

9pm
Compilation

October, (Fourth Week)

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General Studies Paper - 2

General Studies - 2

1. US-China missile rivalry opens up new opportunities for India

Source: This post is based on the article “US-China missile rivalry opens up new opportunities for India” published in “Livemint” on 25th Oct 2021.

Syllabus: GS2 – Effect of policies and politics of developed and developing countries on India’s interests.

Relevance: To understand the arms race between major powers and its implications for India.

Synopsis: The power projection done by china has its own message and also a ground for others to fall into arms race. The scenario further presents an opportunity for India.

Introduction

In the past several years, China has tested its hypersonic missiles, publishing papers reporting their advances in such a sensitive field.

The US govt is obviously aware of this. Hence, US officials expressing shock at this development and comparing China’s hypersonic missile tests to a “Sputnik moment” do seem a bit of exaggeration.

Is this a new arms race?

Indeed, Washington’s open public message on China’s hypersonic missile tests, may well be a part of its defence establishment’s political-bargaining process, whereby US using it as an excuse to further speed-up its missile building process.

This can be seen in the recent context of US President reaffirming commitment to defend Taiwan in the event of a Chinese invasion.

However, the new missiles that China and Russia are deploying are a response to Washington’s 2002 decision to withdraw from the ‘anti-ballistic missile treaty’ and invest in ballistic-missile defence.

What is the message that China wants to convey?

China, in showing up its capability to strike the US homeland with ICBMs and hypersonic missiles, helps in signalling US and others, that a confrontation with China can be problematic.

What are its implications?

Hypersonic missiles are certainly a technological advancement over plain old ballistic missiles as vulnerability to nuclear attack is the basis of ‘**strategic deterrence**’ and ‘world peace’.

However, every additional warhead and delivery mechanism raises the risk of an ‘**accidental nuclear war**’.

What does this mean for India?

Opportunities for India:

– **India should reframe the issue from “non- proliferation” to “No-First use” policy** of nuclear weapons. India is ideally placed to champion a Global No First Use (GNFU) treaty as the first step. Beijing, like India, has a no-first-use policy, and a post-Trump Washington is likely to be more receptive to the idea.

An independent ‘**Space Situational Awareness(SSA)**’ crucial for space defence, also it has the potential to become strategic technology that other countries will require. Indian companies

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can aim to acquire a competitive advantage in the tracking of space objects, both from the ground as well as from space.

India can take advantage of space reforms by focusing public investment in the physics, materials and engineering of anti-satellite and hypersonic systems.

Path for India:

India should stick to 'minimum credible deterrence' by having nuclear warheads so as to create deterrence. India has wisely achieved strategic deterrence without getting into an arms race. We should stay the course.

2. Aiding Afghanistan: On both humanitarian and strategic grounds, India must provide succour to ordinary Afghans

Source: This post is based on the article "**Aiding Afghanistan: On both humanitarian and strategic grounds, India must provide succour to ordinary Afghans**" published in **Times of India** on **25th October 2021**.

Syllabus: GS 2 – Bilateral, regional and global groupings and agreements involving India.

Relevance: Understanding the need of providing humanitarian aid to Afghanistan.

Synopsis: India can opt two-track approach to managing Afghanistan relations under new circumstances.

Introduction

After India's second official-level contact with the Taliban, the Taliban revealed that India has offered to provide humanitarian assistance to Afghanistan.

What is the economic situation of Afghanistan?

The Taliban economy is already on the brink of collapse. Its **foreign reserves were frozen by the US and IMF**. The country is even unable to pay the civil servants and medics salaries for the last few months. According to the [World Health Organization \(WHO\)](#), 90% of 2,300 health clinics across Afghanistan are at the risk of shutting down.

Why India should provide humanitarian aid to Afghanistan?

India sending aid to Afghanistan is a complicated one as the Taliban government is still **not internationally recognized**. But India should provide assistance as if the humanitarian crisis worsens in Afghanistan, it will also have an impact on the neighbouring countries. These countries will not only have to deal with refugees but also the security situation in Afghanistan.

Read more: [India's humanitarian missions are guided by Vasudhaiva Kutumbakam](#)

What should India do?

India's attempt to completely bypass the Taliban in aid delivery may not be possible. But it still sends a message that the Taliban needs to work hard to uphold human rights. This **two-track approach** where **ordinary Afghans are helped and the Taliban is also incentivized** is the best way forward.

Read more: [Implications of the rise of Taliban for India – Explained, pointwise](#)

India could take further steps like **restarting the normal processing of medical and student visas** for Afghans.

3. Step towards more LGBTQIA+ affirmative medical curriculum doesn't go far enough

Source: This post is based on the article "**Step towards more LGBTQIA+ affirmative medical curriculum doesn't go far enough**" published in the **Indian Express** on **25th October 2021**.

Syllabus: GS 2 Mechanisms, Laws, Institutions and Bodies constituted for the Protection and Betterment of these Vulnerable Sections.

Relevance: Understanding the broad picture of NMC guidelines.

Synopsis: NMC guidelines should consider a larger picture into account and draft the changes accordingly in the medical education curriculum.

Introduction

Recently **National Medical Commission** (NMC) has issued an advisory to all medical universities and colleges. It asked them to bring changes in the teaching methods and in the competency-based medical education (CBME) curriculum. It also asked to opt for methods that are not derogatory to the LGBTQIA+ community.

Why do the NMC issue guidelines?

The NMC's notification comes against the backdrop of several recent developments. A petition has been filed in the Madras High Court by a lesbian couple whose relationship was being opposed by their parents. In another incident, Dr Trinetra Haldar Gummaraju, a trans doctor, called out the rampant **queerphobia in medical education**.

Read more: [Madras High Court guidelines for mainstreaming LGBTQIA+ community](#)

Kerala High Court also passed an order asking for the removal of discriminatory and inhuman references to LGBTQIA+ people from MBBS textbooks. The **Transgender Persons (Protection of Rights) Act, 2019** also aims towards the Social, economic and educational empowerment of transgender persons.

What is missing in the NMC guidelines?

Although the NMC advisory mentions necessary changes in the competencies of its CBME curriculum, there are **no specifications** on what these changes are. CBME curriculum itself mentions queerphobic things that are to be taught to students.

For example, being transgender, which is a normal variation, is called a disorder. Sodomy and lesbianism are called sexual offences, even though the Supreme Court has struck down **Section 377**.

This would also make future Indian doctors less empathetic in treating queer patients. NMC, by putting the onus on medical colleges and authors of books, is simply passing the responsibility.

Read more: [Need to ban the Conversion therapy of the LGBTQIA+ community](#)

Why the NMC guidelines alone is not sufficient?

In India, the medical syllabus focussed only on the binary of male and female, heterosexuality and cis-gendered lives. It excludes homosexuality, gender non-binary, queerphobic content and transgender issues. Even CBME curriculum 2019, continues to include a queerphobic syllabus.

There is rampant **queerphobia prevalent in society**. This scares LGBTQIA+ students in medical colleges and even queer faculty members. This in turn leads to practitioners staying away from queer-affirmative medicine, as queer patients hesitate to approach any professional.

What the NMC should do?

It should start by **recognizing the flaws in its own CBME curriculum** and need to make the necessary changes. Specific **guidelines should be made to make healthcare queer-**

affirmative. The changes should not only be limited to forensic medicine and psychiatry, but also to other subjects also.

Further, the **participation of different stakeholders** is required towards the development of a queer-affirmative curriculum.

4. [India's Central Asian outreach](#)

Source: This post is based on the article "**India's Central Asian outreach**" published in **The Hindu** on **25th October 2021**.

Syllabus: GS 2 Bilateral, regional and global groupings and agreements involving India.

Relevance: Understanding the importance of Central Asia on Indian perspective.

Synopsis: Afghanistan's situation has thrown up challenges in the India-Central Asia relationship.

Introduction

The developments in Afghanistan have opened a new set of challenges for India's regional and bilateral ties with Central Asia and the Caucasus.

What are Central Asian initiatives to resolve the Afghan crisis?

The re-emergence of the Taliban has exposed the weakness of coalitions like [Shanghai Cooperation Organisation \(SCO\)](#). It has largely been used by its member countries to meet their own regional, geo-strategic and security interests.

Read here: [Can the Shanghai Cooperation Organisation be the regional body that stabilises Afghanistan?](#)

As the SCO failed to collectively respond to the Afghan crisis, the Central Asian leaders met in Turkmenistan to voice their concerns over the Afghan situation. They raised their concerns over the presence of Central Asian terror groups within Afghanistan and along their borders.

What is India's relation with Central Asian countries?

India's **Connect Central Asia policy** is aimed at furthering India's political, economic, historical and cultural connections with the region. India signed the **Strategic Partnership Agreements (SPA)** with Kazakhstan, Tajikistan and Uzbekistan to stimulate defence cooperation and deepen trade relations.

Read more: [India and Central Asia](#)

Recent developments in India-Central Asia relations

To secure its interests in Afghanistan and push for an inclusive regime, India's **External Affairs Minister (EAM)** visited **Kyrgyzstan, Kazakhstan and Armenia**, which are India's key partners in Central Asia and Eurasia.

Kyrgyzstan: India extended a credit line of \$200 million for the support of development projects. It also signed a memorandum of understanding (MoU) on **High-Impact Community Development Projects (HICDP)**.

Kazakhstan: Indian EAM attended the 6th Foreign Ministers' **Conference on Interaction and Confidence-Building Measures(CICA)**. In this, he targeted China's **Belt and Road Initiative (BRI)** and its method to promote parochial interests. He also criticized Pakistan for its support towards cross-border terrorism.

Armenia: Both countries agreed to enhance trade and cultural exchanges to boost bilateral relations. India also supported efforts for a peaceful solution to the **Nagorno-Karabakh conflict** between Azerbaijan and Armenia under the **Organization for Security and Cooperation** in Europe's (OSCE) Minsk group.

Read more: [Explained: Why Armenia and Azerbaijan are at loggerheads over Nagorno-Karabakh](#)

However, the unstable situation in Afghanistan and a highly problematic India-Pakistan relation have deprived India of the benefit of relations with Central Asia.

5. Transcending borders and boundaries

Source: This post is based on the article “**Transcending borders and boundaries**” published in **The Hindu** on **25th October 2021**.

Syllabus: GS 2 mechanisms, laws, institutions and Bodies constituted for the protection and betterment of these vulnerable sections and Women related issues.

Relevance: Understanding women’s peace movements.

Synopsis: The work of feminist writers and women movements highlighted the core arguments behind women movements. The world should learn from them.

Introduction

The concept of peace-building and protest are usually seen as two distinct entities. But in the matter of women’s movements, particularly in South Asia starting with the 1980s and 1990s, these two were intertwined.

What are the contributions of feminist writers?

Kamla Bhasin, who wrote about women’s issues that transcend even borders, cultures and societies, reflects the issues of women, society and the state.

Women in South Asia face a continuum of violence – both structural and over it – which is inflicted by patriarchies, family structure, community and the state. This was very well depicted in **Bhasin’s book with Ritu Menon, Borders and Boundaries**, and **Urvashi Butalia’s The Other Side of Silence** were both published in the 1990s. They gave the narratives of pain, loss, displacement and violence that the Partition of India had brought on women on both sides of the border.

Read more: [The Indian women’s movement can only grow by being inclusive](#)

Few prominent women movements in South Asia

Various ethnic conflicts in regions like Bangladesh, Sri Lanka, Nepal and Pakistan enabled civil society to debate about issues of justice, rights, patriarchy, militarisation and nuclearisation. In recent decades, South Asia has witnessed collective actions of “disobedient women” fighting for peace and defying state-centric notions of security and order. For example,

-Various initiatives like the **Women’s Action Forum (WAF) in Pakistan** reached out to their sisters in Bangladesh to apologize for the atrocities of the Pakistan army in 1971.

-The **Women’s Peace Bus** undertaken by the Women’s Initiative for Peace in South Asia (WIPSA) from Delhi to Lahore in 2000 demanded a war-free South Asia.

-Women in Security Conflict Management and Peace (**WISCOMP**) brought young South Asians together in workshops on conflict transformation.

-Persevered with the mission to expand constituencies for peace: This is visible in the **mother’s movements in Sri Lanka, the Chipko, Narmada, Bhopal and Kudankulam movements** in India.

What are the core arguments of women movements?

The movements highlight the tension between people’s security and so-called national security. They argue or oppose the war and cultures of militarism. They highlight how the discourses of

hegemony and masculinity are designed to preserve power hierarchies nationally and internationally, and even in the world economic order.

The movements **used numerous innovative methods and feminist concepts.**

What should one learn from women movements?

The landmark **United Nations Security Council resolution (UNSCR 1325)** in 2000 had set the template for women's peace and security agenda. But they should draw from experiences of the women's movement carried out in South Asia to settle the debate between the notion of security and security of women.

Overall, the world needs to create a nurturing love for society, love for people and love for humanity. All this will ensure the security of everyone, including women.

Terms to know

- [United Nations Security Council \(UNSC\)](#)

6. We mustn't lose time on enacting a data protection law

Source: This post is based on the article "**We mustn't lose time on enacting a data protection law**" Published in "**Livemint**" on **26th Oct 2021**.

Syllabus: GS2- Government Policies and Interventions for Development in various sectors and Issues arising out of their Design and Implementation.

Relevance: Personal Data protection bill

Synopsis: India needs to pass its own data protection law as soon as possible in order to demonstrate our leadership at the global level in this newly-emerged but important field of jurisdiction.

What is the significance of Puttaswamy and Others vs. Union of India and Others case?

A 9-judge bench of India's Supreme Court passed a historic judgement in the **Puttaswamy and Others vs. Union of India** and Others case.

It **guaranteed informational privacy to each citizen of India as a fundamental right.**

This right is now a part of the 'basic features' of the Constitution and therefore becomes fully justiciable.

Possibly, no other country in the world has the right to informational privacy as a fundamental right.

What constitutes 'informational privacy'?

It is an amalgamation of several rights. The right to be left alone, the right to body, mind and soul, the right to control over one's data and information related to one's personal life, the right to one's individuality, and the right to be forgotten etc.,

Privacy is not just an idea, but a way of life that enhances the scope of individual liberty, speech and expression. And this is also linked to the right to dissent in a democracy.

Why there is a need to enact data protection law for India?

Until right to privacy judgement, privacy and personal data were broadly regulated under **Section 43A** of the **Information Technology Act, 2000**, and the **Information Technology Rules of 2011**.

With the rise of digitalization in the country and the rapid increase of technology-led services in the daily lives of people, led to the sharing of personal data at different levels. Hence, the need arose to evolve from a basic level of privacy to a more granular and comprehensive mechanism.

Also, other countries like Europe had already passed its **General Data Protection Regulation in 2018**. The broad idea of such reforms is to provide citizens ownership of their data.

What were the key recommendations of the of Justice B.N. Srikrishna committee?

Following the judgement of the Supreme Court, the government had set up a committee of experts in 2017 under the chairmanship of Justice B.N. Srikrishna.

The committee submitted a report titled, 'A Free and Fair Digital Economy: Protecting Privacy, Empowering Indians', a year later along with a draft Data Protection Bill.

Its focus was to ensure that citizens know how their data is processed, why it is being processed, for how long such data would be stored, where it's being stored, how secure it would be, etc.

The major principles suggested by the committee are **informed consent, data minimization, process limitation** and the **right to be forgotten** embedded in the Bill

In addition, it featured '**privacy by design**', a concept that puts privacy at the heart of systems and processes, taking privacy into account during the entire engineering and production processes of a data fiduciary.

Further, the panel's focus was not confined just to protecting an individual's right to privacy, but also extended to fostering an enabling environment for free and fair trade and industry. The latter was important, as it recognized the value of data in economic activity and nation-building.

What are the issues/Challenges present in the Personal Data Protection Bill?

It has drawn some criticism for blanket exemptions provided to the executive, with little or no judicial or parliamentary oversight. The Bill was sent to a **Joint Parliamentary Committee (JPC)** for assessment.

In its current form, the envisaged Data Protection Authority (DPA) does not have the autonomy of an ideal regulator and is largely executive-driven, with only minimal safeguards against political interference. Besides, its independence could be put at risk by a lack of technical competence.

What is the way forward?

In order to regulate the implementation of India's new data protection law, we would need a strong DPA that protects citizens from any abuse of their personal data.

7. Clear regulations: On digital gold

Source: This post is based on the article "**Clear regulations**" published in "**Business Standard**" on **26th Oct 2021**.

Syllabus: GS2 – Statutory, Regulatory and various Quasi-judicial Bodies.

Relevance: Role of SEBI

Synopsis: Address regulatory gaps for digital gold.

What is the issue?

Recently, the Securities and Exchange Board of India (SEBI) issued an advisory, forbidding registered investment advisers from engaging in unregulated activities such as providing platforms for dealing in unregulated products, or otherwise facilitating such trades.

While assets like cryptocurrencies and non-fungible token (NFT) do fall in this category, the regulator specifically mentioned digital gold.

What is Digital Gold?

Digital gold consists of digital certificates issued against holdings of the physical metal. These assets can be traded digitally or redeemed in metal, as the holder chooses.

These are similar to **gold exchange-traded funds** (ETFs) and the government's own sovereign gold bonds. But unlike sovereign bonds, private digital gold certificates and gold ETFs are **not interest-bearing**.

Households that are interested in precious metal holdings can accumulate digital gold in small quantities transparently instead of buying and holding the metal itself. Households that wish to liquidate gold holdings can also do so via this route.

Why SEBI should reconsider its decision on digital gold?

Firstly, unlike cryptocurrencies and NFTs, digital gold consists of assets backed by the physical metal.

Secondly, the players in this market are all well-known, organised entities, including government-owned entities.

Thirdly, there's always greater activity in this segment at the festive season and instead of discouraging such trades, the regulator should consider letting them continue until such time as gold exchanges are established.

What are the concerns related to Digital gold?

Digital gold falls in a **regulatory grey zone** in certain key respects at the moment. The instrument itself does not come directly under the purview of any financial sector regulator, and it is not currently traded on recognised financial exchanges.

What is the way forward?

In August 2021, SEBI flagged deals in digital gold as a breach of the Securities Contracts (Regulation) Rules (SCRR), 1957.

In response to that ruling by the regulator, the National Stock Exchange instructed its members, including stockbrokers and wealth managers, to wind down trades in digital gold by September 10. This has led to an artificial thinning out of the market during the festive season, when demand is high.

Instead of this, the regulator should be looking to remove the grey areas, and to accelerate the transition to setting up full-fledged gold exchanges.

Sebi's proposed framework for new gold exchanges will certainly help bring more clarity and transparency, once such exchanges are Set up.

Until such time however, the regulator should not discourage known entities from offering this instrument.

8. Heady reform: On cannabis use

Source: This post is based on the article "**Heady reform**" published in "**Business Standard**" on **25th October 2021**. **Syllabus:** GS2 – Global groupings and agreements involving India and/or affecting India's interests.

Relevance: To understand Indian and international rules on psychotropic substances.

Synopsis: Implementing UN resolution on cannabis can help sort out some issues and has its own benefits.

Introduction

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The recent zeal of the Narcotics Control Bureau (NCB) in dealing with possession of cannabis in India and on the other hand, India's voting with the majority in the UN to remove cannabis and cannabis resin from the list of most dangerous substances, has contradictions.

What are the laws and rules regarding drugs in India?

International Conventions on Narcotic Drugs in December last year, ended a 59-year international regime under which cannabis was classified as a hard drug.

Narcotics Drugs and Psychotropic Substances (**NDPS**) **Act, 1985**, whereby possession of cannabis continues to be a crime in India.

The Indian law forbid sale, production, and possession of ganja, the flowering and fruiting tops of the cannabis plant, and charas, the resin (also known as hashish). Interestingly, the **NDPS Act excludes the seeds and leaves of the cannabis** plant, though these are used in the making of bhang.

What are some issues with present laws?

Bhang, a common and fairly potent intoxicant imbibed during festivals in north India is **part of the culture** and religion. It is **sold in licensed shops** in states such as Rajasthan and Uttar Pradesh. Cannabis seeds are also used in several eastern Indian **cuisines**.

The irony is that though the law has reduced ganja and charas in India to a moral issue, cannabis **consumption in all its forms continues unabated**.

Ambiguous terms like "conscious possession", provides executive bodies with discretion to exert itself according to their own interpretations, leading to further victimization of the accused.

What are the reforms needed?

Compassionate approach– Users or Substance dependents should be treated as "victims" and not "addicts" and sent compulsorily to rehab and treatment centres instead of to prison.

In line with the **UN resolution**, government should **decriminalise** people in possession of **small quantities** of drugs for consumption.

What are the benefits of legalizing cannabis use?

– It would free the NCB from exerting itself to define such legally ambiguous terms and focus its attentions on the real problem: The flourishing cross-border trade in heroin that is having such deleterious consequences for the youth in Punjab.

– Legalizing cannabis for recreational use can also bring benefits to tax collection, as seen in case of US's states like Colorado and Washington.

9. China's Border Law: The Why, What & What Next

Source: This post is based on the articles "China's Border Law: The Why, What & What Next" published in "Times of India" on 26th October 2021 and "Beijing's Message" published in "Times of India" on 26th October 2021. **Syllabus:** GS2 – India and its neighborhood- relations.

Relevance: To understand the border relations between India and China.

Synopsis: The new land border law of China has its ramifications for India and therefore steps are needed to be taken by India.

Introduction

People's Republic of China's (PRC) passed a new law for strengthening China's border security management, will go into effect by January 1, 2022.

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Operationally, it enjoins the Chinese military to carry out border drills and provides state support for construction of border towns, strengthening of border defences and better integration of populations inhabiting border areas.

It standardises how China patrols its massive 22,100 km land boundaries and borders with 14 countries.

What led to the formation of this law?

First, the ongoing **China-India military standoff** in eastern Ladakh, “**Go West**” campaign in 1999-China has improved its land and rail connectivity to support its border infrastructure.

Second, China is concerned about **illegal migration** from Taliban-controlled Afghanistan and Central Asian countries, especially worried after **US withdrew** its forces from Afghanistan. UNSC’s report highlights that the ‘East Turkistan Islamic Movement’ fighters are also in Badakhshan province(northern Afghanistan) – next door to Xinjiang via the Wakhan Corridor. China worries about the possible spillover from Afghanistan, destabilising the restive Xinjiang Autonomous Administrative Region.

Third, China also worries about illegal immigration from Vietnam and Myanmar, which could perhaps bring more Covid-19 cases into the country.

What are the implications for India?

Impact on boundary dispute resolution – India-China border standoff resulting from Chinese encroachment of eastern Ladakh has little chance of bilateral resolution.

Demography of border areas – The new border law is in sync with the policy of settlement of Han Chinese in newly constructed Chinese border towns, which till now is dominated by ethnic minorities, cannot be ruled out. Such a development is bound to significantly change the border dynamics with India.

The land border law encourages Chinese border personnel to continue indulging in the use of force along the land borders – especially with India and Bhutan – with added **legal protection and legitimacy**.

What steps should be taken by India?

In short term:

The temporary on-ground adjustments like the establishment of the no-patrolling zone at Pangong Tso should be continued.

India needs to deploy its army along the LAC in sizeable strength and for extended durations to prevent further Chinese ingress.

China’s bordering countries – especially India and Bhutan – need to be cautious about the intensification of Chinese activities along the disputed borders and see the evolving role of different PLA services and border defence units under PLA’s new joint operational military guidelines.

In long term:

India should rethink the possibility of a ‘modus vivendi’ with Beijing as an aggressive, inflexible and belligerent China is here to stay.

10. Can quash SC/ST Act cases if ‘civil’ offence: Top Court

Source: This post is based on the article “**Can quash SC/ST Act cases if ‘civil’ offence: Top Court**” published in the **Indian Express** on 26th October 2021.

Syllabus: GS2 Mechanisms, Laws, Institutions and Bodies constituted for the Protection and Betterment of these Vulnerable Sections.

Relevance: Understanding the SC/ST act.

Synopsis: The strict provisions of the SC/ST act are designed to protect the dignity of marginalized sections of society. But can a compromise be allowed under special circumstances?

Introduction

A recent case from Madhya Pradesh where a property dispute, essentially civil in nature, led to a casteist slur between the two parties. The two parties in question reached a settlement outside the court, and a petition of compromise was filed in the case.

Now the SC ruled that it can invoke its power of [Article 142](#) of the Indian constitution or HC under section 482 of the **Code of Criminal Procedure** to quash proceedings under SC/ST Act.

What is the need for special protection for SC/ST communities?

The SC/ST act was passed to ensure that marginalized segments of society are not targeted. It grants police the power to arrest without the need for a warrant from a magistrate.

The act was enacted keeping in view the constitutional safeguards enumerated in **Articles 15, 17 and 21** of the Constitution. This serves a twin-fold objective of protecting the members of these vulnerable communities, as well as providing relief and rehabilitation to the victims of caste-based atrocities.

Read here: [SC/ST \(Prevention of Atrocities\) Act: New developments and Evolution](#)

The Act is a recognition of the fact that the Scheduled Castes/ Scheduled Tribes continue to be subjected to various atrocities at the hands of upper-castes. It was enacted to deter acts of indignity, humiliation and harassment against members of Scheduled Castes and Scheduled Tribes.

Under what circumstances can the proceedings be quashed?

The court can exercise its powers to quash the proceedings under SC/ST law in the following circumstances:

- Where it appears to the court that the offence in question, is primarily private or civil in nature, or
- Where the alleged offence has not been committed on account of the caste of the victim, or
- Where the continuation of the legal proceedings would be an abuse of the process of law.

What should be the way forward?

Undoubtedly, the crimes which hurt the dignity of an individual should not have the provision of allowing a compromise. But if the nature of the dispute is civil and the parties have reached a settlement, courts have taken the right perspective to allow the case to be quashed.

Terms to know

- [Fundamental Rights](#)

11. [A bubbles of Trust approach](#)

Source: This post is based on the article “**A bubbles of Trust approach**” published in **The Hindu** on **26th October 2021**.

Syllabus: GS2 Bilateral, Regional and Global Groupings and Agreements involving India and/or affecting India’s interests.

Relevance: Understanding the emerging role of Quad.

Synopsis: Given the economic and military strength of China, QUAD needs to adopt a collaborative approach to handle the emerging threats.

Introduction

Over the past few decades, asymmetric globalization favoured China. It allowed Beijing to attain power. Beijing is now using that power to undermine liberal democratic values around the world.

Quadrilateral Security Dialogue (QSD) or Quad is an informal strategic dialogue between India, the USA, Japan and Australia. The emergence of QUAD grouping is vital not just from the military perspective, but from the perspective of global geopolitics.

What should the Quad countries do?

To counter the Chinese threat, Quad countries should **focus on economic cooperation** which is in consonance with their geopolitical interests. Every quad country is rich in a particular domain. For example, the USA is a global leader in intellectual property, Japan in high-value manufacturing, Australia in advanced niches such as quantum computing and cyber security, and India in human capital. A combination of all will offer numerous opportunities.

Quad should adopt a **bubble of trust approach** (all its members can trust each other). This will offer a middle path between the extremes of technological sovereignty and laissez-faire globalization. This approach will further help them expand organically, attracting new partners that share values, interests and economic complementarities.

Read more: [Quad Leaders' Summit – Explained, pointwise](#)

How would the bubble of trust approach work?

Quad should adopt the **Critical and Emerging Technology Working Group**. This would allow the scope of the cooperation to be limited to information industries like semiconductors, network infrastructure and connectivity, etc. This will avoid the long and complex negotiations typical of trade agreements.

Moreover, trade blocks tend to be exclusive whereas bubbles tend to expand organically.

Read more: [India, Israel, UAE and U.S. launch quad forum](#)

What should be done to improve Quad?

The Quad **cannot allow differences of approach to widen** in fields such as privacy, data governance and the digital economy. The Working Group must seek to strengthen geopolitical convergences, increase faith in each member state's judicial systems, deepen economic ties and boost trust in one another's citizens.

This agenda **cannot be about substituting China**. Rather, the approach would allow Quad countries to manage their dependencies on China while simultaneously developing a new vision for the global economy.

12. The perils of an unresolved boundary

Source: This post is based on the article **"The perils of an unresolved boundary"** published in **The Hindu** on 26th October 2021.

Subject: GS2 – International Relations.

Relevance: Understanding the India-China border issue.

Synopsis: India–China border issue has a historical and geopolitical context that needs to be understood in its entirety.

Introduction

At the time of Independence, Tibet had the presence of the British Indian government in Lhasa. The British maintained Tibet as a buffer state between India and China. After the withdrawal of the British, the issue of Tibet and the subsequent issue of India China border came up.

Nirupama Rao, former Foreign Secretary and Ambassador to China, in her new book **“The Fractured Himalaya”** traces the history of Tibet, the genesis of the McMahon Line, Communist China’s military takeover and domination of Tibet, and the border row between India and China

What was the Indian stand and Indian position?

The period from 1949 to 1962 was crucial, and Jawaharlal Nehru sought to establish a workable relationship with the Chinese. The negotiations on the issue commenced in December 1953.

India was of the firm view that any military attack on India from Tibet was not feasible. For India, the status of Tibet and Tibetan autonomy was the same as inherited from the British. India considered the McMohan line to be its boundary. India’s stand was thus firm and beyond dispute.

How did Indian diplomacy fail in this matter?

Mac Mohan line of 1914 only showed Tibet and India but did not demarcate Indian and Tibet boundary on the ground. So the Chinese set out a strategy to seek fresh acceptance or demarcation of every stretch of the border between the two.

Indian diplomats, like KM Panikkar, felt that the Chinese understood the Indian position and that the border issue would pose no difficulty. He felt that leaders like Zhou EnLai recognized the legitimacy of India in Tibet and only suggested some political changes. He was of the view that institutions like the telegraph, trade offices would slowly be normalized under normal consulate relations.

What was the Chinese strategy?

Chinese, while discussing the Tibetan issue with India, did not include the settlement of the Tibet-India border. They first sought to take over Tibet, and then negotiate a border settlement with India. In fact, administrators like Sir Girija Shankar Bajpai pointed out that this would be a flawed strategy.

How China was able to complicate the matter for India?

The Indian government had made it clear in Parliament that not only the direct frontier with Tibet, but also the frontiers of Nepal, Bhutan and Sikkim, should remain unchanged.

However, Zhou Enlai made no reference to the frontier or borders in discussion with ambassadors of India. These cunning moves resulted in China taking over Tibet, without even settling the border dispute with India and then creating troubles at Indian borders.

13. Migrants Keep India Moving

Source: This post is based on the article **“Migrants Keep India Moving”** published in **Times of India** on **26th October 2021**.

Syllabus: GS2 Mechanisms, Laws, Institutions and Bodies constituted for the Protection and Betterment of these Vulnerable Sections.**Relevance:** Understanding the problems faced by the migrants.

Synopsis: Migrants in India faces multiple challenges. So, India urgently needs an inter-state migration council.

Introduction

With incidents of killing migrants in Kashmir to poor handling of migrants during covid and recently introduced nativist laws reflects the poor status of migrants and difficulties faced by them.

Read more: [Concerns associated with Local Reservation Laws](#)

Some previous acts against migrants

There have been **numerous instances of subnational nativism** in the past like the Mulki rules in Nizam-ruled Hyderabad in the late 19th century who provided employment to locals for several decades, Anti-South Indian movements in Bombay in the 1960s, Sons of the soil movement in Assam and many others.

What is the problem faced by migrants?

Locals saw migrants as an outsider. They got blamed for stealing the jobs of locals. They are even accused of murders and rapes in cities.

Read more: [Movers and shapers: On Migrant workers](#)

Nativism is **politically motivated** in the destination states. Source states like Bihar provide migrant workers all across the country. Being less educated, legally aware, and less politically represented, they often face discrimination in the destination states. These movements are often politically motivated.

What is the way forward?

As internal migration in India is likely to surge in the coming decades, there is a need for an **Interstate Migration Council** to ensure the well-being of migrants. It should maintain up-to-date information of people residing in other states. The same council can also be used to ensure the effectiveness of the [One Nation One Ration Card](#) policy.

The creation of this council would further help to **curb nativist sentiments** that arise repeatedly on economic, linguistic and religious grounds.

14. Cost of Doing Business

Source: This post is based on the article “**Cost of Doing Business**” published in **Indian Express** on **27th October 2021**.

Syllabus– GS2: Government Policies and Interventions for Development in various sectors

Relevance: Ease of doing business vs Cost of doing business

Synopsis: Governments must focus on lowering prices and reducing regulatory constraints rather than focusing on ease of doing business.

Introduction

Recently, the IMF’s executive board expressed confidence in the leadership of Kristalina Georgieva in the Doing Business survey controversy that raised doubts over the integrity of Ease of the Doing Business (EoDB) rankings.

What are the efforts made by India in improving ease of doing business?

India has made considerable progress on ranking since 2016.

For instance, the cut in corporate tax rates, the launch of Gati Shakti, the sale of Air India as part of an aggressive asset monetisation plan, the scrapping of retrospective taxation, the PLI scheme and labour reforms are likely to provide a boost to the manufacturing sector.

Why India should focus on cost of doing business?

Focus on the Cost of Doing Business (CoDB): the pandemic has made countries inward-looking in terms of their supply chain and domestic capacities. This may affect global trade and growth over the medium term and make countries extremely selective on costs and competitiveness.

Energy costs: Diesel prices in India are 20.8 per cent higher than those in China, 39.3 per cent higher than in the US, 72.5 per cent higher than Bangladesh and 67.8 per cent higher than in Vietnam. This is largely because of heavy taxation.

Case of electricity: prices for businesses in India were higher by around 7-12 per cent vis-à-vis those in the US, Bangladesh or China and by as much as 35-50 per cent as compared to those in South Korea or Vietnam prior to the recent coal/energy crisis. Coal accounts for more than 70 per cent of electricity generation in India is also pricier vis-à-vis other countries leading to higher electricity prices.

This, in turn, leads to a competitive disadvantage for sectors such as auto, durable goods and construction, which consume these intermediate goods.

GST regime: In the case of the petroleum sector, government levies account for nearly half of the prices paid by coal consumers. And coal producers cannot claim input tax credit because electricity is not under GST. Further, coal freight costs are amongst the highest in the world as high freight rates are used to cross-subsidise passenger fares by the railways.

Outsized regulatory levels: A Teamlease report highlights that a small manufacturing company with just one plant and up to 500 employees is regulated by more than 750 compliances, 60 Acts and 23 licences and regulations. Hence, most of them choose to remain in the informal sector.

What is the way forward?

First, cleaning up the power distribution sector, which is largely state-controlled, could potentially lower electricity prices for businesses.

Second, the Centre could leverage the “carrot and stick” framework. Using fiscal incentives to nudge the states to act and disincentivise them from maintaining the status quo. It must prioritise reducing the cost of energy and compliances for businesses.

15. Clearing the air on water: On Parambikulam Aliyar Project

Source: This post is based on the article “Clearing the air on water” published in **The Hindu** on **27th October 2021**.

Syllabus: GS2 – Challenges Pertaining to the Federal Structure

Relevance: Inter-State Water disputes

Synopsis: With political will, Kerala and Tamil Nadu can overcome hurdles to renew the Parambikulam Aliyar Project agreement.

What is Parambikulam Aliyar Project?

It provides for the diversion of 30.5 thousand million cubic feet (tmc ft) annually from Kerala to Tamil Nadu. This major project with an outlay of ₹138 crore was completed in 1972. The project is also an example of co-operative federalism.

9 PM Compilation for the Month of October, (Fourth Week) 2021

Background: The PAP agreement was signed between Kerala and Tamil Nadu on May 29, 1970, with retrospective effect from November 1958.

The agreement ensures Kerala's riparian share in the Sholayar and Chittoorpuzha sub-basins as a guaranteed annual entitlement without applying the distress-sharing formula. It also ensures four months' flow (from the Northeast monsoons) from the Upper Nirar for Kerala's exclusive use in the Periyar basin.

Except for the Kerala Sholayar dam, the Parambikulam, Peruvaripallam and Tunacadavu dams are situated inside Kerala territory but are controlled and operated by Tamil Nadu.

Aims and objective: Using inter-basin diversion, the project irrigates drought-prone areas in the Coimbatore and Erode districts of Tamil Nadu. The project paved the way for surplus waters from eight west-flowing rivers to irrigate eastern Tamil Nadu.

What is the issue?

Kerala's reservation: Kerala has reservations on the non-realisation of its share of 2.5 tmc of water from the Parambikulam group of rivers for the exclusive use of Chittoorpuzha valley.

The failure of Tamil Nadu: Tamilnadu failed in giving Kerala what it is entitled to at the Manacadvu weir and Sholayar dam in low-yield years from the reservoirs under its control and construction of some structures in the project area without Kerala's concurrence.

New constructions: Tamil Nadu regrets the non-realisation of the anticipated yield of 2.5 tmc from the proposed Anamalayar project and the expected yield of four months of flow from the Upper Nirar. It also proposes new constructions to augment its share which have not got Kerala's consent.

Inconclusiveness: The deliberations are so far inconclusive because both States have focused on the total average yield and are not exploring furthering the utilisable yield from the available yield. There is huge variation between the actual yield, the anticipated yield, and also the yield available for utilisation.

What does a closer look at the project hydrology reveals?

Loss of water: Of the last 20 years, the Chalakudy basin experienced overflow from PAP in 12 years. Similarly, a sizeable portion of the water is lost through Manacadavu as unutilisable flows.

Poor storage and the skewed inflow pattern: Kerala had consented to the diversion in the 1960s, anticipating enough storage spaces in both the Periyar and Chalakudy basins to meet its needs, but most of those storage reservoirs were subsequently denied environmental approval.

What is the way forward?

First, experts of both States could analyse and create working tables based on the observed flow regime to see how much additional water can be made available in the system through new reservoir systems and how that can be shared.

Second, it is imperative that proper checks and balances be agreed upon to ensure the guaranteed entitlements at Sholayar and Manacadavu. The political leadership can deliberate on the principles of sharing to review the agreement.

16. [Our children don't need a 'deshbhakti' curriculum](#)

Source: This post is based on the article "Our children don't need a 'deshbhakti' curriculum" published in the **Indian Express** on **27th October 2021**.

9 PM Compilation for the Month of October, (Fourth Week) 2021

Subject: GS 2- Education

Relevance: Understanding the Deshbhakti curriculum.

Synopsis: The proposal to introduce a Deshbhakti curriculum for patriotism needs to be carefully analyzed.

Introduction

Recently New Delhi government announced a proposal to introduce a curriculum for patriotism for school children. The suggestion is definitely welcome as loyalty towards the nation is important for the survival of any nation.

But in the current age of competitive hyper-nationalism and demonstrative patriotism, it needs to be carefully analyzed.

What is nationalism, and why does India need it?

Nationalism means close affinity with the territorial/geographical and socio-cultural landscape people live in. The love for geography, the love for history and freedom fighters, the love of cultural heritage stretching from Gautam Buddha to Vedanta are all parts of nationalism.

As the love for country is natural, it is only natural that the children should learn about it and love the country too. But India needs to be watchful of hyper-nationalism or excessive nationalism.

Read more: [UGC's new Learning Outcomes-based Curriculum Framework \(LOCF\) - Explained, Pointwise](#)

What are the risks of hyper-nationalism?

The government has to urge students not to be a bhakt (attachment or fondness) of any particular deity, be it a nation, a political doctrine, or an organized religion. A Bhakt often loses the ability to decondition his mind, expand his horizon, and even critique what appears to be “sacred”.

India has many historical examples to demonstrate this. For example, fondness of Nazism, totalitarian socialism gave us racial hatred and world wars. Bhakts of greedy capitalism, religious fundamentalism and militaristic nationalism has given a world filled with nuclear weapons, technologies of surveillance and terrorism.

So a “Desh bhakti curriculum” goes against a pedagogy that encourages awakened intelligence, reflexive thinking, ethics of love and critical awareness.

Read more: [PIB Bhubaneswar along with State Culture Department organise a Joint Press Conference on Netaji's Azad Hind Government](#)

On what should the government focus more on?

The government should not focus on children mechanically reciting patriotism. Instead, the government should focus on the value systems that make the country the best.

India needs a learning methodology that cultivates qualities like empathy, compassion and ethics of care. The students should not just focus on the IIT-IIM-America path, but also aim at becoming good human beings.

For that, India needs emancipatory education characterized by critical thinking and guided by love and understanding.

Read more: [New panel to devise school curriculum](#)

17. Regulatory capture of a different kind

Source: This post is based on the article “Regulatory capture of a different kind” published in the **Business Standard** on **27th October 2021**.

Syllabus: GS2 Statutory, Regulatory and various Quasi-judicial Bodies.

Relevance: Understanding the role of Regulatory bodies.

Synopsis: Three-fourths of India’s top regulators are retired government officers. This trend must change.

Introduction

Regulatory bodies are government bodies set up to supervise different sectors of the economy. While most of the regulatory bodies are working independently, there are some that still operating as an extension of the government, like the Regulator for civil aviation.

Their work is to protect the consumer’s interest, frame the policies and ensure that both the public and private sector players followed those policies. But there are certain problems associated with India’s regulatory framework.

What is the composition of regulatory bodies?

Almost three-fourths of these regulatory institutions are headed by retired government officers. The majority is from Indian Administrative Service, Indian Audits and Accounts Service, Indian Railway Service or the Indian Cost Account Service.

What are the problems associated with regulatory bodies?

Selection of non-experts: The selection of non-experts to lead the regulatory bodies may bring a lack of efficiency in the functioning of such bodies.

Bureaucracy and political nexus: A regulator’s independence can be compromised if that person has served the government in key positions before being appointed. So, senior government officials joining regulatory bodies as their heads could give rise to a nexus, thereby defeating the purpose behind regulation.

Conflict of interest: A professional regulator, with relevant experience of the industry, is a boon for regulation. But there is a serious problem of the preponderance of senior government officials playing the role of regulators. There can be conflicts of interest between professional regulators and government officials.

What should the government do?

The government has begun the process of monetization of government assets. This makes it even more important for the government to reduce the stranglehold of civil servants on regulatory bodies. This is because a regulator, who is friendly to the government, may undermine regulation at the cost of consumers’ interest and may even perpetuate government interference in various sectors.

This is counter-productive for an economy that is trying to grow fast, improve its competitiveness and ease of doing business. Thus, the government should look at an industrial model which is aimed at creating professionals who can become regulators in the future.

Read more: [The end of Ease of Doing Business Rankings: Reasons and implications – Explained, pointwise](#)

18. Energy cooperation as the backbone of India-Russia ties

Source: This post is based on the article “Energy cooperation as the backbone of India-Russia ties” published in **The Hindu** on **28th October 2021**.

Syllabus: GS2 – Bilateral, regional and global groupings and agreements involving India

Relevance: To understand the relationship between India and Russia on energy security.

Synopsis: India’s renewable energy needs and other requirements can be fulfilled if India and Russia collaborated.

Introduction

India has been at the forefront of the transformation of global energy and striving to diversify its trade relations. Russia could be a long-term partner in India’s diversification plans.

About recent India Russia collaboration on various fields

Petrochemicals: A JV between RIL and Russia’s Sibur Elastomers established South Asia’s first butyl and halogenated butyl rubber plant in Jamnagar, Gujarat. The plant meets India’s domestic needs and the surplus is exported to Asia, Europe, the US and Brazil among others.

Refineries: ONGC, IOCL and Gazprom have signed up MOUs regarding setting up of refineries in India in line with IEA’s [Energy Outlook 2021](#), identifying India as critical refining hub in Asia.

Nuclear energy: Russian companies have been involved in the construction of six nuclear reactors in the **Kudankulam nuclear power project at Tamil Nadu**.

Read more: [Energy access and its importance – Explained, pointwise](#)

What can be done?

Renewable Energy: India has installed 100GW of renewable energy capacity. To meet the target of 450 GW capacity by 2030, investments of USD 500 billion are required in infrastructure, grid expansion and storage. The Nuclear Energy capacity target for 2031 is 22.5GW, up from 6.7GW at present.

Read more: [\[Yojana October Summary\] Energy Security: Nuclear Power – Explained, pointwise](#)

According to Russia’s Energy Minister, almost all of Russia’s major energy companies were interested in projects in India. So both governments have to provide the necessary support and facilitate corporate leaders to grasp the potential.

Read more: [Reviving India-Russia Relationship – Explained, Pointwise](#)

19. India needs a policy solution for the problem of radicalisation

Source: This post is based on the article “India needs a policy solution for the problem of radicalisation” published in the **Indian Express** on 28th October 2021.

Syllabus: GS 2 Mechanisms, Laws, Institutions and Bodies constituted for the Protection and Betterment of these Vulnerable Sections.

Relevance: Understanding radicalization and associated problems

Synopsis: Any programme aimed at deterring or reversing radicalization must focus on the ideological commitment that enables violence.

Introduction

Recently, multiple suspects have been arrested in the ISI terror module. During the investigation, it was found that **online radicalization played an important role** in the recruitment of members, preparation and execution of extremist activities by the members.

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Read more: [PM calls on SCO to act against radicalization](#)

What did the government do to control radicalization?

Ministry of Home Affairs had set up the **Counter-Terrorism and Counter Radicalisation division** in 2017. Its aim is to frame developing policies and strategies to counter-radicalization. The focus of this division is mainly on the implementation and administration of counter-terror laws and monitoring of fundamentalist organizations such as the Popular Front of India, Jamaat-e-Islami etc.

However, the group is not completely successful in controlling radicalization.

What should India further do to control the threat of radicalization?

Government should realize that any deviation from conventional thinking can not be termed as radicalization. Radicalization becomes problematic only when it has a tendency to lead to violence. So developing a broad understanding can help in creating an effective action plan.

Define radicalization: Government should first begin by defining radicalization. This will provide clarity of purpose and help in developing an action plan.

Frame strategies: The battle against radicalization begins in the minds and hearts. So Indian state should develop and enforce de-radicalization, counter-radicalization and anti-radicalization strategies at a pan-India and pan-ideology level on a war footing.

Adopt uniform policies: Government should adopt uniform policies to deal with radicalization and associated strategies. Also, initiatives should be taken to stop the flow of radicalization across the borders.

Mainstreaming youth: Policies should be adopted to mainstream youth and indulge them in productive work. Government should work on activities like promotion of the syncretic nature of religions in India, promotion of constitutional values and virtues, promotion of sports etc

20. [‘India must not give up on extraditing Kim Davy, accused in Purulia arms drop](#)

Source: This post is based on the article **‘India must not give up on extraditing Kim Davy, accused in Purulia arms drop’** published in the **Indian Express** on **28th October 2021**.

Subject: GS2 – Bilateral, regional and global groupings and agreements involving India.

Relevance: Understanding issues related to the extradition of Kim Davy.

Synopsis: By stalling the process of extradition of Kim Davy, Denmark has shown contempt for Indian institutions.

Introduction

Kim Davy, a citizen of Denmark was prime accused in the Purulia bomb drop case, where arms were dropped in West Bengal from an unidentified airplane. Kim Davy has also publicly accepted to be part of the operation.

After this, India raised the issue of the extradition of Kim Davy from Denmark to India.

Read here: [The Law of Extradition in India](#)

What has been the history of the extradition issue?

Initially, Denmark was reluctant and asked for assurances that he would not face the death penalty, would be safe in jail during the trial and would be allowed to serve his sentence, if convicted, in Denmark. These demands were accepted by India. Finally, an extradition order was passed by the Danish government in 2010.

Davy appealed to a court against the extradition order. The CBI sent a team, presented India’s stand to Copenhagen, but the Danish government lawyers ignored them. The court’s issued a

judgment that relied on the testimony of NGOs and ignored the sovereign guarantees of the government.

Read more: [State of Prisons in India – Explained, pointwise](#)

What was the impact of this on India-Denmark relations?

The Ministry of External Affairs noted the judgment would encourage “terrorists and criminals”. It also rejected “the grounds cited by the Danish court as the basis of its decision”. Further, the Indian embassy in Copenhagen stated that India’s relations with Denmark were affected by the extradition case of Kim Davy. This included trade and economic relations and cooperation in multilateral forums.

What should be the way forward?

India should continue to build its relations and prepare for upcoming high-level visits with Denmark. India should have to resolve the [issues of the Indian judicial system](#).

21. Refugee adoption in India call for the adoption of a specific law

Source: This post is based on the article “**Refugee adoption in India call for the adoption of a specific law**” published in the **Livemint** on **28th October 2021**.

Subject: GS2- International Relations.

Relevance: Understanding the issue of refugees in India.

Synopsis: India has numerous acts dealing with foreigners, refugees etc. But it needs a comprehensive National law.

Introduction

In December 2019, the Indian government introduced the [Citizenship Amendment Act](#) 2019, which sought to make “illegal migrants” from Afghanistan, Bangladesh and Pakistan from a specific religion to get citizenship. This shows that India still lacks a comprehensive law to handle refugees and illegal immigrants.

Read more: [Refugee problem in India and its solutions](#)

What is the current legal position of India on refugees?

India is **not a signatory of the 1951 refugees convention**, under which UNHCR operates. India also **does not have any domestic refugee legislation** which controls the entry and stay of refugees.

Even under Indian laws, there is **no distinction between the terms foreigners and refugees**. The Indian government can further deport any foreigner to their country of origin, even if their life is at risk.

Read more: [India’s Refugee law and policy- An Analysis](#)

How does the government treat refugees in India?

Since there is no particular law for refugees in India, the government regulates the refugees and asylum seekers on an ad-hoc basis.

Administration of refugees in India: Of all the refugees coming in India, India recognized refugees only coming from Tibet and Sri Lanka only. Refugees coming from other countries are registered and protected by UNHCR.

So, refugees in India are identified on these two different parameters- India recognized and UNHCR recognized. They are also treated differently. For eg India recognized refugees have access to all the basic facilities like health, education, etc while the same does not go for UNHCR recognized

Judicial response: Indian judiciary has stepped up from time to time to safeguard refugees from deportation, expulsion and forced repatriation. These are guided by [Article 14](#) and [Article 21](#) of the Indian constitution.

What is the way forward?

It is time for India to adopt a national law for refugees. The law will streamline refugee- status determination procedures for all kinds of refugees and will guarantee them the rights they have under international law.

Terms to know

- [Non refoulment principle and 1951 convention](#)
- [UNHCR](#)

22. Grant the focus back on Early Childhood education

Source: This post is based on the article “Grant the focus back on Early Childhood education” published in **The Hindu** on **29th October 2021**.

Source: GS 2 – Issues Relating to Development and Management of Social Sector/Services relating to Education.

Relevance: Understanding the need for Early Childhood Education (ECE)

Synopsis: Early Childhood Education (ECE) is vital for a child’s overall development and growth.

Introduction

ECE is crucial to the overall development of children, as it impacts their learning and even earning capabilities throughout their lifetimes. In India, for the vast majority of the poor, ECE is provided through 14 lakh anganwadis spread across the country.

Read more: [Importance of good early childhood education](#)

What are the challenges associated with the ECE?

Poor availability of teachers and consequent **loss of interest in learning** from the side of students.

Low parental engagement with Children: Parents do not prioritize ECE enough, as was revealed by the **Vidhi Centre for Legal Policy**. It states that 45% of the 650+ households surveyed in urban Maharashtra reported that they prioritize their older child’s education over ECE.

Why parental engagement is low in ECE?

The **socioeconomic background** of households determines access to preschools and the ability to invest in ECE.

Poor households often have parents working overtime to make economic ends meet, consequently, ECE gets ignored out of **economic compulsion**.

What can be done to overcome these barriers?

The government can take many short-term and effective measures as envisaged in the [NEP 2020](#). (The NEP envisages a greater parental engagement and talks about a changed mindset). A decentralized approach, with teachers at the heart of the ECE initiative, can yield better results.

The **E-paatshala programme** in Balwadis and Akanksha schools in Mumbai and Pune were able to demonstrate financial support to parents can yield higher levels of parental engagement with Children. So, there is a need to empower households economically.

23. [Should the NDPS Act be amended?](#)

Source: This post is based on the article “[Should the NDPS Act be amended?](#)” published in **The Hindu** on **29th October 2021**.

Syllabus: GS2 – Government policies and interventions for development in various sectors.

Relevance: To understand the proposed amendments to the NDPS Act.

Synopsis: The recent proposal to the NDPS Act does not address the issues in enforcement, instead it compounds them.

Introduction

The Union Ministry of Social Justice and Empowerment has proposed certain changes to some provisions of the [Narcotic Drugs and Psychotropic Substances \(NDPS\) Act of 1985](#).

What are the major recommendations to the NDPS Act?

Decriminalise the possession of narcotic drugs in smaller quantities for personal purposes and treat the persons as victims.

Using the [National Fund to Control Drug Abuse](#) to carry out de-addiction programmes, rather than just policing activities.

Must Read: [Drug usage and the NDPS Act – Explained, pointwise](#)

What are the challenges that the police face in curbing drugs?

Drug peddling is an organised crime, so, it is difficult to check narcotic drugs transportation. Also, the police cannot stop each and every vehicle on Indian roads.

The police **cannot go beyond the State jurisdiction** for finding the source of narcotic substances and destroy them.

Securing conviction for the accused in drugs cases is another challenge due to **frequent delays in court** procedures.

Read more: [Pendency of Cases and Rising Vacancies in the Judiciary – Explained, Pointwise](#)

What are the challenges associated with the proposed recommendations?

Like the US, decriminalising smaller quantities might result in the **proliferation of drugs**. Drugs consumption is directly linked to issues such as absenteeism in schools, loss of jobs, income, increase in crime rate, depression, and suicide.

India does **not have enough rehabilitation centres** and faces an acute shortage of psychiatrists and counsellors to rehabilitate drug users.

Despite a High Court order, many traders sell **whiteners** to children below 18 years of age. There are also many children who use **glue, painting chemicals**, etc as drugs. There is no focus on such children becoming victims of drug use.

What should be done?

There should be a **clear distinction** between a drug supplier and an end-user. A drug user needs to be seen as a patient.

Civil society and governments will have to work together to create an enabling environment to address the drug menace.

Read more: [India signed 26 pacts to fight drug menace](#)

24. Why bail proceedings for offences under NDPS Act are complex and open to abuse

Source: This post is based on the article “**Why bail proceedings for offences under NDPS Act are complex and open to abuse**” published in **Indian Express** on **30th October 2021**.

Syllabus: GS2 – Government policies and interventions for development in various sectors.

Relevance: To understand the ambiguities in the NDPS Act.

Synopsis: Conditions of granting bail under NDPS act are very stringent. Amendments should be introduced to it to make it justiciable.

Introduction

As highlighted by the present case of Aryan Khan, the interpretation of provisions for bail under **NDPS act** has resulted in many suffering behind bars for years.

Must Read: [Drug usage and the NDPS Act – Explained, pointwise](#)

What are the issues related to bail under the NDPS Act?

Under this act, the innocent-until-proven-guilty principle is reversed to the guilty-until-proven-innocent principle. The burden of proof of proving himself innocent is on accused.

Section 37 places limitations on granting of bail for offences under the NDPS Act, through 2 conditions:

1. Firstly, that there are **reasonable grounds** for believing that the accused is not guilty of such an offence.
2. Secondly, the person is not likely to commit any offence while on bail.

Read more: [Should the NDPS Act be amended?](#)

Words **reasonable grounds** in the above Act are not defined in the law, so it is subject to judicial intervention. Further, the ambiguity in interpretation and improper ground of denying bail like WhatsApp chats and notes on mobile phones makes it more complicated.

Chief Justice of India spoke “**the sorry state of affairs**” in lawmaking at the Independence Day celebrations this year, said “We don’t know for what purpose they(laws) are made. They(Laws) are causing a lot of litigation and inconvenience to the people, courts...”

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General Studies - 3

1. In Glasgow, all eyes on 2030: On COP 26

Source: This post is based on the article “In Glasgow, all eyes on 2030” published in **The Hindu** on **25th Oct 2021**.

Syllabus: GS3 – Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment.

Relevance: On upcoming 26th United Nations Climate Change conference (COP26) at Glasgow

Synopsis: COP26 must focus sharply on reducing emissions till 2030, rather than on net zero 2050, which is too distant a goal.

Introduction

The stage is set for the 26th UN Climate Change Conference of the Parties (COP26) in Glasgow, starting October 31. Major preparatory conferences and bilateral meetings have been held to persuade countries to raise their emission reduction commitments under the Paris Agreement. Some positive outcomes have been achieved. Yet, many high-emitter countries are woefully short of the emissions reductions required by 2030 to restrict global temperature rise to “well below 2°C” or even 1.5°C above pre-industrial levels.

The loudest noise, however, is around net zero emissions by 2050 i.e., greenhouse gases (GHG) emissions equalling absorption by sinks such as forests.

What is a much better target than net zero?

Recently released AR6 report by IPCC, emphasised that to keep temperature rise within 1.5°C, global emissions should be reduced by 45% from 2010 levels by 2030, on the way to net zero 2050.

What are the issues with the net zero target?

Net zero ignores CBDR: Net zero ignores the foundational principle of the UN Framework Convention on Climate Change (UNFCCC) i.e. common but differentiated responsibilities (CBDR).

– CBDR entails that the developed countries are responsible for over 75% of accumulated atmospheric GHGs causing climate change. So, they should bear most of the burden for reducing emissions, while developing countries should do what they can, with technological and financial assistance from the former. Hence, if the goal is global net zero emissions by 2050, all countries cannot be obliged to reach that goal by the same year.

Net zero, therefore, deliberately diverts attention away from the urgent 2030 target that COP26 should focus on.

Why, the 2030 emission reduction target is more significant than net zero?

As per the UN NDC report that even after accounting for updated NDC (Nationally Determined Contributions) targets, global emissions in 2030 are expected to be 16.3% above the 2010 level. This is worrisome as the IPCC has called for 2030 emissions to be 45% less from 2010 levels for the 1.5°C goal.

Hence, 2030 emission reduction target is much more significant than net zero by 2050.

What is the carbon budget approach?

The gravity of the entire situation may be better appreciated through the more scientific metric of carbon budgets, as highlighted in IPCC AR6 and AR5 reports.

9 PM Compilation for the Month of October, (Fourth Week) 2021

– Carbon budgets represent the quantum of CO₂ the atmosphere can hold for a given global temperature, best assessed through cumulative emissions and not annual flows.

Estimates based on carbon budgets should be used at Glasgow. As per the NDC report, reaching net zero is necessary to stabilise global temperature rise at a particular level, but limiting global temperature increase to a specific level would entail limiting cumulative CO₂ emissions to within a carbon budget.

What is the way forward?

World

– COP26 must focus sharply on achieving the 45% emission cuts from 2010 levels required by 2030 for limiting temperature rise to 1.5°C.

India

– India can raise its NDC pledge of **reducing Emissions Intensity** (ratio of emissions to GDP) by 33-35% from 2005 levels by 2030 to 38-40%. This is quite achievable since India has been averaging around 2% p.a. reduction in EI as per its own NDC.

– India could also **offer to achieve net zero by 2070-75**, invoking CBDR.

– If pressed on a **peaking year**, a **2040-45** guesstimate may not be far off the mark, especially if increasing forest and tree cover are stepped up.

2. Mitigating a crisis: On COP26 Glasgow climate meet

Source: This post is based on the article “**Mitigating a crisis: On COP26 Glasgow climate meet**” published in **The Hindu** on **25th Oct 2021**.

Syllabus: GS3 – Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment.

Relevance: On upcoming 26th United Nations Climate Change conference (COP26) at Glasgow

Synopsis: The COP can at best incentivize adaptation that aids a transition towards clean energy.

Introduction

In a week, heads of state from at least 120 countries are expected to convene in Glasgow for the 26th meeting of the United Nations Conference of the Parties (COP). The annual two-week-long exercise was disrupted last year due to COVID-19.

What is COP 26?

In 1992, countries agreed to an international treaty called the **United Nations Framework Convention on Climate Change (UNFCCC)**, which set ground rules and expectations for global cooperation on combating climate change. It was the first time the majority of nations **formally recognized the need to control greenhouse gas emissions**, which cause global warming that drives climate change.

That treaty has since been updated, including in 2015 when nations signed the Paris climate agreement. That agreement set the goal of limiting global warming to “well below” 2 degrees Celsius (3.6 F), and preferably to 1.5 C (2.7 F), to avoid catastrophic climate change.

CoP26 stands for the 26th Conference of Parties to the UNFCCC. The “parties” are the 196 countries that ratified the treaty plus the European Union. The United Kingdom, partnering with Italy, is hosting CoP26 in Glasgow, Scotland, from October 31 through November 12, 2021, after a one-year postponement due to the COVID-19 pandemic.

Why is COP26 significant?

The year 2020 was to have been an important year as most of the major economies were expected to review the actions undertaken so far in meeting voluntary targets to reduce greenhouse gas emissions in line with the Paris Agreement of 2015. However, the disruption has meant that these **discussions will now move to Glasgow**.

Moreover, the meet is also **significant from US standpoint** following its exit from the Paris Agreement under Trump administration. The Biden administration is making a concerted effort to commemorate the country's return to the fold.

What are the targets toward which COP26 should aim for?

To limit global warming to 1.5°C consensus around following targets need to be achieved at COP26:

- i). Achieving net zero emissions by 2050
- ii). Cutting emissions drastically by at least 45% from 2010 levels

What are the issues that COP26 need to resolve?

Consensus at COP meetings is hard won because of different viewpoints of various stakeholders esp. the developed and developing countries.

– **Developing countries** argue that the climate crisis exists because of excess emissions by the developed West for more than a century. Hence, any attempt at solving the crisis should involve the western countries doing much more than what they have committed to and, at the very least, making good on promises already enshrined in previous editions of the COP.

Moreover, for developing countries, yielding to calls for 'net zero' also means that governments such as India will appear as having succumbed to international bullying.

– **For developed countries**, complying with the demand by developing countries to pay reparations means giving out sums of money unlikely to pass domestic political parameters.

What is the way forward?

The COP, therefore, can at best incentivize adaptation that aids a transition to clean energy.

3. COP26: The agenda for Glasgow

Source: This post is based on the article "COP26: The agenda for Glasgow" published in **The Indian Express** on **25th Oct 2021**.

Syllabus: GS3 – Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment

Relevance: On upcoming 26th United Nations Climate Change conference (COP26) at Glasgow.

Synopsis: COP26, which begins next week in Glasgow after a year's delay, will seek to finalize the rules for the 2015 Paris Agreement on climate. Why is this important, and what else in on the agenda?

Introduction

Negotiators from around the world are assembling in Glasgow, Scotland, from Monday next week for COP26 (or the 26th Conference of Parties to the UN Framework Convention on Climate Change). It was scheduled to be held last year, at the same venue, but had to be put off for the first time in its history because of the pandemic.

Most of the discussions ahead of the meeting have been around an effort to get all countries to **commit to a net-zero target by a specific year**, somewhere around the mid-century. Net-

zero is an extremely contentious subject, deeply dividing the developed and developing countries.

What is the agenda for COP26?

The official agenda of the two-week meeting is:

– to finalise the rules and procedures for implementation of the Paris Agreement, which was supposed to have been completed by 2018.

Must Read: [What are COP meetings and their significance?](#)

What are some issues from Paris Agreement that are still pending?

Regarding Paris agreement, countries are yet to agree on some of the provisions related to the **creation of new carbon markets**.

Carbon markets are an important instrument to facilitate emissions reductions, and were an integral part of the Kyoto Protocol that has now given way to Paris Agreement.

Developed countries want more robust way to calculate carbon credits and this remains the last stumbling block in finalising rules and procedures of the Paris agreement.

Must Read: [What is the carbon market issue?](#)

What is the net zero issue?

An agreement on carbon markets would involve complex negotiations. Hence, the developed world is now pushing to shift the goalpost from what already has been agreed in the Paris agreement by calling for all countries to adopt Net Zero targets by 2050.

Incidentally, the issue of net-zero, or carbon neutrality, does not find a mention in the Paris Agreement, and therefore, does not form part of the process.

Ministers of 24 nations, which call themselves **'Like Minded Developing Countries'**, or LMDCs, denounced the efforts to force a net-zero target on everyone, saying it went against 'equity' and 'climate justice'. **India is a part of LMDC**, and interestingly, so is **China**. Other members include Indonesia, Malaysia, Iran, Bangladesh, the Philippines and Sri Lanka. The LMDC has stated that it was lack of adequate action on the part of rich nations that had led to worsening of the climate crisis and the net zero target runs counter to the Paris Agreement and is **anti-equity** and **against climate justice**.

Must Read: [A timeline of various COP meetings](#)

4. No heroes at COP: On COP26

Source: This post is based on the article **"No heroes at COP"** published in **Business Standard** on **24th Oct 2021**.

Syllabus: GS3 – Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment

Relevance: On upcoming 26th United Nations Climate Change conference (COP26) at Glasgow.

Synopsis: If COP26 fails, it will be because of misplaced targets from the West and China, and a lack of ambition and imagination from India.

Introduction

A few months ago, one could reasonably expect that there would in fact be a significant increase in the global ambition to combat climate change and reduce carbon emissions as a result of COP26 Glasgow conference.

Yet a combination of factors has unfortunately caused this optimism to appear misplaced.

What are the reasons behind this reduction in expectations from COP26?

Multiple nations are responsible for this reduction in expectations.

USA: Biden administration has made no attempt to change the price of carbon in the US economy, and the “build back better” bills barely add up to one-third of the emissions reductions that Mr Biden promised by 2030 and even then face serious objections in the US Senate.

European Union: The EU, meanwhile, has set more credible targets and taken more credible action. Yet its ambition is inward-focused: The “European Green Deal” would ensure a large amount of capital flows to climate-sensitive projects within the EU, but at the potential cost of funding more efficient carbon mitigation projects elsewhere in the world. It also proposes to levy a carbon tariff on goods entering its borders from 2026- in other words, steel from Indian plants, if it is produced in a more emissions-intensive process, will have to pay an additional price per ton to be sold in Europe. This has severely **increased distrust** with its potential partners on climate change, including India.

China: It has pledged to become net zero by 2060. This means there are no restrictions in effect on the announcement of new coal-fired thermal power plants, and China has continued to make such announcements even in 2021; in just the year’s first six months, the projected new plants would increase the country’s emissions by 1.5%.

What are India’s views and why they need to evolve?

India may be right to resist a meaningless net zero target but there is less justification for some of their other points.

On climate finance. In 2015, at the Paris Agreement, the developed world promised to mobilise \$100 billion of climate finance to aid the green transition in emerging economies. Only a fraction of that money has materialised. India insists that any climate action should be predicated on the rest of that grant money being made available.

– This viewpoint is **not constructive**, and not helpful even from India’s point of view. At best, India would get a small amount of incremental grant capital from this \$100 billion. And even the total figure of \$100 billion is extremely less than the trillions of dollars actually required by India and the rest of the emerging world over the next decade if greener infrastructure is to be built.

What is the way forward for India?

– **Global agreement on climate finance:** Govt should push for private-sector investment in green and frontier sectors. India’s government has isolated some of these sectors in its recent moves towards industrial policy — batteries, for example. This agreement on climate finance should cover such areas as risk mitigation, targeted investments, and project preparation assistance. And COP26 is the right location to move towards such a global agreement.

– **South African model:** India’s model should be South Africa (SA), a fellow coal-rich developing country that has had an even harder time imagining a development path that is greener than its current trajectory. Transitioning its debt-ridden state-run electricity company, Eskom, from coal-fired plants to renewables would be prohibitively expensive. That’s why the South Africans have put proposals out there which aim to make it easier to **swap debt for green financing**. These proposals, if approved, would clear up Eskom’s balance sheet on the condition that it begins greater investment in renewables.

5. More than a coal problem

Source: This post is based on the article “**More than a coal problem**” published in **Livemint** on **25th Oct 2021**.

Syllabus: GS3 – Indian Economy and issues relating to Planning, Mobilization of Resources, Growth, Development and Employment.

Relevance: Understanding coal shortage in India

Synopsis: India’s primary coal producer can only be partly blamed for the coal shortage issue, other factors needs to be seen to avert current and further crisis.

Introduction

India is in the midst of a coal shortage and that has led to its power plants having very little coal. As per the report of the Central Electricity Authority, as of 21 October, the 135 coal linkage based power plants tracked had an average coal stock of 4 days.

Coal India Limited is being blamed for this crisis. But is it fair to just blame Coal India alone?

A brief history of coal sector in India

After independence, much of India’s coal production was **privately owned**. The growth in coal production was sluggish and was less than 2% per year before the 1970s.

Mainly for this reason, coal mining was **nationalized** between 1971 and 1973.

In 1993, the government decided to allocate coal blocks to both private sector and public sector companies for **captive consumption**.

The **commercial mining** of coal was allowed when the Parliament passed the Mineral Laws(Amendment) Bill in March 2020. Now, it is possible for a private company to produce coal and sell it commercially.

What has been the performance of “Coal India ltd.”(CIL)?

In 2020-21, the total coal produced by Coal India was around 83% of the total 716.1 million tonnes produced in the country, which came down marginally from 88.5% of India’s coal in 1980-81.

This monopoly of the Coal India firms has translated into huge operating margins(represents efficiency to generate profit). As per the Public Sector Enterprises Survey for 2019-20, the state-owned public sector coal firms had an operating margin of 37.1% in 2019-20.

What are the trends in demand and supply of coal?

Production/supply-The growth in coal production for the 10 year period ending 2019-20 stands at 3.4% per year on average.

The **demand** for coal on the other hand in the last 10 years has grown by around 4.8% per year.

Must Read: [Coal shortage in India – Explained, pointwise](#)

Will commercial mining of coal help?

Commercial mining of coal is allowed now under the Mineral laws (amendment) Bill passed by the Parliament in Mar 2020.

But, the issues is that the private miners will face exactly the same problems that Coal India does, when it comes to setting up a new coal mine.

Along with the **systemic issues** mentioned earlier for Coal India, the lack of **human resources** will also limit the ability of private miners.

Commercial mining of coal might work out well in the long-term, but in the short- to medium-term the importance of Coal India and import dependence is likely to continue.

Can renewable sources fulfill the gap?

In 2020-21, proportion of coal based power was 53%. In absolute terms, almost twice more coal-based power was produced in India in 2020-21 than in 2005-06.

This dependence on coal is unlikely to change in the years to come. Coal India annual report states that the share of coal in overall energy mix is expected to remain high at 48-54% even beyond 2030.

What can be done?

The government needs to support Coal India in sorting out issues related to land acquisition and environmental clearances for both coal India and private companies.

The managerial capabilities of Coal India should be made free social objectives of the government.

6. [What PM Gati Shakti plan means for the nation](#)

Source: This post is based on the article “[What PM Gati Shakti plan means for the nation](#)” published in **The Indian Express** on **25th Oct 2021**.

Syllabus: GS3 – Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

Relevance: Article details the importance of PM Gati Shakti plan.

Synopsis: The current state of infrastructure and how PM-Gati shakti will help in it.

Introduction

This fractionated style of policy-making and execution held back the economic development of India. The Prime Minister’s Gati Shakti plan is a step in changing the status of the progress of the nation by national Master Plan for Multi-modal Connectivity.

What is the current state of infrastructure and how Gati-shakti would address it?

Logistics– The cost of Indian logistics remains high at 13-14% of GDP compared to developed nations where they are 8-10 per cent. The plan will help India to cut down its logistics cost.

Freight transport– India’s modal mix is heavily tilted towards roads, with 60-65% of transport happening via road compared to 25-30% in developed countries, prompting higher costs.

PM Gati Shakti Master plan, we will increase India’s highway network to 2 lakh km and provision utility corridors for laying adjoining power and optical fibre cables, which will be a life-saver in times of natural disasters.

Rail freight business depends excessively on coal.

Domestic waterways face numerous challenges due to high first- and last-mile costs, unavailability of return load in most cases, high voyage costs for specialised vessels and high repositioning costs of domestic containers, among others.

The PM Gati Shakti National Master Plan will herald a new era of infrastructure development and multi-modal logistics.

Master plan will further augment **urban infrastructure** development by streamlining planning and approvals, and integrating civic amenities.

It is expected to increase the share of **natural gas** in the country’s energy mix to 15 per cent from the current 7 per cent.

Must Read: [PM Gati Shakti – National Infrastructure Master Plan – Explained, pointwise](#)

7. Decoding The Unicorn Nation

Source: This post is based on the article “**Decoding the Unicorn Nation**” published in the **TOI** on **25th October 2021**.

Syllabus: GS3 – Indian Economy and issues relating to Planning, Mobilization of Resources, Growth, Development and Employment.

Relevance: Digital transformation and its benefits

Synopsis: India’s demographic dividend may finally be realized through the digital dividend

How COVID helped in India’s digital transformation?

Though, Covid left indelible scars, but it propelled India to the top of the league of digitally connected nations.

Compelled to adapt their lives and livelihoods to a 4×5” smartphone screen, the virus forced the entire populace to embrace new habits and behaviours.

Covid ensured **serious adoption of smart phones**, making it a transaction device, penetrating every strata of our society.

Today, Indian citizens armed with just three things -a bank account, a smartphone and a digital identity can meaningfully transact online, find a job, learn a skill, invest money, take a loan or get access to online services anywhere.

How has India emerged as a destination for venture capital?

– **Spread of e-commerce:** India’s digital startups have seized this transformation opportunity. They no longer have to burn cash, shower discounts to create new habits.

Instead, there’s a **massive surge in demand**, and improved unit economics, as Indians are willingly paying for digital convenience and access.

UPI and QR codes, combined with efficient and speedy delivery logistics infrastructure, have brought **e-commerce to every small town and village**.

As a result, we today have over 700 million of our citizens connected, over 150 million transacting e-commerce customers, and digital aids like Whatsapp being used at mass-scale by small businesses.

India has an astounding total addressable market of 400 million of online orders for meal deliveries.

Given the enormous potential, it is no surprise, therefore, that India has emerged as an attractive destination for venture capital, with \$30 billion (Rs 2,10,000 crore) expected just this year to give wings to unicorns.

How digitalisation will be beneficial for India?

Firstly, low transaction costs, high velocity of transactions, transparency and ease of discovery will all combine to create massive productivity gains in every sector.

For example, each time a Citizen’s charges his FASTag digitally, or use kirana store, or order a meal home via online UPI transfer, a tiny fraction of efficiency gets released, and someone gets productively employed.

Secondly, as the digital trails of economic transactions become shareable and auditable and usable, it will allow millions of small businesses to gain **instant access to credit** and move from being credit-starved to credit-rich.

Thirdly, India is now seen as the champion of the open and democratic internet, and a global hub for technology innovation and startups. Its mobile-first software development capabilities

and deep local markets give it the experience and confidence to create digital products for the world.

Fourthly, the demand for digital talent is soaring, both domestically and internationally. Now “Code in India” should be our new paradigm to export our skills and capabilities to the world. Here the good news is already: Millions of young graduates are taking notice of the fact that learning how to code is the key to a great future.

What are the challenges that needs to be addressed due to increasing digitalisation?

Disruptions: Digitisation will leave no time for incumbents to react, especially since digital-first businesses have reset the equation. Unless legacy businesses learn to adapt, many of them will be replaced by a digital upstart.

Monopolies: As digital platforms become more powerful, regulation will have to rapidly evolve to avoid monopolisation and cartelisation.

Denial of Labour rights: Platforms are already exploiting labour, categorising them as gig-workers and denying them employment benefits. This needs to be addressed.

8. India's productivity challenge is especially steep in-service sectors

Source: This post is based on the article “India's productivity challenge is especially steep in-service sectors” Published in “Livemint” on 26th Oct 2021.

Syllabus: GS3 – Issues related to Service Sector

Relevance: Significance of low-productivity services to India

Synopsis: While low-productivity services will continue to employ the majority of the country's workforce, there is no clear-cut policy path to improve the productivity of workers in these sectors.

Introduction

It is known that productivity is the key to economic prosperity. But the policy solutions needed to raise the productivity of service workers remains one of the biggest challenges for India and hasn't yet received much attention.

Why is this important?

First, low and medium-productivity service sectors (services except real estate, business and professional services) and construction account for over 70% of non-farm employment in India.

Second, while India aims to expand employment in manufacturing, there is no doubt that today's low and medium-productivity services would continue to generate most jobs going ahead. **For instance**, in 2004-05, around 66% of those employed in India's non-farm economy were working in construction, trade, transport and communication, hotels, restaurants and personal services, along with public administration and defence. By 2018-19, this proportion had increased to 72%.

Why India should develop suitable policies for low and medium-productivity service sectors?

One, Premature De-Industrialisation had limited the employment opportunities in India. India has been pushing for manufacturing expansion via its Make in India campaign. But manufacturing would not be able to generate jobs at scale across India the same way it did in other Asian economies like Japan, South Korea and China, given increasingly high levels of automation.

Two, high-skill services cannot absorb the large proportion of educated youth that remain unemployed in search of good-quality jobs.

Three, with a change in patterns of demand towards services and the emergence of new types of services via the shared economy, there is evidence that the structure of occupations is changing and labour markets may be polarizing further. This could lead to greater inequality, which has been the case in many developed countries as well.

Four, the current measure of labour efficiency by the time taken to deliver an order, for example, is not appropriate. Similarly, restricted working hours available for manufacturing and traditional retail sectors may not suit the working style of low and medium-productivity service sectors backed by technology.

9. 2021: A hypersonic space odyssey that we must brace for

Source: This post is based on the article “2021: A hypersonic space odyssey that we must brace for” Published in “**Livemint**” on **26th Oct 2021**.

Syllabus: GS3 – Indigenization of Technology and Developing New Technology

Relevance: Hypersonic technology

Synopsis: The increasing arms race has forced India to not just prioritize economic growth but keep pace on evolving technology in the defence sphere.

Introduction

Suddenly, the world finds itself at the beginning of a new military space race with China, the US and to a less extent Russia as the main participants.

It has been reported that [China recently tested two hypersonic weapons](#) that are potentially capable of evading missile defence systems that were built primarily to combat intercontinental ballistic missiles (ICBMs).

The Chinese Hypersonic Glide Vehicle (HGV) follows the successful development of a similar program by Russia that tested its **Avangard missiles** over the last few years.

The newer Chinese version of the system is a **Hypersonic Glide Vehicle (HGV)** and is capable of much lower orbital altitudes and far more flexible maneuvering.

What countries other than China are working on the development of Hypersonic technology?

The US has been working hard at developing this technology but its test of an HGV last week was not successful.

In addition to the US, Russia and China, Australia, India, France, Germany and Japan are said to be developing hypersonic technology for their own specific purposes.

Japan, for example, is building **anti-ship hyper-velocity gliding projectiles** to guard its Senkaku Islands from the threat of Chinese expansionism.

Australia and the US are jointly working on a **hypersonic cruise missile prototype**, expected to enter service in the late 2020s, a project that leverages work done over the last decade on scramjets, rocket motors and sensors.

Germany and France are working on a hypersonic defence system called **Twister**, which is short for Timely Warning and Interception with Space-Based Theater Surveillance.

What is hypersonic technology and what are its characteristic features?

The word ‘hypersonic’ refers to the ability of missiles to travel at or greater than five times the speed of sound (or Mach 5). The commonly-used technology underlying hypersonic missiles is an ‘air breathing scramjet engine’.

The glide vehicle innovation means it can continue to travel at hypersonic speeds at a lower trajectory and with greater maneuverability even after it separates from the rocket.

How the ongoing rivalry between big powers is different from Cold war era?

There are two major changes in big-power rivalry.

One, this is the first time since the fall of the Berlin Wall in 1989 that the framework for this rivalry has shifted from minimum deterrence to an attempt to gain asymmetric power in some areas, such as HGVs, artificial intelligence, machine learning and cybersecurity;

Two, the theatre for this rivalry has moved from Europe and land/air- based technology to the Indo-Pacific and naval/air/space-based technology.

How India is faring in this arms race?

The Indian **BrahMos cruise missile**, built jointly with Russia, is considered the fastest anti-ship cruise missile in the world.

India is currently working on **BrahMos II**, expected to be delivered in the next five years, which will be a hypersonic cruise missile capable of a Mach 8 speed.

While the BrahMos missile can climb to space altitudes, India's space-weapons programme has been limited to anti-satellite missiles, first pilot-launched in 2019.

The Indian government has repeatedly stressed that its space programme has only civilian aspirations.

Further, India and 34 other countries are signatories to the **Missile Technology Control Regime (MTCR)** that seeks to limit the proliferation of missiles and missile technology.

10. COP 26: Greening of polar ice should top agenda; here's why

Source: This post is based on the article "**COP 26: Greening of polar ice should top agenda; here's why**" published in **DTE** on **25th Oct 2021**.

Syllabus: GS3 – Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment

Relevance: On the potential agenda for COP26 Glasgow meeting.

Synopsis: Greening of the poles must be a top priority for the upcoming COP26 meeting

Introduction

Researchers at NASA, using 29 years of data from Landsat satellites, have observed extensive greening around Alaska and Canada, which were snow-covered lands.

For the past several decades, the **Arctic has been warming twice as quickly as the rest of the world** and undergoing tremendous transformation.

Arctic Sea ice reduced by around 39% in the last 38 years. Over the same period, ice in Antarctica also reduced by 6.2%.

What is the reason behind greening of polar ice?

As per scientists, this is occurring because **Arctic summers are getting warmer every decade**.

Why is Arctic region is getting warmer?

Sea ice has a bright surface meaning about 80% of the sunlight that strikes it is reflected into space.

– **Melting of sea ice:** The sea ice melts and exposes the deep, dark ocean water because of rising temperatures.

– **Heating of sea water:** Now, instead of reflecting 80% of the sunlight, the ocean absorbs 90% of the solar radiation. The seawater heats up and Arctic temperatures rise further, amplifying the rate of warming.

The resultant warmer air and soil temperatures provides a habitable climate turning the region greener.

Rapidly rising temperatures in the Arctic have led to **longer growing seasons and shifting soils** for the plants.

What is the impact of greening?

Greening will convert the ‘net reflective’ ice caps to ‘net absorptive’, tampering with the global energy balance and accelerate polar ice melting.

Scientists have observed the **grassy tundra transitioning to scrublands and shrubs becoming larger and denser**. The Arctic faced several other adverse impacts in its zone because of climate-induced greening.

Impact on biodiversity: The reindeer populations declined with the increased growth of summer pastures. Many non-edible shrubs grew, which eventually led to the disappearance of the reindeer herds from the region, threatening the biodiversity of the region.

How is Antarctic region being impacted by greening of polar ice?

Like the Arctic, the Antarctic is also greening because of the irreversible melting of sea ice, which is green in colour.

In 2016, it was discovered that **marine ice has 500 times more iron than the ice above it**. This iron comes from the rocks under the Antarctic ice sheet which, when glaciers pass over them, are ground into a fine powder.

The ice-bound iron oxidizes in contact with seawater.

The resulting iron oxide particles take on a green hue as light scatters through them. The green ice only becomes visible when an iceberg capsizes and flips over from excessive melting and is disjointed from the main body.

Thus, melting of sea is leading to the greening of polar ice in both Arctic and Antarctic.

What is the way forward?

The effects of climate change (greening of the poles) are trans-boundary in nature. Thus, it is reasonable to assume that the only solution could be integrated international negotiations and frameworks.

These are required to set standards for nations and businesses to achieve global average temperature standards at the earliest, before the warming crosses the tipping point.

11. Explained: Climate targets set, missed

Source: This post is based on the article “Explained: Climate targets set, missed” published in The Indian Express on 26th Oct 2021.

Syllabus: GS3 – Conservation, Environmental Pollution, and Degradation, Environmental Impact Assessment

Relevance: On a lack of commitment from the developed world towards definitive climate action.

Synopsis: Response of the developed world to the climate change issue, the erosion of Kyoto protocol and impact of three decade long climate diplomacy in addressing challenges related to climate change.

Introduction

The annual climate meetings have succeeded in inspiring the world into taking collective action against climate change, but they have not been able to prevent the crisis from worsening in the last two decades.

Countries have missed their targets, gone back on promises made, and delayed their actions.

How has developed world responded to the problem of climate change?

Between 1990 and 2010, when climate change emerged as an issue, very little action was taken to curb growing emissions.

– The first target, for the developed countries to return to their 1990 levels of emissions by 2000, was never taken seriously.

– **Kyoto protocol:** As per the Kyoto protocol 1997, a group of 37 rich and industrialized countries were to collectively achieve a modest 5% reduction in their emissions from 1990 levels during the ‘first commitment period’ of 2008-2012. The protocol couldn’t be operationalized until 2005 in the absence of the requisite number of ratifications. The US didn’t ratify it. Canada also, withdrew later.

Except for the **European Union**, and some of its individual member countries such as **Germany** and the **United Kingdom** (which was then in the EU), most of the countries did not achieve the target.

Data from the World Resources Institute show that the emissions of the US in 2012 were **marginally higher** than they were in 1990, meaning there was no reduction. However, the halving of emissions in Russia because of the collapse of the economy compensated for this to some extent.

Australia’s emissions went up by about 15%.

Global emissions went up by 40% between 1990 and 2012, mainly to the rapid rise of China and India.

China overtook the United States as the world’s leading emitter around 2007. Its current emissions are more than 4 times the 1990 levels.

India’s emissions have grown over 3.5 times from 1990.

What were the objections of developed nations against the Kyoto protocol?

Under Kyoto Protocol, developing countries like China, India, Brazil, were not given any emission reduction targets because over 90% of the accumulated greenhouse gases in the atmosphere, the reason for global warming, had come from the rich and industrialized countries over the last 150 years.

This is what gave rise to the principle of **Common But Differentiated Responsibilities and Respective Capabilities** (CBDR-RC). But gradually there were demands from developed nations for dilution of the distinction between developed and developing countries when it came to mitigation commitments. This was driven largely by the huge three-fold increase in emissions from China between 1990 and 2010, making it the largest emitter of carbon.

Thus began a systematic effort to erode the Kyoto Protocol and replace it with an architecture that put some constraints on the emissions of India and China as well. It was achieved with the finalisation of the Paris Agreement in 2015.

Further, it led to a shift from globally agreed commitments under the Kyoto protocol to nationally determined pledges. This was driven by the US, which could not accept treaty obligations that would require Senate approval. This political shift culminated in the Paris Agreement of 2015.

What has been the impact of climate diplomacy in addressing the challenges of climate change?

Rise in awareness: In 1990, there was ignorance and scepticism about climate change and the anthropogenic responsibility for it. That has changed and climate scepticism, though not gone, is treated as an exception. UNFCCC process that brought scientists from around the world, forged a consensus on facts and projections regarding climate change.

– **Increased participation by pvt sector:** This rising awareness has had a deep impact on the corporate sector with many large companies joining in a net-zero commitment.

– **Increased research:** It also played a role in driving research on renewables, which has led to such dramatic cost reductions that they now count for more in energy investment than fossil fuels.

– **Spread of NGOs:** Yet another consequence of rising awareness has been the rapid spread of global non-governmental organisations, which are adding greatly to understanding, information dissemination, and effective advocacy.

12. Gati Shakti can spur behavioural changes for superior governance

Source: This post is based on the article “**Gati Shakti can spur behavioural changes for superior governance**” published in “**Livemint**” on **25th Oct 2021**.

Syllabus: GS3 – Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

Relevance: To understand the role of Gati-Shakti plan in development of infrastructure.

Synopsis: Information sharing could reform our bureaucracy and raise efficiency in infrastructure creation through use of Gati Shakti plan.

Introduction

Gati Shakti besides being a master plan for infrastructure creation, is also the solution to the problem of information-sharing between ministries and government departments at the Centre. It is a software element in the government’s infrastructure projects implementation.

How Gati Shakti is going to aid other projects?

Gati Shakti should be seen as a cog in India’s wheel of infrastructure creation that is important for the other three: the **10-year infrastructure development** programme announced last year, National **Monetisation** Pipeline and **privatization** of public sector enterprises.

Governments in the world over operate on the basis of **information being power**. Therefore, a dashboard that allows all government stakeholders to access information pertaining to infrastructure projects can become a potential game-changer.

Given time, it could catalyse **behavioural changes** in the bureaucracy. That will constitute a big difference to governance.

It would facilitate **citizen-monitoring and accountability**

What more is needed to be done?

There are two other levels of software upgradation that need to be attained for infrastructure creation to be seamless and faster.

The **extension of the information dashboard to state and local governments**. They constitute the important last-mile elements of projects. That will also advance cooperative federalism.

The second aspect is the **negotiation of contracts** with the private sector for the monetization, creation and/or operation of existing assets. Simplicity of language and transparency of mutual

obligations and expectations will help in avoiding costly re-negotiations, needless litigation and costly delays.

Must Read: [PM Gati Shakti National Infrastructure Master plan](#)

13. Why India shouldn't sign on to net zero

Source: This post is based on the article “**Why India shouldn't sign on to net zero**” published in **The Hindu** on **27th Oct 2021**.

Syllabus: GS3 – Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment.

Relevance: On net zero emission reduction target

Synopsis: India should not declare a net zero target. Instead it should stake a claim to a fair share of global carbon budget.

Introduction

The developed world is building up pressure on India to declare a net zero target at the upcoming COP26 meeting at Glasgow.

But, reaching net zero by a specific time period is irrelevant.

Instead, as per the latest IPCC report, if we are to limit the increase in the world's avg temp from pre-industrial levels to those agreed in the Paris Agreement, then we need to cap global cumulative emissions of CO₂ at the global carbon budget.

Why the timeline to reach net zero emission reduction target is flawed?

Neither the Paris Agreement nor climate science requires that net zero be reached individually by countries by 2050.

Claims that the world must reach specific goals by 2030 or 2050 are the **product of specific economic models for climate action**. These are designed to achieve the Paris goals by the lowest cost methods, without equity and climate justice.

They put **uneven burden of emission reduction requirements on developing countries**, despite their already low emissions, to buy time for the developed world for its own transition.

Less than a fifth of the world has been responsible for three-fifths of all past cumulative emissions, the U.S. and the EU alone having contributed a whopping 45%.

Promises of net zero in their current form further this **hugely disproportionate appropriation of a global commons**, while continuing to place humanity in harm's way.

Lowering the temperature

India's Nationally Determined Commitments (NDCs)

- Reduce emissions-intensity target of 33–35% by 2030 below 2005 levels
- Increase the share of non-fossil-based energy resources to 40% of installed power

generation capacity by 2030

- Create an additional carbon sink of 2.5–3 GtCO₂e by 2030, to be met through additional forest and tree cover

India's achievement claims

- 100 Gw renewable

energy generation capacity (solar + wind + small hydro + biomass)

- Declared large hydro (close to 40 Gw capacity) as a renewable energy source. Will be part of cumulative RE target
- India's emission intensity to GDP is 24%

Source: MoEFCC

Why India must not declare a net zero target?

India's contribution to global emissions is so disproportionately low that any sacrifice on its part can do nothing to save the world.

India is responsible for no more than **4.37%** cumulative emissions of carbon dioxide since the pre-industrial era, even though it is home to more than a sixth of humanity.

India's **per capita emissions are less than half the world average**, less than one-eighth of the U.S.'s, and have shown no dramatic increase like China's post 2000.

Cannot trust promises of the developed nations: Nor can it proceed with the expectation that the developed world and China would limit their emissions further in the future. The failure of the developed world to meet its pre-2020 obligations along with its refusal to acknowledge this provides little confidence for the future.

Why India must claim its fair share of the global carbon budget?

It enables the responsible use of coal, and oil and gas. This will help India to come out of the lower middle-income economy status and eradicate poverty, hunger and malnutrition for good.

Small Industry sector needs expansion: India's resource-strapped small industries sector, which provides employment and livelihoods to the majority of the population outside agriculture, needs expansion and modernisation.

Agri sector is in need: The agriculture sector, the second largest source of greenhouse gas emissions for India after energy, needs to double its productivity and farmers' incomes and build resilience.

All of these will require at least the limited fossil fuel resources made available through a fair share of the carbon budget.

What is the way forward?

Even if India were to enhance its short-term Nationally Determined Contributions under the Paris Agreement in some fashion, unnecessary as of now, it should do so while staking a claim to its share of the global commons.

This will ensure that its efforts will not further enable the free-riding of the developed world and protect its access to this strategic resource, vital to India's industrial and developmental future.

14. [The perils of natural experiments and randomized controlled trials](#)

Source: This post is based on the article "[The perils of natural experiments and randomized controlled trials](#)" published in **Livemint** on **26th Oct 2021**.

Syllabus: GS3 – Economy

Relevance: On Randomized Control Trials (RCTs) in economics

Synopsis: The RCTs that have swept economics and won Nobel recognition remain rather unreliable in comparison with clinical trials. We should be sceptical about the policy conclusions of randomized control trials used in economics and social sciences.

Introduction

Randomized Clinical Trials have revolutionized medicine and led to many life-saving treatments, drugs and vaccines. But, we should be cautious before applying conclusions based on Randomized Controlled Trials (RCTs) to economics and social science fields.

Must Read: [2021 Nobel Prize in Economic Sciences – Explained, pointwise](#)

What are the issues with applying RCTs in economics and social sciences?

i). The fallacy of composition: The human body, the object of clinical trials, is a very complex but generally closed system. The impact of a trial drug on one person is independent of its impact on others.

The fallacy of composition occurs when one assumes that if something is true of members of a group or collection, it is true of the group as a whole. In simple words, under this fallacy it is falsely assumed that just because something is true at an individual, firm, industry level, so it must be true for the whole economy.

The results of a randomized clinical trial for, say, a vaccine, after it has gone through the quality checks of three phases, can be safely applied to the whole population.

Not so in the case of a Randomized Controlled Trial (RCT).

This is so because in economics, individuals are part of a complex and open system, their decisions and interactions are dependent upon one another. Thus, at the economy-wide level the impact on one individual may not be extrapolated to be applied on the whole population.

Example:

Rise in minimum wage: A rise in the minimum wage in one district or industry may not have an adverse impact upon employment and costs and prices, since firms invariably have some margin of profits to absorb the hike. But an economy-wide minimum wage rise may push up prices, unless the central bank tightens policy to offset that.

Education subsidy: A certain subsidy leading to more education for some individuals may benefit them, but nationally, it may not.

ii). Accuracy of data: The second vital matter is the accuracy of the data that researchers generate by conducting surveys to conduct their RCTs. In their pioneering 1994 study (*for which Card recently got Nobel in Economic Science*), David Card and Krueger generated their own data from phone interviews. Given **ideological biases**, researcher-generated survey data is intrinsically suspect.

What is the way forward?

The academic debate continues. The question to ask is:

Of all the studies using RCTs published in the top 10 economics journals in the past two decades, how many generated their own data versus used publicly-available data? – This would broadly indicate the reliability of non-medical RCTs that have swept the field.

15. How Punjab can shine again with nutritional security and climate-friendly agriculture

Source: This post is based on the article “**How Punjab can shine again with nutritional security and climate-friendly agriculture**” published in the **Indian Express** on **25th October 2021**.

Syllabus: GS3- Major Crops – Cropping Patterns in various parts of the country and issues arising out of it.

Relevance: Crop diversification, sustainable farming.

Synopsis: Adjusted for land holding, the Punjab farmer is doing poorly, and the culprit is paddy. By shifting from rice to maize and diversifying to fruits and vegetables, farmers in Punjab and Haryana can earn more, while practicing sustainable farming.

What are key findings of the latest Situation Assessment Survey (SAS) of agri households?

As per the findings of SAS survey conducted by NSO,

- An average Indian farmer earned Rs 10,218 per month in 2018-19 (July-June).
- Across states, the highest income was received by a farming household in Meghalaya (Rs 29,348) followed by **Punjab** (Rs 26,701), **Haryana** (Rs 22,841), Arunachal Pradesh (19,225) and Jammu and Kashmir (Rs 18,918)
- The lowest income levels were in West Bengal (Rs 6,762), Odisha (Rs 5,112) and Jharkhand (Rs 4,895).

Why farmers in Punjab and Haryana need to diversify their crops?

On normalising the incomes of agri-households by their holding sizes as per SAS survey, Punjab’s ranking on per hectare income falls from 2nd to 11th and Haryana goes down from 3rd to 15th.

– This simply means that per hectare income of the farmers in Punjab and Haryana are lower. And the farmers in Punjab and Haryana are earning higher incomes primarily because the size of their landholding is greater compared to their counterparts from other states.

Whereas, farmers belonging to states such as Jammu and Kashmir, Kerala, Meghalaya and Arunachal Pradesh earn better income from cultivating fruits and vegetables, spices, and livestock. These are high value in nature, not linked to MSPs, and market and demand-driven.

How can farmers in Punjab and Haryana augment their incomes with more sustainable agriculture?

Punjab’s former Chief Minister Amarinder Singh had recently approached the Centre with an idea to create a fund of around Rs 25,000 crore to help farmers switch from paddy to maize. Centre should give this idea a serious thought with the following modifications.

One, the fund should be under a five-year plan to shift at least a million hectares of paddy area (out of a total of 3.1 million hectares of paddy area in Punjab) to maize.

Two, the corpus should have equal contributions from the Centre and state.

Three, since Punjab wants that farmers be given MSP for maize, an agency, the Maize Corporation of Punjab (MCP), should be created to buy maize from farmers at MSP. This agency should enter into contracts with ethanol companies. Much of this maize can be used to

produce ethanol as the poultry and starch industries will not be able to absorb this surplus in maize once a million hectares of paddy area shifts to maize.

Fourth, maize productivity must be as competitive as that of paddy in Punjab and the best seeds should be used for that purpose. This is to ensure that ethanol from maize is produced in a globally competitive manner. The Govt's policy for 20 per cent blending of ethanol in petrol should come in handy for this purpose.

What would be the consequential benefits?

Sustainable water source: Punjab will arrest its depleting water table as maize needs less than one-fifth the water that paddy does for irrigation.

Savings in Power subsidy: Punjab will save much on the power subsidy to agriculture, which was budgeted at Rs 8,275 crore in the FY2020-21 budget, as paddy irrigation consumes much of the power subsidy.

Climate mitigation: this could result in a win-win situation for all (farmers, the Government of Punjab and the country) as there will be lesser methane emissions and less stubble burning. Moreover, ethanol will also reduce GHG emissions in vehicular pollution.

Nutritional security: Will help Punjab to produce more nutritious food and raise on the nutritional security front with sustainable and climate-resilient agriculture.

Doubling farmers income: Punjab farmer's income on a per hectare basis will increase more sustainably.

What more needs to be done?

Other parts of the diversification strategy should include,

- Increasing the area under fruits and vegetables
- More focused policy to build efficient value chains in not just fruits and vegetables but also livestock and fisheries.
- Agri-sector needs to be backed by proper processing, grading and packaging infrastructure to tap its full potential.

16. The awkward grant of patents to artificial intelligence

Source: This post is based on the following articles "**The awkward grant of patents to artificial intelligence**" published in **Livemint** on **27th Oct 2021**.

Syllabus: GS3 – Science and Technology- Developments and their Applications and Effects in Everyday Life.

Relevance: Artificial Intelligence and Intellectual Property Rights

Synopsis: This article elucidates why patents cannot be granted to artificial intelligence (AI) programs.

Introduction

In April 2020, the South African patent office granted a patent to an artificial intelligence (AI) program called **DABUS** (Device for the Autonomous Bootstrapping of Unified Sentience).

DABUS used fractal geometry to come up with a better design for food containers that both improves grip as well as heat transfer.

However, it has to be noted that, before **DABUS** was finally granted a patent in South Africa, the DABUS application was been rejected by patent offices in the US, Europe and the UK.

On a similar account, last year the Indian Copyright Office registered a copyright over an artwork in the name of an artificial intelligence application called **RAGHAV** (Robust Artificially intelligent Graphics and Art Visualizer).

Why other countries refused to grant patent to an artificial intelligence (AI) program?

The European Patent Office (EPO) pointed out the following issues

One, the law designates a natural person as the inventor of a work in order to preserve their moral right over the invention as well as to secure for her the economic rights made available by the patent. **AI does not fall under the classification of natural person.**

Two, the programs are doing little more than **just following the broad instructions of the humans** who designed them. In order to be entitled to the economic benefits, an inventor needs to have actually performed the creative act of invention.

Three, **AI still lack an autonomous will, self-awareness and personality** in the way that humans have. At this point they can only mimic what passes for intelligence using clever tricks of pattern recognition and complex sentence completion.

Why AI algorithms cannot be treated as an inventor in the first place?

Firstly, Patent holders are granted a limited monopoly over their invention so that they can monetize their work and exercise the right to prosecute those who copy their inventions.

In order to be able to exercise the benefits that this legal monopoly offers, an inventor needs to have the ability to negotiate the complex commercial terms of a patent licence.

In case of patent infringement, the inventor needs to be able to understand the nature of the infringement as well as the various pros and cons of prosecuting the infringer.

Human inventors have little trouble understanding the relevant issues, and, with a little guidance from patent lawyers, are able to take appropriate decisions based on their own particular social and economic context.

Artificial intelligence algorithms, on the other hand, will find it hard, if not impossible, to even place all the relevant data points in an appropriate context.

Secondly, any patent granted to an artificial intelligence algorithm would, for all practical purposes, be exercised by the inventor of that algorithm. So, there is no point in calling the algorithm an inventor in the first place.

Thirdly, all these algorithms are little more than prediction machines designed to take information we have and use it to discover information we do not. Their abilities are constrained to generate outcomes within the narrow domains in which they are trained.

Terms to know

- [Artificial Intelligence](#)

17. A mammoth project to help endangered species and planet

Source: This post is based on the article “**A mammoth project to help endangered species and planet**” published in “**Business Standard**” on **26th Oct 2021**.

Syllabus: GS3 – Conservation, environmental pollution and degradation, environmental impact assessment.

Relevance: Bio-technology and its link with the preservation of bio-diversity.

Synopsis: A US based company has taken a project to introduce a hybrid of extinct Mammoth and Elephants.

Introduction

A US bio-startup “Colossal” launched a project to regenerate the extinct woolly mammoth, or rather to create an **elephant-mammoth hybrid** with mammoth characteristics, through gene-sequencing and gene-splicing technology, CRISPR.

The mammoth went extinct around 1650 BCE — less than 4,000 years ago. Since mammoths lived in cold, permafrost areas, well-preserved mammoth DNA is available. Mammoths were related to Asian elephants, with 99.6 per cent of DNA in common.

Must Read: [Bringing woolly mammoths back from extinction might not be such a bad idea – ethicists explain](#)

How the experiment will be done?

If the genes unique to mammoths are inserted into Asian elephant DNA, a viable hybrid embryo may result. The gene splicing technology, CRISPR, which allows easy cut-and paste insertion (and deletion) of genes may be capable of the delicate editing necessary.

What is the expected outcome?

Experiment claims it could **create “a cold-resistant elephant** with all of the core biological traits of the Woolly Mammoth” — thick woolly coat, fat deposits, small ears, curling large tusks to push through frozen ground to access buried vegetation.

It may lead to insights that may **help prevent modern elephant extinction**, and also advances in multiplex CRISPR editing, as well as possibly establishing links between genetics and climate change.

It can help **reverse climate change**”, “help endangered species”, and “upset existing ecosystems”.

What are the concerns and challenges?

It is being expected that if the hybrid could be introduced in large numbers, it would disrupt the current ecological balance by uprooting trees, and thus **return the Tundra to the grasslands of 4,000 years ago**. This would mean better carbon absorption and limit damage from global warming, which is now leading to a massive unfreezing of the Arctic. However, this might be an exaggeration as it presupposes the hybrid could be introduced in large enough numbers to change the ecosystem and also that it wouldn't have negative consequences on other species.

Size differences- Another challenge is the size difference. Female Asian elephants are smaller in height and weight than the mammoth. Female African elephants are larger than Asian elephants, so the hybrid embryo transferred to an African elephant, is more suited to carrying a larger foetus to term.

18. Pandemic Stimulus Backfired

Source: This post is based on the articles **“Pandemic Stimulus Backfired”** published in **“Times of India”** on **26th October 2021**.

Syllabus: GS3 – Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

Relevance: To understand the after-effects of fiscal stimulus on country's economy.

Synopsis: The world reacted to downturn of economy by spending in different bands. The results are not the same even in same band of stimulus owing to various reasons listed.

Introduction

The data on aggressive monetary and fiscal stimulus of the top emerging and developed markets and the strength of the ensuing recovery showed no direct relationship.

Emerging markets which stimulated most aggressively got no payoff in a faster recovery, owing in part to the downsides of overindulging.

How much did India spend and what are the results?

India went into the crisis with a large deficit, which limited how big it could go on stimulus. Its package amounted to **10% of GDP**, mid-size compared to its peers. But its payoff for moderation was one of the **strongest recoveries in emerging markets**.

A moderate spender, **India** suffered mixed backfire effects. A relatively little negative impact on its inflation and interest rates, but a relatively large impact on its currency value. A deficit of 11% of GDP, highest among major emerging markets, but this condition existed before the pandemic.

Why is stimulus showing unclear benefits, and even backfiring in many emerging markets?

The stricter the **lockdown** and the slower the vaccine rollout, the bigger the hit to growth.

Emerging country overwhelmed by factors unique to the pandemic, including the **global impact** of massive stimulus in the US and other developed countries, and the fight against the virus.

Developing nations lack the financial resources and the **institutional credibility** to ramp up spending without unbalancing the economy, and end up getting impacted by global markets.

The logic of stimulus campaigns may have more to do with **politics** than economic conditions. The populist measure of spending huge may have backfired them.

19. Global inequality: New drugs go the way of vaccines

Source: This post is based on the article “**Global inequality: New drugs go the way of vaccines**” posted in the **Times of India** on **27th October 2021**.

Subject: GS 3- Issues relating to intellectual property rights.

Relevance: Understanding health inequity

Synopsis: As the Covid-19 pandemic has revealed, there is an urgent need to work on health inequity to ensure that everyone has access to affordable medicine.

Introduction

Recently, many countries, including India, moved a proposal at [World Trade Organization \(WTO\)](#) for waiving the intellectual property rights on critical medicines and technologies related to the Covid-19 pandemic. This highlights health inequity on critical medicines.

What is the level of health inequity during the pandemic?

Countries in the developed world have produced, consumed and stockpile about 75% of the total vaccines manufactured. Some developed countries are even providing booster shots after completing vaccination. While only 3% of the people in developing countries have received the vaccine. This clearly shows the prevalent inequity in access to critical medicines.

Why is the supply of Covid-related items constrained?

The core of the issue of this inequity lies in [intellectual property](#) (IP). Companies making drug discoveries protect IPR's very aggressively. So even at the peak of the Covid-19 pandemic, patients and governments were struggling to get equipment like masks, testing kits, critical drugs due to intellectual property rights concerns.

Read more: [Intellectual Property Rights\(IPR\) and Universal Vaccination – Explained, Pointwise](#)

The crisis deepened further as there was a breakdown in the global supply chains. This followed the stocking of equipment and an artificial increase in prices.

Now the countries do have medicines that can help in reducing the viral load, but given the cost of these medicines, there is a need to provide a waiver for critical medicines.

What attempts have been made towards health inequity during the pandemic?

India and South Africa, at the World Trade Organization, raised the concern for waiver of intellectual property rights for critical medicines in COVID-19 treatment. This proposal was then backed by nearly a hundred countries. However, EU, Switzerland and UK have stalled this proposal. They argue that this proposal will discourage innovation.

But if it is accepted under TRIPS, it would facilitate technology transfer of Covid-19 therapies. Biotech companies and generic producers will be able to mass-produce COVID-19 vaccines and therapies and make them available to developing world countries like Bangladesh, sub-Saharan Africa.

What should be the way forward?

There is a need to come to an agreement in WTO. Compulsory licensing, if granted, leads to pressure and legal harassment between the companies and countries.

So health activists urge the MNCs to share the formula which can be used to quickly ramp up the manufacturing of vaccines and therapies. This step towards global collaboration can be vital in thwarting the next health threat.

20. India's post-pandemic fiscal future

Source: This post is based on the article “**India's post-pandemic fiscal future**” published in **Business Standard** on **28th October 2021**.

Syllabus: GS3 – Indian Economy and issues relating to Planning, Mobilization of Resources, Growth

Relevance: Fiscal discipline and debt sustainability

Synopsis: The post-pandemic fiscal future would depend on the way government expenditure is directed.

Introduction

Tax collection in the current fiscal year is likely to exceed the Budget estimate by a significant margin. This would enable the government to increase growth-enhancing capital expenditure and also help reduce the fiscal deficit to some extent.

What is the current fiscal scenario?

As per the Union government,

– the fiscal deficit will be brought down to 4.5% of GDP by 2025-26.

According to IMF projections,

– India's general government Budget deficit will come down to 7.8% of GDP by 2026-27, compared to 12.8% in the last fiscal year.

What are the current medium-term fiscal challenges Indian economy is facing?

Government debt: According to International Monetary Fund (IMF) projections, it will remain above 85% of GDP by 2026-2027, which would be over 10 percentage points higher than the pre-Covid level.

However, India is not the only country where government debt has gone up substantially. The global public debt is estimated to have increased to about 100 per cent of GDP, with advanced economies contributing the most in 2020.

Pandemic-induced economic disruption: India will need to work on multiple levels to bring government finances under control and redirect spending to support growth.

Balancing spending and debt: India cannot sharply reduce spending to contain debt and deficit in the near term as this would impair economic recovery. As per IMF, fiscal space can be created through a credible medium-term consolidation strategy.

Fiscal discipline: The Union government is targeting to contain the fiscal deficit at **6.8%** of gross domestic product (GDP) in the current fiscal year, compared to 9.5% last year.

Which factors can affect the financial stability?

Growth and exports: Higher deficit and debt will affect government spending with implications for growth. India must focus on exports for higher growth. However, exports as a percentage of GDP slipped from about 24 per cent in 2008 to about 18 per cent in 2020.

Flow of compensation to states against the shortfall in GST collection: it will end next year. This could affect the fiscal position of a large number of states and create policy risks.

The quality of expenditure: As a recent article by Reserve Bank of India, the share of revenue deficit in gross fiscal deficit has been around 70% for the Central government, which is more than twice the level envisioned by the FRBM review committee. As a result, capital outlay of the government has suffered.

Debt sustainability: The IMF expects India's medium-term potential growth to be about 6%. The policy establishment will need to aggressively push reforms to attain higher sustainable growth. Higher public sector resource requirements for an extended period would affect longer-term growth potential.

What is the way forward?

First, create some policy space as soon as possible.

Second, the government needs to systematically address the low and stagnant tax-to-GDP ratio. India's tax gap is said to be worth about 5% of GDP.

Third, issues in the GST system, including simplification of processes and adjustment of rates to the revenue-neutral level, need to be addressed immediately. Besides, the government will need to aggressively push the disinvestment programme to raise resources.

Fourth, a more robust indirect tax system is necessary to reduce the dependence on high fuel taxes to fund government expenditure and the direct tax system needs to be reviewed as well to increase the tax base.

21. [It's time for a new QES](#)

Source: This post is based on the following articles "**It's time for a new QES**" published in **Business Standard** on **28th Oct 2021**.

Syllabus: GS3 – Indian Economy and issues relating to Growth, Development and Employment.

Relevance: On Quarterly Employment Survey

Synopsis: The Quarterly Employment Survey is based on an outdated frame and will result in incorrect estimates.

Introduction

Recently, the Labour Bureau, under the Ministry of Labour and Employment, released the Quarterly Employment Survey (QES) results for April-June 2021 for non-farm industries in the organised sector.

However, the findings of QES met with muted scepticism on the reliability and validity of the quarterly estimates and their comparability with the dated annual census estimates.

Must Read: [All-India Quarterly Establishment-based Employment Survey \(AQEES\)](#)

What are issues with the present QES?

Issues in comparing the quarterly QES estimates with the annual Economic Census 2013-14:

One could compare estimates based on a sample survey with census figures provided the sample is representative of the frame it is drawn from and appropriate data multipliers are applied to sample survey data.

In comparing the QES with the Economic Census, however, this does not appear to be the case, as the **sample selection is not proportional** to the units in the frame.

For instance, establishments in the education sector accounted for the largest number of units in the frame, but the education sector stands third in terms of the number of units in the sample.

Additionally, there are problems in **comparing a year-long census with quarterly estimates** from a sample survey.

It is also important to remember that the Economic Census was designed to create sample frames for conducting surveys in the non-farm sector and not for producing employment estimates. Shortcomings of the Economic Census's employment numbers are widely acknowledged and hence sparsely used.

QES is based on an outdated sample frame: The Economic Census is based on the "enumeration blocks" of the Population Census, 2011, as the primary geographical units. Hence the universe of establishment for drawing up QES samples is nearly a decade old.

One can reasonably expect large scale entry and exits of establishments during the seven years when the economy has grown at an average annual rate of 5%.

Estimating quarterly employment using the QES based on such an outdated sample frame and comparing it with the annual Economic Census estimates do not seem statistically appropriate. It has to be noted that, in 2017, the revised QES was abandoned as the employment estimates were unsatisfactory.

So, what should be done to correct for the failed effort?

It is, perhaps, best to abandon the current QES, expedite the Economic Census-2020 frame, and re-launch the QES with a statistically sound sample frame.

Even the government appointed a task force on employment statistics in 2017 suggested scrapping the QES, as the outdated Economic Census-2013-14 sample frame was responsible for the poor QES estimates.

Further, the task force recommended that there is an acute need to strengthen sources of enterprise and establishment-level data by

- Increasing coverage across enterprises,
- bringing both industry and services into the fold,
- carrying out enterprise surveys at a greater frequency and to conduct the Economic Census at regular intervals.

22. 5 Questions On Facebook

Source: This post is based on the following articles "**5 Questions On Facebook**" published in **TOI** on **28th Oct 2021**.

Syllabus: GS3 – Role of Media and Social Networking Sites in Internal Security Challenges

Relevance: Negative impact of Social media networks

Synopsis: New revelations underline how the Facebook company is sheltering hate speech in India.

Introduction

In September 2021, Frances Haugen, a former Facebook employee had submitted eight complaints to the US Securities and Exchange Commission. This is the regulatory body that exercises oversight over the capital markets and companies like Facebook Inc which are listed there.

What were the complaints alleged against Facebook?

Mismanagement: Haugen's complaint alleges material misrepresentations by Facebook and that its management has misled shareholders.

Promotion of extremist content and hate speech: Facebook is deleting less than 5% of all the hate posted on its platform. The most shocking revelation is that Facebook's algorithms themselves promote misinformation and other divisive, low-quality content while claiming to prioritise "meaningful social interactions".

Childrens vulnerability: Instagram (which is owned by Facebook) is harmful to children, especially teen girls who have said that the platform makes thoughts of suicide and self-harm as well as body image and eating issues worse.

Are the revelations significant in the Indian context?

As India is Facebook's largest user base, the recent disclosures become significant for close to 34 crore users. The following issues have been revealed w.r.t India

Discriminatory budgetary allocation: Facebook devotes only 13% of its total budget on content moderation for India (along with the rest of the world), devoting 87% to the United States which has less than 10% of users.

Lack of Skilled professional: The internal documents note that Facebook lacks the ability for classifiers in widely used languages like Hindi and Bengali. Thereby, it lacks the ability to intelligently determine hate speech when made in these languages, even when it is notified by users.

Communal division being prompted by Facebook: The internal report **Adversarial Harmful Networks: India Case Study** shows that Facebook was aware that anti-Muslim narratives and hate speech were prevalent on its platforms in India by certain political actors but it chose to do nothing due to political reasons.

What has been various governments' response?

Till date, there has been no official comment by the Union government or any other state government.

There seems to be similar inaction by any legislative body, including by the standing committees on information technology and home affairs, as well as the committee on peace and harmony constituted by the Delhi government.

At present there are no public interest litigations (PILs) filed on these disclosures.

What steps should Facebook take?

The first point of correction must be accompanied by **insulating its content moderation decisions from senior executives** in roles of business development and policy teams that

handle government relationships. The reason for this is due to the internal documents citing interference by Facebook India's public policy team.

A final reform may be done by placing a human rights expert as an **independent director** on the board to change its corporate culture.

What should Govt of India do?

For the Indian government the first step should be to acknowledge the problem caused by social media rather than to wait out this media cycle. Such recognition should support credible processes that are transparent for the creation of institutions that enforce rights respecting regulations.

23. Carbon removal and phasing out of coal

Source: This post is based on the following articles

'**Agenda for CoP26: How to achieve net zero**', '**Agenda for CoP26: Why the phasing out of coal won't be decided in a jiffy**' published in **Down to Earth** on **27th Oct 2021**.

'**An inclusive climate deal is what CoP-26 must deliver**', '**How India plans to make its stand clear at COP26**' published in **Livemint** on **29th Oct 2021**.

'**Why India's net-zero commitment matters for the world**' published in **Indian Express** on **29th Oct 21**.

'**A climate dividend**', '**The Glasgow climate test**' published in **The Hindu** on **29th Oct 21**.

Syllabus: GS3 – Conservation, Environmental Pollution and Degradation, Environmental Impact Assessment.

Relevance: Regarding emissions reduction from coal-based sources

Synopsis: Possibility of phasing out coal, challenges involved and major issues with carbon removal technologies.

Why phasing out of coal is necessary?

Among fossil fuels, coal has the **highest contribution to carbon dioxide (CO₂) emissions**. Of the 36.44 gigatonnes (Gt) of CO₂ emitted from the burning of fossil fuels in 2019, **almost 40%** came from coal-fired power plants and industry.

Coal production also **releases methane (CH₄)**, a more potent greenhouse gas than CO₂. It accounts for 35% of CH₄ emitted by all fossil fuel-related sources, says IPCC's Sixth Assessment Report (AR6).

What are the global coal CO₂ emission trends?

According to the AR6 report,

– fossil CO₂ emissions have **slowed down** in the past decade. CO₂ emissions from coal use grew at 4.8% per year in the 2000s but slowed to 0.4% per year in the 2010s.

– The global pipeline of proposed coal power plants has **collapsed by 76 per cent** since the Paris Agreement in 2015 and 1,175 GW of planned coal-fired power projects have been cancelled in this period.

Who are the major consumers of coal?

Despite the progress, coal still accounts for 34% of the world's power production in 2020.

China: China alone contributed 50 per cent of the world's CO₂ emissions from coal in 2019 and runs over half of the world's operating fleet, which is still growing.

Other major consumers of coal are **Japan, South Africa, Russia and South Korea**. None of them have a target date to phase out coal.

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Within the **EU-27**, Germany has the largest coal fleet — its phase-out target is 2038, with added effort to advance the date to 2030.

Asia-Pacific: As a result, today Asia-Pacific is the highest consumer of coal. Within the region, China, now a global superpower and developed nation, uses the lion's share; in 2020, it accounted for 68 per cent of the 33,604 terawatt-hours (TWh) of coal power generated in the region.

India still gets over 70 per cent of its energy from coal

USA: While it has drastically reduced the use of coal since the early 2000s due to a boom in shale gas, its coal consumption in 2020 was about 2,556 TWh, compared to India's 4,871 TWh. Thus, India does use twice as much coal but with a population four times larger than the US.

UK: UK's energy mix is still heavily dependent on oil and gas — natural gas is not a “clean energy source. Moreover, UK, has recently turned its coal-fired power plants back on because of record high nature gas prices.

So, there is still a long way to go before the world can meet to discuss climate crisis and the light bulbs are not powered by coal.

What are some issues with the carbon removal technologies?

The best-known technologies are:

- Carbon Capture and Storage (CCS)
- Direct Air Capture and Storage (DACs)
- Bioenergy with Carbon Capture and Storage (BECCS)

Carbon Capture and Storage (CCS): CCS captures waste CO₂ from large sources such as factories or fossil fuel power plants and stores it underground.

– **Issues:** There's little role for CCS in the future as electricity production needs to be largely shifted to renewable sources by 2050. Despite its existence since the 1970s, CCS is yet to scale up to levels adequate to meet IPCC's goals.

Direct Air Capture and Storage (DACs) technology, as the name suggests, sucks CO₂ directly from the air. Among the various carbon removal technologies, DACs is the only one that can remove carbon at climate-significant scales.

– **Issues:** If it is run on renewable energy, it could deliver negative emissions. However, it consumes large amounts of electricity, making the technology expensive.

Bio-Energy Carbon Capture and Storage (BECCS), captures CO₂ from biomass-based power plants.

– **Issues: Economic viability** of the technology is also highly uncertain — the cost is estimated at \$15-400 per tonne CO₂e. Besides, BECCS threatens **food security** by promoting diversion of land for biofuel production. It is estimated that rolling out BECCS at scale will require up to 3,000 million hectares — about twice the land currently under cultivation globally.

24. Who is my regulator?: On RBI's recent actions against auditors

Source: This post is based on the following articles “**Who is my regulator?** “ published in **Business Standard** on **29th Oct 2021**.

Syllabus: GS3 – Role of Financial regulators and issues arising out of it

Relevance: Institute of Chartered Accountants of India vs National Financial Reporting Authority

Synopsis: RBI's recent actions against auditors highlight the need for role clarity as well as coordination among regulators

Introduction

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Recently, the RBI had issued an order debaring a firm of chartered accountants from undertaking any type of audit assignment in any RBI regulated entity for a period of two years. This action has been taken, on account of the failure on the part of the audit firm to comply with a specific direction issued by the RBI with respect to its statutory audit of a systemically important non-banking financial company.

Similarly, in the past, SEBI has also banned a CA firm for their involvement in the accounting scam in a large listed company. These orders are now in appeal before the Supreme Court (SC).

What are the roles and responsibilities of Institute of Chartered Accountants of India (ICAI)?

Objective: The Institute of Chartered Accountants of India (ICAI) is a body established by The Chartered Accountants Act, 1949, for regulating the profession of chartered accountancy.

Composition: The ICAI is managed by a council of 40 members of whom 32 are elected by chartered accountants and the remaining eight are nominated by various public authorities.

Core functions of the ICAI:

- Regulating the profession of accountancy,
- Formulation of accounting standards
- Prescription of standard auditing procedures
- Disciplining and taking action on misconduct by auditors

The ICAI, like other regulators of “professions”, is thus structured as a self-regulatory organisation (SRO).

While ICAI has the power to Discipline and take action on misconduct by auditors, why RBI and SEBI needs to intervene?

Over the years, ICAI’s record in disciplining errant members has not been noteworthy. As a consequence, there has been a growing tendency among sectoral regulators to discipline the auditors.

Why National Financial Reporting Authority (NFRA) was constituted?

In the wake of some large corporate accounting and auditing scandals in the late 1990s, many OECD countries established bodies to oversee the audits of public companies. This was aimed to protect investors and further the public interest in the preparation of informative, accurate, and independent audit reports.

In line with this global development, the **National Financial Reporting Authority (NFRA)** was constituted by the Government of India on October 1, 2018, under the **new Companies Act** of 2013.

What are the powers given to National Financial Reporting Authority (NFRA)?

Broadly, the NFRA has the power to

- Monitor and enforce compliance with accounting and auditing standards,
- Oversee the quality of service
- Undertake investigation of the auditors of a class of companies.

These include companies whose securities are listed on any stock exchange in India or outside. Large unlisted public companies with a paid-up capital or annual turnover or debt above prescribed thresholds, all insurance & banking companies are within the NFRA’s jurisdiction. For the balance class of companies, the ICAI continues to be the regulator of the profession.

How the accounting and auditing fraternity responded after the constitution of NFRA?

It was unhappy with the dilution of its self-regulatory role. In November 2018, the Northern India CA Federation had challenged the constitutional validity of powers given to the NFRA. A similar petition has been filed by another CA which is pending before the Madras High Court.

What is the way forward?

The present situation offers an opportunity to put in place a clear regulatory framework and machinery for the conduct of the accounting and auditing profession.

First, If the twin regulatory model continues, this should ideally be in one consolidated legislation with clarity on the respective roles of ICAI and NFRA.

Second, the disciplining arm of the ICAI will need to be restructured and strengthened to improve its effectiveness and credibility.

Third, both ICAI and NFRA have representatives of sectoral regulators on their key decision-making bodies. These will need to be fully energised to become robust mechanisms for sectoral inputs as well as operational regulatory coordination and co-operation.

Finally, as the economy becomes more complex, India will need to strengthen the regulatory frameworks in other similar cross-cutting domains like data protection and competition.

25. The New Economic Scrabble

Source: This post is based on the article “**The New Economic Scrabble**” published in **Indian Express** on **29th October** 2021.

Syllabus: GS3 – Planning, Mobilization of Resources, Growth

Relevance: Jio, UPI, GST supporting startup ecosystem

Synopsis: India’s start-up ecosystem is radically breaking from its past in company valuations, unicorn numbers, funding round sizes, foreign interest, and growth.

Introduction

The three acts of entrepreneurship from five years ago — Jio, UPI, and GST have converged to accelerate startup ecosystem. This **triad** of private, nonprofit, and government courage demonstrates the economic upsides of a better balance between the three sectors.

How economic development is like a game of scrabble?

The Harvard economist Ricardo Hausmann suggests economic development is like a game of scrabble.

Goods and services are made by stringing together productive capabilities such as inputs, technologies, and tasks just as words are made by putting letters together.

Countries with a greater variety of capabilities can make more diverse and complex goods, just as a scrabble player who has more letters can generate more and longer words. If a country lacks a letter, it cannot make the words that use it.

In Hausmann’s framing, the government provides the vowels and the private sector provides the consonants.

The 1955 Avadi resolution poisoned India’s economic scrabble by restricting constants and shrinking the state’s resources to provide vowels.

How triad helped entrepreneurs?

JIO: India’s per GB internet data costs are just 3 per cent of those in the US. A bold and risky \$35 billion bet made by a private company transformed Indians from being data deprived to data-rich.

Increased consumption: it has jumped 15 times because costs fell by over 90 per cent.

The addition of millions of consumers and smartphones: Jio's delightful five-year disruption of the market has exploded the most important universal metric in startup valuation.

UPI is a public good: Google's letter to the US Federal Reserve suggesting America learn from India's Universal Payments Interface (UPI) run by the National Payment Corporation of India. UPI's mobile-first architecture is a key pillar of the paperless, presenceless, and cashless framework of the Aadhaar-seeded India Stack.

UPI reduces friction and costs for entrepreneurs and consumers in low-value payments.

GST: informality bred corruption and low-productivity enterprises with low-paying jobs, whose business model of regulatory arbitrage and tax evasion made formal enterprises noncompetitive. GST incentivised law-abiding supply and distribution chains.

The doubling of indirect tax registered enterprises since GST creates a virtuous economic cycle of higher total factor productivity for enterprises and employees.

How UPI, GST and JIO helped startups?

India now has the highest ratio of unlisted to listed companies with a \$1 billion valuation. Initial public offering documents filed by early startups like Nykaa, Paytm, Zomato and PolicyBazaar roughly average a 10x valuation rise since the triad went live.

Estimates suggest India's startup ecosystem valuation will explode from \$315 billion today to \$1 trillion by 2025.

What is the lesson of this economic scrabble?

A government does more when it does less. In the post-1947 economic policy, consonants were restricted and vowels were misclassified or missing.

The recent episode of Air India is the start of righting the historical wrong of misclassifying many private consonants as government vowels.

What is the way forward?

First, India needs a healthy balance between the state, entrepreneurs, and foreigners. The triad reinforces each element to drive inclusion and prosperity by enabling billions of people and millions of enterprises to do billions of sachet size transactions with low or no cost.

Second, Gandhiji's notion of democracy, where the weakest have the same opportunity as the strongest is only possible when entrepreneurs have all the consonants and vowels.

26. Differential treatment: On fisheries subsidies issue at WTO

Source: This post is based on the following articles "**Differential treatment**" published in **Business Standard** on **29th Oct 2021**.

Syllabus: GS3 – issues related to fisheries sector

Relevance: Roles and responsibilities of WTO in ensuring fair global trade practices.

Synopsis: India must protect its interests in WTO on fishery subsidies

Introduction

The issue on fishery subsidies was first raised during the WTO's **Doha ministerial meet** in 2001.

The basic objective of the global pact on fisheries subsidies, was to discipline or eliminate subsidies that encouraged illegal, unreported and unregulated fishing.

The provision of special but differential treatment for developing countries was decided to be ingrained in it.

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Recently, India has moved amendments to the draft of the proposed agreement on fisheries subsidies in WTO. It is meant to **make the accord more balanced** by curbing in huge grants being given out by rich nations for exploitative fisheries.

Also, it will give space to other countries to consolidate their fisheries sectors.

What was the proposal given by India?

The present text, which tends to safeguard the commercial interests of the developed countries, is unacceptable to India because it fails to uphold the much-needed sustainability of fisheries.

Going by the estimates put out by the UN Food and Agriculture Organization (FAO), nearly two-thirds of the \$35-billion subsidies go to enterprises engaged in commercial fishing.

On the other hand, the developing countries' subsidies, just a fraction of it, are aimed mostly at facilitating livelihood security for the fisheries-dependent coastal communities.

To correct this imbalance, New Delhi has proposed that the **rich countries stop subsidising fishing in distant waters beyond their exclusive economic zones (EEZ) for 25 years**. This would give time to the other countries to build their own sustainable fisheries capabilities.

Why there was a need for global pact on fisheries subsidies?

Unsustainable resource Exploitation: The urgency of a binding accord on fisheries subsidies is evident from the FAO's estimates that about 34 per cent of the world's marine resources are already over-exploited.

Threat to Fisherman's livelihood: Considering that the extent of overfishing was hardly 10 per cent in 1970 and 27 per cent in 2000, this trend, if continued, would deplete the fish stocks, threatening the livelihood of traditional fisherpersons.

How has WTO responded to India's Proposal?

The WTO's response to the Indian proposal seems fairly positive. This was clear when WTO chief Ngozi Okonjo-Iweala stated at the end of her recent New Delhi visit that the Indian plea "deserved to be heard".

She also promised to place it on the negotiation table though, understandably enough, its adoption by the negotiators could not be guaranteed.

Why fisheries subsidies hold significance for India?

For India, the issue of fisheries subsidies has special significance.

Positive impact on Livelihood: The country has about 16 million fisher-persons relying almost solely on fishing for their subsistence. Many more are engaged in the value chain.

Increase Marine fish production: Almost the entire growth in fish production is coming from the inland fisheries (aquaculture). A favourable outcome of the global deal on fisheries subsidies is, therefore, imperative for the growth of Indian marine fisheries.

Increases Competitiveness: The subsidy given by the government to this sector is quite meagre, barely around Rs 770 crore. It meets only a part of the cost of diesel and essential fishing gear. Consequently, most Indian fisher-persons are unable to operate beyond the coastal waters.

27. Gati Shakti: Connecting the silos

Source: This post is based on the following articles "**Gati Shakti: Connecting the silos**" published in **Business Standard** on **28th Oct 2021**.

Syllabus: GS3 – Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

Relevance: To understand the present working of infrastructure sector.

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Synopsis: Gati shakti master plan would help India converge its infrastructure spending, however few challenges need to be seen.

Introduction

Gati Shakti National Master Plan seeks to enhance multi-modal linkages, increase competitiveness and provide a linked platform for rolling out various infrastructure projects as part of a grand master plan.

It is a platform based on geographic information system or GIS that will connect all economic zones and clusters in the country.

The platform has been developed by the Bhaskaracharya National Institute for Space Applications and Geoinformatics (BISAG-Gandhinagar-based autonomous scientific society under Meity).

Network Planning Group (NPG) will have the responsibility of ensuring proper functioning of the platform and providing user assistance.

Must Read: [PM Gati Shakti – National Infrastructure Master Plan – Explained, pointwise](#)

What are the key benefits of PM Gati Shakti?

Breaks the silo culture: Typically, each ministry or department rolls out its own plans and programmes irrespective of the linkages with others. Gati Shakti ensures that different ministries are working in sync with each other.

Integrative approach: It forces an integrative approach. To achieve synchronisation and compatibility it now mandates all state entities to compulsorily enter their planned projects into the Gati Shakti platform. For this purpose, a fresh administrative architecture has been created alongside

Optimum use of finances: It ensures optimum use of available finances. Currently, there are no inter-linkages by which the Ministry of Finance provides sanctions and resources. Standalone projects get cleared because of their own perceived viability. Henceforth, clearance by Network Planning Group (NPG) is expected to be the key determinant for considering sanction.

What are the challenges involved?

Team-work: Ministries and government departments are notorious for being inward-looking and holding on to their turf. Clever ways be found to beat the system and bypass the integrative requirements.

States participation: Without this the integration at the Central level may be sub-optimal.

Technology: Will the technology deliver in practical terms to configure and review projects, and will the platform indeed be the wonder-tool it is expected to be?

Administrative framework: Each economic cluster should have dedicated development commissioners instead of district magistrates and collectors with many other diverse responsibilities.

28. [People may now be ready for a renewable revolution](#)

Source: This post is based on the article “**People may now be ready for a renewable revolution**” published in **Livemint** on **29th October 2021**.

Syllabus: GS3 – Conservation, Environmental Pollution and Degradation

Relevance: Coal shortage in India, Renewable energy sector in India

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Synopsis: Cheap, reliable and clean energy are means to fulfil the energy demand and these will determine the success of the global climate action movement.

Introduction

The random power cuts that last 5-7 minutes hurt commercial operations more than the long-scheduled cuts.

This is especially true for small-scale industrial outfits with basic operational setups (like power loom shacks) that employ a vast majority of workers in India.

What is the reason behind increased power cuts?

The post-covid boom in economic demand: it is coupled with flooding in coal-producing regions. It has led to major shortages of coal at power plants across the country.

High dependence on coal: By October, some coal plants had dangerously low stocks of only two days. Given the global energy supply crunch, the precarious situation of coal plants in India could prevail for the next six months.

Government interventions to mitigate the pressure on coal supply: temporary closure of some power plants and reduced electricity supply, particularly across rural India.

Must Read: [Coal crisis in India – Explained, pointwise](#)

What has led to decreased production of coal?

Increased investment in renewable energy (RE) technology: This is partly because the economics of new coal plants does not make sense. Most of the 33 gigawatts (GW) of coal power generation capacity under construction and the 29GW in pre-construction stage will end up as stranded assets.

No new coal plants: According to a report authored by Kashish Shah, there have been no new coal plants announced and no movement on the 29GW of pre-construction capacity in the last 12 months.

Which factors are responsible for the growth of RE sector in India?

Cost of electricity: coal-fired power cannot compete with the ongoing cost reductions of renewables. Solar tariffs in India are now below even the fuel costs of running most existing coal-fired power plants.

Favourable investment climate in the renewable energy sector: India has set a target of 450GW of renewable energy capacity by 2030. The government has been taking sustained steps to attract foreign investment partnerships, partly as an antidote to the weak debt financing ecosystem.

Policy support: Existing regulation allows 100% foreign direct investment in renewable energy projects, without prior government approval. A \$600-million incentive scheme for new solar power projects will boost the production of polysilicon, wafers, cells and modules over the next five years.

Economic, environmental and moral imperatives for foreign investment: India is the third largest carbon emitter after the US and China. However, its per capita energy consumption is a third of the world average.

What is the way forward?

First, the government must read the headwinds and introduce fiscal incentives like tax breaks and excise relaxations for research, development and production of renewable energy technology, particularly off-shore wind and hydro power.

Second, future elections could be fought over power, but this time, it could be the public making the power cuts.

29. It is time to move on to next phase of power reforms

Source: This post is based on the article “**It is time to move on to next phase of power reforms**” published in “**Down To Earth**” on **28th October 2021**.

Syllabus: GS3 – Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

Relevance: Power sector reforms in India.

Synopsis: Electricity Act, 2003 has its own achievements and limitations. The new rules are aimed at taking the sector to a new high.

Introduction

The Union Ministry of Power recently notified the rules under Electricity Act, 2003 in the interest of electricity consumers and other stakeholders.

What are the achievements under “Electricity Act 2003”?

The 2003 Act allowed for the **delicensing of generation and transmission**, which resulted in **capacity additions** of 50,000 MW in 11th and 88,000 MW in 12th plan period, up from 20,950 MW in the 10th Plan(2002–03 to 2006–07).

Our **per capita power** consumption has increased almost **2.3 times** since 2003.

The **country’s installed capacity** has increased to 388 gigawatt. **Renewable** energy capacity (solar, wind and other renewables, excluding hydropower) surpassed 102 GW.

It paved the way for a long series of other reforms that followed.

Why is there a need for new rules?

The Electricity Act was notified in 2003. To remain effective over time it has to continually adapt to the **changing needs and desires** of consumers in all sectors of economy, including electricity.

The need for a continuous, round-the-clock **supply** of energy in homes, businesses and industries is set to rise. Hence, the strain on electrical **distribution** will simultaneously grow. This necessitates the implementation of a new framework for DISCOM’s.

– **Innovative technologies** will play a larger role in the future. Batteries, other creative storage technologies, electric vehicles and distributed supply are all likely to cause big structural changes.

What new rules have been notified?

These include **Electricity (Timely recovery of costs due to change in law) Rules, 2021**, and rules on **promotion of renewable** energy generation by dealing with Must-Run matters and other matters, 2021.

Delicensing of the distribution sector with content (electricity) and carriage (wire) separation is planned.

A framework will be put in place to allow customers the **option of choosing** from multiple **distribution companies**. There is also a proposal to allocate Rs 305,984 crore over 5 years for a revamped, reforms-based and result-linked power distribution scheme.

The **tariff policy** was also **amended** to improve payment security for power supplies, and to reduce losses and cross-subsidies.

What are the challenges in efficient growth of Electricity sector?

Distribution sector-The debt owed by DISCOM's to electricity producers is huge, Rs 116,127 crore. DISCOMs haven't been paying GENCOs on time which mostly affects the coal industry. Average **AT&C loss** level of rated discoms: It has been hovering around **21%**.

30. India's Clean Molecule Bet: On Green Hydrogen

Source: This post is based on the articles "India's Clean Molecule Bet" published in "Times of India" on **29th October 2021**.

Syllabus: GS3-Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

Relevance: Importance of Green Hydrogen for India.

Synopsis: Green hydrogen has the potential to alter the present fossil fuel dominated energy basket. Still, there are challenges for scaling this technology, that needs to be worked upon first.

Introduction

India, being the second most vulnerable country to climate change, is now leading the climate war with a clean molecule-green hydrogen.

COP-26 in Glasgow presents India with an opportunity to present its decarbonisation strategy based on renewable energy, storage and green hydrogen to the world.

India presently imports \$160 billion worth of fossil fuel energy and is likely to double it in the next 15 years.

How can hydrogen help India?

Sectors that utilise solid and liquid fuels cannot be powered by electricity due to technical factors. Hydrogen will help India and the world to decarbonise sectors such as steel, copper, fertiliser, cement, oil refining and long distance transport.

Green hydrogen can help to build scale and export capabilities in high-value green products such as green steel, green ammonia and high-tech components.

Must Read: [Green Hydrogen: Potential, Issues and Solutions – Explained, pointwise](#)

What is the way forward for India?

Reduce costs – Power costs including generation and transmission contribute to more than 70% of green hydrogen cost.

Initiatives such as transmission and distribution waivers, surcharge waivers and low taxes/duties will help reduce green hydrogen costs by enabling the electrolysis facilities to be set up closer to demand centres.

Additional capacity -India must ensure that a large proportion of the upcoming new hydrogen capacity should be green in addition to mandating a fraction of existing capacities to go green.

Additional demand – Long distance transport sector can also provide additional demand in the form of hydrogen-derived ethanol or hydrogen fuel cells.

Export capabilities – Preparing sunrise sectors like green steel for green hydrogen is critical for creating vibrant clean export capabilities in India.

Innovation capabilities – As a nascent field, R&D investments become critical to the success of the Indian electrolyser industry, where the roles of venture capital and academia-industry partnerships are imperative.

Green ammonia synthesis – Scaling it in the Indian coast can be a historical opportunity to export energy. A well-designed alliance with Korea, Singapore, Taiwan and Japan will enable win-win partnerships.

31. Cities and climate change: why low-rise buildings are the future – not skyscrapers

Source: This post is based on the article “Cities and climate change: why low-rise buildings are the future – not skyscrapers” published in “Down To Earth” on 29th October 2021.

Syllabus: GS3- Conservation, environmental pollution and degradation, environmental impact assessment.

Relevance: To understand the interplay of urban infrastructure and its consequent effects on climate.

Synopsis: The plan of urban architecture for accommodating more people needs a change. The new research model offers solutions to both infrastructure and climate.

Introduction

More than 50% of the world’s population live in cities and urban areas. By 2050, an additional 2.5 billion will be living there.

Hence, we need a climate proof plan of architecture for urban areas.

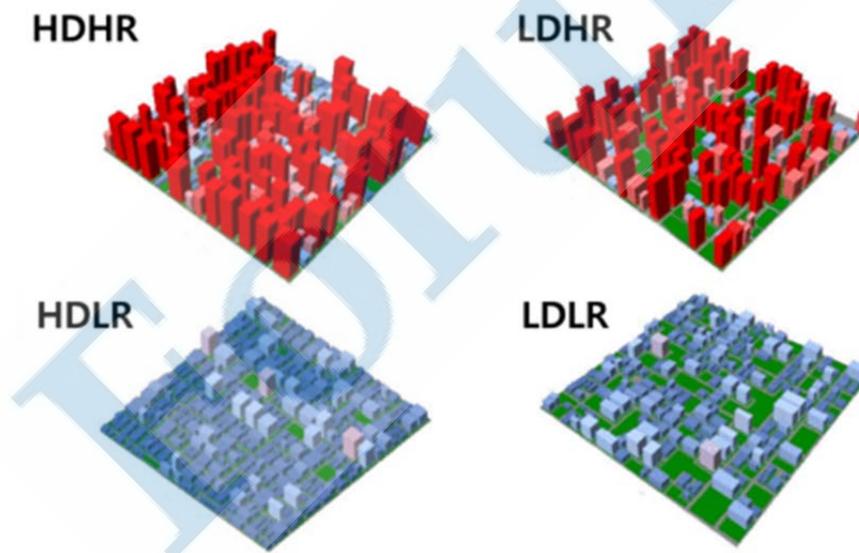
There is a popular belief that taller, more densely packed skyscrapers are the way forward, because they optimise the use of space and house more people per square metre and limit urban sprawl.

But as per a new study and given the global commitments to emission-reduction targets and mitigating climate change, this is not the most sustainable solution from a carbon-reduction perspective.

The study found that densely built, low-rise environments are more space and carbon efficient, while high-rise buildings have a drastically higher carbon impact.

What was the study and its findings?

In the study, both operational and “embodied” carbon — of different buildings and urban environments were studied. Four different urban scenarios were developed:



High-density, high-rise (**HDHR**)- tall and close together.

low-density, high-rise (**LDHR**)- tall but more spread out.

high-density, low-rise (**HDLR**)- low and close together.

low-density, low-rise (**LDLR**)- low level and more spaced out.

Results: The study showed that **HDLR** scenario is more space and carbon efficient i.e **more environmentally friendly**.

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When moving from a HDLR to HDHR urban environment, the average increase in whole life-cycle carbon (both operational and embodied) emissions is 142%.

Operational carbon is generated while a building is in service.

Embodied carbon (hidden carbon) is produced during the extraction, production, transport and manufacture of raw materials used to construct a building, plus any produced during maintenance, refurbishment, demolition or replacement.

Why building design is a critical element?

At a global scale, the construction sector is responsible for a significant impact on the environment. In this, **largest contribution** comes from ‘consumption of energy and resources’, which is due to **design stage neglect**.

Design is also important because skyscrapers rely heavily on concrete as a structural material. And concrete has highest hidden carbon contribution among construction materials. So the type of materials we use, how much we use, and how we use them is crucial.

What are the various issues with the present building design frameworks?

Presently, in building design, “operational efficiency” is given more importance, however **“embodied impact assessment” is voluntary** and therefore neglected. The focus is on driving down ‘operational energy’ requirement.

Embodied impact is the impact from the production of materials, their transportation to the construction site, and the construction process itself

However the proportional **share of ‘embodied energy’** consumption has been driven **up**, as the materials and activities required to build it in first place produce proportionally more impacts across the building’s lifespan.

What is the solution?

We need to build more HDLR type buildings rather than HDHR.

32. Facebook deploys hardly any resources in India to tackle misinformation. This must change

Source: This post is based on the article “**Facebook deploys hardly any resources in India to tackle misinformation. This must change**” published in “**Indian Express**” on **26th October 2021**.

Syllabus: GS3 – Awareness in the fields of IT.

Relevance: To understand the challenges put by technology.

Synopsis: Social media platforms in India are being used to spread hate against minorities and to serve petty political ends. Moreover, platforms like Facebook are not taking serious steps to address these issues as clear by the recent revelations.

Introduction

Since 2016, Facebook has been under the scanner for its alleged involvement in encouraging fake news, to the extent of affecting elections, promoting hate speech and emboldening prejudice.

Now, for the first time, leaked internal reports have made it clear that the issues that plague social media in the US are also true for India, the company’s largest market.

What are the concerns w.r.t usage of Facebook in India and its policies towards Indian market?

Bots (AI) and fake accounts tied to political parties and cultural organisations tried to spread **fake news**, to impact the elections.

Facebook spends 87% of its global budget earmarked for tackling misinformation in North America where only 10% of its users reside. Given the resources it deploys in US and other countries, it is clear that the well-being of **some users and geographies matters more** than others.

Political parties and their proxies — groups representing narrow community interests — have used the platform to great effect for their own ends.

Facebook did little to curb reported instances of **hate speech** against minority communities.

What is the way forward?

Social media must be more transparent and proactive in addressing the fundamentals of its algorithms and business models, which can clearly cause social harm.

For impartial and reasonable regulation of the digital sphere, the political class, too, must be willing to sacrifice the quick gains it has reaped on social media.

Instead of focusing on polarization of the general public, political parties should utilize digital media for evidence-based discussions.

33. Catch all control that aren't likely to end overfishing

Source: This post is based on the article “**Catch all control that aren't likely to end overfishing**” published in **Livemint** on **26th October 2021**.

Subject: GS3- Resources of economic importance.

Relevance: Understanding the issue of over-exploitation of fisheries.

Synopsis: Overexploitation of fish resources needs to be addressed urgently.

Introduction

The world faces many global or common problems ranging from climate change to over-exploitation of common resources like fisheries. According to [Food and Agriculture Organization \(FAO\)](#) more than a third of the marine resources have been depleted beyond a point which it cannot replace itself.

Why fisheries segment is important?

39 million people depend on fisheries for their livelihood. Fisheries meet about 1/5 of the animal-proteins requirement of about 42% of the population of the world.

What are the ways to solve the fisheries' problem?

[World Trade Organization \(WTO\)](#) should focus on **ending subsidies** for activities that promote deep-sea fishing. For example, ending subsidies on cheap fuel for Deep Sea trawlers.

Countries need to control the illegal or unregulated high-volume mechanized deep sea fishing.

Read more: [Differential treatment: On fisheries subsidies issue at WTO](#)

For territorial waters, it should be left to the country to manage the resources. For example, India.

What should be the way forward?

Though ending the subsidies would be difficult, WTO should still take up the issue. The developed countries, which have caused maximum harm, need to take up more responsibility in overcoming this crisis.

34. Is India ready for a world where electric vehicles will dominate transportation?

Source: This post is based on the article “Driving a New World Order” published in **Indian Express** on **30th October** 2021.

Syllabus– GS3: Conservation, Environmental Pollution and Degradation

Relevance: Significance of Electric Vehicles

Synopsis: India needs Electric Vehicles to protect the environment and acquire a permanent place in the new global order.

Introduction

Fossil-fuel-based transportation has resulted in pollution around the world. India has nine of the 10 most polluted cities in the world i.e., Greater Noida, Noida, Lucknow, and Delhi, etc. Thus, the government is steadily encouraging electric vehicles.

How Electric Vehicles are beneficial compared to combustion engines?

An EV operates on an electric motor instead of an internal combustion engine. and has a battery instead of a fuel tank.

1) It does not emit environmentally harmful gases. 2) It's cost of running is 80 paise per kilometer compared to 7-8 per kilometer for petrol-based vehicles.

Initiatives to promote EV

Government Initiatives: 1) **National Electric Mobility Mission Plan** aims at least 30 per cent of vehicles on our streets by 2030, would be electric. 2) **Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME) scheme:** It provides for road and registration tax subsidies and technological support to encourage the manufacturing and purchase of electric vehicles.

Private initiatives: Companies like Amazon, Swiggy, Zomato, and Ikea are deploying EVs for deliveries. Car manufacturers like Mahindra and Tata Motors are making partnerships with mobility companies Ola and blue smart mobility respectively, to ensure more EV delivery and ride-hailing services.

Challenges in the adoption of electric vehicles in India

lack of charging infrastructure in India is a major issue. At present, there are only 427 charging stations around the country.

Uninterrupted supply of electricity will also be a challenge in the adoption of EVs.

India will be dependent upon foreign countries like China and Korea for [lithium-based EV batteries](#). Its manufacturing in India is at a nominal stage.

35. How to create a truly digital public

Source: This post is based on the article “How to create a truly digital public” published in **The Indian Express** on **30th Oct** 2021.

Syllabus: GS3 – Science and Technology- Developments and their Applications and Effects in Everyday Life.

Relevance: Utilizing technology for governance, Building trust of the marginalized on digital tech

Synopsis: Technological solutions for social services should be more citizen centric. At present these solutions are more suitable for elite class instead of marginalised class.

Introduction

Government has recognized the power of technology in ensuring inclusion at a massive scale. Technology is being used for social services such as receiving vaccines and rations to paying for cooking gas and applying for fertilizer subsidies.

However, the technology of such services is not designed, keeping in mind the ordinary citizens of the country. It is more suitable for “elite” citizen i.e., male, urban, upper class. The term used in law, un-ironically, is “reasonable man”.

What are the issues in technological designs of services?

Accessibility and trust deficit: Large segments of Indians either do not trust or don't have access to the digital model of services and hence rely upon trusted human intermediaries.

Gender digital divide: social commerce entrepreneurs are not able to take the benefit of technology due to gender divide.

What are the suggestions to make digital spaces truly public?

Encouraging human-centric design: A shift from the default “build first and then disseminate” approach is required. Designs should be human-centric and its assessment by users should be mandatory before its rollout. For example, UPI payments app, BHIM and Postman Savings products have been successful among non “digital natives” due to their simple and pro-poor designs.

Using trusted human interface: Local intermediaries like community leaders and civil society organizations and existing networks like ASHAs should be used to bridge the digital divide. These intermediaries are trusted by those who are not comfortable or don't trust the technology.

Institutionalize an anchor entity: This entity will bring together innovators, policymakers, civil society organisations and researchers to ensure citizen-centricity in GovTech. One such platform is Citizen Lab in Denmark.