards them.

The problems of urban areas require a different approach rather than simply demolishing.

There are many illegal lands or structures but with the time they become legalized.

The encroachment of forest lands by powerful people degrades the urban environment.

This all happens due to the peculiar relations between governments and land markets and sometimes our own participation in it.

12. A bad idea: Separating 'E' from ESG

Source: The post is based on an article "A bad idea: Separating 'E' from ESG" published in

The Business Standard on 31st August 2022.

Syllabus: GS 3 - Industries and industrial policies

Context: The article discusses the importance of social and governance for any entity and what stand can India take in the future.

What are the importance of social(S) and governance (G) in ESG?

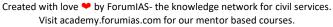
The S and G pillars are as important as E(Environment) in assessing corporate performance from stakeholders' perspective.

Corporations that violate human rights, infringe labor rights or have gender-insensitive policies should be disapproved and they can't be idolized.

Impact investments can't ignore a corporate's performance under these two pillars.

Even the Conference of Parties' (COPs') negotiations under the UNFCCC framework give due consideration to Social and Economic factors, besides Environmental.

What are the issues associated with COPs meetings?





The developing countries have struggled to put up a united front to keep the social and economic dimensions relevant in these discussions.

They have failed to meet their commitments on providing finances and technology transfer to developing countries.

There are clear signs of developed countries sliding back on their own emission commitments made in climate change negotiations.

The ongoing Russia- Ukraine war and its impact on the global availability of fossil fuels and their prices have forced many countries to rework their energy policies.

What are the different stands taken by developed countries?

The developed countries mostly try to push their agenda due to their larger presence in the international forums.

ESG is an important subject of discussion in international forums like Financial Stability Board (FSB). These forums are dominated by the developed countries and their decisions prevail.

What is required from India in the G20 meetings?

Indian officials attending meetings of these forums need to be careful. They should not end up supporting ideas that go beyond what has been agreed during the climate change negotiations. India will assume the presidency of G20 by the end of this year.

There is likely to be a lot of pressure from the developed member countries on India to commit more on such issues that are of interest for the developed countries.

We must safeguard our domestic policy space in these negotiations.

13. Suicide of Businessmen: Limited liability could save some Indian lives

Source: The post is based on the article "Limited liability could save some Indian lives" published in the Livemint on 1st September 2022.

Syllabus: GS 3 – Indian Economy and issues relating to planning, mobilization, of resources, growth, development and employment.

Relevance: About the suicide of Businessmen and the role of Limited Liability Partnerships(LLPs).

News: According to the National Crime Records Bureau (NCRB), during the two pandemic years of 2020 and 2021 more businessmen took their own lives than cultivators. This defies pre-covid trends.

What are the key findings of NCRB data on the suicide of Businessmen?

Daily wage-earners committed more suicides: The category of daily wage-earners logged the biggest toll with over 42,000 such deaths in 2021. This is a little above a quarter of the year's total. The report highlighted business distress caused by the covid crisis as a plausible factor.

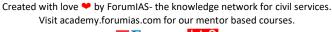
Business folks vs farmers: By last year's count, more than 12,000 people in business died by suicide. On the other hand above 10,000 individuals engaged in agriculture lost their lives during the same period.

Subcategory of Businessmen: According to the NCRB database, suicide cases among people who were in business included 4,500+ vendors, 3,600+ tradesfolk and 3,800+ persons doing something else.

States of Businessmen committed suicides: Karnataka, Maharashtra, Madhya Pradesh, Tamil Nadu and Telangana accounted for half of them.

What are Limited Liability Partnerships(LLPs)?

Read here: Limited Liability Partnership (LLP)





India passed its <u>Limited Liability Partnership Act</u>. This created an LLP format, letting people join hands to set up a business entity governed by far fewer compliance rules than a regular company, but with the personal assets of partners shielded by the law from creditors.

How Limited Liability Partnership can reduce the suicide of Businessmen?

a) It limits the dues of a business to the money wilfully invested in it, **b)** In LLPs the owners would get a share of profits but have nothing at stake beyond the value of their shares.

What should be done to improve the effectiveness of LLPs?

In the informal sector, defaulting debtors can face severe consequences. But the LLP Act has witnessed only scant adoption. A special campaign to promote LLP enterprise and/or formalization of the informal economy has to take place.

14. A quarter century of public-private partnership

Source: The post is based on an article "A quarter century of public-private partnership" published in The Business Standard on 1st September 2022.

Syllabus: GS 3 - Privatization and liberalization

Context: This article discusses the PPP model and concerns associated with it. History of PPP

The early 1990s witnessed the growth of public-private partnership or PPP before it mainstreamed into economic policy.

Spectrum's Kakinada and GVK's Jegurupadu power plants were two of the eight fast-track projects approved by the government in 1992.

However, the fiscal 1996-97 can be regarded to be the official starting year of PPP.

An **expert group on Commercialization of Infrastructure Projects** submitted a path-breaking report advocating a significant role for private capital. The private sector allowed into ports through an amendment to the Major Port Trusts Act and National Highways Authority of India's capital base was widened to Rs. 500 crores.

This report helped the formation of various organizations such as **The Infrastructure Development Finance Corporation**.

The **Planning Commission recognized a significant intra deficit**. It planned to raise the Gross Capital Formation (GCF) in infrastructure to 9 per cent of GDP by the terminal year of the 11th Plan (2007-12).

The India Infrastructure Finance Company Ltd (IIFC) was set up in 2006 to provide long-term financial assistance to PPP projects.

The share of private capital moved up from 22 per cent in the 10th Plan period to 37 per cent in the 11th Plan.

PPP started lowering from 2012 onwards due to inappropriate risk-allocation, aggressive bidding, twin balance-sheet problems, mounting non-performing assets, and lack of dispute resolution.

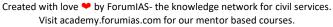
Almost all Indian corporations and commercial lending institutions are careful of investing in greenfield PPP projects and foreign investors prefer operating brownfield assets.

What were the steps taken by government to revive PPP?

The Budget of 2014 proposed to set up an institution called **3P India** with allocation of Rs 500 crore.

In May 2015, the government constituted a nine-member committee which submitted its report "Revisiting and Revitalizing PPP Model of Infrastructure Development".

The committee endorsed setting up "3P India".





3P India would deal with complex PPP issues like renegotiation, independent regulation, equitable risk-allocation, and amendments to Prevention of Corruption Act 1988, expeditious redress of disputes, and capacity building.

The annuity and hybrid annuity models that sought to substantially reduce the risk of private investment were adopted.

New sectors like ropeways and effluent treatment plants were brought into the PPP ambit.

PPP is back with 100 percent of the National Monetization Pipeline target of Rs 6 trillion and 40 percent of the National Infrastructure Pipeline target of Rs 111 trillion expected to be funded under PPP formats.

The finance ministry in July announced the setting up of a new body called the Infrastructure Finance Secretariat (IFS) which is expected to play an integrative role in the revival of the PPP ecosystem.

15. Effecting the ban on single-use plastics

Source: The post is based on the article "Effecting the ban on single-use plastics" published in The Hindu on 2nd September 2022.

Syllabus: GS 3 – Environment – Pollution.

Relevance: About the ban on SUPs(single-use plastics).

News: The Ministry of Environment, Forest and Climate Change has notified the Plastic Waste Management Amendment Rules, 2021. Since July 1, 2022, India has banned the manufacture, import, stocking, distribution, sale, and use of single-use plastic (SUP) items with low utility and high littering potential.

About Plastic Waste Management Amendment Rules

Read here: Plastic Waste Management (Amendment) Rules, 2022 - Explained, pointwise

Other countries that banned SUPs: Bangladesh became the first country to ban thin plastic bags in 2002; New Zealand banned plastic bags in July 2019. China had issued a ban on plastic bags in 2020 with a phased implementation.

What is the international commitment that led to banning SUPs?

India is a party to the United Nations Environment Assembly (UNEA). India has also signed a resolution to draw up an agreement in the future that will make it legally binding for signatories to address the full life cycle of plastics, from production to disposal.

India also piloted a resolution on single-use plastics pollution at the 4th United Nations Environment Assembly in 2019, recognising the urgent need for the global community to address this issue. This resolution was adopted at the UN Environment Assembly as an important step forward.

Read more: Candy sticks to earbuds: Govt bans single-use plastic from 2022

Why are single-use plastics harmful?

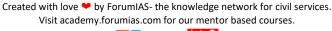
Read here:

- Explained: Why is single-use plastic being banned in India from July 1
- Why is single-use plastic being banned in India?

What are the measures taken to enforce the ban on SUPs?

In an effort to empower citizens to help curb the plastic menace, the Central Pollution Control Board (CPCB) has launched a grievance redressal application.

The Government has been taking measures for awareness generation towards the elimination of single-use plastics. The awareness campaign has brought together entrepreneurs and start-ups,





industry, Central, State and local Governments, regulatory bodies, experts, citizen organisations, etc.

What are the challenges in enforcing the ban on SUPs?

Read here:

- India's ban on select single-use plastic items: A start but still a long way from blanket ban
- Single-use plastic ban: Reading the fine print reveals ominous loopholes

What can be done to properly enforce the ban on SUPs?

1) The solution to the plastic pollution problem is not the responsibility of the government alone, but of industries, brands, manufacturers and most importantly consumers, 2) Greener alternatives to plastic may be considered a sustainable option. For example, compostable and bio-degradable plastic, etc.,

16. <u>Making at home: Vikrant's commissioning & plans to build fifth generation fighters must</u> speed up defence self-reliance

Source: The post is based on an article "Making at home: Vikrant's commissioning & plans to build fifth generation fighters must speed up defence self-reliance" published in The Times of India on 2nd September 2022.

Syllabus: GS 3 - Defence technologies - Indigenization of technology

News: This article discusses the advantages of indigenization.

The Cabinet Committee on Security (CCS) recently cleared the project to develop Tejas Mark-2. It is an upgraded version of the indigenous light combat aircraft Tejas Mark-1. Another project of Rs 15,000-plus crore to build a fifth-generation advanced medium combat aircraft will be cleared in the next few months.

Tejas Mark-1 will replace the ageing MiG-21s while Tejas Mark-2 will gradually substitute Mirage-2000s, Jaguars and the MiG-29s.

Another good news is commissioning of INS Vikrant. More than 75% of the ship's components have been procured domestically.

Why indigenization in defense is necessary?

Geopolitical environment – It has become more complex and India can no longer rely on Russia which is now China's "limitless" ally.

Cost – Most hi-tech foreign purchases will be costlier than their domestically manufactured counterparts.

Advantage for Indian industry – Made in India arms and defence systems will be a big boost for Indian industry.

Why are imports still a necessity?

The import content for the indigenous Tejas fighter continues to be around 50%.

The key reason for reliance on foreign aero engines is that domestic Kaveri engine project failed. Big private sector companies should be invited for joint research and development to make import dependency minimum.





17. <u>Three key changes: To counteract global slowdown GoI should privatise, reform agri market</u> & reduce customs duties

Source: The post is based on an article "Three key changes: To counteract global slowdown GoI should privatise, reform agri market & reduce customs duties" published in The Times of India on 2nd September 2022.

Syllabus: GS 3

News: This article discusses about the steps that India should take to tackle global economic slowdown.

April-June quarter's GDP data shows recovery in the Indian Economy. However, global economy has slowed down.

Also, RBI's monetary tightening to contain inflation will hinder economic progress.

All these issues can be tackled if the state and central govt. can resume the shelved reforms.

What steps can be taken by government of India to counter global economic slowdown? Privatization

GoI needs to overcome bureaucratic hurdles to privatization.

The government announced strategic disinvestment of 35 PSUs in 2016. Out of which 24 are still in the process of sale.

There is slow progress in the proposed privatization of two public sector banks of the 12 functioning ones.

These transactions will provide capital for GoI and boost its infrastructure development plans.

Agriculture

The potential of the common platform for a national agricultural market (e-NAM) hasn't been fully tapped.

It has a great potential but there is a need to work on logistics and dispute settlement.

Trade

The protectionist approach needs to be discarded to get the most out of the PLI scheme. FTAs, rather than bilateral trade deals, should be prioritized.

18. The world of clean hydrogen buzzing with activity

Source: The post is based on an article "The world of clean hydrogen buzzing with activity" published in The Business Standard on 2nd September 2022.

Syllabus: GS 3 - Energy and associated issues

Context: The article discusses the steps that have been taken by India and other countries for promoting green hydrogen.

What is green hydrogen?

Read Here

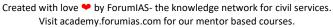
What is needed to increasing the production of Green Hydrogen?

Green hydrogen has a critical role to play in decarbonization and the achievement of net-zero emissions.

There are four things needed to scale it up:

- Competitively priced renewable energy
- Electrolysers
- Supporting physical infrastructure
- Policy push

One of India's advantages is cost-competitive renewable energy.





What steps have been taken in India?

Reliance is one of the largest producers of grey hydrogen globally.

It has announced to **deliver green hydrogen at the lowest cost** and to progressively commence transition from grey hydrogen to green hydrogen by 2025.

This will be supported by a giga-scale electrolyser manufacturing facility.

The **Adani Group** announced a partnership with Total Energies for its green hydrogen push.

The company targets production of 1 million tonnes of green hydrogen per year by 2030.

What steps have been taken worldwide?

US have recently passed Inflation Reduction Act. It is the world's first tax credits for hydrogen. **Amazon** appounced to buy almost 11,000 toppes of liquid green hydrogen from Plug Power.

Amazon announced to buy almost 11,000 tonnes of liquid green hydrogen from Plug Power annually.

Walmart had signed a similar deal with Plug Power to get up to 20 tonnes per day of carbon free hydrogen to power material-handling lift trucks in the US.

Canada is aiming to become a major producer and exporter of hydrogen as well as related clean technologies.

Germany is aiming to import significant amounts of renewable hydrogen to decarbonise its hard-to-abate sectors in line with its 2045 climate neutrality target.

19. Overseeing an ocean: INS Vikrant joins the navy's fleet

Source: The post is based on an article "Overseeing an ocean: INS Vikrant joins the navy's fleet" published in The Business Standard on 2nd September 2022.

Syllabus: GS 3 - Defense Technology - Indigenization of technologies

Relevance: security and bilateral relation

News: Indian Naval Ship (INS) Vikrant is commissioned into the navy's fleet. The articles discuss the further challenges before India in securing the vast ocean.

It will the second aircraft carrier with India, first one being the INS Vikramaditya, that was bought from Russia. It will enter India into the exclusive club of only 5 countries, with 2 aircraft carriers.

However, it will still not be sufficient to tackle the challenges in front of India.

What are the issues India might still face?

Indian navy required two deployed carriers, minimum: One for the east coast (the Bay of Bengal and Malacca Strait) and a second for the west coast (the Arabian Sea, the Pakistan coast and West Asia).

Lately, the navy has begun suggesting for a third deployed carrier to carry out power projection at longer ranges across the Indian Ocean Region.

Now, **India's 2** aircraft carriers don't mean that both will be deployed. The naval fleet must have three aircraft carriers to have two carriers operationally available. Because most of the time one of those three would be in the dockyard for maintenance.

For example, out of US's 11 carriers, only three US Navy carrier strike groups (CSG) were operationally deployed.

The Indian Navy's two aircraft carriers would mostly amount to just a single operationally deployed carrier.

Similarly, operationally deploying three carriers would require a four-carrier fleet.

What is the significance of warships?

Naval forces have an unparalleled capability for dispensing humanitarian aid and disaster relief as the Indian Navy did after the Asian tsunami of 2004.





US has come up with National Defence Authorisation Act that specifies the annual defence budget and expenditures under various heads. It has for the first time; the US has given the navy legal and budgetary powers to discharge a clear peacetime as well as its combat role.

India plays a role of security provider in the Indian Ocean Region. It has a role and interest in protecting sea lines of communication (SLOCs) that carry 70 per cent of global trade.

China expanding navy poses a threat to India. China's warship is building yards in Dalian and constructing four-five large and sophisticated destroyers simultaneously.

what are the challenges in front of India?

India is facing a dilemma whether it should focus on sea or land borders to counter China. India is the only member country of the Quadrilateral that shares a land border with China. PLA's multiple encroachments, across the LAC, have heightened the tensions on India's land borders.

However, the US and Australia are pushing India to focus on the Indian Ocean Region. India must resolve its stand since India's own economic prosperity depends upon keeping open its SLOCs in the Indian Ocean.

20. India's cyber infrastructure needs more than patches

Source: This post is created based on the article "India's cyber infrastructure needs more than patches", published in The Hindu on 3rd September 2022.

Syllabus Topic: GS Paper 3 – Cybersecurity

Context: Cybercrime is increasing with the increased use of information and communication technology (ICT). However, the capacity of enforcement agencies to investigate cybercrime remains limited.

According to the National Crime Records Bureau (NCRB), from 12,317 cases of cybercrime in 2016, there were 50,035 cases registered in 2020.

In Arjun Pandit Rao Khotkar vs Kailash Kushanrao Gorantyal case, SC settled the rules on the admissibility of electronic evidence.

The Court held that a certificate under Section 65B(4) of the Indian Evidence (IE) Act was a mandatory prerequisite for the admissibility of (secondary) electronic records if the original record could not be produced.

States are responsible for creating the infrastructure for cybersecurity, whereas the center is responsible for providing uniformity in the legislation.

What are the challenges in dealing with cyber or computer-related offences?

No separate procedural code: There is no separate procedural code for the investigation of cyber or computer-related offences. The nature of electronic evidence is entirely different compared to the traditional crime.

A five-judge committee suggested Draft Rules for the Reception, Retrieval, Authentication, and Preservation of Electronic Records. However, it is yet to be given statutory force.

Recruitment of technical staff for the investigation of cybercrime is not happening at the required pace. Any person with an academic background in the arts, commerce, literature, or management cannot identify digital evidence.

Authority to investigate: As per the Information technology Act, offenses registered under the act, cannot be investigated, by an officer, below the rank of an inspector. However, there are not enough inspectors in a district for that purpose.

Examiner of Electronic Evidence: While most State cyber labs are sufficiently equipped to analyze hard disks and mobile phones, many are yet to be notified as 'Examiner of Electronic





Evidence' (by the central government) to enable them to provide expert opinions on electronic records.

Trans-national cybercrime: It is very difficult to investigate Transnational cybercrimes. In these cases, blocking an objectionable website or suspect's account is the only option available to the authorities.

What should be the future course of action?

First, the broad 'guidelines for the identification, collection, acquisition, and preservation of digital evidence' are given in the Indian Standard IS/ISO/IEC 27037: 2012. Which are issued by the Bureau of Indian Standards (BIS). The guidelines are sufficient to ensure that electronic evidence is neither tampered with nor subject to spoliation during the investigation.

Second, a sufficient capacity build-up is required to handle cybercrimes. It could be done either by setting up a separate cyber police station in each district or range or by having technically qualified staff in every police station.

Third, Information Technology (IT) Act, 2000 should be amended and make the officers of the rank of sub-inspector, eligible to investigate the cybercrimes.

Fourth, the central government has proposed launching a digital rupee using blockchain technology soon. State enforcement agencies need to be ready for these technologies. Cyber forensic laboratories of States should be upgraded by providing modernization funds by the center.

Fifth, Data localization must be implemented to deal with the transnational crimes happening in India

Sixth, the Indian police receives a CyberTipline report on online Child Sexual Abuse Material (CSAM) from the U.S.'s non-profit agency, the National Center for Missing & Exploited Children (NCMEC). India should develop its in-house capacity and/or makes intermediaries accountable to identify and remove online CSAM for immediate action by the police.

21. INS Vikrant sets sail: Why it is key to India's maritime strategy

Source: The post is based on the following article "Wind in the sail" published in The Hindu on 3rd September 2022."INS Vikrant sets sail: Why it is key to India's maritime strategy" published in the Indian Express on 3rd September 2022.

"India needs to get cracking on the next aircraft carrier" published in The Times of India on 3rd September 2022.

Syllabus: GS 3 – Indigenization of technology and developing new technology.

Relevance: About the present state of the Non-Proliferation of Nuclear Weapons (NPT) Treaty.

News: India commissioned its first indigenously designed and built aircraft carrier, INS Vikrant. About IAC Vikrant

Read here: IAC Vikrant

The Navy has taken an active interest in procuring either the <u>French Rafale M</u> or the <u>American F/A-18 Super Hornet</u>. This would need structural modifications in the ship which would allow the <u>operation</u> of these more capable aircraft from its deck.

What are the strategic advantages of aircraft carriers like IAC Vikrant?

Access to littoral spaces: In peace and in war, no platform provides access to littoral spaces as thoroughly and emphatically as the aircraft carrier.

India's proactive maritime strategy: Vikrant will boost India's maritime capability in the Indo-Pacific and the Indian Ocean Region. It will also aid India's 'SAGAR' or Security and Growth for All in the Region initiative.





Trade benefits: A strong Navy is critical to India's ambition to grow its share in global trade. This is because India's merchandise exports are largely maritime.

Economic empowerment: One shipyard job leads to the creation of 5-6 jobs in ancillary industries. Over 500 Indian firms and 100 MSMEs contributed to building INS Vikrant. For example, Vikrant generated employment opportunities for almost 15,000 personnel across various segments including 2,000 personnel at the Cochin Shipyard.

The versatility of aircraft carriers: With Vikrant, India's aircraft carriers can be been used as versatile assets, switching between power projection, soft and hard power diplomacies. This is because the navy earlier has only one aircraft carrier.

Counter China: INS Vikrant significantly expands the Indian Navy's footprint in the backdrop of increasing Chinese activity in the region. For instance, Under the People's Liberation Army Navy's (PLAN) "far-seas" strategy, China deploys 7-8 vessels in the IOR at any given time. There will be a Chinese Carrier battle group (CBG) moving into the IOR on a near-permanent basis in the future.

What is a Carrier battle group (CBG)?

A Carrier battle group (CBG) is a floating airfield capable of moving 400-500 nautical miles a day. CBG also provide operational flexibility on a 'here and now' basis to launch air defence operations, anti-submarine and anti-ship warfare, and also strikes on land-based targets. CBGs have the inherent capability to prevent emerging threats at standoff ranges.

What are the challenges raised while building aircraft carriers?

Critics were concerned about the relevance of aircraft carriers in the contemporary world. They say there is little point in spending billions for a carrier strike force to protect the Bay of Bengal or the Arabian Sea. This is because a) The near-seas defence can be easily ensured from airbases on India's island territories, b) Aircraft carriers are logistically unviable and highly vulnerable to new hypersonic weapons and disruptive technologies, c) Susceptibility to enemy attack: The flattop of aircraft carriers is defenceless(a virtual sitting duck) against modern-day underwater attacks, long-range strategic airpower and ballistic missiles; d) Prized target for enemies: In a conflict scenario, the destruction of the opponent's aircraft carrier is a priority mission.

How can India move ahead after IAC Vikrant?

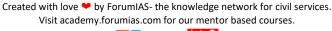
Increase indigenous content: The IAC Vikrant has 76% of indigenous content overall, but its critical technology has been imported. This points out the need for persistence and increases further indigenisation.

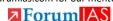
Build second indigenous aircraft carrier: The Indian Navy's ambition is to have three aircraft carriers. (INS Vikramaditya procured from Russia is undergoing a major repair-and-maintenance cycle). The expertise gained from building Vikrant could now be used to build a second, more capable, indigenous carrier.

Solve the fighter jet conundrum: India's plans to develop its own twin-engine deck-based fighter remain a distant dream. So, India should resolve the fighter jet conundrum while also taking a call on the second indigenous aircraft carrier.

Must read: Need for a New Aircraft Carrier for the Indian Navy - Explained, pointwise

The deployment of maritime power needs to be anchored in the logic of geopolitics and long-term state interests, and not on contingent assessments of imminent needs.





22. Fungi form a kingdom of life — they show us how we all need others to live

Source: The post is based on an article "Fungi form a kingdom of life — they show us how we all need others to live" published in **The Times of India** on **3rd September 2022**.

Syllabus: GS 3 – Biodiversity Relevance: fungi and its uses

News: This article discusses the fungi and problem associated with it.

What are fungi?

1) They are neither plants nor animals. They are a body of species. They vary in size. 2) Yeast, moulds, lichens, mushrooms, and conks or wood are types of fungi.3) Fungi decompose matter. They also perform a symbiotic role. Plants can only synthesize nutrients from the soil with the help of fungi. 4) Fungi are impacted by climate change, use of chemicals, habitat loss, and fragmentation. 5 Some fungi are critically endangered.

What are the uses of fungi?

Some fungi cause diseases and some provide essential goods. For example, **Yeasts** give us food preservation and liquid sterilization technique. Antibiotics come from **moulds** and penicillin and statins from **fungus**. Medicines needed for organ transplants come from **fungi**.

What can be done to save fungi?

The IUCN Red List should be applied to fungi as well.

They need to be added to flora and fauna in environment legislation.

Fungi are dependent on plants and animals to grow in order to preserve fungi we should preserve those trees and animals.

Fungal conservation is integrally habitat conservation.

23. Microbes enable all life — and they adapt constantly

Source: The post is based on an article "Microbes enable all life — and they adapt constantly" published in **The Times of India** on **3rd September 2022**.

Syllabus: GS 3 – Biodiversity

Context: This article discusses microbes and issues related to them.

Microbes

- 1) They have the ability to respond to the environment by constantly adapting to the environment.
- 2) Microbes have groups of molecules or proteins that behave like sensors when they see sugar and light. 3) They pass this information to cells and they move in that direction. 4) This process of movement is called **taxis**. 5) They have photoreceptor that senses different molecules and light wavelengths including infrared.

What are the problems with microbes?

Fertilizers entering into lakes allow microbes to grow into algal blooms.

Algal blooms expand very fast and suck up nutrients and release virus and toxins which can poison animals.

Cyanobacteria

It is a type of microbe.

They are **blue-green** in colour because they have pigments which let them absorb lights for photosynthesis.

They have existed for about two billion years and over the time they became mineralized.





24. <u>India needs to get cracking on the next aircraft carrier: INS Vikrant is a necessary but not sufficient condition to offset China's string-of-pearls threat</u>

Source: The post is based on an article "India needs to get cracking on the next aircraft carrier: INS Vikrant is a necessary but not sufficient condition to offset China's string-of-pearls threat" published in **The Times of India** on **3rd September 2022**.

Syllabus: GS 3 - Security and associated issues

Context: The article discusses about challenges faced by Indian in Indian Ocean Region and benefit of indigenous warships to Indian economy.

The indigenous aircraft carrier INS Vikrant constructed will boost India's maritime power and sea control capabilities.

What are the problems being faced by Indian navy?

The country has been without an operational aircraft carrier for the last two years. Its only carrier INS Vikramaditya inducted from Russia in 2013 has been undergoing a major repair-and-maintenance cycle.

India needs at least **three carriers** while one undergoes the periodic maintenance, the other two can be operationally available for the eastern and western seaboards.

Another problem is associated with the serviceability-maintenance of the jets acquired for the carriers.

India had acquired 45 MiG-29Ks from Russia to operate from the deck of INS Vikramaditya.

The navy is now looking to import 26 new jets to meet the shortfall till the indigenous twin engine deck based fighter is ready in around 10 years.

What are the maritime threats to India?

1) There has been increasing threat from China in the Indian Ocean Region. China has world's largest navy of 355 warships and submarines. It can deploy 7-8 vessels in the IOR at any given time. 2) It is building two more carriers at an astonishing speed. There will be a Chinese CBG moving in the IOR on a near permanent basis in the future. This will erode India's traditional maritime combat edge in its own strategic backyard.

Which is more useful a shore based field or aircraft carriers?

IOR is getting increasingly militarized along with the expanding military bases therefore it is necessary for India to deploy aircraft carrier.

Fighters jets taking off from shore-based airfields will have relatively limited combat ranges.

Carrier battle group (CBG) is a floating airfield capable of moving 400-500 nautical miles a day. CBG also provide operational flexibility on a 'here and now' basis to launch air defence operations, anti-submarine and anti-ship warfare, and also strikes on land-based targets.

Land based airbases can also be more vulnerable to pre-emptive strikes compared to the mobile airfields on CBGs.

CBGs have the inherent capability to prevent emerging threats at standoff ranges.

How indigenous warships help the economy?

One shipyard job leads to creation of 5-6 jobs in ancillary industries.

Over 500 Indian firms and 100 MSMEs contributed towards building INS Vikrant which has a 76% indigenous content.

It generated employment opportunities for almost 15,000 personnel across various segments which included direct employment of 2,000 personnel at the Cochin Shipyard.



