

7 PM COMPILATION

16th to 30th April, 2021

Features of 7 PM compilation

- ❖ Comprehensive coverage of a given current topic
- ❖ Provide you all the information you need to frame a good answer
- ❖ Critical analysis, comparative analysis, legal/constitutional provisions, current issues and challenges and best practices around the world
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Phasing Out Coal in India – Explained, Pointwise

Introduction

Coal is the largest source of electricity in the world. Recently, the UN Secretary-General urged wealthy nations to end coal use by 2030. But, about **30% of the primary energy supply of the G20 countries** depends on coal. Further, only a **negligible decrease in coal use**(0.9%) is observed between 2012 and 2017 in G20 Countries. So phasing out coal is not an easy step despite setting [Net Zero carbon emission](#) by developed countries. Phasing out coal in India is a bigger challenge than in developed countries.

A few of the International Organisations and few developed countries are asking India to adopt a net-zero emissions target. But it is not an easy step. According to The Energy and Resources Institute(TERI), to achieve net-zero greenhouse gas emissions India needs to **phase out coal altogether by 2050**. This is because coal is the most important and abundant fossil fuel in India.

According to the 2017 data, almost 94 GW of coal-based power plants are planned(announced, pre-permitted or permitted) or already under construction in India. Further, India also has the 2nd largest coal share in electricity generation globally. This underlines the challenge in phasing out coal in India.

Needs to phase out coal

1. **Climate change:** Coal-fired electricity generation accounts for 30% of global **carbon dioxide (CO2) emissions in 2018**. According to the IPCC's Special Report Global Warming of 1.5 °C, a near-total reduction in the use of coal and other fossil fuels for electricity generation by 2050 is necessary to limit global warming to 1.5 °C. So to achieve the [Paris climate deal](#) reduction of coal is essential.
2. **Health benefits:** Coal is a major and is often the **leading contributor to air pollution**. Estimates found that coal burning is responsible for more than 800,000 premature deaths per year globally. Further, coal is also the reason for many millions of cases of serious and minor illness. This also has economic implications, like increased healthcare costs and a higher number of lost working days.
3. **Costs:** Renewable energy rapidly emerged as the lowest cost option of new power generation. **By 2025, electricity generation from new renewable energy infrastructure will get cheaper** than power generation from new coal infrastructure.
4. **Energy independence and fiscal benefits:** Reducing coal imports **promotes energy independence, improves the balance of payments**. Further, it can also reduce geopolitical tensions in purchasing coal. For example, India can reduce importing coal and save Forex reserves.

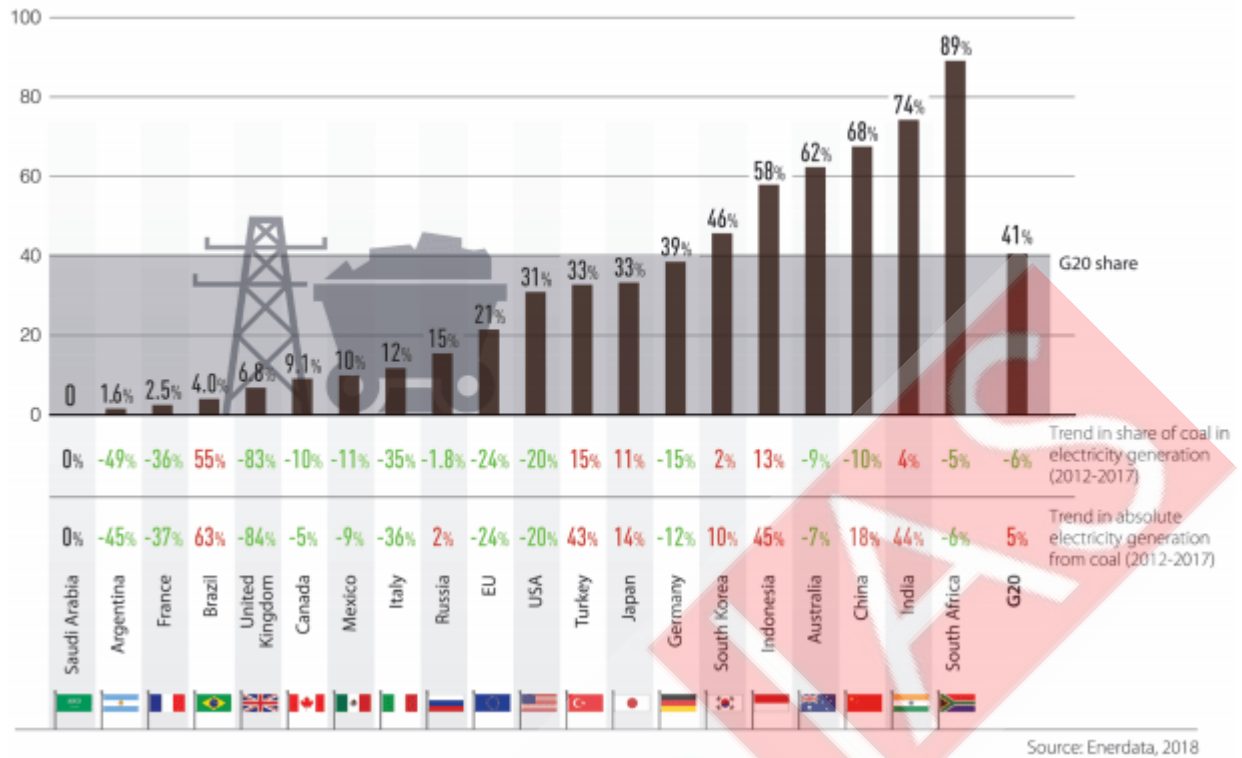
Capacity of Coal usage around the world

China has the biggest energy supply from coal. China alone accounts for nearly half of the world's coal consumption.

In 2017, the G20 countries accounted for 85% of global coal exports. The major exporters include [Australia \(37% of global coal exports\)](#), Indonesia (16%), Russia (12%). So **phasing out coal will impact their coal export revenue and create associated job loss**, etc.

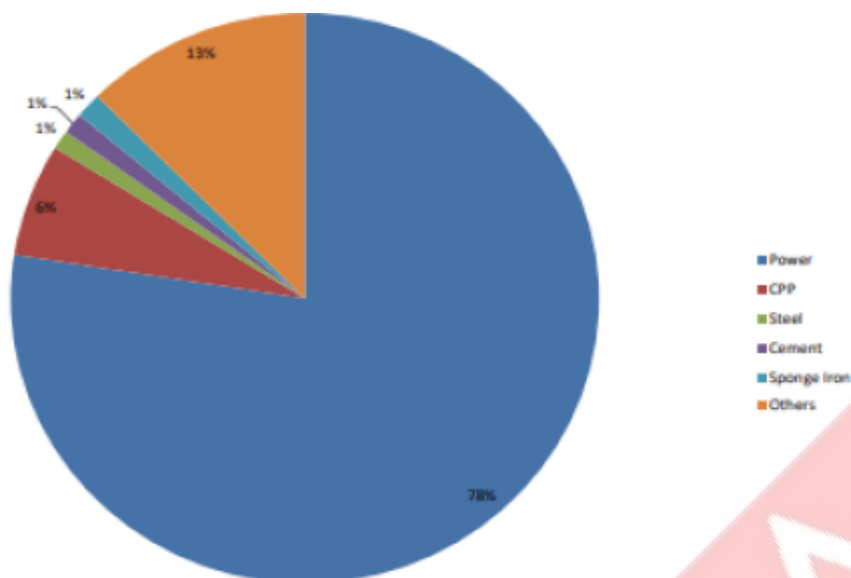
However, countries like the **UK, Italy, France, the European Union, the United States** shows strong commitment and reduction in coal usage due to their policies. Such as pre-retiring coal plants, the [introduction of the carbon tax](#), etc.

The following image shows the share of coal in electricity generation in 2017.



Capacity of Coal usage in India

1. India holds the 5th biggest coal reserves in the world. Around 7% of the world's proven [coal reserves are located in India](#).
2. According to the Ministry of renewable energy, the total installed capacity of renewable energy is 368.98 GW. But still this only accounts for 23.39% of India's energy mix. On the other hand, the coal sector accounts for more than 60% of India's energy mix. This shows the importance of Coal in India.
3. In FY20, India consumed approximately 942 million tonnes (MT) of coal. Of that 730 MT was produced domestically.
4. India is also the **3rd biggest coal importer** among G20 countries. Further, India also accounts for 12% of global coal imports.
5. According to the **monthly production pattern of the Ministry of Coal**, the Majority of Coal was used in Power production and Captive Power Plant (CPP).



Challenges in Phasing out coal in India

Phasing out the entire [coal sector](#) is not an easy task in India. There are many associate issues involve in phasing out coal. Such as,

- 1. Depriving the geographic advantage of resource-rich state:** According to the Geological Survey of India, India has 319.02 Billion tonnes(bt) cumulative coal reserves in India. Of these 219.65 bt(**68% of total reserves**) **present in only 3 states. Jharkhand, Orissa, and Chhattisgarh.** The entire economy of these states depends upon coal for other developments. Phasing out coal will reduce their economic capacity.
- 2. Reduction in Taxes:** In FY20, the Centre alone collected approximately Rs 29,200 crore in GST compensation cess from coal. Phasing out coal will impact India's tax collection
- 3. The economic influence of coal in freight movement:** Coal alone accounts for 40 percent of the total freight revenue in Indian Railways and trucks. So, phasing out coal will reduce the revenue of Railways in India.
- 4. The impact of Job loss:** Using different employment factors, one study has mentioned direct coal jobs at 7,44,984. This figure does not include contract employees, Captive mine workers, employees in coal transportation, coal consuming sectors like steel, power, etc. **Phasing out coal in India will create a huge job loss across the sector.**
- 5. Stranded assets risk:** Economic shifts and policy changes may turn coal-fired power plants into stranded assets(non-performing assets). This will rapidly decrease their value, or they may turn into liabilities. This process is already observed in some G20 countries.
- 6. Economic Cost in phasing out:** Phasing out coal is not an easy task considering the associated cost involved in the transition. For example, The German coal phaseout plan calls for an investment of more than 50 billion euros for mining and plant operators, impacted regions and employees. Similar investment is not feasible in India.

Suggestions to phase out Coal in India

- 1. Deployment of clean energy on a mass scale:** According to The Energy and Resources Institute(TERI), If India needs to achieve a net-zero greenhouse gas emissions target, then the share of renewables in the power mix needs to climb to 90%(From 23.39% now). So India needs to [deploy clean energy on a large scale](#).
- 2. Adopting net-zero emissions target:** Various environmentalist and even the CEO of NITI Aayog wants [India to embrace the Net-Zero emission target](#). It is important to note that there is also a **Private member bill submitted in Lok Sabha, urging the**

Indian government to commit a net-zero emissions target by 2050. So, India needs to adopt such a target.

3. **Focus on energy efficiency:** Instead of phasing out coal immediately, India can move towards energy-efficient buildings, lighting, appliances, and industrial practices. This will **help faster phase-out of coal in the future.**
4. The government has to encourage all states and UTs **to make their respective carbon-neutral plan.**
 - The UT of Ladakh and Sikkim state are already planning such a carbon-neutral plan.
 - Further, at the local level cities like Bengaluru and Chennai, the Panchayat of Meenangadi in Wayanad, Kerala also planning such a carbon-neutral plan.
5. **Other initiatives like,**
 - India also has to develop both natural and man-made **Carbon Sequestration practices.**
 - **Use of biofuels:** Can help reduce emissions from light commercial vehicles, tractors in agriculture.

Conclusion

Phasing out coal is essential not only for India but for all countries. But developed countries that started their Industrialisation by burning coal has to adopt the Common but differentiated responsibilities and respective capabilities (CBDR-RC) for phasing out coal. This will not only provide adequate time for developing countries like India and Least Developed Countries but also fix their responsibility also.

Issue of Gender Gap in Judiciary – Explained, Pointwise

Introduction

The issue of a gender gap in the [judiciary](#) is in the spotlight after a plea filed by the Supreme Court Women Lawyers Association in Supreme Court (SC). The plea advocated for increasing women participation in the judicial set up in order to [augment gender justice](#). The participation of women in the judiciary so far has remained minuscule, especially at higher levels. Therefore, an attitudinal change, along with a strong will to attain gender equality is needed amongst the male judges, in order to curb the gender gap in the judiciary.

Current Gender Gap in Judiciary

- Almost 70 years have passed since the independence, but, the Supreme Court could witness **the appointment of only 8 women judges so far**.
- 1. Justice Fathima Beevi became the first [woman to be appointed as SC judge](#) in 1989.
- 2. After this, there are only 7 more appointments to date. The last ones being [Justices Indu Malhotra](#) and Indira Banerjee in 2018.
- 3. Currently, one woman judge is present in the SC.
- 4. So far, No women Judge has held the position of the [Chief Justice of India](#).
- In 25 [High Courts](#), only 81 women judges are present out of 1078. This portrays the glaring inequalities in the judicial setup.
- Similarly, women represent 48 per cent of our population, but they constitute only 28 per cent of district court judges

Why is such a Gender Gap is prevalent?

Both the government and [collegium system](#) is responsible for such dismal performance.

- The government appointed **only one woman judge till 1989**, while hundreds of males got appointed to SC.
- After 1993, the [collegium](#) became the ultimate authority to recommend names to SC. But this group also missed the opportunity to recommend more women judges. So far only 7 women judges have been appointed to the SC based on the recommendation of the Collegium.
- Important Article and cases
- **Article 124(2)** of the Indian Constitution provides that the Judges of the Supreme Court are appointed by the President. He/she should consult such a number of the Judges of the Supreme Court and of the High Courts in the States as he/she may deem necessary for the purpose.
 - First Judges Case – In this case, the court held that the President is not bound by CJI's advice.
 - From the Second Judges Case (1993) – the [Collegium system](#) evolved and start making appointments.

Need to bridge the gender gap in Judiciary

1. **Principle of Reasonable representation:** As per this, there has to be more women judges as they constitute almost 50% of the Indian population, but are highly underrepresented in the judiciary.
2. **The credibility of Judgements:** The judiciary is the protector of fundamental rights. Further, it gives various judgements for enhancing **inclusive participation and equality** in society. If the institution itself lacks these principles, then the worth of its judgements/ advisories/ directives will get diminished.

3. **Public Confidence:** More women will bring diversified perspectives that would improve fairness in decision-making. This will automatically strengthen the public's confidence in the judicial setup.
4. **International Obligations:** Sustainable Development Goal 5 of UN calls for attaining gender equality. Greater participation of women in the judiciary will act as a prudent step in this direction.
 - Lack of Gender sensitivity in the Court Judgements:
 - There are cases in which marital rape was not acknowledged as a crime. Few For example,
 - SC recently granted bail to a government servant who is accused of repeated rape and torture of a 16-year-old child.
 - During this hearing, CJI questioned that "When two people are living as husband and wife, however brutal the husband is, can the act of intercourse between them be called rape?"
 - There are also instances when the court **upheld the superiority of society's attitude** toward women against the rights of Women.
 - For example, **In Narendra vs K. Meena (2016)**, the SC said that under Hindu traditions, a wife after marriage is supposed to fully integrate herself with her husband's family. Further, the court held that the **refusal of women to live with in-laws** amounts to cruelty. Therefore, the **husband is entitled to divorce her** under the Hindu Marriage Act.
 - Apart from that, there are other instances as well when women protection laws are diluted without considering the sensitivity of the issue. Such as the intervention of the court against the right of a woman to marry according to her will. For example,
 - The **infamous Hadiya (2017) case:** The woman's father accused her that she was forcefully converted to Islam. Though, Hadia had denied it repeatedly. But, the court ordered an investigation by the National Investigation Agency for looking into the matter of marriage of two adults.

Challenges in bridging the gender gap in the judiciary

There are some hurdles to bridge the gender gap in the judiciary.

1. **Seniority Principle:** This principle is followed in case of appointments to the higher judiciary. However, strict adherence to this also discourages more women appointments.
2. **Insensitive Attitude:** Many judges feel that there are fewer women judges, and they also lack the desired qualities of Judges.
3. **Neglect of Academic Community:** The collegium or government **doesn't appoint any distinguished jurist (like a law professor) to the supreme court.**
4. **Liberal stance of Collegium might impact the quality of Justice:** Providing reservations for women might impact the quality of Justice as there might be a chance where a woman Judge is get appointed only to fill the reservation.

Suggestions to improve Gender Gap in Judiciary

- The willpower towards women empowerment needs to be enhanced in the judicial branch **through sensitization workshops and gender-sensitive training.**
 - They must realize that women take a longer path to success that is often interrupted by childbirth and childcare.
- The government and Judiciary can provide relaxation to **the seniority principle.** This will ensure gender balance on the bench of the top court.
- The **collegium should diversify the appointment process** in order to bridge the humongous gender gap. They can also recommend a **distinguished women jurist** for appointment to SC as permitted by **Article 124** of the Indian Constitution.

Such appointments can help in tackling the criteria of geographical representation in the supreme court, as many times there are no women judges in a particular geography.

- **Encouraging more women to take up the profession:** Both the government and the Bar Council of India has to take adequate steps to include more women to take up the Lawyer profession. This will improve the quality of women lawyers in the long run.
- **Creating a road map towards bridging the gender gap:** SC has to take the plea filed by Supreme Court Women Lawyers Association as an opportunity. Utilising that, the SC has to **create a vision document** to [bridge the gender gap in Judiciary](#).

Conclusion

The collegium should now take a liberal stance towards women judges and must ensure at least 5-6 women judges are present in SC at least within a decade. This will not only ensure gender parity but will also give India its first female chief justice.

Extradition of Fugitives to India – Explained, Pointwise

Introduction

Recently, the U.K's Home Secretary approved the [extradition of diamond merchant Nirav Modi to India](#). He is wanted in India, in connection with the Punjab National Bank(PNB) fraud.

However, the extradition will happen only when the U.K's cabinet minister approves this order. Till then, Nirav Modi can also make an appeal against the home secretary's order in the court.

Therefore, the Indian agencies need to enhance their cooperation with the British authorities. This will ensure the smooth extradition of Nirav Modi. Further, it will also open gates for extraditing other fugitives like Mehul Choksi and Vijay Mallya.

About the case

1. The CBI had registered the case on January 31, 2018, against Nirav Modi, Choksi and others including then officials of Punjab National Bank.
2. As per CBI, the accused plotted a criminal conspiracy to **defraud the public sector bank** by fraudulently issuing Letters of Undertaking.
 - LOUs are a guarantee that a bank gives to banks abroad where its client approaches for credit.
 - The figure of LOUs amount to 13000 crores as they were issued without any sanctioned limit or cash margin. Further, these were not entered into the core system of the bank.
3. However, Modi had escaped from India on January 1, 2018, before the registration of the case in CBI.
4. A non-bailable arrest warrant was issued by the trial court against him. This was followed by a [red corner notice](#) in June 2018 by [Interpol](#).
5. The UK Police arrested him in London in March 2019. Finally, in February 2021, a district court accepted the reasonable grounds of a warrant against Modi in Indian courts.
 - Under the UK Extradition Act 2003, the judge sent his findings to the Secretary of State for Home Affairs.
 - Secretary of State makes a decision based on 3 things:
 1. Extradition shouldn't result in Death Penalty
 2. Rule of speciality must be followed post the extradition
 - **Rule of speciality or Principle of Speciality:** This states that the extradited person cannot be punished for any other offence but only for the offence for which he is being extradited. So, India cannot conduct a trial on Nirav Modi for any other pre-extradition offences.
 3. The fugitive is shouldn't have been extradited to U.K from another country
 - Post this, the UK Cabinet minister is authorised to order extradition under the **India-UK Extradition Treaty**. He has two months to make the decision.

About Extradition

Extradition is the formal process of one state surrendering an individual to another state for prosecution or punishment for crimes committed in the requesting country's jurisdiction.

- It typically is enabled by a bilateral or multilateral treaty.

Other Related terms:

- **Deportation:** Under this, a person is ordered to leave a country and is not allowed to return to that country.

- **Exclusion:** In exclusion, a person is prohibited from staying in a particular part of a sovereign state.
- **Repartition:** It is the process that enables the transfer of foreign prisoners to their native country where they can serve their remaining part of their sentences.

Extradition in India

1. In India, the extradition of a fugitive (accused or convicted) is governed by the **Extradition Act, 1962**.
2. The extradition of a fugitive depends upon the treaties/conventions/arrangements entered into by India with other countries
3. The **Ministry of External Affairs** is the nodal body for extradition matters in India.
4. At present, India has bilateral extradition treaties with 43 countries and extradition arrangements with 10 countries.
 - Extradition arrangements are non-binding and do not impose any legal obligations on party states. On the other hand, treaty mechanisms are binding.
5. India is also a party to several multilateral conventions. They provide a binding extradition framework for curbing transnational crimes such as drug trafficking, terrorism, and aircraft hijacking.
 - Based on this an extradition request can be made under:
 - **United Nations Convention Against Corruption (2003)**,
 - **United Nations Convention against Transnational Organized Crime (2000)** etc.
6. Requests for the surrender of fugitives can also be made to non-treaty states. These requests will be considered in accordance with the laws and procedures of the foreign state.

Principles Governing Extradition

Apart from the **Principle of Specialty**, there are other principles as well in extradition. This includes,

- **Firstly, Principle of Dual Criminality:** This requires that the offence that the fugitive is alleged to have committed, should be an offence both in the requesting as well as the requested state.
- **Secondly, Principle of Reciprocity:** Countries must show reciprocity in the exchange for fugitives between requesting and requested State.
- **Thirdly, Principle of Competence:** The requested state must be satisfied that the requesting state has a right to prosecute the fugitive.
- **Fourthly, Principle of proportionality between offence and sentence:** Punishment for a particular crime should not be excessively harsh or inhuman upon the fugitive. European countries generally don't extradite when the requesting country has the potential to inflict capital punishment on the fugitive.
- **Fifthly, Principle of relative Seriousness of the offence:** Extradition is usually permissible only for relatively more serious offences, and not for trivial misdemeanours or petty offences.

Status of extradition in India

- India has been able to extradite back many of the fugitive offenders in the past. However, failures were also witnessed in the case of many offenders.
- **Successful cases of Extradition:**
 1. **AgustaWestland chopper deal** co-accused Rajiv Saxena was extradited from the United Arab Emirates in Jan 2019.

2. Mohammed Yahya, who faced cases of cheating, forgery, and criminal conspiracy, was extradited from Indonesia on October 12, 2018.
 3. Vinay Mittal, who faces cases of cheating, forgery, and criminal conspiracy, was extradited from Indonesia on September 9, 2018.
 4. **Chhota Rajan** was extradited from Indonesia on November 6, 2015, on charges of murder and kidnapping.
 5. **Abu Salem** was extradited from Portugal in 2005 to face trial in the 1993 **Mumbai bomb blasts case**.
- **Ongoing extradition cases:**
 1. India is in the process of extraditing Mehul Choksi and Vijay Mallya from the U.K. for their criminal charges of financial frauds.
 2. Similarly, Tahawwur Rana, a key accused in the **26/11 Mumbai terror attack**, will soon be extradited from the US.
 - **Failed:**
 1. India failed to Extradite Lalit Modi (**IPL Betting Case**) from the UK
 2. Similarly, India also failed to extradite David Headley (Conspirator of 2008 Mumbai attacks) from the US

Need for Extradition

- **Sovereign constraint:** Since the territorial constraints stop the victim state to effectively exercise its jurisdiction, extradition alone offers the legal avenue to overcome the jurisdictional hardship.
- **Upholding Justice:** Bringing back offenders from foreign countries is essential for providing timely justice and grievance redressal.
- **Provides a sense of gratification:** Punishment of the criminal in the same country in which the crime is committed provides a sense of gratification and security for the public of that country.
- **Act as deterrence:** It serves as a deterrent against offenders who consider escape as an easy way to subvert India's justice system.

Issues with Extradition

1. **Delayed Response by Indian Agencies:** This sometimes gives an impression that the requesting state is not serious about extraditing the fugitive. It results in the denial of an extradition request by the extraditing state.
 - For example, the extradition request against former IPL chief Lalit Modi was filed after a decade.
2. **Poor Prison Conditions:** The Indian prisons fall short of desired facilities like quality food, bedding, health facilities, etc. This discourages western nations from extraditing fugitives on grounds of human rights violations.
 - Eg – Karamjit Singh Chahal (charges of separatism), Sanjeev Chawla (illegal betting) and Kim Davy (terrorism) escaped extradition due to poor prison conditions.
3. **Disregard to extradition clauses:** India was criticized by Portugal for the violation of the **Principle of Specialty**. As India imposed additional cases on Abu Saleem. The same is also feasible in the current extradition cases also. This damages India's image for upholding extradition laws, especially from the EU.
4. **Less number of bilateral extradition treaties:** India has a fewer number (43) of bilateral extradition treaties compared to other countries. The US and the UK, for example, have extradition treaties with over 100 countries each.
5. **Political Nature:** It is often argued that extradition is as much a political process as it is a judicial one. Therefore, it sometimes gets rejection on political grounds in spite of passing the judicial test.

- Eg – **Warren Martin Anderson was not extradited** by the U.S to India in spite of being the CEO of Union Carbide Corporation. UCC was the parent company of UC India limited that was responsible for the Bhopal Gas tragedy in 1984.
- 6. **Double standards for Wealthy individuals:** Countries are sometimes accused of having a soft corner for wealthy fugitives. For instance, Jan Marsalek of the Wirecard scandal and former Renault CEO Carlos Ghosn were not extradited by Russia and Lebanon respectively.
- 7. **Double jeopardy:** The “double jeopardy” clause debars punishment for the same crime twice. This is the primary reason why India has been unable to extradite David Headley from the US.

Suggestions to improve extradition

1. India needs to **sign the UN Convention against Torture** that will generate greater trust in its prisons and police personnel.
2. The country needs to improve the capacity and efficiency of investigating agencies to conduct speedy investigations. The government should **establish a central agency** to take up larger cases involving extradition.
 - The **Justice Malimath Committee report (2003) recommended setting up a Central Agency**, on similar lines with the Federal Bureau of Investigation (USA). This would exercise jurisdiction over crimes and offences affecting national security.
3. India should push the adoption **of its nine-point agenda** by the G 20 countries. The agenda contains a comprehensive framework of action against fugitive economic offenders.
4. The country should enact **complementary legislation** that smoothen the extradition process. For instance, the government can change some of the critical provisions in the **Fugitive Economic Offenders Act**.

Conclusion

India needs to strengthen its domestic framework and maintain harmonious relations with other countries. The fulfilment of these twin objectives are a requirement in ensuring a smooth, transparent, and speedy extradition process.

The Issue of Medical Oxygen in India-Explained, Pointwise

Introduction

A number of states are reporting shortage of medical oxygen after an increase in the number of Covid-19 patients. So, India is [planning to import at least 50,000 metric tonnes of medical oxygen](#) to cater to the rising demand. With the Covid-19 cases increasing day by day, the demand for medical oxygen is going to increase in near future.

Bridging the shortage of oxygen supply is essential to avoid a situation like the Gorakhpur Hospital tragedy that occurred in 2017. In 2017, 72 children of Uttar Pradesh's Gorakhpur BRD Medical College died due to a lack of medical oxygen supply. So, in this article, we will explain the importance of medical oxygen and its impact on health care.

About the decision to import medical oxygen

- According to industry experts, India has the capacity to produce **more than 7,000 metric tonnes of medical oxygen**.
- **Maharashtra** has the total capacity to produce 1,250 tonnes/day. But according to the government sources, Maharashtra has already exceeded its production capacity. Further, they are also procuring 50 tonnes from Chhattisgarh and 50 tonnes from Gujarat daily to meet their regular medical oxygen demands.
- **Madhya Pradesh**, on the other hand, does not have its own manufacturing plant and relies on Gujarat, Chhattisgarh, and Uttar Pradesh for oxygen supply. With 59,193 active Covid-19 patients as of April 16, it requires 250 tonnes of oxygen daily.
- Similarly, Gujarat's Oxygen requirement has increased to 500 tonnes per day.
- Further, As India touches 16 lakh active Covid-19 infections, many states reported a shortage of medical oxygen.
- So the Health Ministry decides to **import 50,000 metric tonnes of medical oxygen**.

What is medical oxygen?

- **Medical oxygen** is high purity oxygen suitable for use in the human body. So, it is used for medical treatments.
- The Medical Oxygen cylinders contain a high purity of oxygen gas(99.5% purity). **No other types of gases** are present in the medical oxygen cylinder. This is to prevent contamination.
- The cylinders previously used for other purposes have to be evacuated, thoroughly cleaned, and labelled appropriately before filling up oxygen.

Application of Oxygen in medical field

Due to the indispensable use of medical oxygen, the World Health Organisation include this on their **List of Essential Medicines**. Today modern medicine almost depend on the support of oxygen supplies. Benefits include,

- Provide a basis for virtually all modern anaesthetic techniques.
- Restore tissue oxygen tension by improving oxygen availability. This is used for a wide range of conditions such as shock, severe haemorrhage, carbon monoxide poisoning, major trauma, cardiac/respiratory arrest.
- Provide life support for artificially ventilated patients.
- Aid cardiovascular stability of patients.
- To aid heartbeat stability in an acutely ill patient

Side effects of medical oxygen

If it is used above the prescribed amount, the medical oxygen creates certain side effects. This is why the doctor prescription of oxygen is essential. The side effects include,

- **Convulsions or seizure** will appear in patients after a few hours of exposure to oxygen at pressures above 3bar(g).
- It can cause **Retrolenticular fibroplasia** in premature infants if they exposed to oxygen concentrations greater than 40%. In short, it is a condition of abnormal growth of blood vessels in the eye. Retrolenticular fibroplasia is the leading cause of child blindness today in the world.
- Some patients will also develop **coughing and breathing difficulties** after they put under medical oxygen.
- **The issue of Oxygen toxicity:** Excessive or inappropriate supplemental oxygen can cause severe damage to the lungs and other organ systems.

Why there is a shortage of medical oxygen in India?

1. **Lack of cylinder and cryogenic tankers:** India does not have enough cryogenic tankers to ensure 24×7 road transport of oxygen. Similarly, smaller suppliers do not have enough jumbo and dura cylinders to supply medical oxygen to remote locations. This results in higher prices for an oxygen cylinder. Thus raising the cost of oxygen.
2. **Setting up a medical oxygen plant is a time-consuming process:** It is not feasible to set up new oxygen manufacturing plants or expanding existing plants within a month. For example, A private company that starts to install a new oxygen-producing facility in the past took almost 24 months to properly installing one manufacturing plant.
3. **Oxygen wastage and unnecessary use in hospitals:** In the past, the Health Ministry repeatedly demanded hospitals to reduce wastage and unnecessary oxygen use in Hospitals. But the hospitals not yet take any decision on this. Industrial experts also **raised concerns over possible leakages** in hospital pipelines that supply oxygen.
4. **Heavy reliance on private players:** Of the total medical oxygen supply **nearly 60%** is manufactured by only one private firm.

Regulatory provisions of medical oxygen in India

- According to the **Drug Prices Control Order, 2013**, Medical oxygen is placed under the **National List of Essential Medicines (NLEM)**.
- The **National Pharmaceutical Pricing Authority** will monitor and control the prices of the **National List of Essential Medicines (NLEM)**.
- So, the NPPA controls and monitors the medical oxygen prices in India.
- **NPPA:** It is an independent body set up in 1997. It is under the Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers.
- **Mandate:** To fix/revise controlled bulk drug prices and formulations, enforce prices and availability of medicines under the Drug(Price Control) order, 2013.

Government initiatives to increase the availability of medical oxygen

During the Covid-19 pandemic, the government initiated various steps to increase the production of oxygen and also maintaining the prices. This includes,

1. Under the **Disaster Management Act, 2005**, the Ministry of Health & Family Welfare(MOHFW) delegated its powers to the NPPA. Especially to take all necessary steps to regulate the availability and pricing of liquid medical oxygen (LMO) and oxygen cylinders.
2. Further, to ensure the availability of oxygen at a reasonable price **the NPPA capped the price of medical oxygen cylinders** and LMO for six months(in September).
3. Recently, Central Mechanical Engineering Research Institute(CMERI) develops an [oxygen enrichment unit\(OEU\)](#) that could provide crucial support to COVID-19 patients. An oxygen enrichment unit is a device that concentrates the oxygen from the surrounding air.

4. **Mapping of oxygen sources for 12 high burden state:** The Centre-appointed Empowered Group-2 mapped the medical oxygen capability in 12 States having high disease burden. Such as Maharashtra, Tamil Nadu, Kerala, Gujarat, Delhi, etc.
5. **Identification of hospitals for installing PSA plants:** Recently the MOHFW sanctioned the installation of 162 Pressure Swing Adsorption plants at hospitals to augment oxygen capacity by over 154 Metric Tonnes.
6. During the first wave of the Covid-19 pandemic, industrial oxygen producers were allowed to produce LMO.

Suggestions to improve medical oxygen

1. **Fixing the PSA Plants in remote locations:** This will make hospitals manufacture their own oxygen and make the hospitals self-reliant. Further, it will reduce transportation costs and delays in oxygen supply.
2. **Exploring alternate mode of oxygen transportation:** At present, oxygen transportation relies primarily on road transport. Industry experts suggest using trains to transport oxygen faster.
3. **Converting surplus industrial oxygen into medical oxygen:** Empowered Group-2 suggested using argon and nitrogen tankers in oxygen transport to fulfil the demand. It also suggested using industrial cylinders for refilling. The government can implement the suggestions.
4. **Curbing oxygen wastage and unnecessary use in hospitals:** The MOHFW repeatedly warned against this. The health ministry even appointed an **expert committee to fix medical oxygen for patients**. The committee suggested the following,
 - **Firstly**, fixing the oxygen supply to 40 liters in intensive care units and 15 litres in normal wards per patient per minute.
 - **Secondly**, providing oxygen only to patients having oxygen saturation levels below 94%. (Oxygen saturation in the blood below the level of 94 is considered as a matter of concern for people suffering from Covid-19).
5. The hospitals have to follow this limit as it will reduce wastage.
6. Oxygen is essential for hospital care. India is improving its capacity drastically. But till then it is the responsibility of doctors to use the oxygen effectively.

Post-Pandemic School Education System: Issues and Challenges – Explained, Pointwise

Introduction

The pandemic highlighted the shortcomings of our school education system that is more focused on rote learning. This system pays very low regard to the creativity and mental wellbeing of children. The government tried to cope up with the pandemic by focusing on [digital education but failed to deliver the desired results](#).

The issue has again come in news after the government's directive to cancel the class 10th board examination and postpone the class 12th examination. Revamping the education system is an essential condition for delivering an inclusive, sustainable, and quality education for every citizen.

Current Scenario of School education system

- The rising Covid-19 cases and the onset of the second wave in India induced many activists and parents to demand the cancellation of exams.
- This created pressure on the government. Finally, the government canceled Class X Boards and the postponed Class XII Board in 25000 CBSE affiliated schools.
- The government is again focusing on the same steps as it did in 2020 i.e. sustaining the education system through the online mode.

Government steps to improve the online education system

- The government used various means such as text/video/audio content through SMS, WhatsApp, radio, and TV programs to reach out to students and engage them.
- Further, the government also used [various free e-learning platforms](#) to deliver education. This includes,
 - **Diksha portal:** It contains e-learning content aligned to the curriculum.
 - **e-Pathshala:** It is an app by the National Council of Educational Research and Training (NCERT) for Classes 1 to 12 in multiple languages
 - **SWAYAM:** It consists of 1,900 complete courses including teaching videos, computer weekly assignments, examinations, and credit transfers. It caters to both school and higher education.
 - **SWAYAM Prabha:** It is a group of 32 direct-to-home channels devoted to the telecasting of educational programmes.

Challenges with online education system

1. **Millions out of the education network:** As many don't have access to digital devices like mobile phones and internet routers. Further, a study points out that inability to attend online school was the [biggest challenge girls faced](#).
 - It also disrupts the significant school programmes that enhance enrolment levels like the [Mid-Day meal scheme](#).
2. **Neglect of Child emotions:** Children in the pandemic are undergoing emotional turmoil due to reduced peer to peer interactions, confinement in homes and enhanced grip of adults on the lives of children. These all impact the child's basic emotions.
3. **Poor Learning Outcomes:** Teachers lack the skill and expertise to impart digital education. Similarly, children copy from textbooks during their exams as there is a shortage of invigilating software programs to check malpractice.
 - A study by Azim Premji university estimates that 92% of students from Classes II to VI have [lost at least one specific foundational ability](#) in languages.

4. **Neglect of physical and mental well-being:** Excessive focus on academic learning reduced the focus on physical fitness through sports and mental well-being through moral education.
5. **Mismatch with Industrial requirements:** India Skills Report 2021 estimates that **only 45.9%** of Indian youth possess sufficient employability skills. Online learning will further affect the employability of students. This shows lacunae in the quality of the higher education curriculum.
6. **Appeasement Tools:** Imparting education through a digital medium is just an appeasement policy that doesn't cure the real problem in the education system.

Causes for these challenges in school education system

1. **Excessive focus on rote learning:** The curriculum tries to encourage memorisation of text rather than cultivating a conceptual understanding of issues. To cater for the changing needs of online education, the government did not modify the rote learning education curriculum. Instead, the government continued with the same syllabus in an online way.
2. **Exams define intelligence:** The system equated passing of exams with a student's intelligence level. Online education also places excessive focus on completing the exam cycle and giving multiple exams.
3. **Discourages Creativity:** Parents and teachers want to see children as doctors, engineers, bureaucrats etc. Children are rarely encouraged to become writers, artists or adopt any other vocational skill.
4. **Myopic View of Education:** The **focus** of online education also tuned **solely on syllabus completion**. Thus, the education neglected other key elements like peer interaction, physical fitness, moral education etc.
5. **Digital Vulnerability:** The digital systems of many schools and universities are using obsolete technology. This makes them prone to greater connectivity and security issues
6. **Greater hardships for the teachers:** The school/college administrators failed to assess the mental health of teachers and non-teaching staff. They were forced to deliver regular lectures irrespective of their online teaching skills.
7. **Not considerable as a permanent option-** Despite the high momentum, online options are still not considered permanent alternatives to classrooms.

Suggestions to improve school education system

1. The government should adopt a new system of education that is **fair, robust, and removes the dependency on time-tabled exams**. It must focus on unleashing the creative potential and imparting greater resilience in children.
 - In this regard, there must be a prudent implementation of [National Education Policy \(NEP\) 2020](#) that aims to achieve this purpose.
2. There has to be a **bridge between higher education institutions and schools to ensure a seamless movement into tertiary learning**.
 - For this, the government need to review the higher education entrance exams and make necessary changes as per the new learning of this century.
 - Further, the focus must be on imparting new-age skills like Big Data Analytics, Artificial intelligence, Digital Marketing etc. This will improve the employability potential of students.
3. Schools should **adopt novel methods of teaching**. For instance, other states might adopt the Delhi government's happiness curriculum for improving the mental well-being of students.

4. The **assessment of students must be based on an integrated approach** rather than mere textbook exams. Under this weightage should be given to indicators like peer interaction, curiosity potential, creativity acumen etc.
5. The bureaucracy must recognise that universities and schools have their own academic considerations. They must **refrain from standardising academic** requirements, calendars and learning processes.
6. Finally, to implement all these measures we need to support the education sector with **adequate budgetary resources**. Hence, it is important to increase the share of education to 6% of GDP as envisaged by NEP 2020.

Conclusion

India has an opportunity to reimagine and modernise learning in order to combat future uncertainties. It must adopt a multi-step strategy for a more equitable and resilient educational system thereby coming closer to the realisation of SDG -4 (Providing Quality Education).

Covid-19 Pandemic and Internal Migration in India- Explained, Pointwise

Introduction

As per the 2011 census, there are **450 million** (38% of the population) internal migrants in India. The World Bank report titled '[Migration and Development Brief](#)' mentions that nearly **40 million internal migrants** are affected by the Covid-19 Pandemic. Further, the Internal migrants in India faced various challenges in their migrated state, migration path and home state.

The Covid-19 second wave is presently forcing states to implement lockdown. This once again highlighted the challenges faced by internal migrants in India.

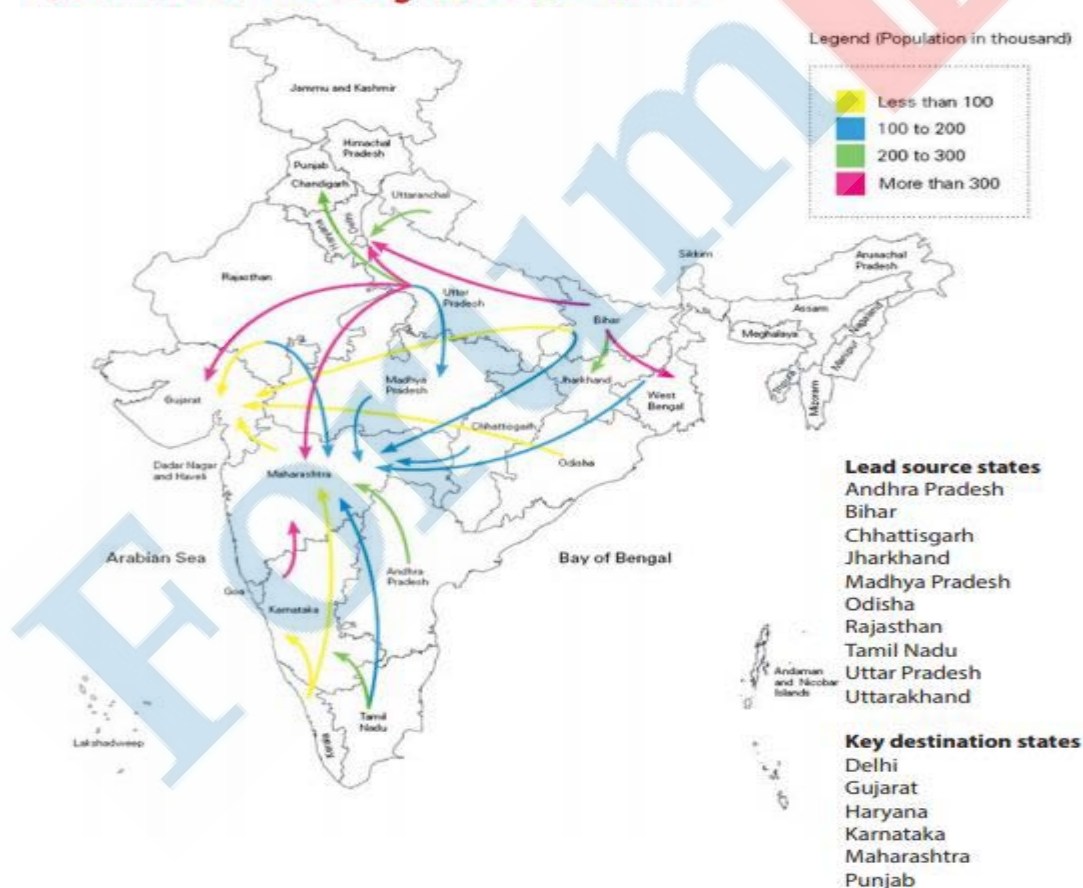
The amount of Internal Migrants in India

According to the World Economic Forum's '[Migration and Cities](#)', India's internal migration is growing at 4.5 per cent annually.

The Economic Survey of India 2017 estimates that the magnitude of inter-state migration in India was close to 9 million annually between 2011 and 2016.

- UP, Bihar, Rajasthan and MP had the highest 'outmigration'.
- Maharashtra, Delhi and Gujarat had the largest 'in-migration'.

Major Net Migration Flow in India (duration 0-9 years), 2001



Bhagat and Mohanty, 2009.

Causes of Internal Migration in India

1. **Urbanization:** Rural-urban migration is a major characteristic of urban transition in India. The rates of urbanization influence rural-urban wage differences. An increase in the demand for labour in urban areas and better wages increase migration.
2. **Marriage:** Marriage is an important social factor for migration. As observed by Census 2011, the majority of the women migration is due to marriage.
3. **Employment:** The prime reason for migration from rural to urban areas and urban to urban areas in search of better employment in industries, trade, transport and services.
4. For Example, significant numbers of people from drought-prone regions—e.g. from areas of Andhra Pradesh, Karnataka, and Maharashtra—migrate seasonally to work in brickmaking, construction, tile factories, and agricultural work. Such migration is of both rural-rural and rural-urban streams.
5. **Education:** Due to the lack of educational facilities in rural areas, people migrate to urban areas for better academic opportunities. In the 2011 census, about 1.77% of people migrated for education.
6. **Lack of security:** Political disturbances and interethnic conflicts is another reason for internal migration.

Impact of Covid-19 pandemic on internal migration

According to the International Labour Organization (ILO) and the Asian Development Bank (ADB) report 4.1 million youth lost Jobs during the pandemic.

- Construction and agriculture witnessed major job losses among seven key sectors.
- The worst-hit migrant is “**vulnerable circular migrants**”. Almost 200 million of them were affected by the Covid-19 disruption.
- Further, the Centre for Monitoring Indian Economy (CMIE) mentions that **three-quarters of these job losses** were at small traders and wage labourers level.

Vulnerable circular migrants: These are the migrants who also have a foothold in rural and urban areas. For example, They might work in construction sites, rickshaw pullers in cities, etc. But when these urban jobs face any issues they will go to their rural areas in search of Job.

- Migrant workers from the **Textile and garment industry and construction industry and other migrants in brick kilns** were also affected by the Covid-19 Pandemic induced lockdown.

Impact of the pandemic on internal migrants

Migrants are less familiar with their new environment. So the pandemic caused various social, economical, psychological and emotional trauma on internal migrants.

1. **Associated non-covid death of internal migrants:** nearly 1.14 crore migrant workers moved towards their home. This is more than the population of Uttarakhand state. Overall there is at least 971 non-covid death. In that, nearly 96 workers died on trains.
2. **Increased demand in MGNREGS jobs:** According to Government data, over 11 crore people worked under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) during the financial year 2020-21. This is the first time since the launch of the scheme there were 11 crore beneficiaries. This is due to the returning of internal migrants.
3. **Challenges in the distribution of essential items and relief materials:** As there is a lack of credible data or registration of migrants the migrants not received their essential items and relief materials. This is because the last migration survey by the National Sample Survey was conducted in 2007-08.

4. **A rise in the level of inequality:** The [Oxfam international](#) points out the level of increased inequality due to the internal migrant movement in "[The Inequality Virus report](#)". The migrant exodus worsened the level of inequality further.
5. **Challenges under temporary shelters and quarantine centres:** During they move towards their home state they have to cross various states. As each state followed different protocols for quarantine the migrants faced both mental trauma and physical challenges.
6. **Absence of effective laws:** As there is no coherent law on the unorganized sector. Migrant workers were not able to demand their rights and entitlements. Further, there is also a **Poor implementation of protections under the Inter-State Migrant Workmen Act, 1979**. The **ISMW Act** provides protections for inter-state migrant workers, especially from exploitation. But the Act poorly implemented as the penalties are lower.

Impact of the pandemic induced reverse migration on economy

Indian economy suffered largely due to massive reverse migration(exodus). The impacts include,

1. **The collapse of mini-economies:** Migrants remain as a sustainable labour supply in urban areas. The sudden internal migrant exodus changed this drastically. For example, closure of Csmall petty shops in front of urban offices.
2. **Increase in cost of labour:** This is witnessed especially in industrialised and manufacturing states. The internal migrants supplemented the local workforce. But since they move to their home state, the high demand for labour increased the cost of labour.
3. **Production delay:** India's GDP aggregate depends on high growth industrial or trade centres. For example, the Covid-19 mask manufacturing unit in Tamil Nadu and Maharashtra faced a shortage in labour as the Internal migrants moved to home states.
4. **Stress on MSMEs:** The MSME sector that relied on cheap labour and ancillary inputs also faced challenges. Further, there was also a domino effect in the MSME sector due to the hardships of bigger companies.
5. **Framing of local reservation policies:** Since migrant workers faced challenges at local, regional and national levels, the states try to protect them by making reservation laws. These laws aimed towards providing reservation for locals in private jobs. States such as [Haryana](#), Madhya Pradesh, Karnataka, Andhra Pradesh tried to implement them.
6. **Crowded agricultural sector:** The migrant workers who lost a job in manufacturing moved to the rural areas and demanded jobs at very low wages. This made the agriculture sector more crowded and also created Stagnation in agricultural wages.

Suggestions for improving the conditions of internal migrants

- India needs to formulate migration centric **policies, strategies, and institutional mechanisms**. Such as,
 1. Providing equal or better wages to migrant workers by **implementing national minimum wage**.
 2. The government can also explore displacement allowance, home journey allowance, free medical facilities, etc for internal migrants.
 3. Creating **present migrant data pool** instead of relying on past information like NSSO, Census, etc.
 4. The state governments have to generate decentralised data and enforcement officers for implementing the labour codes, ISMW Act, etc.
 5. The government has to provide amenities and social securities for the migrant population. For instance, pan India implementation of the **Kerala government's** Aawaz health insurance scheme for migrant workers.

- The government can also assess the implementation of [NITI Aayog's "draft national policy on migrant workers"](#). The [important recommendations](#) of the policy are,
 1. The Ministry of Labour and Employment has to create a special unit to help converge the activities of other Ministries. This unit would manage migration resource centres in high migration zones.
 2. **Role of Panchayats:** Panchayats should maintain a database of migrant workers. It would issue identity cards and passbooks to workers.
 3. **Inter-state migration management bodies** should be set up to cover the nation's key migration corridors: Uttar Pradesh and Mumbai; Bihar and Delhi; Western Odisha and Andhra Pradesh, etc

Conclusion

The world reports points out that India's internal migration is growing 4.5 percent annually and the urban population is expected to be 50 per cent by 2050 India needs to take care of the situation of internal migrant effectively. But for that, India has to start working on the current data of internal migrants. Further In-depth understanding of the cause and effect of internal migration is the need of the hour.

Introducing National Digital Currency in India – Explained, Pointwise

Introduction

There is uncertainty over the legal status of [digital currencies](#) in India. An unofficial estimate mentions that Indian investors holding around \$1.5 billion (Rs 10,000 crore) in digital currencies. The inter-ministerial committee (IMC) suggested a ban on private digital currencies, but it favors RBI-backed National Digital Currency or central bank digital currency (CBDC).

The draft Cryptocurrency and Regulation of Official Digital Currency Bill, 2021 aims to prohibit all private cryptocurrencies. The Bill also aims to lay down the regulatory framework for the launch of an “[official digital currency](#)”.

What is the CBDC or National Digital currency?

A Central Bank Digital Currency (CBDC), or **national digital currency**, is simply the digital form of a country’s fiat currency. Instead of printing paper currency or minting coins, the central bank issues electronic tokens. This token value is backed by the full faith and credit of the government.

The growth of cryptocurrencies such as [Bitcoin](#), [Dogecoin](#), Ethereum etc raised challenges to fiat currencies. Along with their other vulnerabilities made the central bank of each country explore the possibility of introducing their own digital currencies.

According to the Bank for International Settlements, more than 60 countries are currently experimenting with the CBDC. There are few Countries that already rolled out their national digital currency. Such as,

- **Sweden** is conducting real-world trials of their digital currency (**krona**)
- **The Bahamas** already issued their digital currency “**Sand Dollar**” to all citizens
- **China** started a trial run of their digital currency **e- RMB** amid pandemic. They plan to implement pan-china in 2022. This is the first national digital currency operated by a major economy.

National Digital Currency in India

With the growth of digital currencies worldwide, various start-ups dealing with cryptocurrency have come up in India, such as Unocoin in 2013 and Zebpay in 2014. Further, their volatility is a cause of concern for India.

So the government-appointed **SC Garg Committee** for suggestions. The committee recommended banning cryptocurrencies and allow an official digital currency. Further, the committee also drafted a bill Banning of Cryptocurrency & Regulation of Official Digital Currency Bill.

Important recommendations of the panel:

1. The panel recommended banning anybody who mines, hold, transact or deal with cryptocurrencies in any form. Further, the panel recommend a jail term of one to 10 years for exchange or trading in digital currency.
2. The panel also proposes a monetary penalty of up to three times the loss caused to the exchequer or gains made by the cryptocurrency user whichever is higher.
3. The panel also recommended completely banning all private cryptocurrencies in India.
4. However, the panel said that the government should keep an open mind on the potential issuance of cryptocurrencies by the Reserve Bank of India.
5. Post submitting the panel report and the draft bill the government held discussions with stakeholders and conduct Inter-ministerial discussions. The government decided to provide a 3-6 month exit period prior to banning the trading, mining, and issuing of cryptos. The RBI also already started working on CBDC.

Challenges with non-state digital currency

1. **Safety and security of cryptocurrencies:** This is one of the key issues with cryptocurrency. **Mt Gox bankruptcy case** is a highlight of this. Mt gox is a Tokyo-based cryptocurrency exchange. After the cyberattack, several thousands of bitcoin went lost and the company is yet to settle the claim.
2. **No investor protection:** Since the cryptocurrency transactions are anonymous in nature, there is no investor/consumer protection in cryptocurrencies.
3. **Conflict of interest:** Globally, crypto-currency exchanges act as both custodian and a regulator. So, their own interest and consumer protection get into conflict.
4. **Non-regulation:** There are some cryptocurrency regulators who often indulge in money laundering and terrorism financing. Further, they are immune to the Central Bank regulation of various countries.
5. **The volatility of cryptocurrency:** Many cryptocurrencies have only a limited amount of coins. For example, Bitcoins fixed the maximum possible number as 21 million. This creates an increase in demand with each passing day and creates instability in exchange rates. This made the cryptocurrency more volatile in nature.

Advantages of rolling out National Digital Currency

1. **Improving efficiency in the financial system:** As the currency in digital form, it can provide an efficient way for financial transaction. Further, digital currency also solves the challenges with Cash and coins. Cash and coins require expenses in storage and have inherent security risks like the [recent heist in the RBI currency chest](#).
2. **Reducing systemic risk:** There are about 3,000 privately issued cryptocurrencies in the world. According to IMF, the key reason for considering national digital currency is to counter the growth of private forms of digital money. There is a possibility of these companies going bankrupt without any protection. This will create a loss for both investor and creditor. But the National Digital currency has government backing in case of any financial crisis.
3. **Opportunity to private players:** As the state-backed digital currency can provide investor/consumer protection, the private can confidently invest in the associated infrastructure without any doubts over its regulation. This will improve the services to people.
4. **Reduce volatility:** The national digital currency will be regulated by the RBI. So, there will be less volatility compared to other digital currencies.
5. **Helps in better macroeconomic management:** Current RBI's work on [inflation targeting](#) can be extended to national digital currency also. Since India is planning to ban other cryptocurrencies, the RBI can better regulate digital and fiat currency. Thus upgrading to digital currency and balancing the macroeconomic stability.

Challenges in rolling out National Digital Currency

1. **Potential cybersecurity threat:** India is already facing [many cyber security threats](#). With the advent of digital currency, cyberattacks might increase and threaten digital theft like **Mt Gox bankruptcy case**.
2. **Lack of digital literacy of population:** Introduction of digital currency is technological advancement. But as per Digital Empowerment Foundation in 2018 report, around 90% of **India's** population is digitally illiterate. So, without creating enough literary awareness introduction of digital currency will create a host of new challenges to the Indian economy.
3. **Challenge in regulation and taxation:** Introduction of digital currency also creates various associated challenges in regulation, tracking investment and purchase, taxing individuals, etc.

4. **Threat to Privacy:** The digital currency must collect certain basic information of an individual so that the person can prove that he's the holder of that digital currency. This basic information can be sensitive ones such as the person's identity, fingerprints etc.

Suggestions

1. The government can follow the western concept of **treating digital currency as property** and imposing capital gains tax.
2. **Enhance digital literacy:** The government has to create enough awareness campaigns and inform people about identifying fraudulent methods. This will reduce India's digital divide.
3. **Creation of adequate cybersecurity methods:** Before the introduction of National Digital currency the government has to create certain important things, such as,
 - Training of law enforcement agencies on handling any threats
 - Creating a **policy of basic information** assessed while issuing, verifying someone's digital currency.
4. There is no doubt that the introduction of National Digital currency prevents the various threats associated with the private-owned cryptocurrencies and take India the next step as a digital economy. But the government has to create necessary safeguards before rolling out.

The issue of Urban Fires in India – Explained, pointwise

Introduction

Urban fire has the potential to rapidly spread to adjoining structures. These fires not only take life but also damage and destroy properties such as homes, schools, commercial buildings, etc.

The issue of urban fires came in the news after a fire caused the death of 15 Covid-19 patients in the intensive care unit (ICU) of Vijay Vallabh Hospital in Virar, 50 km from Mumbai. This raises a question on the efficacy of fire safety norms that fail to prevent such tragic incidents.

Current Scenario of urban fires

- It was suspected that the fire at the Virar Hospital Fire begun from the compressor unit of the AC. It took the lives of 15 patients.
- The CM has announced a grant of 5 lakh to the family members of the deceased and 1 lakh for injured persons.
- The current tragedy comes within a month of the Bhandup Hospital Fire in Mumbai that led to the death of nine COVID-19 patients.
- **Data on Urban Fire incidents**
- India has witnessed many tragic fire incidents. Eg – Uphar cinema, New Delhi (1997); Kamala Mills, Mumbai (2017) and Taxila Coaching Centre, Surat (2019).
- According to National Crime Records Bureau figures, 17,700 Indians died due to fire accidents in 2015.
- **Maharashtra and Gujarat**, our two most highly urbanised states, account for **about 30% of the country's fire accident deaths**.
- The **India Risk Surveys 2018** has placed India at 3rd position in fire incidents. This signifies the grave risks of fire incidents to urban habitats.
- **Causes for urban fire accidents**
- **Faulty Electrics:** These are the **biggest cause of workplace fires**. Loose wires, overloaded plugs, old equipment etc. can all result in a fire accident.
- **Flammable and Combustible Materials:** Urban premises that hold any number of materials that are flammable or combustible represent a dangerous hazard.
- **Human Error:** When staff are not trained properly, they are at risk of making catastrophic mistakes. Accidents such as placing liquid near electrical equipment, burning food in the kitchen or spilling flammable liquids have occurred due to human error.
- **Lack of awareness among people:** In many accidents, it was observed that firefighting equipment was installed. But there is no knowledge training for the persons to handle the equipment.

Fire Safety Management in India

- **Fire service is a state subject** and also has been included as a **municipal function** in the XII schedule of the Constitution.
- Many states have established **Fire & Emergency Services** through a statutory Act. These acts were based on the **Model Fire Service Bill** circulated by the Ministry of Home Affairs.
 - Similarly, in some states, municipal corporations and local bodies are responsible for providing fire services.
- Currently, the **National Building Code -2016** is the basis for fire safety norms in India.

- Apart from that, India is also taking certain proactive institutional mechanisms to address fire risk. This includes,
 - At the Central level, the Director-General of Civil Defense, Home Guards, & Fire Services under the Ministry of Home Affairs is assisted by the **Fire Adviser**. He will deliberate upon the management of fire services.
 - In addition, the **Standing Fire Advisory Committee** provides inputs for improving fire management in the country.
 - The **National Fire Service College, Nagpur** provides training and education.

Issues in Urban Fire Safety Management

- **Lack of robust fire mitigation technologies:** Most of the modern Buildings in major cities lack sufficient in-built fire safety services such as smoke alarms and sprinkler systems. These systems operate as early warning systems and fire control measures.
- **Poor adoption of Model Fire Safety Bill:** The centre has introduced a model bill in 2019 for Maintenance of Fire and Emergency Services of a state. This focused on prevention, mitigation and response of Fire incidents, but many states have failed to adopt its provisions, resulting in greater fire incidents.
- **Lack of compliance:** Many buildings in heavily congested areas of India do **not adhere to the National Building Code** and do **not have fire clearance certificates**.
 - For instance, the Surat Coaching centre building didn't have any emergency exit. This forced the students and the instructors to jump off the building to escape the fire. However, in the process, they lost their limbs and life as well.
- **Rapid Urbanisation:** This has increased the proliferation of high rise buildings due to scarcity of land. However, ensuring fire safety in them is a complex affair due to lengthy exit routes and more fire-prone areas.
- **Development creating greater risks:** The sectoral advancement in the country has enhanced urban fire safety concerns –
 - In the industrial areas, wear and tear of machinery, storage and new materials etc. add new urban fire risks every day.
- **Problems associated with Fire Services:** There are certain inherent concerns with the fire services. Such as limited financial resources, working in high-crime areas. Further, they are poor in leveraging relationships with citywide institutions, reaching out to residents to focus on fire safety.
 - Further, there is an inadequate number of fire stations and high traffic congestion thereby leading to greater response time.

Suggestions to control urban fire

- **Enactment of a Fire Act in every state:** The states which have not enacted their own Fire Act should immediately enact a suitable Fire Act based on the 2019 model bill.
- **Following Fire Safety Standards:** The Home Ministry must make sure that National Disaster Management Guidelines on Scaling, Type of Equipment and Training of Fire Services. The States has to duly follow them.
- **Regular Auditing:** There should be time-bound fire and electric audits of all hospitals within the municipal area. Moreover, the government has to conduct third-party fire safety audits throughout the urban areas.
- **Mock Drills:** The fire services have to **conduct regular fire safety drills** so that people are aware of what to do in the event of such a tragedy.
- **Awareness Generation:** A significant emphasis needs to be placed on creating awareness among different stakeholders like citizens, administrators, politicians, builders, engineers etc.

- **Infrastructure and Technology:** Simple interventions like constructing water storage tanks at suitable locations can provide water during fire emergencies. In addition, **adopting modern technology** such as water mist and drones is the need of the hour.
- **Financial support to the fire safety department:** The government should provide financial support and assistance in augmenting and [modernising the fire departments](#).
 - For urban areas, the government can **impose a fire tax/levy**. The government can earmark the revenue generated for the improvement and upkeep of the fire services.
 - Similarly, fire management has to incorporate **innovative funding** through public-private partnerships.

Conclusion

Through conscious planning, the government has to strengthen and upgrade the Fire services in India. To achieve this facet, a robust institutional mechanism and coordinated approach including all concerned stakeholders is desired.

Changing dynamics of India-US Relations – Explained, Pointwise

Introduction

The dynamics of India-US relations are changing. Since the formation of the Biden government, there have been many ups and downs in the relations. Initially, India and the US were seen cooperating in the QUAD summit but, in the last few weeks, the US has taken many steps that go against India's interests. In the most recent of such steps, the US put a restriction on the export of Covid-19 vaccine raw materials to India. Although it lifted the restrictions later.

What was the issue?

The 'Covishield' vaccine produced in India requires **bio-reactor bags** from U.S. firms as a raw material. These bags are used to grow cells for vaccine manufacturing. Apart from that, Indian firms also use **filters, microcarrier beads and cell culture media** from US companies.

But recently the US administration invoked their **Defence Production Act**. This emergency law requires domestic manufacturers to prioritize federal(central) government purchase orders. The American companies have no option but to produce Coronavirus vaccines and Personal Protective Equipment for the US only. This resulted in restricting the global exports. This is like an outright ban on the export of such materials.

India is the world's largest vaccine manufacturer. According to Ministry of External Affairs statistics, up to April 13, India alone supplied over 65 million vaccines to 90 countries globally. So the US decision impacted India more. Further, the Serum Institute of India (SII) CEO(produces Covishield) has also requested the US administration to lift the ban. But the US administration mentioned that this is not an "outright ban" and the priority of their domestic demand. The global community criticised this as the US **forget to act like a citizen of the globe**.

However, in the most recent event, the US has lifted this ban and promised to cooperate with India.

Just like this incident, there are many recent instances when US was seen going against India's interests. It is despite cooperating recently in the QUAD and visit of US Official to India.

Recent positive developments in India-US relations

From 1999 to 2018, trade in goods and services between the two countries surged from \$16 billion to \$142 billion. In 2019, overall U.S.-India bilateral trade in goods and services reached \$149 billion.

1. In 2014 **US emerged as the top arms supplier to India by** overtaking Russia. The U.S. categorized India as "a Major Defence Partner" in 2016.
2. The US helped India to join the export control regimes (Australia Group, Missile Technology Control Regime and Wassenaar Arrangement). Now India is trying to be part of the Nuclear Suppliers Group. The US not only supports India's membership in the NSG but also provided certain relaxations to India.
3. **The development of QUAD:** This is an informal strategic dialogue arrangement between India, the USA, Japan and Australia. The recent COVID-19 pandemic, China's bullying nature, changing geo-economic interests in the region, etc. helped Quad to evolve faster. This resulted in the Quad meeting and the first-ever virtual Quad summit recently.
4. **Signing military agreements:** India so far signed all the Foundational agreements with the US. Such as LEMOA, COMCASA, BECA. This brought both the countries closer to each other.

5. **India's participation in Five eye grouping:** In 2020, India made its first-ever participation in the Five-eyes grouping. This facilitates intelligence-sharing among the US, Canada, UK, Australia, and New Zealand.
6. **Development of Indo-pacific** – The US under its **Pivot to Asia policy and Indo-Pacific Strategy** views India as an ideal balancer to check the aggressive rise of China. Therefore, the US formulated the concept of Indo-Pacific to counter China in the South China Sea and the Indian Ocean.
7. **Cooperation in Climate change:** Recently the US president on [Earth Day](#) conducted the [Leaders Summit on Climate change](#). During the summit **India-US** jointly announced a **climate and clean energy Agenda 2030 Partnership**.

Some recent concerns in India-US relations

There is a lot of dynamism in the India-US relations. Despite the above-mentioned developments, there are certain concerns such as,

1. **India's defence ties with Russia:** The US vies development of [India Russia relations](#) especially the defence ties as a threat to their bilateral relations.
 - The US did not like India's decision to manufacture [Kamov 226 helicopter in India](#).
 - Further, the US did not like India's **decision to purchase the S-400 supersonic air defence systems**.
 - The US even threatens to impose [Countering America's Adversaries through the Sanctions Act](#) on India.
2. **US's violation of India's Maritime rights:** Recently, one of the US warships carried out its [Freedom of Navigation operation\(FONOP\)](#) in [India's Exclusive Economic Zone](#). The FONOP operation carried out approximately 130 nautical miles west of Lakshadweep Islands. This is a clear India's **Exclusive Economic Zone (EEZ)**.
3. **The US on India's Human rights:** Recently the US state department released its [2020 Human Rights Report](#). The report mentions India has several human rights issues such as **restrictions on freedom** of expression and the press, **Crimes involving violence** and discrimination targeting members of minority groups, etc.
4. **Currency manipulator tag for India:** Recently, the United States added India to the '[monitoring list](#)' of [currency manipulating countries](#). The US Treasury department defines currency manipulation as when countries deliberately influence the exchange rate between their currency and the US dollar to gain an unfair competitive advantage.
5. **India as a Country of Particular concern:** The US Commission on International Religious Freedom recommended classifying [India as a Country of Particular Concern\(CPC\)](#). Further, the USCIRF also recommend targeted sanctions on Indian individuals and entities for 'severe violations of religious freedom'

Reason behind US Foreign Policy shifts on India

1. **Frequent policy shift:** The foreign policy of the US always varies from one President to another. So, carrying long-term India-US relations is not an easy step. [For example](#), The Obama administration worked hard to sign the Iran nuclear deal. But the Trump administration revoked that. With the advent of the Biden administration now they are again working on revamping the [JCPOA \(Joint Comprehensive Plan of Action\)](#).
2. **Dealing with Afghanistan and Pakistan:** The US does not see India as part of the Afghan solution. This is because India firmly supports the Ashraf Ghani

government and refusing to engage the Taliban. So, in Afghan matters, the US will seek more support from Pakistan than India.

3. **The neutral stance of India on certain US-related issues:** India follows the foreign policy based on its own interests. Further, India did not follow the policy followed by US allies like Saudi Arabia, Australia, etc.
 - For example, India maintains a neutral relationship between Iran and Saudi Arabia. The US on the other hand supports its ally, Saudi Arabia.
 - Similarly, India maintains a neutral relationship with Palestine and Israel. The US on the other hand supports Israel in general.

Suggestions to improve India-US relations

1. Both India and the US have to take certain steps to improve their bilateral relations. Such as,
 - Expand dialogue on emerging threats in the cyber and space domains.
 - Broader collaboration between defence industries.
2. Instead of conducting FONOP patrols in the EEZ's of friendly countries, the FONOP patrols of the US Navy have to identify the potential threat(China) to freedom of navigation in the region. This is evident from China's "**anti-access, area-denial**" or **A2AD capability** and its rejection of **the UN Court of Arbitration verdict in its dispute** with the Philippines.
3. The Indian government has to push for getting relaxations from the US. Such as getting permissions for the S-400 missile system purchase and receiving an exemption from the **CAATSA** sanctions.
 - India can utilise the strong people-to-people ties of the [Indian diaspora in the US](#) to claim such relaxations.
4. The US government also has to see the big picture. Such as,
 - **Understanding the global situation** of Covid-19 and permitting the exports of raw materials.
 - Taking **proactive steps towards stable foreign policy** development.
5. Overall, India-US relations so far have many ups and downs. But the relationship continued to improve by addressing the challenges through negotiation. This time too, negotiation with the US is one of the key ways to resolve the ban on vaccine raw material.

Universal vaccination in India : Challenges and way forward – Explained, Pointwise

Introduction

The daily cases of Covid-19 infections are breaking new records. India is almost touching 4 lakh cases per day. Moreover, India's health care infrastructure is also falling short of taking care of that many cases at once. Thus, the majority of experts are of the opinion that the only way out of this crisis is universal vaccination in India. It means the majority of the population should be administered vaccines to achieve a herd immunity.

India started its coronavirus vaccination drive almost three months ago. According to the data from the Ministry of Health and Family welfare, so far, India has vaccinated only 146 million people (less than 2% of the population has received both the doses). With the universal vaccination in mind, India recently released a [new vaccination policy](#). But to vaccinate the remaining population, India has to face various challenges and need innovative solutions.

India's vaccination policy so far

- India so far released three phases of vaccination policy
- The first three phases vaccinated healthcare workers, frontline workers, and those above the age of 45.
- The Centre procured the entire quantity of vaccines from manufacturers Serum Institute of India and Bharat Biotech ([Covishield and Covaxin respectively](#)). The centre then distributed them to states for vaccination.
- The states distributed the stock to government vaccination centres. These government centers administered the vaccine free of cost. Private hospitals charged recipients Rs 250 per dose.

Salient features of India's new vaccination policy

The new vaccination policy is the fourth phase of India's Covid-19 vaccination policy. Under this phase, there are few changes,

1. Changes for Citizens:

- All adults over the age of 18 will be eligible for vaccination starting from May 1.
- Those eligible in the earlier phases can continue to get the free doses provided by the Government of India.

2. Changes for distribution:

- Under the new rules, the Centre will automatically receive only 50% of vaccines produced by manufacturers. It will allocate these to states based on the extent of infection (active cases) and performance (speed of administration).
- The remaining 50% can be acquired by the states directly or by private hospitals and industrial establishments.
- The Centre will allow the imported, fully ready-to-use vaccines to be entirely utilised in the other-than-Government of India channel.

Other steps taken towards universal vaccination in India

- [Electronic Vaccine Intelligence Network\(EVIN\)](#): It is an innovative technological solution aimed at strengthening immunisation supply chain systems across the country. The EVIN shows real-time information on vaccine stocks and flows and storage temperatures across all cold chain points in the country. During the Covid-19 vaccination, the delivery system will use this EVIN solution.
- [CoWIN platform and CoWIN App](#): It is a digitalised platform launched by the Ministry of Health and Family Welfare (MoHFW). It aims to help agencies to keep a track of the Covid-19 vaccination programme in real-time. Further, the app also allows Indian

citizens to apply for a Covid-19 vaccine shot. The app also provides a **QR based Certificate** once the person is vaccinated.

- Further, India's drug regulatory authority relaxed Imports restrictions on COVID-19 vaccines. Also, it approved the restricted use of vaccines, which are already approved for restricted use by the US in emergency situations.

Need for achieving universal vaccination in India

1. **Reducing daily caseload and eliminating Covid-19 altogether:** At present India's daily caseload is the highest in the world. India will soon register half a million cases each day. Universal vaccination will not only reduce the Covid-19 cases but also help India to achieve Covid-19 free status.
2. **Reducing infection to the vulnerable sections:** Covid-19 infects senior citizens and people having comorbidity such as diabetes, blood pressure, etc. By vaccinating them India can prevent the life of countless individuals.
3. **Vaccines are the most effective health intervention against Covid-19:** Universal vaccination in India will prevent various health intervention costs and economic cost of the Indian economy. Universal Vaccination will provide relief to
 - Heavily burdened health infrastructure and health care professionals.
 - The Covid-19 induced lockdown and associated economic losses, etc
4. **Can help to achieve herd immunity before universal vaccination:** Herd immunity is the indirect protection from an infectious disease if a population is immune either through vaccination or immunity developed through the previous infection. WHO supports achieving 'herd immunity' through vaccination. India needs to vaccinate around 70-75% of its population to achieve herd immunity. So, in process of Universal vaccination, India can reach herd immunity.
5. **Past Experience:** Vaccination is the most effective way to reduce the impact of epidemics and pandemics. Universal vaccination in India has eliminated smallpox, polio. They also reduced the impacts of serious diseases including measles, mumps, rotavirus, etc. Further, India's Universal Immunisation Programme (UIP) provides free vaccines against 12 life-threatening diseases, to 26 million children annually. But achieving a similar feat against the Covid-19 is not an easy task.

Challenges to universal vaccination in the Covid-19

The population of India is 1.3 billion. If the Covaxin and Covishield require two doses then India needs to vaccinate 2.6 billion doses across the nation. This itself is a challenge.

1. **Infrastructure challenges:** This is one of the biggest [hurdles in India's universal vaccination programme](#) against the Covid-19. This includes,
 - a. **Unequal distribution of cold storage facilities among states.** For example, out of the 28,932 cold chain points, half are in the five southern states, Maharashtra and Gujarat. Whereas the eight states in the North and Odisha that account for over 40 per cent of the country's population have only 28 per cent of the cold chain points.
 - b. **Other Infrastructure challenges:** Both the Covaxin and Covishield requires to stored within a temperature of 2-8 degree Celsius. But the temperature-controlled boxes face challenges like frequent power supply interruption, lack of storage facilities at the remote location, etc.
2. Challenges related to affordability:
 - a. Under the new vaccination policy, vaccine producers can sell 50% of their production directly to State governments and private hospitals. Further, the price of vaccines to state and private is not fixed.
 - b. So, the private manufacturers may make a huge profit. This creates problems in affording the vaccine. This is evident as **both vaccine manufacturers hiked their**

prices after the launch of the policy. For example, the Serum Institute mentions Rs 400 for state government and Rs 600 for private parties.

3. **Creation of Interstate equality:** With the new vaccination policy states are responsible to vaccinate their people. With every state individually contacting the suppliers and bargaining price and supply, the discretion will be with the supplier. So this will create interstate inequities and make poorer states suffer more. This is a clear **deviation from universal vaccination** in India.
4. **Production-related challenges:** The world's largest vaccine maker, Serum Institute of Technology initially promised to supply 100 million doses of vaccines a month. But in reality, it only provided between 50 million to 60 million doses. India so far exported 66.4 million vaccines (As of April 27). With the government commitment to export vaccines along with the production gap, India is facing a **delay in universal vaccination** and facing a **demand-supply mismatch**.
5. The issue of vaccine hesitancy:
 - a. In simple terms, it refers to delay in acceptance of vaccines or refusing vaccines despite their availability. In the past three months, only 40 percent of the 30 crore high-risk population were vaccinated, partly due to the initial vaccine hesitancy.
 - b. There is a non-transparency of data related to the two vaccines proposed for use in the program.
 - c. Furthermore, acquiring the data for under the 50s with **comorbidities** will also a challenging and difficult one.
6. **The Issue of Vaccine wastage:** According to the RTI information, India has wasted more than 44 lakh of 10 crore doses (Till April 11). Tamil Nadu wasted over 12 percent, followed by Haryana (9.74%), Punjab (8.12%). Ideally, a vaccination centre must have 10 recipients to make optimal use of a single 10-dose vial. If the person is not available then that vaccine vial becomes a waste.

Suggestions to improve universal vaccination in India

1. **Conducting a detailed demand-supply analysis:** To conduct a calibrated expansion of the eligibility criteria India needs to conduct a detailed analysis including the vaccine manufacturers' real-time production capability, the supply chain delays, etc.
2. **Reducing vaccine hesitancy:** The only way to counter that is to be open and honest about adverse effects and make available relevant information in the public realm. So, both the state government and the centre need to be more transparent in the Universal vaccination process.
 - India can establish an independent team of experts under the aegis of the WHO to ensure adherence to recruitment standards, consent conditions, adverse event record management, compensation standards. This will improve public confidence and provide enough data for the future policies of the government.
3. **Encourage stakeholder participation:** The government have to rectify the issues with the new vaccination policy with better stakeholder participation.
 - Stakeholders should include not only state governments but also the local bodies that are struggling to control the pandemic.
4. **The government can ask private companies towards cartelisation:** (It means the group of industry participants coming together to fix the price of products and services.). Since the foreign players are also producing vaccines, India can work towards the cartelisation efforts. This will fix the price of Covid-19 vaccines. In case of any failure in the process, India **can invoke compulsory licensing** and reduce the vaccine prices towards universal vaccination in India.
5. **The move towards zero-wastage:** The state governments have to use each and every vaccine in an effective way. States wasting the vaccine can follow zero-wastage states like

Kerala, West Bengal, Himachal Pradesh, etc. For example, the Kerala model includes the following steps. such as,

- Training health care staffs including ASHA workers towards the importance of vaccine usage
- Creating efficient inventory management for managing vaccines.
- Mobilise beneficiaries after they register for the vaccine.

Conclusion

“None of us will be safe until everyone is safe”, so the government has to take necessary steps towards universal vaccination. The need of the hour is a winning strategy against an epidemic that has drained us economically, socially and psychologically. The winning strategy is feasible when all the stakeholders come together to address the grievances.

ForumIAS

MGNREGA: Issues and Significance – Explained, pointwise

Introduction

The government of India has been running the world's largest employment guarantee program since 2005 under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA). It has been in implementation for more than 15 years and has delivered optimum results. Although some issues thwart its success which must be resolved.

About MGNREGA

- It guarantees 100 days of work a year to every rural household with an aim to enhance the livelihood security of people.
- The National Rural Employment Guarantee Act, 2005 introduced the scheme. In 2010, NREGA renamed as MGNREGA
- The Act currently covers all districts except for those that have a 100% urban population.
- The Ministry of Rural Development (MRD) in association with the state governments monitors the implementation of the scheme.

Key Features of the MGNREGS

1. **Demand-driven scheme:** Worker will get the work whenever he demands and not when the Government has work available.
2. **Employment Allowance:** Gram Panchayat has the mandate to **provide employment within 15 days of a work** application. If it fails, the worker will get an **unemployment allowance**.
3. **Timely Payment:** Payment of wages within 15 days of completion of work. In case of failure, the worker will get a delay compensation of 0.05% per day of wages earned.
4. **Women empowerment:** Minimum **one-third of the workers should be women**
5. **Minimum wages:** Wage payment should be according to the Minimum Wages Act 1948 for agricultural laborers in the State.
6. Gram Sabhas conduct Social audits to enable the community to monitor the implementation of the scheme.
7. Both the Center and the States share the funding of the scheme.

Performance of MGNREGA so far

- It has generated more than 31 billion person-days of employment in the last 15 years.
- The government has spent over Rs 6.4 lakh crore in the last 15 years on this demand-driven program.
- Since 2006, more than 30 million water conservation-related assets have been created in the country's rural areas.

Performance of MGNREGA during Covid-19 Pandemic:

- According to the government data, over [11 crore people worked under MGNREGS](#) during the financial year 2020-21 alone. Few other achievements of the Scheme last year are,
 - This is the first time since the launch of the scheme in 2006-07 that the MGNREGS numbers crossed the 11-crore mark in a year.
 - Further, the 11 crore mark is also higher by about 41.75% if we compare 2019-20 data (about 7.88 crores worked).
 - In 2020-21, the total expenditure was 62.31% higher than in 2019-20.
 - As part of the economic package during the Covid-19 pandemic, the government announced additional funding of Rs 40,000 crore for the MGNREGS over and above the budgetary allocation of 2020-21.

Significance of MGNREGA

- **Rural Development:** The programme mandates that at least 60 percent of the works undertaken must be related to land and water conservation. The creation of these productive assets boost rural incomes as the majority of villages are agrarian.
 - For instance, In Barmani village of Madhya Pradesh's Sidhi district, the MGNREGA created water conservation assets. So the [internal migrants](#) went home started resuming farming and stayed there after the situation turns normal.
- **Tackling Water Stress:** The water conservation structures built under MGNREGA have potentially conserved at least 28,741 million cubic metres of water in the past 15 years. This is an immense achievement to tackle the approaching water stress.
- **Curtailling Distress Migration:** The scheme provides support in times of distress and individuals are not forced to migrate into cities.
 - For instance, distress migration has stopped in Bandlapalli village in Andhra Pradesh's Ananthapuramu district and the village is drought-proof today.
- **Women Empowerment:** This is a natural result of employing women to 1/3rd of all MGNREGA jobs.
 - Eg - MGNREGA has led to the formation of the country's largest group of trained women well-diggers in Pookkottukavu village of Kerala's Palakkad district.
- **Battling Uncertainties:** The program provided a sigh of relief to millions of migrants and other people who lost their **livelihood in the pandemic times**. The scheme ensured that the vulnerable get access to basic income thereby decreasing suicide rates in the country.
- **Community Assets:** The scheme has led to the [creation of common community assets](#). These assets are built by communities on common lands thereby **creating a sense of responsibility** towards the structure which results in better care.
 - For instance, many Johads (percolation ponds) had remained abandoned for several years in many villages of Haryana. However, villagers revived them under the MGNREGA.

Issues with MGNREGA

- **Data on the impact of productive assets:** The government does not monitor whether a structure has actually helped water conservation. Further, there is no government data on the impact on groundwater levels, improvements in livelihoods etc. post the creation of assets.
- **Poor maintenance:** Many structures created under MGNREGA become defunct due to poor maintenance. This simply implies the wastage of time, energy, and resources.
- **Inadequate Funds:** A huge surge in demand for MGNREGA works has been witnessed in pandemic times. But the government hasn't duly allocated funding in a similar proportion.
 - Rs. 73,000 crores have been allocated for the year 2021-22. It is greater than the original allocation of Rs. 61,500 crores for 2020-21. But this is 34.5% lower than the revised estimate of Rs. 1,11,500 crores.
- **Insufficient support:** With the unemployment rate reaching a 45-year high at 6%, giving merely 100 days of employment is not sufficient.

Suggestions to improve the MGNREGA

- The villages must learn from the success of fellow villages. In this regard, every panchayat should ensure caution while framing and implementing the mandatory five-year plan under MGNREGA.

- The government must now measure the potential outcome from the assets created under MGNREGA. For this, it must track the impact of water harvesting structures in terms of local land and water resources.
- For constant monitoring and maintenance of water work, the government can get the support of communities and civil society organizations like the **Paani Foundation**.
- Adequate facilities such as soap, water, and masks, etc. must be provided free of cost to workers during the pandemic.
- The government should provide greater funds for the proper implementation of the scheme. It currently provides 0.47% of GDP while **the World Bank recommends 1.7 %** for the optimal functioning of the program.
- The government can enhance the number of days to 150-200 days depending on the vulnerability in a particular state.
 - The states can increase it as done by **Odisha and Himachal Pradesh** which have added 50 days and made it 150 days in a year

Conclusion

The government must fill the lacunas in MGNREGA. The government can then see a variety of benefits such as: vulnerable section gets due relief, villages get productive assets, the burden on cities will get reduced etc. Apart from that, it will also fulfil the constitutional duty under Article 41 (Right to work in certain cases).

New Umbrella Entity for Payment System – Explained, Pointwise

Introduction

The RBI in August last year released a framework for setting up New Umbrella Entity or entities. These Entities will carry out various payment services, similar to the ones being provided by the NPCI right now.

Recently the Reserve Bank of India said that it is not in favour of having direct and supervisory control over the [New Umbrella Entities](#). Instead, the RBI wants agencies such as the National Payments Corporation of India (NPCI) or a newly formed body to take over the role.

However, creating a regulatory agency is not only time and money consuming but also reduces RBI's power to control the entity itself.

What is New Umbrella Entity?

In February 2020, RBI proposed to create an alternative umbrella organisation for retail payments. This is to prevent the monopoly of the [National Payment Corporation of India\(NPCI\)](#). Presently NPCI is taking care of all retail payments systems in India.

As envisaged by the RBI, New Umbrella Entities will be a not-for-profit company. They will set up, manage and operate new payment systems. New payment systems include wallet transactions, [Aadhaar-based payments, and remittance services](#), [UPI transactions](#), ATMs, white-label PoS, etc.

Need for New Umbrella Entity:

1. **Enhance competition:** At present, the NPCI is the only entity handling the payment system. So, it is not for sure that the transaction costs are the lowest, or they cannot be reduced further. Similarly, the competition will also provide a variety of product offerings in the payment system.
2. **The monopoly of NPCI:** Private players in the payments space have expressed few concerns with the NPCI. Further, the NPCI is the only entity managing all retail payments systems in India. So, the New Umbrella Entities will enhance the competition and improve the service delivery in the retail digital payment ecosystem.

Functions of New Umbrella Entities

As per the RBI, the following will be the functions of these NUEs;

- They will develop new payment standards, methods, and technologies.
- They will **operate in clearing and settlement systems**. Furthermore, they will also **identify and manage relevant risks**. This includes **risks** related to settlement, liquidity, credit, and operation.
- New Umbrella Entities will also preserve the integrity of the retail payment system.
- These entities will monitor the system both nationally and internationally to prevent shocks, frauds, and challenges that affect the system in general.

RBI framework related to the New Umbrella Entities

The RBI in its framework mentioned certain [guidelines for New Umbrella Entities](#). These are,

- **Capital:** The pan-India new umbrella entity(NUE) or entities will focus on retail payment systems with a minimum paid-up capital of Rs 500 crore.
 - However, the RBI will not permit any single promoter or group to hold more than 40% investment in the NUE. Also, the NUE should maintain a minimum net worth of Rs. 300 crore at all times.

- **Ownership:** Further, the promoter or the promoter group of the NUE should be 'owned and controlled by residents' with 3 years of experience in the payments ecosystem.
- **Governance:** The entity has to follow corporate governance norms set by the RBI. The RBI will retain the right to approve the appointment of directors and nominate a member on the entities' board.
- **Foreign Investment:** As long as the NUE's comply with the other guidelines the Foreign Investment is allowed.

Need for the New regulator/NPCI to regulate New Umbrella Entities

1. **The quantum of digital transactions in the country:** The retail transfers in the country expanded enormously. For example, in 2020-21 alone Rs. 165 lakh crores of money transferred in 27 billion transactions. This requires a regulator to oversee the transactions and ensure proper service delivery.
2. **RBI is not having the capacity:** RBI will need a huge upfront cost to create a regulatory body for these NUEs. So the RBI thinks it can be left to NPCI or any new regulator.
3. **Better functioning of NUEs:** The new regulator/NPCI can handle the customer queries, granting licenses, monitoring the functions of the NUE in a better way.

Challenges with vesting the regulatory control of NUE to NPCI or a new regulatory body

1. **Various challenges with letting NPCI regulate NUEs:**
 - Many of the New Umbrella Entities are also the shareholders of the NPCI. So, if the regulatory control is vested with them, then there will be a conflict of interest between developing the NUE and controlling NUE.
 - Further, the NPCI is seen as a competitor to the NUEs. So letting them regulate might diminish the competition.
 - Also, the NPCI is performing very well in promoting the digital leap of India. Asking it to take over the regulatory function will also reduce its capacity and hamper India's digital progress.
2. **Various challenges associated with creating a new regulator:**
 - Creating a new regulator with enough capacity, manpower and regulatory capability from the top-down is a great challenge.
 - Delay in creating the regulator or hurrying it to work faster will pave way for the New Umbrella Entity to exploit the loopholes.
3. **Other challenges:** By leaving the power of regulation to NPCI or a new body will distant the RBI from the digital payment ecosystem. As the digital payment ecosystem is considered as the future of the economy, thus it is important that it is regulated directly by a capable body like RBI.
4. **The question of data privacy and data theft:** The new regulator/NPCI will have to strengthen the data security infrastructure right from the beginning as digital payments are already increasing in the country. For example, the recent data breach in BHIM and Mobikwik payment apps.
5. **Ambiguity in the function of the regulator:** There is no clarity on RBI's relationship with the regulator post the formation. For example, will the RBI have regulatory control over the regulator? If the regulator is independent, then it may not function as efficiently as the RBI.

Solutions to regulate New Umbrella Entities:

- **Create a new body or restructuring the NPCI:** The RBI can set up a new regulator for NUEs, or it can restructure the NPCI board to avoid conflict of interest.
- **The RBI has to take up the regulatory responsibility of NUEs.** Because;
 - The RBI can use the existing capacity to generate enough infrastructure to regulate these NUEs.
 - Also, the cost of setting up the infrastructure for the regulator will be the least for a regulator like RBI than the new regulator. As there is enough manpower, capital, technological capability available.
 - So, the RBI has to set up a separate branch/division to regulate these New Umbrella Entities.
- **The multiplicity of the regulator:** India so far has created too many regulatory bodies in the financial space such as RBI, SEBI, PFRDA, IRDAI, etc. So, the government has to perform the **review and consolidation of these regulatory bodies**. This will ensure consistent and predictable signals to the market. Further, limited regulators can work cohesively and efficient manner.
- **Building privacy by design:** The government has to **pass the [Data Protection Bill](#)**. This will make NUE store data within India and provide users the right to privacy in the digital space. Further, the government has to strengthen the RBI's digital capability.

Conclusion

The New Umbrella Entities are transforming India's retail payment system from cash to cashless transactions. With further digitization, their operations are going to expand. So regulating them is a necessary step to infuse checks and balances in the retail [digital payment space](#). But, the RBI has to take responsibility for that, instead of transferring power to others.

Intellectual Property Rights (IPR) and Universal Vaccination – Explained, Pointwise

Introduction

The Covid-19 cases in India are increasing at a very high rate in India. According to the government data, the number of positive cases is increasing at a rate of more than 3 lakh every day since April 21. Now, the only solution suggested by experts around the world is universal vaccination. The government with its new vaccination policy aims to vaccinate people above 18. However, vaccines are not available in sufficient quality to match demand. One of the hindrances to the wide-scale production of vaccines is [Intellectual property rights](#) and the TRIPS (Trade-Related Aspects of Intellectual Property Rights) agreement. Last October, India and South Africa also moved a motion at the WTO. In that motion, they asked the WTO Council on (TRIPS) to provide a waiver of Intellectual Property Rights for vaccine production. However, the proposal was opposed by the developed countries.

Protection of Intellectual Property Rights under the TRIPS

- TRIPS is a key legal instrument on intellectual Property Rights. The agreement imposes binding obligations on member countries to ensure a **minimum level of protection and enforcement** of IP rights in their territories.
- The developed countries especially the US aggressively pushed for the TRIPS agreement.

What is Intellectual Property Rights?

Intellectual Property Rights (IPRs) are legal rights over intangible creations, innovation and discovery. This can be in the industrial, scientific, literary and artistic fields. The most well-known types are copyrights, patents, trademarks, and trade secrets. The main purpose of intellectual property rights is to encourage the creation of a wide variety of intellectual goods.

- Under the TRIPS agreement, the patent holders have the exclusive right to manufacture, sell, and use the vaccine or the drug for the entire term of patent protection. This entire term includes 20 years from the date of the filing of the patent.
- If a country violated the provisions of the agreement then the country has to face the **WTO Dispute Settlement Body**.
- A country can even file a complaint even when there is an allegation of the violation. This is called a **non-violation complaint** in WTO. However, the members of TRIPS agreed not to use them under the TRIPS Agreement.

Intellectual Property Rights exemptions under WTO and TRIPS:

Both the WTO and the TRIPS Agreement have certain exemptions. Such as,

1. According to the **Marrakesh Agreement or WTO agreement**, any exceptional circumstances may **waive off obligations imposed on a WTO member country**. This waiver will include both the WTO Agreement and any other multilateral trade agreement. But to get such a waiver, the **request has to receive three-quarters of the member's support** in the WTO Ministerial Conference.
 - Furthermore, the Ministerial Conference can prescribe terms and conditions for such waiver.
 - The Ministerial Conference can also review the waiver annually if the waiver is granted for more than a year.
 - A waiver may be granted to an individual WTO member country or even collectively.
2. If the waiver is requested from **any multilateral trade agreements under TRIPS**, then the country has to submit the request to the Council of TRIPS. So, the TRIPS Council has jurisdiction over it. The TRIPS council can provide waivers for the Covid-19 vaccine manufacturing, selling, and usage.

3. **Articles 31(f) of the TRIPS Agreement:** This is one of the important provisions under the TRIPS Agreement. It provides for a **compulsory license**. Under this, the government can issue a license to make use of a patent without the patent holder's consent. But, this drug can be used **only for the supply of the domestic market**. So the government cannot export the patented product.
 - For example, In 2012, India permitted generic production of Bayer Corporation's Nexavar. This drug was used for the treatment of Liver and Kidney cancer.
 - Similarly, South Africa permitted the generic production of Anti-Retroviral Drugs used in HIV treatment.
4. Apart from these three types, pharma companies also conclude **voluntary licensing arrangements between pharmaceutical companies**. For example, the licensing agreement between AstraZeneca and Serum Institute of India. Under this, the Serum Institute of India can produce vaccines for both domestic use and export.

Status of vaccine manufacturing

In India:

- The world's largest vaccine maker, Serum Institute of Technology initially promised to supply 100 million doses of vaccines a month. But in reality, it only provided between 50 million to 60 million doses.
- On the other hand, Bharat Biotech has a planned production capacity of 12.5 million a month. Its current production is somewhere between 1-5 million.
- So, India's monthly COVID vaccine manufacturing capacity is about 60-65 million doses only.
- The population of India is 1.3 billion. If the Covaxin and Covishield require two doses then India needs 2.6 billion doses. But the present production cannot meet that amount in a short time.

Situation in Europe:

- [AstraZeneca's entered into a contract with the European Union](#). It committed to supplying an initial 300 million doses of vaccine for distribution among the 27 member countries. Further, it provided an option to order another 100 million doses.
- But it delivered only 30 million doses in the first quarter of 2021. Further, the company also says it can only provide 70 million in the second quarter, rather than the 180 million it had promised.
- So, the Covid-19 Vaccines are already in short supply. In this scenario, protecting the Intellectual Property is not only delay the [universal vaccination](#) but also extending the Covid-19 crisis itself.

About removing Intellectual Property Rights for Covid-19 vaccines

- As the Intellectual Property Rights hinder the supply of vaccines, both India and South Africa have proposed to waive off IP rights like patents, copyright, and trademarks for prevention, containment or treatment of Covid-19.
- Other developing countries started to co-sponsor the India and South Africa request. The TRIPS Council also discussed this issue both formally and informally.
- But many developed countries are opposing the move due to their arguments in favour of IP Protection.

Arguments for Intellectual Property Rights laws

The supporters of IP protection mention the below-mentioned points for strengthening IP policies through a network of national and international laws.

- Intellectual Property Rights **incentivises innovation**. It will provide income to the company invested in its research and capacity. So, the IPR policies will incentivise the companies to perform more research for their incentives.
- Higher cross-border IP protection would bring in **greater dividends for their pharmaceutical corporations**. The company can expand their operations in other countries and provide solutions to the domestic problem also in future.
- **The Exemption clause to provide waiver:** The country can get a waiver from the WTO if it wants a waiver for manufacture, sale, and usage. The WTO even provided collective waivers in two instances. Such as
 1. In 2003 **waivers from certain GATT obligations** were granted by the WTO to some countries. This is provided after they adopted certain necessary measures to prohibit the export and import of rough diamonds to non-participant countries in the [Kimberley Process Certification Scheme](#)
 2. In 2003, the General Council waved off export restriction under the compulsory licence. This is to provide more accessibility of medicines in LDCs and other developing countries that lacked manufacturing ability.

Arguments against Intellectual Property Rights laws

1. **Deny Right to health:** Intellectual Property Rights especially patents, **hinder the introduction of affordable vaccines and drugs** in developing countries. Thereby, denying people their right to health.
2. Patents can **block the wider accessibility** of vaccines and **prolong the pandemic**. For example, the entire vaccination exercise will end the pandemic not the invention of the vaccine and patenting it. So, the patents are reducing the accessibility of vaccines.
3. **Ambiguous definition:** the term “exceptional circumstances” mentioned in the WTO Agreement is not mentioned anywhere in the Agreement.
4. **Preconditions to waiver:** There are certain preconditions attached to the waiver. Such as, the pharmaceutical company must manufacture only the necessary amount to meet the needs of the eligible importing country
5. **Conditions in waivers:** The waivers from the Intellectual Property Rights has so far come with stricter terms and conditions. For example, in waiving of export restriction on compulsory licence the conditions are,
 - The LDC and other developing countries have to notify the TRIPS Council that they have insufficient or no manufacturing capability to manufacture the drug.
 - They need to specify the required quantity
6. **Challenge with the compulsory license:** The success of compulsory license depends on every country's manufacturing capability (As other countries cannot export them). Further, the developed countries will exercise great pressure on countries issuing a compulsory license. For example, In 2012, the US government put great pressure on India for issuing a compulsory licence to the generic version of Bayer's cancer drug.

Suggestions to improve vaccination

- WTO's TRIPS Council has to recommend the General Council “a waiver”. This has to include a waiver from the implementation, application, and enforcement of certain provisions of the TRIPS Agreement. These related to waiving IP rights like patents, copyright, and trademarks for prevention, containment or treatment of Covid-19.
- As the Covid-19 pandemic is the worst global health crisis in the last 100 years. So, in this situation, protecting Intellectual Property Rights will aggravate the crisis. The WTO has to permit countries having manufacturing capabilities to manufacture the vaccine and export them globally.

- Many LDC and developing countries lack manufacturing capability in the pharmaceutical sector. But, they need Covid-19 vaccines for their population. So the WTO and developed countries have to look beyond IP Protection.
- World Health Organization recently mentioned that “no one is safe unless everyone is safe”. So the vaccine manufacturers have to look beyond profit and try to serve Humanity. Further, the governments are ready to pay for vaccines, the only thing the global community expect from vaccine manufacturers is to set aside Intellectual property Rights during the Covid-19 pandemic alone.

