

CIVIL SERVICES EXAMINATION focus

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CURRENT AFFAIRS ANALYSIS

logical . simple . targeted
analysis & explanation
of relevant news

ETHICS, INTEGRITY & APTITUDE

Coverage from
varied
sources

ESSAYS OF THE MONTH

Selected essays
from Rau's
GSI students

**JULY
2021**

**Rau's IAS
Study Circle**
Since 1953



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from

JAN 10

ENROLL NOW

*editorial
note*



PANDEMIC: A REFLECTION

Pandemics are rare events in the history of mankind. Our generation has suffered the wrath of COVID-19 pandemic after almost 100 years (last pandemic was the Spanish Flu of 1920s). Life as we know, has changed and evolved. The pandemic has accelerated certain changes.

- 1. March of the State continues:** The 21st century was expected to be a crisis for States. There were debates that modern state, a product of modernity, has receded in relevance with calls for '**Withering away of the State**'. However, the pandemic brought State at the centerstage as the chief manager of the crisis. It was State and its capacity which determined if people would survive. Countries with better capacity were able to better handle the pandemic by preventing deaths and ensuring availability of vaccines for its citizens. China was able to control the pandemic, USA, despite being the most powerful country, suffered and this saga was more or less the same for many other developed as well developing countries.
- 2. Transition to digital:** The transition to digital was a trend which started even before the pandemic. However, what was on the sidelines and an aspiration became central to continuity of life and enterprise. Many businesses have gone completely digital, and they are continuing to function despite

the pandemic. Work from home is now globally accepted. As the schools are closed, digital education has emerged as the only way to educate millions of children across the globe.

- 3. In Science we trust:** Science and scientific methods has been central to the covid response. Scientists especially epidemiologists became household names. Vaccines, which take years to develop, are developed within a year using tools of biotechnology and computing capabilities. The pandemic highlighted the need to invest in scientific and research capabilities even more.
- 4. Cooperation solves problems:** Every crisis, howsoever big, can be addressed if stakeholders come forward, rise to the occasion and cooperate. The pandemic and its consequences could have been far worse if this spirit of cooperation was not there. Countries across the globe cooperated to make data, vaccines and medical equipment available to the poorer countries. India's 'Vaccine Maitri' initiative, COVAX initiative, proposal for waiver of patents on COVID-19 vaccines, USA lifting embargo on vaccine inputs, Union governments decision for procuring vaccines for all States and lowering of GST rates for COVID Vaccine and related medication are case in point. Also, millions of ordinary people offered

cooperation to fellow citizens by making food available, donating plasma and helping with human care. Many NGOs rose to the occasion. Actor Sonu Sood's efforts will be eulogized for a long time.

5. Public service is the highest form of service:

Often in contemporary times, there is a ridicule and dismissive attitude towards public service and bureaucracy. However, the 'steel frame' rose to the occasion and proved its mettle. When everyone was worried about protecting his/her life, the police manned the streets and enforced lockdowns; doctors and medical personnel continued to serve ailing people not worrying about the fact that they too are vulnerable to virus; administration continued to function ensuring help to the needy especially vulnerable by ensuring free food grains under PDS reached the needy. Many Doctors, medical staff, police officers, administration officers (frontline workers) have lost their lives too, but their tireless efforts ensured that the impact of pandemic is reduced to a great extent. Surely, more could have been done and more capacity needs to be developed in the public sector, but it was a crisis, the spirit of selflessness displayed is truly inspiring.

At the same time, the pandemic brought out the **fault lines** of our society, polity and economy out in the open. It became evident that even in times of crisis and human suffering narrow political gains, profiteering and ill intentions continue to cloud decision making. The crisis despite being a medical crisis was also a moral and ethical crisis.

1. Lack of investment in public goods such as healthcare infrastructure specifically the non-availability of medical oxygen left so many gasping for air and many lost their lives. This necessitates the pressing need for a social compact on the need to invest in public goods especially healthcare infrastructure.
2. **Crisis of Conscience:** Black marketing of drugs and vaccines showed crisis of conscience in the society. The very thought of profiteering out of this misery

makes us think how low humanity has stooped to. Moral fabric of the society needs a rebuild and law and order mechanisms need to be strengthened.

3. Misery of the unorganised sector and the migrant labour crisis brought out in the open glaring inequalities in our economic model. Even as stock markets across the globe soared, millions of households were thrown into the folds of poverty. This should make us think about the need for social security and universal basic income.
4. Fractured polity especially the politicking during the times of this crisis reflects how the political class failed to rise to occasion and deal with this crisis on a firm footing. Holding of elections during a pandemic, centre and states fighting and throwing allegations at each other over vaccine availability are glaring proofs that the political class needs to rethink over their priorities.
5. **Crisis of discipline:** The pandemic could have been easily controlled had people wore masks, washed hands with soaps or sanitizers and maintained social distance. However, the resistance on the part of people to these simple measures was saddening. Despite widespread awareness about these measures, people resisted, thereby, putting at risk their lives and of those around them.
6. **The need to value nature:** Anthropogenic factors have further worsened the impact of this pandemic. As we fight the present pandemic, we should consciously choose to pay attention to worsening of climate change, degradation of biodiversity and threats that we humans have posed to the Earth. Humanity has only one home i.e., the Earth, and we cannot afford to ruin it.

The second wave of pandemic has ended, and we have lived more than a year under the pandemic. Hopefully, we will learn from our mistakes and rebuild our lives. We should instill compassion towards those who suffered and lost their loved ones.

focus

CRITICAL NOTES FOR THE PREPARATION OF GENERAL STUDIES PAPERS

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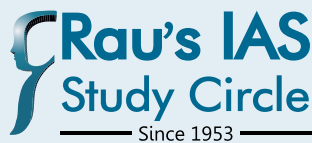
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The purpose of Focus is to expound the applied nature of General Studies to Civil Services aspirants thereby making them aware of the real demand of UPSC exam.

The sources relied for selection and analysis of issues are:

1. The Hindu, The Hindu (Sunday)
2. The Indian Express
3. The Times of India
4. Asian Age
5. The Tribune
6. The Economic Times
7. Hindu Business Line
8. Frontline
9. Economic and Political Weekly
10. IDSA
11. BBC
12. Yojana
13. Kurukshetra
14. Down to Earth



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Dear Students,

FOCUS is the Study Circle's monthly publication of contemporary issues and current affairs analysis. It is in fact a collective effort, by experienced educators in varied themes, of identifying current affairs in light of the UPSC syllabus, supplementing them with background information, explaining their related dimensions, lending them a generalist viewpoint and thus producing critical notes for the preparation of General Studies' syllabus.

The publication, as the name suggests, focuses solely on issues which are relevant to the **factual** as well as **applied** aspects of the General Studies' syllabus. That is how Focus covers all anticipated issues and themes for the upcoming Civil Services Examination (CSE).

Features

PART ONE | CURRENT AFFAIRS ANALYSIS

- This month edition covers analysis of news from the immediately preceding month.
- All news/issues are categorized and clubbed syllabus-wise (International Relations, Polity & Governance, Science & Technology, Ethics, Integrity & Aptitude and so on) for efficient study.
- Background information has been added to provide context.
- Related and Additional information-dimensions have been explained to add depth to your understanding.
- Maps and figures have been provided for associative and retentive learning.
- Practice Questions

PART TWO | ETHICS, INTEGRITY & APTITUDE

- Coverage from varied sources

PART THREE | ESSAYS FOR YOU

- Selected essays from Rau's GSI students

For further understanding or discussion in any topic, please consult your respective professors.

Good Luck!
RAU'S IAS STUDY CIRCLE

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PART ONE

**CURRENT
AFFAIRS
ANALYSIS**

**logical .simple .targeted
analysis & explanation
of all relevant news of the month**

INTERNATIONAL RELATIONS & SECURITY

GS PAPER (PRELIMS) & GS PAPER II & III (MAIN)

INDIA AND RUSSIA

#BILATERAL RELATIONS # SECURITY

PRIMARY SOURCE THE HINDU

IN NEWS

India Russia relations are witnessing a transformation because of the emerging geo-political scenario as a result of the US – China confrontation in the Indo-Pacific and the resultant closeness between Russia and China, besides other factors. So let us understand the different aspects of this issue in detail.

RUSSIA - CHINA AND THE QUAD

- Russia has been critical of the concept of Indo Pacific and the Quadrilateral security dialogue.
- Russia's foreign minister had termed Quad as an 'Asian NATO' and compared with it 'Cold War' era tactics. Russia thinks that Quad and Indo - Pacific conception is primarily an American initiative designed to contain both China and Russia.

- Russia on the other hand favours concept of Asia-Pacific.

→RELATED INFORMATION: ASIA PACIFIC VS INDO-PACIFIC

IDEA OF ASIA PACIFIC

- The phrase 'Asia Pacific' relates to that part of Asia which is adjoining to the Pacific Ocean.
- It is an idea proposed and supported by Asia's Pacific powers who sought a term to describe their common region.
- The Asia Pacific, therefore, has three major constituents: *north-east Asia, south-east Asia and Oceania (South Western Pacific)*. The idea of Asia-Pacific excludes India, thus India and the US are seen as external to the local politics and issues of Asia-Pacific region, with no direct interests involved.
- Asia-Pacific is more of an economic conception, rather than a security related notion.



IDEA OF INDO - PACIFIC

- The Indo-Pacific is an integrated theatre that combines the Indian Ocean and the Pacific Ocean, and the land masses that surround them. Thus, the entire region starting from *Western Indian Ocean and Eastern Pacific Ocean* is seen as *one-geopolitical unit*. This conception of the region, makes India a central player in the politics of the region.
- Even though it is still an evolving concept, most analysts see it as an idea that captures the shift in power and influence from the West to the East.
- It is both a strategic as well as an economic domain comprising important sea-lines of communication that connect the littorals of the two oceans.
- Since it is primarily a maritime space, the Indo-Pacific is associated with maritime security and cooperation.

Russian ambassador to India had recently advised India to take a "larger look at Chinese foreign policies", while describing the Indo-Pacific strategy as an effort to revive the Cold War mentality. Russian foreign minister recently visited Pakistan. This is the first time a Russian Minister has done so.

In this background India is concerned about Russia's uncritical advocacy of China's global Vision.

EMERGING GEOPOLITICAL ISSUES AND INDIA - RUSSIA RELATIONS**India's increasing alignment with the US:**

- India aligning with US in the Quad in the Indo-Pacific strategy is one of the key issue between India and Russia. Russia continues to mistrust US, principally because of the expansion of NATO towards its borders.
- India insists that its Indo-Pacific initiative's seek a cooperative order, and that the Quad dialogue (of India, Japan, Australia and the U.S.) is not the nucleus of a politico-military alliance. India has always insisted that ASEAN is the lynchpin of its Indo-Pacific strategy, though QUAD has no representation from ASEAN.

Russia - China Bonhomie : Reasons for China and Russia cooperation:

- As Russia's relation sour with the US and Europe over the expansion of NATO, Russia's annexation of Crimea etc. Russia is looking towards China as a partner.
- Both Russia and China have convergence over anti-American foreign policy and a vision for a multi-polar world.
- Russia's economy critically depends on oil & gas exports. China being the largest importer of oil & gas is a big market for Russia's exports. Also, European countries have stopped Russia from building pipelines. With China, Russia has secured a long-term market for its exports.
- Russia supports China's 'One belt, One road' initiative.
- **Defence Exports:** Russia is the principal supplier exporter of China's defence requirements. Close to 77% of China's arms imports came from Russia during 2016-20.
- Russia and China have amicably settled their boundary-dispute.
- Cooperation on the Arctic where both Russia and China seek to develop sea lines for shorter trade routes. China is particularly interested in this as it will reduce its vulnerability on Strait of Malacca.
- India has raised apprehensions about their technology- and intelligence-sharing. India's has raised concerns about Russia's China embrace, encompassing close political, economic and defense cooperation. Further speculations are rife about a future Russia-China military alliance.
- However, possible issues which can sour Russia-China relationship are: China's increasing interference in the politics and security of Central Asian Republics, China's copying of technology from Russian defence systems, China re-raising the border dispute is also seen as a concern in Russia and also Russia will not like to be perceived as junior partner of China.

RUSSIA - PAKISTAN ANGLE

- In recent years, there is an increasing closeness among Russia and Pakistan. Recently, Russian foreign minister recently visited Pakistan. This was the first time a Russian Minister has done so.
- Russia and Pakistan have indulged in defence exercises (Friendship 2020).

- **Reasons for Russia-Pakistan bonhomie:** During the cold war era, Russia saw Pakistan as an agent of the West. Also, Pakistan's role in Russia's defeat in Afghanistan in the 1980s made their relations sourer. However, recently few factors have led to changing this relationship:
- **Resolution of Afghanistan:** Pakistan has central role in the Afghanistan political situation and its resolution. Most of Taliban's leadership remains in Pakistan. Russia wants a peaceful Afghanistan as it is worried for peace and radicalization in the Central Asian Region. This has brought Russia closer to Pakistan. Russia and Pakistan are part of extended Troika negotiating with Taliban and Afghan governments, along with China and USA. Russia sees its defence support to Pakistan as critical for controlling terrorism in the region and its own backyard. Russia is currently Pakistan's second largest defence supplier.
- Russia's close relations with China are facilitating its close relations with Pakistan.
- Also, Russia sees Pakistan as a market for its defence exports in future. As India, tries to diversify its sources of defence imports, Russia is also trying to diversify its export markets.
- **Energy Cooperation:** Russia is one of main exporters of oil & natural gas in the world. Pakistan being a energy short country offers a big market to Russia. Russia plans to build a gas pipeline connecting Karachi and Afghanistan in Russia.
- Pakistan's increasing distance from the USA especially as USA has cut its defence support to Pakistan. This has led Pakistan to search for new friends.
- Russia sees Pakistan as a **Zipper state**, which due to its geography occupies a very important place in Asian landmass by connecting South Asia to Central Asia.

New cold war:

- US is taking on both China and Russia thereby driving the two together.
- This is accelerating the move to bipolarity towards a new cold war.

CONCERNS FOR INDIA - RUSSIA TIES

- Russia is one of the principal friends of India in the International sphere. The relation is time-tested.

However, off-late the relationship is seen as losing steam:

- **Falling share of Russia's defence exports to India:** Russia supplied 49% of India's arms imports in 2016-20. The share although still high has been falling off late. This is principally because India is trying to diversify its defence imports and does not want to be too dependent on only one-single supplier. Also, there are concerns that the same systems are being shared by Russia with China which can compromise, India's security. Russia's failure to provide critical parts and sub-systems have also made India look towards newer partners. Further, USA's CAATSA law makes it harder for India to import defence systems from Russia.
- **Economic relations:** India-Russia economic relations have failed to attain to their full potential. Though Russia is one of the principal supplier of energy to India, in other realms this has not been very impressive.
- **Nuclear cooperation:** Russia continues to be one of the biggest supporters of India's nuclear program. Russia has built state of the art nuclear energy reactors in Kudankulam. Also, plans are there to build similar reactors at other locations in India.

GEOGRAPHY IN GEOPOLITICS -

- The Eurasian landmass to India's north is dominated by Russia and China.
- Strategic and security interests in Central Asia, West Asia and Afghanistan dictate India's engagement with the region and the connectivity projects linking it, like the International North-South Transport Corridor through Iran.
- For pursuing these interests, India will have to effectively manage its relations with Russia.

WAY FORWARD

- The real 'strategic triangle' in the maritime domain will be that between India, US and China. Some realist analysts believe, that in future Russia and USA can come over their differences, as and when Russia is assured of its security from the NATO. Realists see China is being most important threat to Russia.

- Russia is yet to realise that it will gain immensely from the multilateralism that the Indo-Pacific seeks to promote.
- Being China's junior partner will undermine Moscow's great-power ambitions.
- Russian policymakers are obsessively preoccupied with Russia's 'status' rivalry with the U.S. And this largely impacted Russia's view of India-China relations.
- As such India should pursue the normalisation of relations between US and Russia, while diminishing Russia's propensity to coordinate its South Asian policies with China.
- Flooding the region with development initiatives and investment from other parts of the country.
- Reclaiming those parts of the territory now occupied by Pakistan and China (Pakistan Occupied Kashmir, or PoK, and Aksai Chin).
- Ending the rule of political "dynasties" in J&K in favour of a "Naya Kashmir" polity.
- Internationally, India communicated that the decision was purely an "internal" one, and did not affect India's ties with any other country.

HOW FAR THESE OBJECTIVES HAVE BEEN ACHIEVED?

Terrorism

- Incidents of terrorism and violence have decreased since 2019. However, this has come at a high cost of the curbs on rights of the citizens.
- More than 5,000 people were arrested, the longest Internet shutdown in any democracy was instituted for 213 days.

Economy

- Curbs have led to the closure of schools and online education for their children and diminishing sources of income. Also, the pandemic and security situation has reduced tourist inflows to the State, mainstay of its economy.
- Government claims it has more than 400 MoUs from businesses nationwide promising to invest in the UT. Its success will only be measured once the money comes in, given the state of the national economy.

PoK and Aksai Chin

- This goal looks hardly achievable, because of the recent showdown at the Galwan valley between Indian and Chinese forces. Further concerns have been raised about the possibility of **a two-front war**.
- US is also unlikely to support India in its PoK adventure given it is itself withdrawing from the Afghanistan and the increasing strength of Taliban and the support it has from Pakistan.

Ending Political Dynasties

- The present outreach involves all the previous leaders which the government had claimed to getting rid of in favour of a new polity in Kashmir.

KASHMIR AND THE REGIONAL GEOPOLITICS

#GEO-POLITICS # SECURITY



IN NEWS

Prime Minister in an outreach to the political leaders of J&K met senior leaders from J&K based political parties to chart course of action for the Union territory's future . This came almost 22 months after the abrogation of article 370 and subsequent arrests of the political leaders. This outreach is clearly a softening of stance by the central government.

In this backdrop, some experts have argued that this change of stance has been necessitated by the regional Geo-politics, while others have argued that it has been because of the space created by the strong-arm tactic of the government and has nothing to do with the regional geopolitics. Let us look at both these arguments.

Argument - The change in the Government's Kashmir policy (highlighted by the central government's outreach) is influenced by regional geo-politics which is changing because of the withdrawal of US from Afghanistan.

What were the objectives of abrogation of article 370 and the reorganization of J&K as stated by the government in the parliament?

- Ending terrorism and violence in J&K.

Issue being an internal matter of India

- J&K has now been discussed in more capitals, including the U.S. Congress, Parliaments in the United Kingdom, the European Union (EU) and the Nordic countries, than ever before, while several delegations of EU parliamentarians, Ambassadors and United Nations diplomats have been escorted to the valley to elicit their approval for the situation there.
- The J&K dispute has been discussed at least **three times at the UN Security Council**, which had not touched the issue since 1971.
- It has been argued that the process of Outreach to political leaders and the statements about making J&K a state again by the home minister indicates that these changes have come because of the external considerations.

Pakistan and the J&K issue

- Offlate, Government of Imran Khan in Pakistan did not mention its previous demands of plebiscite and UN resolutions. Further, Pakistan's PM had said that he would be willing to talk if there was a reversal in some of the August 5 steps, or if the India proffers a "roadmap" on J&K.
- Now Pakistan has been insisting on the restoration of Article 370. Previously, it rejected the Article's validity.
- The downturn in Pakistan-backed violence in Jammu-Kashmir as well the softening of rhetoric suggest a flexibility borne out of international pressure as well as the sustained threat of a (Pakistan) blacklisting by the Financial Action Task Force.

WHY THE CHANGE IN STANCE BY BOTH INDIA AND PAKISTAN?

- The change in stance of both India and Pakistan clearly highlights that these changes have come because of external prompting from the U.S. which is keen to complete its Afghanistan pull-out and its negotiations with the Taliban. As well as nudges from Saudi Arabia, Qatar and the United Arab Emirates.
- Recently, Qatari special envoy revealed that Indian officials have engaged the Taliban leadership in Doha. India had resisted engaging with Taliban all along. There are fears in India that a Taliban takeover of Afghanistan, will have spill overs in the form increased

terrorism and insurgency in the region, thus it makes sense to have the local leadership content to reduce this possibility.

LARGER GEOPOLITICAL CONTEXT

- The U.S.-China confrontation is becoming the centre of global geo-politics, due to which India's global strategies will be further put to test.
- The U.S.'s expectations of cooperation from India to its East, on China and the Indo-Pacific, have clearly not been commensurate with India's expectations that America would reduce India's threats to its west, from Afghanistan and Pakistan.

Counter argument - The government's outreach to the political leaders of Kashmir is from a position of strength and has not been influenced by the external calculations.

CENTRE'S KASHMIR POLICY AND THE WORLD

- Government's policy since the insurgency in J&K started has never been influenced by the external calculations.
- At the start of 1990s, when India was confronted with a full-blown insurgency in the Kashmir Valley and India's staunchest ally, the Soviet Union had collapsed, the then United States Assistant Secretary of State for South Asia questioned Jammu and Kashmir's accession to India.
- Even during that time Indian Prime Minister P.V. Narasimha Rao's refused to concede ground in any substantial measure. Despite, the world being unipolar and USA being the sole superpower.
- So, it is difficult to believe that present government would do so under any external pressure. India has all along been seeking a strategic autonomy in world affairs, where it is powerful enough to cooperate with nations as it deems fit for pursuing its national interests.
- Although the takeover of Afghanistan by the Taliban presents a difficult situation in the region, it does not necessarily mean that it will impact Kashmir in any major way.
- Also, the change in Pakistan's stance is being influenced by not just the Nudges by the UAE led backchannel diplomatic efforts but it's mainly because

of the fault lines that exist within the Pakistan military establishment and the civil-military tussle.

FROM A POSITION OF STRENGTH

- The present outreach is because of a window of opportunity where the government can speak and act from a position of almost absolute strength. This is because terrorism and violence are at its low. Popular protests have come down.
- In sum the employment of the entire spectrum of Kautilyan policies (**saam, daam, dand and bhed — persuade, purchase, punish, and exploit the weakness**) have helped to create this new space.
- There has been remarkable support for Centre's abrogation by institutions such as Supreme Court of India, who have not heard the case of 370. Also, the tight curfew like situation has made it impossible for the J&K economy to flourish. Thus, it was need of the hour that Centre reached out for local connect and that the strong arm tactics will not work for long.

WAY FORWARD

- Twenty-first century governance and empowerment require a federal solution that is contemporary and built on best practices globally.
- The fresh consensus for a 'Naya' Jammu and Kashmir must capture the best practices of democratic governance globally, and yet be reflective of the idea of India: a celebration of diversity in all its forms.
- The challenge before Jammu and Kashmir's leaders, old and new, is to arrive at a compelling blueprint for good governance within a framework of healthy federal relations that will be rooted in a vision for peace, prosperity, and real empowerment.
- This should start with confidence building steps by Centre such as quick elections to the legislature of the UT, restoration of Statehood at the earliest possible date, taking all sections of J&K together and ensuring development of economy of the UT.

INDIA AND AFRICA

#BILATERAL RELATIONS

PRIMARY SOURCE THE HINDU

CONTEXT

Africa is considered a foreign policy priority by India. The present government designed a forward-looking strategy to deepen relations with African countries. But now the strategy needs a critical review because the latest economic data confirms that, India-Africa trade is on a decline.

Foundation of India – Africa Relations -

- India-Africa relations dated back to pre-Independence era during National Independence movement of India. After Independence, India's **anti-colonial & anti-racist** stand and **Non-Aligned policy** brought India and Africa even closer. India closely supported decolonisation struggle in Africa and also raised voice against apartheid policies.
- Eastern Africa and India share the Indian Ocean Littoral. (Maritime Neighbours)
- Independent India, though extremely poor after two centuries of colonial exploitation, strived to share its limited resources with African countries under the banner of **South-South cooperation**. The ITEC program ensured that many African students pursued education in India.
- Diaspora has also been a source of strength among the two.
- India has been one of the largest contributors of UN Peacekeeping Missions, thus India's role in ensuring peace and security in Africa is critical.
- India is the fifth largest investor in Africa. India is one of the few countries which has given duty free, quota free access to low-income African countries. Bilateral trade between India and Africa stood at 62 bn dollars. India is the fifth largest export destination for Africa.
- India and Africa became close partners since then and have been continuing working together for shared interests at global platforms till today.

WHY AFRICA IS SIGNIFICANT TO INDIA?

- **Resources:** Africa is a resource rich region with abundant resources of Coal, Oil, Natural gas, Uranium and critical minerals such as Cobalt, Phosphorus, Copper etc. India sources 20% of its energy requirements from Africa. This relation has graduated

from buyer-seller relationship, with India investing in developing oil & gas production and LNG terminals in the region. For ex. ONGC investments in Mozambique.

- **Trade and Investment:** 6 of world's fastest growing economies are from Africa. It provides good opportunities for Investment by Indian companies and also an emerging market for Indian Exports. Many of Indian companies are big investors in Africa such as Airtel etc. India along with Japan have committed for **Asia-Africa Growth Corridor Program** which can take this trade and investment relationship even further.
- **Convergence of Interests on global issues** like Climate change, Terrorism, Global trade (Multilateralism), UNSC governance reforms etc.
- **Maritime security-** African cooperation is necessary for security in the Indian ocean
- **Development Cooperation:** After South Asia, Africa is the largest recipient of India's overseas assistance. More than 40% of India's LOC benefit the African countries. India's developmental **programs focus on improving the quality of life of African people with focus on small irrigation, solar electrification, power plants, transmission lines, etc.**
- **People to People Contact:**
 - India is one of the main suppliers of pharmaceuticals and vaccine to Africa. Thus, India plays an important role in Health of the region. This has become critical during the COVID-19 pandemic.
 - India is undertaking **e-Vidyabharati** and **e-Arogyabharati** program aiming to provide tele-education and tele-health education to African students.

AFRICA: HOPE AND OPPORTUNITIES

1. African countries are taking firm steps to fight terrorism and ensure that terrorism does not disrupt the social fabric.
2. **Africa Continental Free Trade Agreement** will be game changer for inter-Africa trade and removal of barriers to trade, investment and growth. This gives further hope for India to boost its trade and investments in the region.

3. Political transition are increasingly peaceful with democracy taking firm roots.

IMPACT OF COVID ON AFRO-INDIA RELATIONS

- **India-Africa trade is on a decline:** According to the Confederation of Indian Industry (CII), bilateral trade valued at \$56 billion in 2020-21, fell by \$10.8 billion compared to 2019-20, and \$15.5 billion compared to the peak year of 2014-15.
- India's '**vaccine diplomacy**' has suffered a setback in the wake of the second wave of COVID-19 in the country and the shortage of vaccine raw materials from the U.S.
- **Less attention to Africa:** Geopolitical tensions in Asia aftermath of COVID compelled New Delhi to concentrate on its ties with the Quad powers, Consequently, the attention normally paid to Africa lost out.
- Many of African countries often suffer from political instability and civil wars, which make investments their very risky.
- Competition from China and other countries for resources in Africa.
- Terrorism has taken routes in many African countries. Such as Boko Haram in Nigeria etc.

Measures to Revive the India-Africa relations

- **Clear strategy for African development:** Line of Credits (LoC) provided by India are typically used by recipient countries to fund small development projects such as roads, bridges, water supply systems, which do not address the larger development challenges like food insecurity, health insecurity, poverty in African countries. So, targeting important areas **like food & health security, climate change adaptation** and **gender equality** will help improve development outcomes and make India's development cooperation programme more effective.
- **Promote development-friendly private investments:** India should try to support Indian companies making investment in development-friendly projects for mutual benefit. This will revive the economic situation of Africa and increase the demand for exports from India.

- **Timely completion of projects:** India's record has been poor in terms of completion of projects on time. Efforts must be made to expedite the LoC projects.
- **Improve the experiences of Africans in India:** India should respond instances of harassment and racial attacks on African students effectively. Incidents of race attacks on African nationals have severely dented India's image. If untreated, this could be a potential source of tension between India and Africa and damage the goodwill India currently enjoys in the continent.
- The 4th **India-Africa Forum Summit** pending since last year, should be held as soon as possible, even if in a virtual format. India-Africa Forum summits should be held once in three not five years.
- Higher Cooperation and engagement with Africa wide institutions such as African Union, African Development Bank etc.

- This is a post held on an annual basis, rotated among various regional groupings. The 76th session (2021-22) is the turn of the Asia-Pacific group. This is the first time Maldives will occupy the office of PGA.

OPPORTUNITIES FOR COOPERATION BETWEEN INDIA AND MALDIVES

- **Geographical Proximity:** Maldives is located just 300 nautical miles from India's mainland.
- **Vaccines:** Both the countries can cooperate on matters related to equitable access to Vaccines and **TRIPS waiver**
- **Climate change:** Climate change is detrimental to both developing countries like India and Small Island Developing States such as the Maldives. So, both the countries can collaborate to strengthen the global response to climate change, through the **UNFCCC and the Paris Agreement**
- **Terrorism:** Peace and security in the Indian ocean region are of common interest to both the countries. In the backdrop of growing radicalization in the region, India and Maldives can revive discussion on **Comprehensive Convention on International Terrorism (CCIT)**

(The adoption of the CCIT under the UN was first proposed by India in 1996, but it has been in limbo ever since due to opposition from several countries on some of the provisions laid out in the convention.)

- **Multilateral Reforms:** India and Maldives can work in tandem for multilateral reforms. (Example - UNSC reform to expand UNSC permanent membership and make it more representative)
- **Respecting International laws on the seas and navigation:** Maldives' proximity to the west coast of India and its situation at the hub of commercial sea-lanes running through Indian Ocean makes it strategically important to India. Both the countries can work together to revive the sanctity of 'United Nations Convention on the Law of the Sea'. *(In the backdrop of Recent US navy's violation of the EEZ of India and Maldives and Chinese expansionism in Indo pacific region)*
- **Maldives economy is a majorly** dependent on tourism. Many Indians visit the Maldives as tourists. Also, many Indians are employed in these resorts.
- **India First Policy of Maldives:** Ever since President Solih came into power, he has practiced a stated

INDIA AND MALDIVES

#BILATERAL RELATIONS

PRIMARY SOURCE THE HINDU

IN NEWS

Maldives Foreign Minister Abdullah Shahid won the Presidential election of the United Nations General Assembly. The presidency assumes significance because of coinciding of this term with India's election as a non-permanent member of the UNSC. Also, the Indian decision of opening a new consulate at Addu city has faced backlash on social media and the recent attack on Mohammad Nasheed have consequences for India-Maldives relations. In this background let us look at broader contours of India-Maldives relations.

ABOUT UNGA PRESIDENT

- United Nations General Assembly is **one of the six principal organs of the United Nations**, serving as the main deliberative, policy-making, and representative organ of the UN.
- The President of the United Nations General Assembly (PGA) is responsible for chairing the United Nations General Assembly session for the elected term and is also the presiding officer for this duration.

policy of 'India First'. This reflects that the present government of India gives highest importance to relations with India.

INDIAN ASSISTANCE TO MALDIVES

- **Operation Cactus** - In 1988, when armed mercenaries attempted a coup against President Maumoon Abdul Gayoom, India sent paratroopers and Navy vessels and restored the legitimate leadership under Operation Cactus.
- **2004 Tsunami** - India had provided assistance to Maldives and had also supported it during the drinking water crisis in 2014
- **COVID -19** - India rushed \$250 million aid in quick time, India has also rushed medical supplies to the Maldives, started a new cargo ferry.
- **Greater Male Connectivity project:** This is an infrastructure project in Maldives, connecting Male (the capital) with three neighbouring islands through construction of a bridge-and-causeway link. This project was a part of \$400 million line of credit announced by India to the island.

Concerns in India – Maldives Relationship: Although India and Maldives enjoy a healthy relationship, there some areas of concern between the two nations.

- **Enhanced Chinese Presence:** Maldives signed its **first country-specific FTA with China in 2017** and thereby becoming China's 2nd FTA in South Asia after Pakistan. It raised concerns that it will **deepen the debt trap to China**, wherein more than **70% of Maldives' foreign debt is owed to China**. There has growing trend of Chinese companies and individuals acquiring land in Maldives. This land grab has raised concern of Maldives being increasingly falling into **an economic neo-colonial influence of China**. The new government of President Solih has affirmed that Maldives will scrap the FTA with China and investigate the Chinese land grab in Maldives.
- **President Yameen Hangover:** President Yameen had earlier declared an emergency in Maldives and halted the functioning of Maldives Parliament (Majlis) and arrested several opposition leaders. This was opposed by India and several other countries. Apart from this, President Yameen augmented relations with China without taking India into confidence. This led India-Maldives relations to decline.

- Although the New Government under president Solih has welcomed Indian support, The previous President Yameen and his party has launched an **'India Out' campaign** against New Delhi's massive developmental funding for creating physical, social and community infrastructure. There have been protests for early release of Mr. Yameen — sentenced to five years of imprisonment in a money laundering case, pending appeal.
- **Growing Radicalization:** There is a growing presence of ISIS/Daesh in Maldives and has been seen with growing influence of Saudi philosophy of Wahhabis. Moreover, due to the continuous defeat of Daesh, these fighters have been returning to Maldives and pose a threat to security of India, Sri Lanka and Maldives.
- **New Consulate in Addu:** Recently Union Cabinet approved Opening of a New Consulate General of India in Addu City, Maldives. But the Maldivian government has not made any decision regarding it. This came in the backdrop of ongoing #saveAddu social media campaign by a section of Maldivians, who are sceptical of India's presence in Addu atoll.
- **Helicopter Issue** : India had gifted the Maldives two ALHs (Advanced Light helicopters) in 2013 and each was operated by the Indian Coast Guard and the Indian Navy. However, a controversy broke out in 2018 after the previous Maldives government refused to extend the visas of Indian military personnel and asked India to take back the helicopters.

G7 SUMMIT

#INTERNATIONAL GROUPINGS



Recently, UK hosted the 47th G7 Summit at Cornwall. Indian Prime Minister participated at this meet on the invitation of UK PM. Besides India Australia, South Korea and South Africa participated as guests. Many key announcements were made with the view of reforming the emerging world order. In this backdrop let us understand the various aspects of G7 from prelims as well as mains perspective.

ABOUT G7

- The Group of 7 (G7) is an informal group of seven countries — the **United States, Canada, France,**

Germany, Italy, Japan and the United Kingdom, the heads of which hold an annual summit with European Union and other invitees.

- Together the member countries represent **40% of global GDP** and **10% of the world's population**.
- G7 has no legal existence, permanent secretariat or official members.
- Leaders of G7 countries meet annually and discuss emerging global issues.
- The presidency of G7 meetings is held by each of the seven countries in turn, each year.

KEY OUTCOMES OF 47TH G7 MEET

- **Build Back Better World (B3W) Project**

Conceptualised by the US to narrow the US \$40 trillion infrastructure needs of the developing world. It is an Alternative infrastructure initiative to counter China's Belt and Road Initiative. It works on the principles of 'Transparency and Inclusion', respects Environmental and labour laws

- **Reached a deal on Global minimum corporate taxes-** The deal aimed at controlling tax evasion by Multinational companies.
- G7 to donate 1 billion COVID Vaccine doses to developing nations.
- It called for timely, transparent and science-based WHO-convened Phase 2 COVID-19 Origin's study.
- The communique released after the meet also talks about of need for **Rules based international and freedom of navigation** with reference to China
- G7 leaders agreed to raise their contributions to meet an overdue spending pledge of \$100 billion a year to help poorer countries cut carbon emissions and cope up with Global warming

Changing nature of G7: The combination of G7 and 3 other invitees- **India, Australia and South Korea** has drawn attention to an expanded '**D10**' coalition of democracies.

- First proposed by Boris Johnson, the original purpose of D10 was aimed **to address China's growing technological clout in 5G** as well as **supply chain vulnerabilities** that were exposed during pandemic

- But gradually, with the Joe Biden's efforts, the group is being seen as an alternate democratic arrangement against the authoritarian states such as China

ADVANTAGES OF PROPOSED D10 COALITION TO INDIA

- The proposed 5G alliance (as proposed by UK) may bring **technology and investment to India**.
- Membership in coalition of 10 large democracies not only **increases the soft power of India but also gives a platform for India to pursue reforms in UNSC**. (This coalition will give an opportunity to convince the major powers to make way clear for India's candidature as a permanent member of UNSC).
- It acts as a **bulwark against Chinese expansionism** in the Indian ocean and its **wolf warrior diplomacy** in the India's neighbourhood.
- Eventually, if this coalition turns into a trade bloc, that will improve trade and investment opportunities for India (In the backdrop of lingering EU-India trade deal and pull out of RCEP).

CHALLENGES

- Economic Interconnectedness transcends across any rigid divisions of democracies and dictatorships
- ✓ despite being a U.S. ally and a democracy, South Korea is wary of joining a formal D10 or Quad-plus alliance because its economy is interwoven with that of China.
- ✓ EU is wary of any such coalition (D10) since it recently signed **EU-China new investment treaty**.
- ✓ India would not want to be seen directly in a group which has an evident anti-China orientation. As India, shares a disputed boundary with China.
- Even Indian can't afford to alienate friendly undemocratic powers like Vietnam, Iran or Russia, which are important for India's ambitions of becoming a 'leading power' in the world.
- US and European powers are themselves not disassociated with undemocratic allies. The U.S.'s allies in West Asia remain notoriously authoritarian, and European countries still cultivate client dictatorships in Africa.

- Thus, if the proposed Democratic Alliance of D10 comes into being it should have a positive agenda of trade, development, addressing climate change,

promoting democracy through soft power, reforming global governance and rule of law.

SECURITY ARTICLES

CYBER SECURITY

#CYBER SECURITY

PRIMARY SOURCE

THE HINDU

CONTEXT

Cyber war is referred to as the fifth domain/dimension of warfare, is now largely being employed against civilian targets. Recent high profile cyber-attacks highlight the need for improved defences against actual, and potential, cyberattacks by all countries across continents.

RECENT CYBER-ATTACKS

- **'Solarwinds'** - In 2020, Cyber-attack on US government and private companies in USA was sponsored by Russia. It was termed as **UNC2452**. It involved data breaches across several wings of the U.S. government, including defence, energy and state.
- A Chinese group **Hafnium** attacked Microsoft's software gaining remote control over affected systems.
- **Ransomware attack** on colonial pipeline company - paid out several million dollars as ransom.
- Russia-backed group, **Nobellium**, next launched a phishing attack on 3,000 e-mail accounts, targeting USAID

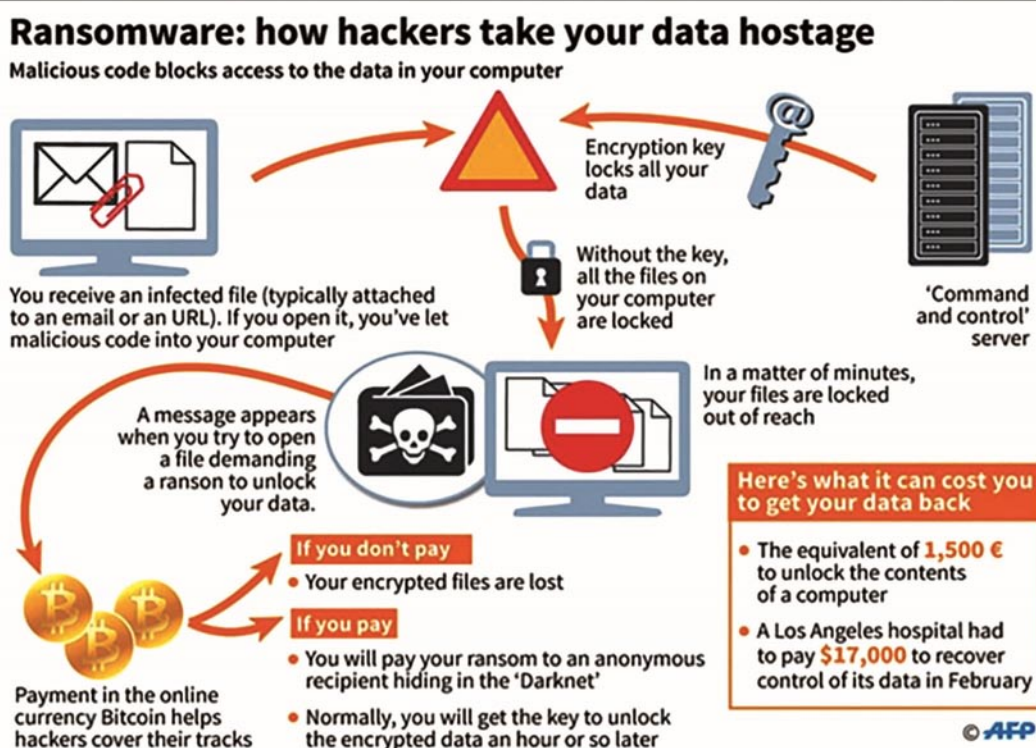
CHANGING NATURE OF CYBER-ATTACKS -

- Most nations have been concentrating mainly on erecting **cyber defences to protect military and strategic** targets. They are preparing defences against software vulnerabilities referred to as **'Zero-**

day'. However, such zero-day vulnerabilities could exist outside the military domain.

Zero day vulnerabilities - Stuxnet is an example which crippled Iran's uranium enrichment programme some years back. It is a type of attack that exposes a vulnerability in software and creates complicated problems well before anyone realizes something is wrong. They could lie undetected for a long time.

- Distinction between military and civilian targets is increasingly getting erased.
- **Example** - In 2012, there was a cyberattack on Aramco, employing the **Shamoon virus**, which wiped out the memories of 30,000 computers of the Saudi Aramco Oil Corporation. This was seen as a major reason for disturbance in the **West Asia**.
- In civilian space the cyber-attacks are - **ransomware and phishing and spear phishing**.
- Ransomware attacks have skyrocketed, with demands and **payments going into millions of dollars**. India figures prominently in this list, being one of the most affected.
- The recovery cost from the impact of a ransomware attack — in India has tripled — and mid-sized companies, in particular, today face a catastrophic situation, if attacked, and may even have to cease operations. Thus, the need to be aware of the nature of the cyber threat to their businesses and take adequate precautionary measures, has become extremely vital.



- Banking and financial services were most prone to ransomware attacks till date, but oil, electricity grids, and lately, health care, have begun to figure prominently.
- Cybercriminals are increasingly **targeting a nation's health-care system** and trying to gain access to patients' data. The available data aggravates the risk not only to the individual but also to entire communities.
- **Motivation of cyber-attacks** - for (some) nation states, the motivation is geopolitical transformation; for cybercriminals, it is increased profits; for terror groups, the motivation remains much the same.
- **Data** is becoming the world's most precious commodity, attacks on data and data systems are bound to intensify.
- The data life cycle - data at rest (when it is being created and stored) - data in motion (when it is being transmitted across insecure and uncontrolled networks) and data in use (when it is being consumed). Exposure of data at all these levels is intensifying the risk.

WHAT NEEDS TO BE DONE?

- Cybersecurity professionals are now engaged in building a **'Zero Trust Based Environment'**.

Zero Trust is a security concept centered on the belief that organizations should not automatically trust anything inside or outside its perimeters and instead must verify anything and everything trying to connect to its systems before granting access. "The strategy around Zero Trust boils down to don't trust anyone".

- New technologies such as artificial intelligence, Machine learning and quantum computing are promising ones for cyber security.
- Government officials as well as businesses need to be aware of the potential threat of cyber attacks.
- India needs to revise its own cyber-security policy to take into account the rapidly changing cyber-threat landscape.
- Cyber-insurance policies need to be made available to corporates and professionals so that they can get compensated for their losses if subjected to cyber attacks.
- Cyber-security ecosystem needs to be strengthened by the domestic regulators such as the RBI for banks

and financial institutions, TRAI for Telecom Companies, Central Electricity Authority for Power Utilities etc. Sectoral CERTs need to be formed.

- New Technologies and human resource to fight cyber security threats need to be developed.
- A global accord to tackle such a threat is the need of the hour. As tackling cyber threats demand global cooperation. For ex. India can consider joining the **Budapest Convention** or can pitch for an accelerated Global Convention to tackle such issues.

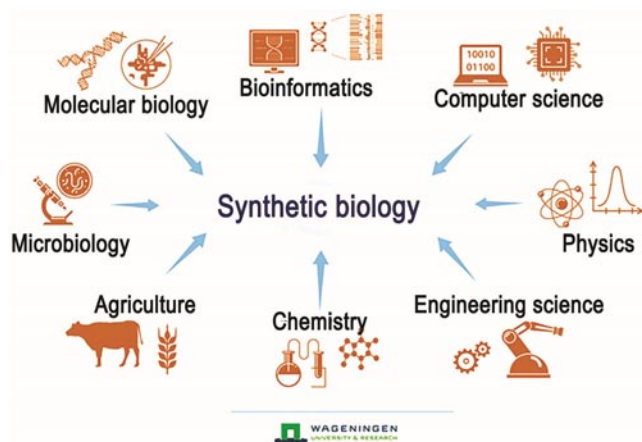
SYNTHETIC BIOLOGY AND BIO WEAPONS

#BIO-WEAPONS # SECURITY

PRIMARY SOURCE THE HINDU

CONTEXT

The traditional notion of security is undergoing a change. The growth of exponential technologies such as synthetic biology, artificial intelligence and nanotechnology is bound to change the theory and practice of national security. The rapid rise of synthetic biology and the danger of Bio-weapons needs to be focussed upon.



SYNTHETIC BIOLOGY - "A DOUBLE-EDGED SWORD"

- Synthetic biology is a revolutionary technology which can help us manipulate biological organisms and processes for human betterment, especially in treating diseases, by re-engineering cells.

- The reality is that there has been very little focus on threats emanating from biological sources. There is the possibility of deliberate misuse of technologies such as synthetic biology.
- With increasing access to such technologies, there is a need to review the biosecurity systems in place where such technologies are in use. Accidental leaks of experimental pathogens are another concern. Example - Recent focus on study of origin of COVID-19.
- Insufficiently trained staff, inadequately safeguarded facilities, and lack of proper protocols could all be behind such leaks. A well-planned attack using highly infectious pathogens synthetically engineered in a lab could be disastrous.

LACK OF REGULATORY REGIME FOR BIO - WEAPONS

- Unlike the nuclear domain, the fields of biotechnology or synthetic biology are not regulated internationally despite growing military interest in synthetic biology applications and their potential misuse.
- The **Biological and Toxin Weapons Convention (BTWC) of 1972** does not have a verification clause, nor does it have clearly laid down rules and procedures to guide research in this field.
- Biological weapons are essentially dual use, the same technology can be used to develop vaccine and medicines and offensive bioweapons. Also, newer technologies such AI, 3D printing, CRISPR-CAS-9 etc can make it more easier to develop such weapons.

About the Biological and Toxin Weapons Convention (BTWC) of 1972: The BTWC was the first multilateral disarmament treaty banning the production of an entire category of weapons.

Terms of the Treaty

The BWC bans:

- The development, stockpiling, acquisition, retention, and production of:
 1. Biological agents and toxins "of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes;"
 2. Weapons, equipment, and delivery vehicles "designed to use such agents or toxins for hostile purposes or in armed conflict."

- The transfer of or assistance with acquiring the agents, toxins, weapons, equipment, and delivery vehicles described above. All State parties have to destroy all such bioweapons upon becoming a member of BTWC.
- The convention further requires states-parties to destroy or divert to peaceful purposes the "agents, toxins, weapons, equipment, and means of delivery" described above within nine months of the convention's entry into force.
- The treaty regime mandates that states-parties consult with one another and cooperate, bilaterally or multilaterally, to solve compliance concerns. It also allows states-parties to lodge a complaint with the UN Security Council if they believe other member states are violating the convention. The Security Council can investigate complaints, but this power has never been invoked.
- The treaty stands for indefinite period of time.

CHALLENGES TO THE BTWC REGIME

1. Universality Gap:

- The BTWC has currently been signed by 183 countries. However, some countries such as Israel, Egypt and some others have not ratified the treaty. Thus, nothing prevents them from developing biological weapons. Steps must be taken to bring them on board.
- The BTWC mainly prevents states from developing biological weapons. However, most biological technologies are dual use with increase ease can also be available to non-state actors and terrorist organisations. The BTWC is silent on how to tackle this threat.

2. Implementation Gap: Verification of compliance of the treaty by BTWC states requires implementation at the national level. There is no elaborate international monitoring and inspection regime which is present in most-arms control treaties.

3. Response Gap: The BTWC is silent on how should state parties react in case of a biological attack. In response to a perceived violation, member states can lodge a complaint with the UNSC. However, the power veto means that no action may be taken.

4. Institutional Gap: The meetings of the BTWC are infrequent. There is no permanent agency to ensure implementation of BTWC. Since 2007, a small

Implementation Support Unit has been formed. But its mandate and funding are limited.

SUGGESTIONS FOR STRENGTHENING BTWC

1. In the absence of a standing international body to oversee implementation of the BWC, the option of placing biological weapons under the jurisdiction of the existing Hague-based Organisation for the Prohibition of Chemical Weapons (OPCW) should be explored.
2. The idea of equipping the BTWC with a verification or investigation mechanism should be revisited.
3. Countries not party to BTWC should be encouraged to become parties to BTWC.
4. Next BTWC review conference in 2021 provides an opportunity for strengthening the BTWC loopholes.

India's preparedness -

- India is under prepared compared to the more developed countries in this area given poor disease surveillance, insufficient coordination among various government departments dealing with biosecurity issues.

- Multiple institutions are dealing with biosafety and biosecurity threats but there is no coordination among them.

Example - implementation of biosafety guidelines is the responsibility of the Science and Technology Ministry and the Environment Ministry. However, labs dealing with biological research are set up under the Indian Council of Medical Research and the Indian Council of Agricultural Research, which are under the Ministries of Health and Agriculture, respectively.

- This highlights two issues pertaining directly to biosecurity.

1. One, the multiplicity of bodies and ministers makes coordination difficult, especially in the absence of an empowered coordinating body.

2. Two, given the rising risk of diseases of zoonotic origin, the traditional ministry-wise separation might not be useful.

- Another important question is whether India, with its porous borders and ill-trained border control institutions, is prepared for defending against pathogens or dangerous biological organisms or agents arriving from abroad. COVID-19 should serve as a wake-up call.

MISCELLANEOUS

UN SECRETARY GENERAL

#INTERNATIONAL ORGANIZATION

PRIMARY SOURCE THE HINDU
IN NEWS

UN General Assembly reappointed Antonio Guterres as the UN Secretary General for a second term beginning January 1, 2022, after Security Council unanimously recommended his name to the General Assembly for re-election.

HOW UN SECRETARY GENERAL IS APPOINTED?

- The UN Secretary-General is appointed by the General Assembly on the recommendation of the Security Council.
- Secretary-General is chosen during closed-door sessions of the Security Council, and approval by the General Assembly is seen more as a formality.
- The 5 permanent members of the UNSC– China, France, Russia, the United Kingdom, and the United States – can eliminate a candidature by a veto.
- However, a resolution adopted by the General Assembly in 2015 made the selection process more open and transparent, allowing member states for the first time to see basic information about all candidates, including their resumes, and to question them at open sessions.
- For any contesting candidate, a recommendation by any UN member state is essential. In the current race, Guterres was endorsed by Portugal.

ROLE OF UN SECRETARY GENERAL

- It should be noted that president of UNGA is different from the Secretary general of UN secretariat.
- The role of secretary-general is described as combining the functions and responsibilities of an advocate, diplomat, civil servant, and CEO. The UN Charter designates the secretary-general as the "chief administrative officer" of the UN and allows them to

perform "such other functions as are entrusted" by other United Nations organs.

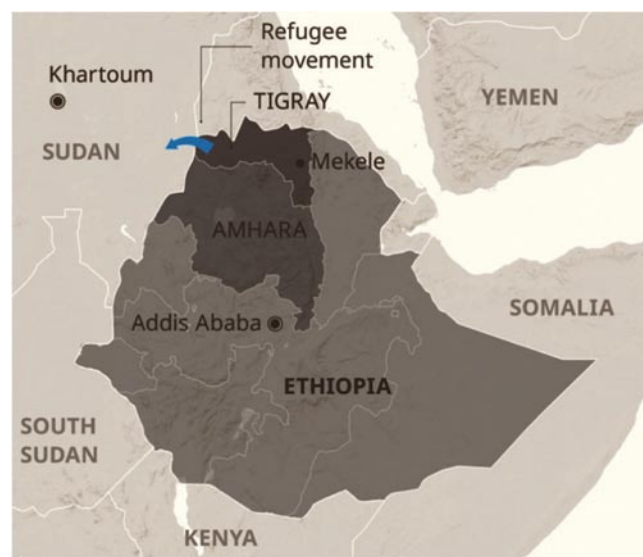
- The Charter also empowers the secretary-general to inform the Security Council of "any matter which in his opinion may threaten the maintenance of international peace and security".
- These provisions have been interpreted as providing broad leeway for officeholders to serve a variety of roles as suited to their preferences, skill set, or the circumstances.

TIGRAY

#LOCATION

PRIMARY SOURCE THE HINDU

According to UN Agencies, hundreds of thousands in Tigray are facing famine, and millions more are at risk. However, the Ethiopian government has rejected the accusations, and claimed that the food shortages were not severe. The conflict that began between Ethiopia's federal government and the ruling party in the Tigray region in the country's north last September has since blown up into a crisis in the Horn of Africa.



Global Peace Index 2021

#INDEX

PRIMARY SOURCE THE HINDU

15th edition of the Global Peace Index (GPI) was released recently, which ranks 163 independent states and territories according to their level of peacefulness.

ABOUT THE INDEX

- The index is produced by the **Institute for Economics and Peace (IEP)**.
- GPI is the world's leading measure of global peacefulness.
- This report presents the most comprehensive data-driven analysis to-date on trends in peace, its economic value, and how to develop peaceful societies.
- Iceland topped the table for the 13th consecutive year, followed by New Zealand and Denmark.
- **India** climbed two spots to become the 139th 'peaceful' country on the **Global Peace Index 2020**.

17+1 initiative

#INTERNATIONAL INITIATIVES

PRIMARY SOURCE THE HINDU

The 17+1 initiative is a China-led format founded in 2012 in Budapest with an aim to expand cooperation between China and the Central and Eastern Europe (CEE) countries.

- The framework focuses on investments and trade for the development of the CEE region, that is less developed as compared to the Western European states
- The platform is largely seen as an extension of China's flagship Belt and Road initiative (BRI)
- The initiative includes twelve EU member states and five Balkan states — *Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Macedonia, Montenegro, Poland, Romania, Serbia, Slovakia and Slovenia*.

GULF BETWEEN CHINA AND CEE COUNTRIES

- Most of the promised Chinese investments and projects either delayed or cancelled raising doubts about the future of the 17+1 initiative
- US-China tech war over 5G further widened the gulf. NATO membership of CEE countries is proving to be a major obstacle for China's digital silk road
- There has been discontent against China among CEE countries because of its coercive diplomacy, faulty medical supplies, and pandemic-related misinformation

Asia-Pacific Economic Cooperation (APEC)

#INTERNATIONAL GROUPINGS

PRIMARY SOURCE THE HINDU

APEC Structural Reform Ministerial Meeting was held recently which revolved around the overarching theme of promoting balanced, inclusive, sustainable, innovative and secure growth for APEC economies.

- The Asia-Pacific Economic Cooperation (APEC) is a regional economic forum established in 1989 to leverage the growing interdependence of the Asia-Pacific.
- Its motive was to resist protectionist policies by individual member states, and the promotion of trade liberalisation and economic cooperation within the affiliated Asia-Pacific economies
- APEC's 21 member economies are Australia; Brunei Darussalam; Canada; Chile; People's Republic of China; Hong Kong, China; Indonesia; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Papua New Guinea; Peru; The Philippines; The Russian Federation; Singapore; Chinese Taipei; Thailand; United States of America
- India has **observer status** in the forum.

Agni P

#SECURITY #DEFENCE

PRIMARY SOURCE pib

- Agni P is derived from Agni Prime.

- It is a new generation of Agni class of missiles developed by DRDO.
- It is a nuclear capable ballistic missile with a range capability of 1,000 to 2,000 kms.
- It is canisterised making it more flexible to use.
- The missile extensively uses composite material which has reduced its weight by half of Agni-2.
- The missile has high maneuverability which acts as a defence against missile defence system.

PRACTICE QUESTIONS

MCQS

Q.1) With reference to “17 plus 1 Initiative”, consider the following:

1. It is a Russia-led initiative to expand cooperation with eastern European countries
2. It is considered as an answer to the BRI initiative of China

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

Q.2) Which of the following statements about “Asia-pacific economic cooperation” is/are correct?

1. Asia-Pacific Economic Cooperation (APEC) is a regional defence forum of Asia Pacific countries.
2. All the Pacific rim countries are members of this forum.
3. India has observer status in the forum.

Select the correct answer using the code given below:

- (a) 1 only (b) 3 only
(c) 2 and 3 only (d) 1 and 2 only

Q.3) Which of the following countries were invited as guest countries in the recently concluded 47th G7 summit?

- (a) India, Mexico, Israel and South Korea
(b) Israel, India, south Africa and Mexico
(c) India, Australia, South Africa and South Korea
(d) Australia, Israel, India and South Korea

Q.4) Consider the following statements:

1. UNGA president is elected once in every 3 years.
2. UN general secretary is appointed by the General Assembly on the recommendation of the Security Council.

Which of the statements given above is/are correct?

- (a) 1 only (b) 2 only
(c) Both 1 and 2 (d) Neither 1 nor 2

Q.5) Arrange the following Ports in West to East order:

1. Bander-e-Abbas 2. Gwadar
3. Chabahar 4. Port of Duqm

Select the correct answer using the code given below:

- (a) 1-4-3-2 (b) 2-4-3-1
(c) 1-3-4-2 (d) 4-1-3-2

DESCRIPTIVE QUESTIONS

- Q1.** Discuss the changing contours of India-Russia relations in light of evolving Russia-Pakistan and Russia-China relations?
- Q2.** Small-islands nations should actually be seen as large oceanic countries. In this light, highlight the significance of India-Maldives relations.

Answers to above MCQs: 1 (d), 2 (b), 3 (c), 4(b), 5(d)

CONSTITUTION, POLITY AND GOVERNANCE

GS PAPER (PRELIMS) & GS PAPER II (MAIN)

FEDERALISM

FEDERALISM ADMIST INCREASING CENTRALISATION

#FEDERALISM #CENTRE-STATE

PRIMARY
SOURCE

THE HINDU

SECONDARY
SOURCE

NCERT

CONTEXT

Centre-State relations have become increasingly strained. States have been complaining against center's vaccine policy, GST compensation issue, handling of All India Services etc. Centre has been alleged to have an attitude of high-handedness.

Let us understand about India's federal structure as envisaged in the Constitution and also the impact of federal relations between states and central government on account of Fiscal Federalism, Legislative Interference & Socio-cultural diversity.

NATURE OF FEDERALISM

- **Two Level of Governments** - The term 'federalism' refers to the constitutionally allocated distribution of powers between two or more levels of government in the modern nation-state system. One, at the national level and the other, at the provincial, state or local level.

- **Division of Power & Functions** - A written constitution clearly marks the powers and responsibilities of the different levels of government.
- **Both Units function Independent of each other** - Both levels of governments at center and in states enjoy their power independent of the other as mandated by the constitution.
- **Independent Judiciary** - Disputes between the two levels of government are addressed by an independent judiciary by interpreting the law of the land.

BIRTH OF INDIAN FEDERALISM

- **Ensuring Unity in Diversity** - Strong Centre was envisaged by Constitution framers as they believed that India required a federal constitution that would accommodate diversities. But they also wanted to create a strong center to stem disintegration and bring about social and political change.
- **Presence of Provinces & Princely States** - It was necessary for the center to have wide powers because India at the time of independence was not only divided into provinces created by the British, but there were more than 500 princely states which were looking forward for independence. Hence, Indian Federalism was the best mechanism to integrate the provinces within the Indian Union.
- **Tackling Socio-economic Problems** - Besides the concern for unity, Constitution makers also believed that the socio-economic problems of the country

CONSTITUTION, POLITY AND GOVERNANCE

needed to be handled by a strong central government in cooperation with the States. Poverty, illiteracy and inequalities of wealth were some of the problems that required planning and coordination. Thus, the concerns for unity and development prompted the makers of the Constitution to create a strong central government.

CONSTITUTIONAL PROVISIONS ON INDIAN FEDERALISM

- **Article 1 of the Constitution** mentions that India that is Bharat shall be a Union of States. It means that states do not have power or right to secede away from the Union of India. Unlike USA, in India, different states have not formed because of an agreement among the states.
- **Article 3** of the Constitution empowers Parliament to create new States. It allows the federation to evolve, grow and respond to regional aspirations.
- **Formation of new State** - When a new state is formed, Schedule I and Schedule IV of the Constitution are amended.
 - **Schedule I** - contains list of States and Union Territories.
 - **Schedule IV** - provides for allocation of seats in Rajya Sabha. The allocation of seats in Rajya Sabha is made on the basis of the population of each State.
- **Dr. B.R. Ambedkar** responded to the question as to why India is a "Union" and not a "Federation of States": *"The Drafting Committee wanted to make it clear that though India was to be a federation, the federation was not the result of an agreement by the States to join in a federation and that the federation not being the result of an agreement no State has the right to secede from it. The Federation is a Union because it is indestructible."*
- **Distribution of Legislative, Administrative & Financial Powers:** Constitution has demarcated each level of government by devising an elaborate scheme of distribution of legislative, administrative and financial powers between the Centre and the States.
- **Article 246** of the Indian Constitution clearly enumerates the Federal character of the Indian Constitution. It empowers:

- Parliament to make law under Union List
- States to make law under State List
- both the Parliament and States to make law under Concurrent List.

- **Finance Commission** constituted under Article 280 to evaluate the state of finances of the Union and State Governments, recommend the sharing of taxes between them, lay down the principles determining the distribution of these taxes among States. Thus, Finance Commission is a constitutionally mandated body that is at the center of fiscal federalism.
- **Settling Inter-state River water disputes under Article 262.** For this purpose, the Parliament has enacted The Inter-State River Water Disputes Act, 1956.
- **Inter-state Council (Article 263)** enquires into and advise upon disputes which may have arisen between States.
- **GST Council (Article 279A)** makes recommendations to the Union and State Government on issues related to Goods and Service Tax. The GST Council is chaired by the Union Finance Minister and other members are the Union State Minister of Revenue or Finance and Ministers in-charge of Finance or Taxation of all the States.

However, it has been observed that conflict between center and states has increased in the past few years and one of the main reasons is over centralization tendency of the union government. In this regard, let us go through the three key areas of conflict between the center and states.

AREA OF FRICTION BETWEEN CENTRE & STATES (INCREASING CENTRALIZATION)

1. ECONOMY – FISCAL FEDERALISM

In recent years, the fiscal federalism has become skewed towards the Centre in certain aspects and the same has been opposed by a number of states.

Important issues which have arisen in the Centre-State Fiscal Relations.

- **Higher Share of Cess and surcharge:** Cess and surcharge imposed and collected by the Centre does not form part of the Central Divisible pool of taxes.

CONSTITUTION, POLITY AND GOVERNANCE

They are not distributable among the States and hence continue to remain with the center. Over a period of time, the Centre has been imposing a large number of surcharge and Cess to mobilize revenue.

- The share of Cesses and Surcharge as a percentage of Gross Tax Revenue (GTR) of the center has increased sharply from 2.3% in 1980-81 to 15% in 2019-20. The States see this as an illegitimate way of depriving resources that are rightfully due to them.
- **Problems in Paying GST compensation Cess to States:** States agreed to give up the power to impose indirect taxes and adopt GST on the basis of a guaranteed 14 per cent growth in GST revenues per annum for a period of 5 years. However, on account of CoVID-19 pandemic, there was a GST shortfall of almost around Rs 3 lakh crores. However, money collected under GST compensation Fund was hardly around Rs 65,000 crores. Hence, there was an obligation on the Centre to pay a compensation amount of almost Rs 2.35 lakh crores. Initially, the Centre asked the States to borrow this amount from the market. Later on, due to strong opposition, the Centre decided to borrow on behalf of the states and compensate them. This recent issue over GST compensation has led to erosion of trust in fiscal federalism.
- **Centrally Sponsored Schemes (CSS):** The Centrally Sponsored schemes are the schemes which are financed by both Centre and States, but implemented by the respective State Governments. States complain that CSSs suffer from lack of financial autonomy. Also, most CSS operate in the realm of State List. Also, certain states have refused to implement certain CSS as they believe their schemes are better than that of Centre. For instance, some of the States such as West Bengal, Telangana etc. have decided not to implement Ayushman Bharat Scheme.
- **Borrowing powers of the States:** Under Article 293, the States are allowed to raise loans from the Centre or market. However, a State cannot raise a public loan without the consent of the Centre if there is still outstanding any part of a loan. Since all the State Governments have been and continue to be indebted to the Centre, the Centre effectively controls the amount of public debt raised by State Governments.

Presently, the fiscal deficit of a State cannot exceed 3% of GSDP.

- **Centre's Permission on future Borrowings:** In recent times, particularly in the aftermath of CoVID-19 pandemic, frictions have risen over the Centre's attempt to perpetually control borrowings by the States. The recent 50-year interest free loan announced by the Centre for the states is a case in point. Any State which avails this facility will need to take Centre's permission for all future borrowing at least for the next 50 years.
- The Finance Commission is an impartial body to balance the fiscal needs of center and states. However, the **Terms of Reference and members of Finance Commission are fixed by Centre alone** not taking States on board.

2. LEGISLATIVE & INSTITUTIONAL INTERFERENCE

- **Examples of Increasing Centralization** - Executive has been blamed for centralizing the work from Prime Minister's Office, converting important bills into Money Bill to bypass Rajya Sabha, excessive use of Ordinance route for legislations, converting states into Union Territory, Merging of two Union Territories etc.
- **Ignoring Elected State Governments** - Centre is increasingly ignoring elected representatives of State governments. Such transgressions, often with the help of Governors, allows the central government to actively control administrative decision making which effectively lies in state government's domain. Governors have started performing active administrative roles instead of their signatory roles.
- **Interferences in Public Health** - Public Health is a state subject (State List - Entry 6) but Disaster Management Act was used to impose National Lockdown due to medical emergency. There was also lack of co-ordination with states on important decisions related to health facilities of state and also on vaccine policy.
- **All India Services:** All India Services act as a link between Centre and States. However, the recent issue of Centre Summoning the Chief Secretary of West Bengal and Chief Secretary resigning shows how All India Services also have become a contentious issue.

CONSTITUTION, POLITY AND GOVERNANCE

- States resorting to son of soil policies, reservation of jobs for residents of states.
- **Inter-state council** remains dysfunctional, institutions like NITI Aayog instituted to promote the feeling of Team India have not been very effective.
- States claim that **offices of CBI and Enforcement Directorate are often misused**. Law and Order and Police is in the domain of State List. Certain States have withdrawn general consent from CBI.

3. IMPACT ON SOCIO-CULTURAL FOUNDATION

- Increasing flaring of regional tensions
- States resorting to son of the soil policies, attempting to reserve jobs for the resident of the States.
- Racially motivated policies towards people from different regions of the country.
- Return of one-party dominance in the form of one party dominating both the central and most of States government. Earlier, coalition era ensured that States had more bargaining power of the center.

WAY FORWARD

1. Centre and States should adopt an attitude of cooperation, dialogue and consultation over contentious issues.
2. Recommendations of Punchhi Commission and Sarkaria Commission should be implemented.

CONCLUSION

Constitutional powers including fiscal relations are inherently biased towards the Centre. Vesting of all residuary powers with the Centre and giving over-ruling powers to the Centre on matters in the Concurrent list are the primary sources of this bias. What is needed is a federal coalition that looks beyond the legal-constitutional aspects of federalism to preserve the idea of a plural India in terms of both culture and politics.

BORROWING POWERS OF STATES

#BORROWING #FISCAL POWERS

PRIMARY SOURCE

THE HINDU

SECONDARY SOURCE

pib

CONTEXT

During the COVID-19 pandemic, Centre has incentivized the states to adopt reforms by enabling them to borrow more.

BORROWING POWERS OF THE CENTRE AND STATES

- **Borrowing Powers under the Constitution** - The Constitution of India confers the power of borrowing on both the Centre (**Article 292**) and the States (**Article 293**). However, the center and states are not placed on equal footing with respect to borrowing powers.
- **Borrowing Powers of the Centre:** The Central Government has unrestricted powers of borrowing in India and from abroad subject only to such limits as may be fixed by the Parliament by law (Article 292). The borrowing by Centre is based on the security of Consolidated Fund of India.
- **Borrowing Powers of State:** The borrowing powers of the States are limited (**Article 293**). Within India, a State may raise loans from the Government of India or float public loans. However, *a State cannot raise a public loan without the consent of the Government of India if there is still outstanding any part of a loan which has been advanced to it by the Government of India*. Since all the State Governments have been and continue to be indebted to the Central Government, the Central Government effectively controls the amount of public debt raised by State Governments.
- **State not to exceed borrowings limits (Article 293)** - This constitutional mechanism has been used by the Central Government to ensure that State Governments do not exceed annual borrowing limits that are set at the beginning of every year. Presently, these limits are set in accordance with a formula that ensures that **the fiscal deficit of no State exceeds 3% of Gross State Domestic Product**.

CAN STATES BORROW FROM OUTSIDE INDIA?

- *States have no power to raise loans outside India under Article 293.*
- States borrow from international institutions such as World Bank etc. In such cases, the central Government acts as a facilitator and enables the states to borrow from such agencies.

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- **Further, in 2017**, the Central Government enabled the financially sound states to borrow directly from external agencies subject to fulfillment of certain conditions.
- The guarantee for such loans is given by the State Government. The Government of India acts as counter-guarantor.

CENTRE INCREASED BORROWING LIMITS OF STATES DURING PANDEMIC BY 2% OF GSDP

- The finances of the States have been adversely affected due to pandemic. Accordingly, the Centre has decided to increase the borrowing limit of the States **from 3% to 5% for 2020-21.** This will give States extra resources of Rs. 4.28 lakh crores.
- **Half of this special dispensation i.e., 1 percent of GSDP** was linked to undertaking citizen centric reforms by the States.
- **The four citizen centric** areas for reforms identified by the Department of Expenditure were:
 1. **Implementation of One Nation One Ration Card System - (0.25 %)**
 2. **Ease of doing business reform - (0.25 %)**
 3. **Urban Local body/ utility reforms - (0.25 %)**
 4. **Power Sector reforms - (0.25 %)**

1. Additional Borrowings Permitted to States under One Nation One Ration Card Reform

- States completing One Nation One Ration Card system reform are eligible for additional borrowing of 0.25 percent of Gross State Domestic Product (GSDP).
- **Additional borrowing limit of 0.25 percent of the Gross State Domestic Product (GSDP)** is allowed to the States only on completion of both of the following actions:
 - Aadhar Seeding of all the ration cards and beneficiaries in the State.
 - Automation of all the Fair Price Shops in the State.

2. Additional Borrowings Permitted to States under Ease of Doing Business

- States completing Ease of Doing Business reforms are eligible for **additional borrowing of 0.25 percent of Gross State Domestic Product (GSDP).**

- *The conditional reforms to be done by States to be eligible for 0.25% further borrowing are:*
 - Completion of first assessment of 'District Level Business Reform Action Plan'.
 - Elimination of the requirements of renewal of registration certificates/approvals/licenses obtained by businesses under various Acts.
 - Implementation of computerized central random inspection system under the Acts wherein allocation of inspectors is done centrally.

3. Additional Borrowings Permitted to States under Urban Local Body Reform

- Reforms in ULBs and the urban utilities reforms are aimed at financial strengthening of ULBs in the States and to enable them to provide better public health and sanitation services to citizens. Economically rejuvenated ULBs will also be able to create good civic infrastructure.
- The set of reforms stipulated by the Department of Expenditure to achieve these objectives are:

- **The States will notify** – (a) Floor rates of property tax in ULBs which are in consonance with the prevailing circle rates (i.e., guideline rates for property transactions) and; Floor rates of user charges in respect of the provision of water-supply, drainage and sewerage which reflect current costs/past inflation.
- The State will put in place a system of periodic increase in floor rates of property tax/ user charges in line with price increases.

4. Additional Borrowings Permitted to States under Power Sector Reforms

- As a part of reform process, following conditions was to be met by States:
 - reduction in Aggregate Technical & Commercial (AT&C) losses or
 - achieved the targeted reduction in Average Cost of Supply and Average Revenue Realization (ACS-ARR) gap.

TULU LANGUAGE

#LANGUAGE #EIGHT SCHEDULE



CONTEXT

The Tulu speakers, mainly in Karnataka and Kerala, have been requesting the governments to give it official language status and include it in the eighth schedule to the Constitution. Tulu is considered as not only a language but also a culture and tradition with a history of its own.

In this backdrop, let us understand about Tulu Language and the benefits if it is included in the Eight Schedule.

PROTECTION OF LANGUAGE UNDER ARTICLE 29(1)

Article 29(1): Any section of the citizens residing in the territory of India or any part thereof having a distinct language, script or culture of its own shall have the right to conserve the same.

- Placing all deserving languages on an equal footing will promote social inclusion and national solidarity. Article 29 of the Constitution provides that a section of citizens having a distinct language, script or culture have the right to conserve the same.
- According to 2001 Census, India has 30 languages that are spoken by more than a million people each. Additionally, India has 122 languages that are spoken by at least 10,000 people each. It also has 1,599 languages, most of which are dialects.
- These are restricted to specific regions and many of them are on the verge of extinction. There is a need to accommodate number of languages in its cultural discourse and administrative apparatus by giving them recognition and protection under Article 29 of the Indian Constitution.
- There have been demands from various sections for inclusion of languages in the 8th Schedule. Constitution lays not clear criteria for inclusion of a language in the 8th Schedule. Since the evolution of dialects and languages is dynamic, influenced by socio-economic and political developments, it is difficult to fix any criterion for languages,

- In the past, **Pahwa Committee (1996)** and **Sitakant Mohapatra committee (2003)** have been constituted by Ministry of Home Affairs for evolving objective criteria for inclusion of more languages in the 8th Schedule.

ABOUT TULU LANGUAGE

- Tulu is a Dravidian language spoken mainly in two coastal districts Dakshina Kannada and Udupi of Karnataka and Kasaragod district of Kerala. The cities of Mangaluru, Udupi and Kasaragod are the epicenters of Tulu culture.
- As per the 2011 Census report, there are about 18 lakhs Tulu-speaking people in India. Some scholars suggest Tulu is among the earliest Dravidian languages with a history of 2000 years.
- **The earliest piece of literature, *Tulu Mahabharata* is from the 15th century written in Tulu script.**
- **Madhvacharya's eight matts** established in Udupi in the 13th century were centers of Tulu literature during his lifetime and thereafter. However, very little of this has survived.
- Scholars believe that the language is well developed and was one of the earliest off-shoots of proto-South Dravidian language, with many dialectal variations.

TULU LANGUAGE IN SCHOOL OF KARNATAKA

- Karnataka government introduced Tulu as a language in schools a few years ago. According to the state education department, in the year 2020, children from Dakshina Kannada and Udupi districts wrote Tulu as the third optional language in Class 10 examination.
- There are demands for inclusion of Tulu language education as laid down by New Education Policy.

GROUND FOR DEMAND OF INCLUSION OF TULU LANGUAGE IN 8TH SCHEDULE

- Tulu has a rich oral literature tradition with folk-song forms like paddana, and traditional folk theatre yakshagana.
- Kasaragod district is called 'Sapta bhasha Samgama Bhumi (the confluence of seven languages)', and Tulu is among the seven.

CONSTITUTION, POLITY AND GOVERNANCE

- The Tulu-speaking people are larger in number than speakers of Manipuri and Sanskrit, which have the Eighth Schedule status.
- There is also a statehood for Tulunadu demand in the regions where Tulu is spoken.

CHALLENGES FOR TULU LANGUAGE TO BE INCLUDED IN THE 8TH SCHEDULE

- *The Tulu language has lost its prominence as a major language and its script is considered to be near extinct.*
- *There was also some confusion regarding the script of Tulu language, which closely resembles Malayalam.*
- *Most of the literature has been lost because of difficulties in preserving palm leaf scrolls, the earliest literature available is from the 15th century.*
- *Lack of serious literature in Tulu language*
- *Research in Tulu language and script has been sorely lacking.*
- Will lead to demand for inclusion of more languages in the 8th schedule of the Constitution.
- Tulu has not even been conferred State language status in Kerala.

BENEFITS OF INCLUDING TULU LANGUAGE IN 8TH SCHEDULE

- If included in the Eighth Schedule, Tulu would get recognition from the Sahitya Academy. Tulu books would be translated into other recognized Indian languages.
- Members of Parliament and MLAs could speak in Tulu in Parliament and State Assemblies, respectively.
- Candidates could write all-India competitive examinations like the Civil Services exam in Tulu.

VIII SCHEDULE - ARTICLES 344(1) AND 351

LANGUAGES

- The Constitutional provisions relating to the Eighth Schedule occur in **Article 344(1) and 351 of the Indian Constitution.**
- **Article 344(1)** - *The President by order to constitute a Commission after every 10 years representing the different languages specified in the Eighth Schedule. The Commission shall recommend to the President as to:*

Progressive use of Hindi Language for official purposes of the Union, restrictions on the use of English for official purposes of the Union, form of numerals to be used by Union etc. The Commission while making its recommendations should give due regard to industrial, scientific and cultural advancement of India, and the just claims and interests of persons belonging to the non-Hindi speaking areas in regard to public services.

- **Article 351** - *It shall be the duty of the Union to promote the spread of the Hindi language to develop it so that it may serve as a medium of expression for all the elements of the composite culture of India and to secure its enrichment by assimilating the forms, style and expressions used in Hindustani and in the other languages of India specified in the Eighth Schedule, and by drawing, wherever necessary or desirable, for its vocabulary, primarily on Sanskrit and secondarily on other languages.*
- Constitution enjoins that state would promote basic education in mother tongue.

DEMAND FOR MORE LANGUAGES TO BE INCLUDED IN 8TH SCHEDULE

- However, the Union must provide a way to include more languages in the VIII Schedule or provide certain alternative whereby these different languages get same protection which is being received by the 22 mandated languages.
- This is because many unscheduled languages have a sizeable number of speakers: Bhili/Bhilodi has more than 1 million speakers; Gondi has 29 lakh speakers; Garo has 11 lakh speakers; Ho has 14 lakhs; Khandesi, 18 lakhs etc.

INDIA NEEDS TO LEARN FROM THE YUELU PROCLAMATION

- **The Yuelu Proclamation of UNESCO** highlights that *protection and promotion of linguistic diversity helps to*
 - *improve social inclusion and partnerships*
 - *reduce the gender and social inequality between different native speakers*
 - *guarantee the rights for native speakers of endangered, minority, indigenous languages, as well as non-official languages and dialects to receive education*

- promote cultural diversity, endangered language protection, and the protection of intangible cultural heritage.

So, Tulu, along with other deserving languages, should be included in the Eighth Schedule of the Constitution in order to substantially materialize the promise of equality of status and opportunity mentioned in the Preamble.

JUDICIARY

LIVE-STREAMING OF COURT PROCEEDINGS

#JUDICIARY #LIVE STREAM

PRIMARY SOURCE

THE HINDU

SECONDARY SOURCE

pib

IN NEWS

The E-Committee of the Supreme Court has published the Draft Rules on Live-Streaming and Recording of Court Proceedings.

NEED FOR LIVE-STREAMING

- Supreme Court while agreeing with the maxim 'sunlight is the best disinfectant' agreed for live streaming of court proceedings in the **Swapnil Tripathi vs Supreme Court of India** (2018) and allowed for live-streaming of court proceedings.
- CrPC and CPC legally mandate that courts in India need to be open. Thus, courts in India are open to members of public, however due to logistical challenges and infrastructural limitations, they are denied the opportunity. With the help of technology people will be able to attend the courts.

BENEFITS OF LIVE-STREAMING ARE

- Upholds the legitimacy and public confidence in judiciary
- Increases the effectiveness of courts
- Transparency will act as a check against possible judicial corruption and arbitrariness
- This will create awareness of law among citizens
- Right to know and receive information flows from Article 21

- Litigants will be saved of the need to travel to courts on regular basis to witness hearings.

ABOUT DRAFT RULES FOR LIVE STREAM

- The Rules have been framed with the object to "imbue greater transparency, inclusivity and foster access to justice".
- Draft Rules propose a 10-minute delay in transmission and exclusion of communally sensitive cases and matters that involve sexual offences and gender violence against women.
- The Rules are part of the National Policy and Action Plan for implementation of Information and Communication Technology (ICT) in the judiciary.
- The Rules would cover live-streaming and recording of proceedings in High Courts, lower courts and tribunals over which the High Courts have supervisory jurisdiction. (Article 227).
- **Article 227 - Power of superintendence over all courts by the High Court** - *Every High Court shall have superintendence over all courts and tribunals throughout the territories in relation to which it exercises jurisdiction.*
- Parties to the case can raise objection to live-streaming. However, the decision to not live-stream will be that of the bench. If the live-streaming is to be stopped reasons for the same will be given.

THE FOLLOWING WILL BE EXCLUDED FROM LIVE-STREAMING

1. Matrimonial matters, including transfer petitions
2. Cases concerning sexual offences
3. Cases concerning violence against women.
4. Matters involving the sexual harassment of children and juvenile justice.

5. Cases, which in the opinion of the Bench, may provoke enmity amongst communities likely to result in a breach of law and order.
6. Recording of evidence, including cross-examination.
7. Privileged communications between the parties and their advocates; cases where a claim of privilege is accepted by the Court; and non-public discussions between advocates.
8. Any other matter in which a specific direction is issued by the Bench or the Chief Justice.

E-COMMITTEE OF SUPREME COURT

- E-Committee of the Supreme Court is the governing body charged with overseeing the e-courts project.
- e-Courts is a pan India project monitored and funded by the Department of Justice, Ministry of Law and Justice, Government of India.
- Its vision is to transform the judicial system of the country by ICT enablement of courts.
- Chief Justice of India is the Patron-in-Chief of e-Committee while a judge of the Supreme Court is the Chairperson of e-Committee.

E-COURTS PROJECT

#E-GOVERNANCE #JUDICIARY



IN NEWS

The e-Committee of the Supreme Court of India recently released its draft vision document for Phase III of the e-Courts project.

1. BRIEF UNDERSTANDING OF PHASE I & PHASE II OF E-COURTS PROJECT.

e-COURTS INTEGRATED MISSION MODE PROJECT (PHASE-I)

- **The e-Courts Integrated Mission Mode Project** is one of the national e-Governance projects being implemented in High Courts and district/subordinate Courts of the Country.
- The project was conceptualized on the basis of the **“National Policy and Action Plan for Implementation**

of Information and Communication Technology in the Indian Judiciary-2005” by the e-Committee of the Supreme Court of India.

- **Objective of the e-Courts project** is to provide designated services to litigants, lawyers and the judiciary by universal computerization of district and subordinate courts in the country and enhancement of ICT enablement of the justice system.

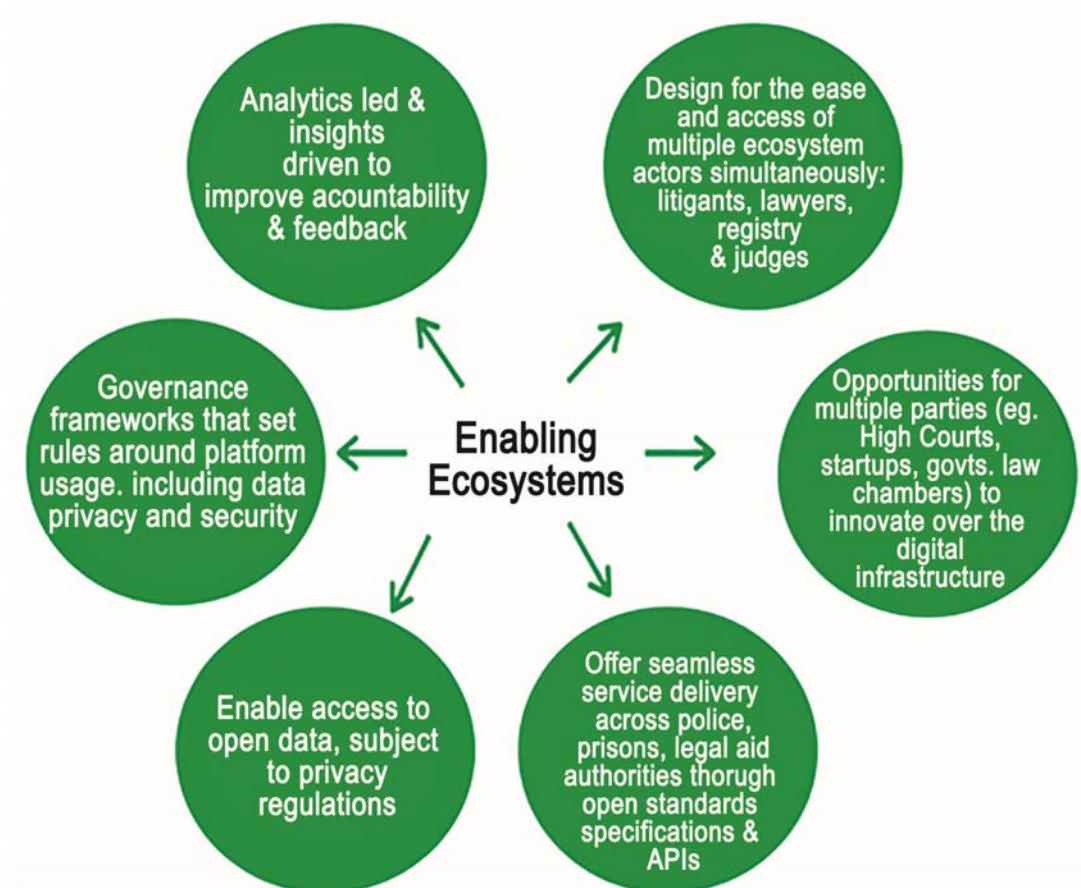
e-COURTS PHASE-II

- **Phase II** envisaged enhanced ICT enablement of court through universal computerization, use of cloud computing, digitization of case records and enhanced availability of e-Services through e-filing, e-payment gateways and mobile payments.
- The proposed initiatives are:
 - Enhancement of computer infrastructure in courts
 - Strengthening the system of serving notices and summons.
- Integrating District Legal Service Authorities and Taluka Legal Service Committees with rest of the Court complex ICT infrastructure.
- Providing a full-fledged Computer Lab to State Judicial Academies (SJA).
- Development of Central Filing Centers with sufficient infrastructure.
- Video-conferencing of all court rooms with prisons.
- Systems for timely and regular updating of data by laying down protocols for updating and improving connectivity to expedite data updating to National Judicial Data Grid by all courts.
- Facilitating court and case management through Management Information System (MIS).
- **Court room management automation**
- **Judicial Knowledge Management System** – provides for facilities such as Integrated Library Management Software for optimum use of resources available in various court libraries and as Digital Library accessible to beneficiaries online.

2. IMPORTANT HIGHLIGHTS OF PHASE III OF THE ECOURTS PROJECT

CONSTITUTION, POLITY AND GOVERNANCE

- Phase III of the e-Courts project envisions a judicial system that is more accessible, efficient and equitable for every individual who seeks justice, or is part of the delivery of justice, in India.
- Phase III of the project seeks to adopt an 'ECOSYSTEM APPROACH' where systems interact with each other.



- It suggests a "seamless exchange of information" between various branches of the State, such as between the judiciary, the police and the prison systems through the Interoperable Criminal Justice System (ICJS). ICJS functions under Ministry of Home Affairs (MHA).
- Inter-operable Criminal Justice System (ICJS)** is a common platform for information exchange and analytics of all the pillars of the criminal justice system comprising of Police, Forensics, Prosecution, Courts & Prisons.
- ICJS is invested under the CCTNS project of the MHA**, the ICJS enables a nationwide search on police, prisons & courts databases across all States/ UTs in the country.

Phase III will enable the vision and a shift to an 'ecosystem approach' by:

- SIMPLIFYING PROCEDURE:** Digital technologies will enable easier steps to file cases, find documents, and court management.
- CREATING A FOUNDATIONAL DIGITAL INFRASTRUCTURE** - to enable interactions and exchange of data, co-creation of services by different ecosystem actors and improve the efficiency and intelligence of the system
- PUTTING IN PLACE A NEW INSTITUTIONAL AND GOVERNANCE FRAMEWORK** - Phase III aims to set up a Digital Courts Technology Office in the short term (which will evolve to a National Judicial Technology Council in the longer term) that will focus on designing the Digital Infrastructure

KEY BUILDING BLOCKS OF PHASE III

3. CHALLENGES

- 1. ICJS will likely exacerbate existing caste and class inequalities** that characterize the police and prison system because data creation happens at local police stations.
- 2. MISUTILISATION OF DATA** - Data collected through ICJS will be shared and collated through the e-Courts project will be housed within the Home Ministry under the ICJS. Thus, there are chances of profiling of communities and castes or other misutilization of data collected.
- 3. CREATING 360 DEGREE PROFILE** - There has been a dangerous trend towards creating a 360-degree profile of each person by integrating all of their interactions with government agencies into a unified database. This can compromise person's privacy and subjection to political ends, targeting corporates for government benefits etc.
- 4. INTEGRATION OF DATA COLLECTED WITH OTHER AGENCIES INCLUDING POLICE, PRISON & COURTS** - This has the potential to violate data privacy rights and also rights to privacy (K.S. Puttaswamy Judgment).
- 5. INCREASED STATE SPONSORED SURVEILLANCE & PROFILING** - Above mentioned activities will increase chances of surveillance by various State authorities. Home Ministry get access to court data which is unrelated to criminal justice is not explainable. This process serves no purpose other than profiling and surveillance.

4. WAY FORWARD

The objectives of Phase III were to streamline judicial processes, reduce pendency and help the litigants through integration of technology for justice delivery. This objective can be achieved within the framework of our fundamental rights and for this the e-Courts must move towards localization of data instead of data centralization.

RECUSAL OF JUDGE

#JUDICIARY #RECUSAL

PRIMARY
SOURCE

The Indian
EXPRESS

SECONDARY
SOURCE

THE HINDU

CONTEXT

Justice Indira Banerjee and Justice Aniruddha Bose of Supreme Court have recused themselves from hearing cases relating to West Bengal.

Recusal of Judge in a case refers to their withdrawal from a case or refusal to hear a case or deliver a verdict. The practice stems from the cardinal principle of due process of law that nobody can be a judge in her own case. Any interest or conflict of interest would be a ground to withdraw from a case since a judge has a duty to act fair.

THE ASPECT OF NEUTRALITY IN RECUSAL

- According to Oxford Dictionary, the term "recusal" means to excuse a judge, lawyer, or member of a jury from a case in court because they may not be able to act fairly.
- Public confidence in the legal system is maintained when a Judge has no interest in the parties, advocates or subject-matter of litigation. One essential component of equal justice under the law is a neutral and detached Judge to preside over the court proceeding.
- Disqualifying or removing oneself as a Judge over a particular proceeding because of one's conflict of interest is based on the maxim that Judges are charged with a duty of impartiality in administering justice. The maxim of not only must justice be done; it must also be seen to be done.
- In general, it is exercised by the judges voluntarily in order to avoid situations of 'conflict of interests. However, it cannot be forced upon a judge as violating the judicial impartiality as per the common law system which India follows.

SUPREME COURT GUIDELINE

- In the **NJAC judgment**, the Supreme Court provided for guidelines to be followed where the judge may be required to step down:
 - **In cases of presumed bias**, where the judge has a pecuniary interest in the outcome of a case.
 - **In cases of apparent bias**, where a reasonable, fair-minded observer would believe there is a real possibility that the judge is biased.

CONSTITUTION, POLITY AND GOVERNANCE

BENEFITS OF RECUSAL

- Avoids conflict of Interest for the Judge
- Strengthens Neutrality in Judgment
- Strengthens public trust in judiciary
- Impartial Judiciary also strengthens roots of democracy.

PROBLEMS

- While voluntary recusal is followed in some cases by the judges themselves, demanding recusal is seen a dangerous trend due to the following:
 - Questions the integrity of the judges

- Sets a dangerous precedent for future cases where undue pressure demanding recusal can be put forth based on vested interests.
- May affect judicial impartiality.
- Increased Political Pressure on Judge to recuse from a case based on his previous records.
- Damages the integrity of Judiciary.

WAY FORWARD

- Recusal from a case must be the sole decision of the Judge and he/she cannot be forced to recuse from a case based on pressure from vested groups.
- Demand for recusal should be rejected and recusal decision should be left best to the judge in question.

ELECTIONS

WB CM FILES ELECTION PETITION IN HC

#ELECTIONS #ELECTION PETITION

PRIMARY SOURCE

The Indian EXPRESS

SECONDARY SOURCE

RPA 1951

IN NEWS

West Bengal Chief Minister has approached the Calcutta High Court by way of an election petition challenging the 2021 Assembly elections results from the Nandigram constituency. In this backdrop, let us understand about Election Petition.

ABOUT ELECTION PETITION

- An Election petition is a process to inquire into the validity of the election results of different kinds of elections conducted by the Election Commission.
- It is a means under law to challenge the election of a candidate in a Parliamentary, Assembly or local election. Election petitions are filed in the High Court of the particular state in which the election was conducted. Therefore, **only the High Courts have the original jurisdiction on deciding on election petitions.**

- In India, **Representation of People Act, 1951** provides for the manner in which election petition can be filed.

FILING OF ELECTION PETITION

- **Filing of Election Petition** - An election petition can be filed by any candidate, or an **elector** relating to the election personally, to the authorized officer of the High Court.

Note: An elector is a person whose name is entered in the electoral roll of that constituency.

- **Time Period** - An election petition calling in question an election shall be filed within the time period of forty-five days from the date of declaration of results.
- **Particulars** - An election petition must consist of concise statement of the material facts stating the claim of the petitioner, particulars of **corrupt practice** alleged by the petitioner including date and place of commission of such offence.

CORRUPT PRACTICE

- **Section 123 of RPA, 1951 describes the following as Corrupt Practice:**
 - Bribery
 - Undue influence

- Direct or indirect interference or attempt to interfere on the part of the candidate or his agent or by any other person with the consent of the candidate.
- Appeal by a candidate on the ground of his religion, race, caste, community or language.
- Use of, or **appeal to religious symbols** or the use of, or **appeal to national symbols**, such as the national flag or the national emblem to enhance the prospects of the election of that candidate or to affect the election prospect of any rival candidate.
- The promotion of, or **attempt to promote, feelings of enmity or hatred** between different classes of the citizens of India on grounds of religion, race, caste, community, or language, by a candidate or his agent or any other person.
- The propagation of the practice or the commission of sati or its glorification for election prospects.
- Publication of any **false statements** about rival candidates – including their personal character and conduct.
- Getting any assistance from any gazetted officer to enhance election prospects.

Punishment: Any person who in connection with an election under this Act promotes or attempts to promote on grounds of religion, race, caste, community or language, feelings of enmity or hatred, between different classes of the citizens of India shall be **punishable with imprisonment for a term which may extend to three years or with fine or with both.**

GROUND OFS OF DECLARING ELECTION TO BE VOID

- Candidate Not Qualified to contest elections as per law.
- Any Corrupt Practice committed by the candidate or his election agent or by any other person with the consent of the candidate.
- When nomination of candidate is improperly rejected by the Returning Officer.
- If the result of the election has been materially affected –
 - By the improper acceptance or any nomination of candidate
 - By any corrupt practice committed in the interests of the returned candidate by an agent other than his election agent.
 - By the improper reception, refusal or rejection of any vote or the reception of any vote which is void.
 - by any non-compliance with the provisions of the Constitution or of this Act or of any rules or orders made under this Act.

ISSUES OF ELECTION PETITION

1. Current procedure of filing election petitions differs amongst various High Courts. Presently, there is no clarity if the petition is to be filed before the principal seat of High Court or the bench within whose exclusive jurisdiction the particular contested election was conducted.
2. Inordinate delay in adjudication of election petition. Sometimes even the full term of house expires, thus rendering the election petition infructuous.
3. If a petitioner claims a further declaration that he himself or any other candidate has been duly elected, all contesting candidates other than the petitioner are made parties to petition. However, to implead candidates who have lost their security deposits having no chance of being declared duly elected, constitutes a waste of time and resources of both the petition and these candidates.

SUGGESTIONS BY LAW COMMISSION IN ITS REPORT ON ELECTORAL REFORMS ON ELECTORAL REFORMS:

1. All high courts to form a dedicated election bench before whom election petitions are to be filed.
2. Day to day trial of election petitions for early conclusion with trial to be concluded within 6 months.
3. Election Commission to compile data on election petitions and publish it in its annual report.
4. In case where the petitioner makes an additional declaration that he himself or any candidate has been duly elected, no contesting candidates who have lost their security deposit shall be joined by the petitioner as respondents to the petition.

CONSTITUTION, POLITY AND GOVERNANCE

A robust well-functioning system of election petition is necessary for democratic credentials. Steps need to be taken for expeditious resolution of election petitions.

DELIMITATION EXERCISE IN J&K

#DELIMITATION #JAMMU&KASHMIR

PRIMARY SOURCE

The Indian EXPRESS

SECONDARY SOURCE

Outlook

SECONDARY SOURCE

ThePrint

IN NEWS

Delimitation exercise has started in the UT of J&K, following which elections are planned to be held.

PURPOSE OF DELIMITATION

- Delimitation is commonly used in the context of **drawing boundaries for Assembly and Lok Sabha Constituencies based. The exercise of delimitation is done to ensure that roughly the value of vote of each citizen remains equal. Thus, after every census an exercise of delimitation is to be done to adjust constituencies for change in population.**
- **Article 82 of Indian Constitution provides for delimitation and it says** *Upon the completion of each census, the allocation of seats in the House of the people to the States and the division of each State into territorial constituencies shall be readjusted by such authority and in such manner as Parliament may by law determine.*
- Once the Act comes into force, the Central Government constitutes a Delimitation Commission.
- The present **delimitation of constituencies** has been done on the basis of **2001 census** and has been in use since the 2009 Lok Sabha Elections.
- According to a 2002 Constitution Amendment, there will be no further delimitation of constituencies till the first census after 2026.

ISSUES WITH THE DELIMITATION:

1. **Threat of Gerrymandering:** Constituencies can be redesigned to ensure a particular party benefits.

2. Delimitation acts as a penalty for communities who have controlled population control measures. Such communities political representation may reduce on account of delimitation.
3. Due to increase in population, an increasing number of people are being represented in a single constituency.

ABOUT DELIMITATION COMMISSION

- **In the Past - Four Delimitation Commission** have been constituted since independence:
 - **1952** - under Delimitation Commission Act, 1952
 - **1963** - under Delimitation Commission Act, 1962
 - **1973** - under Delimitation Commission Act, 1972
 - **2002** - under Delimitation Commission Act, 2002
- Delimitation commission is established by an act of Parliament.
- **Orders of Delimitation Commission cannot be called in question before any Court of law.**
- **The copies of its orders are laid before the House of People and the State Legislative Assembly concerned, but no modifications are permissible therein by them.**

CONSTITUTION OF DELIMITATION COMMISSION - AS PER DELIMITATION ACT, 2002

- The Central Government shall constitute a Commission to be called the Delimitation Commission which shall consist of three members as follows:—
 - (a) **one member, who shall be a person who is or has been a Judge of the Supreme Court**, to be appointed by the Central Government who shall be the Chairperson of the Commission;
 - (b) **the Chief Election Commissioner or an Election Commissioner nominated by the Chief Election Commissioner**, ex officio;
 - (c) **the State Election Commissioner of concerned State**, ex officio.
- The Commission shall have all the powers of a civil court under the Code of Civil Procedure.

EARLIER ATTEMPTS OF DELIMITATION IN J&K

- Delimitation in J&K has not been in alignment with rest of because of the special status accorded to it under Article 370.
- The last delimitation exercise conducted in J&K was under **President's Rule in 1995 by the retired Justice K.K. Gupta's Commission**.
- The next exercise was due in 2005, but in 2002, but government in J&K froze delimitation until 2026 by amending the Jammu & Kashmir Representation of the People Act, 1957, and Section 47(3) of the Constitution of Jammu & Kashmir.

DELIMITATION FOR JAMMU & KASHMIR IN PRESENT TIMES

- **Loosing Special Status by Abrogation of Article 370** -In 2019, Jammu and Kashmir lost its special status and became a Union Territory.
- **The Jammu and Kashmir Reorganisation Act, 2019** provides for delimiting Parliamentary and Assembly Constituencies of Jammu & Kashmir. The Reorganisation Act has mentioned that a Delimitation Commission shall be set up under **Section 3 of Delimitation Act of 2002**. The Reorganisation Act also specifies that delimitation will be based on the **2011 Census**.
- A delimitation commission was constituted and asked to carve out Assembly and Parliament seats for the Union Territory

SOCIAL JUSTICE

MARATHA COMMUNITY BROUGHT UNDER EWS CATEGORY

#RIGHTS ISSUES #RESERVATION

PRIMARY
SOURCE

The Indian
EXPRESS

SECONDARY
SOURCE

THE HINDU

IN NEWS

The Maharashtra government has extended benefits under the Economically Weaker Section (EWS) quota to the Maratha community.

WHY DID THE MAHARASHTRA GOVERNMENT INTRODUCED EWS QUOTA FOR SEBC?

- This decision was taken after the Supreme Court struck down the Maharashtra State Reservation for Socially and Educationally Backward Classes (SEBC) Act, 2018 which extended reservation to the Maratha community in public education and employment.
- Supreme Court struck down Maratha reservation in public education and employment as total reservation was in excess of the ceiling limit of 50% fixed by the Supreme Court.

- As per the government resolution, the Maratha community members can now avail benefits under 10% EWS reservation in government jobs and education.
- 10% Reservation to members of economically weaker sections was introduced through Constitution 103rd Amendment.

CONSTITUTION (ONE HUNDRED AND THIRD AMENDMENT) ACT, 2019

- The reservation of 10% will be over and above the existing 50 per cent reservation enjoyed by the members of Scheduled Castes, Scheduled Tribes and the Other Backward Classes. This will take the total reservation to 60 per cent.
- The reservations intends to include such members who do not avail the benefits of reservation, This includes members in the general category as well as members of the minority communities including Muslims, Sikhs, Buddhists, Christian and other communities who do not enjoy any kind of reservation.

Note: "Economically Weaker Sections" shall be notified by the State from time to time on the basis of

family income and other indicators of economic disadvantage.'

ENSURING FAIR OPPORTUNITY

- **Article 46 of DPSP** mentions that the State shall promote with special care the educational and economic interests of the weaker sections of the people, and, in particular, of the Scheduled Castes and the Scheduled Tribes. But, economically weaker sections of citizens were not eligible for the benefit of reservation.
- Thus, the amendment aims to ensure that economically weaker sections of citizens get a fair chance of receiving higher education and participation in employment in the services of the State. This will also fulfill the mandate *of Article 46*.

AMENDMENT IN ARTICLE 15

- The Act inserts a new provision – Article 15(6), whereby:
 - (a) State can make any special provision for the advancement of any **“economically weaker sections of citizens”**
 - (b) State can make any special provision for the advancement of any “economically weaker sections of citizens” relate to their **admission to educational institutions** including private educational institutions, whether aided or unaided by the State.
 - (c) However, such reservation **will not apply to minority educational institutions**.
 - (d) Reservation to such educational institutions would be in **addition** to the existing reservations and **subject to a maximum of 10 per cent**.

AMENDMENT IN ARTICLE 16

The Act amends Article 16 by inserting a new provision **Article 16(6)** where the state may make any provision for the reservation of appointments or posts in favour of any economically weaker sections of citizens in addition to the existing reservation and subject to a maximum of ten per cent.

LGBTQIA+

#RIGHTS ISSUES #SOCIAL JUSTICE

PRIMARY SOURCE THE HINDU SECONDARY SOURCE The Indian EXPRESS

IN NEWS

Madras High Court directed the Union Ministry of Social Justice and Empowerment to enlist non-governmental organisations (NGOs) that could provide counseling, monetary support, legal assistance and protection to lesbian, gay, bisexual, transgender, queer, intersex, asexual and such others' (LGBTQIA+) community until a law could be enacted to protect them.

DIRECTIONS OF MADRAS HIGH COURT

- **Ministry of Social Justice and Empowerment** to upload the details of the NGOs working for LGBTQIA+ community on its website.
- Any person from LGBTQIA+ community who has faced an issue **can approach any of the enlisted NGOs** for safeguarding their rights.
- NGOs should coordinate with the police with respect to offences committed against LGBTQIA+ community and provide need-based relief.
- NGOs, in consultation with the Ministry, should **maintain confidential records** of such persons who approached them and data be submitted to the Ministry bi-annually.
- **Changes Needed in Present Mechanism** to the existing government short stay homes, anganwadi shelters, Garima Greh (shelter home for transgender persons) for providing accommodation, food, medical care and recreational facilities to those from the community in need of such assistance.
- Carrying out **sensitization programs** for stakeholders, including police and prison authorities, judges, physical and mental health professionals, educational institutions, health workers, public and private workplaces.

PROBLEM FACED BY LGBTQIA+ COMMUNITY

- Subject to **intolerance, discrimination, harassment, and the threat of violence** due to their sexual orientation

CONSTITUTION, POLITY AND GOVERNANCE

- **This is due to homophobia** (the fear or hatred of homosexuality). Some of the factors that may reinforce homophobia on a larger scale are moral, religious, and political beliefs of a dominant group.
- **Social Neglect** - Lesbian, gay, bisexual, transgender (LGBT) people face tremendous difficulties growing up in a society where heterosexuality is often presented as the only acceptable orientation and homosexuality is regarded as deviant. They continue to face discrimination and exclusion across the world in all spheres of life.
- **Problems faced in the labour market** - A majority of LGBT people hide their sexual orientation out of fear of losing their job. Particularly vulnerable are young LGBT people who experience estrangement from family and friendship networks, harassment at school and invisibility, which can lead in some cases to underachievement at school, school drop-out, mental ill-health and homelessness.
- **Denial of Equal Access** - Discrimination not only denies LGBT people equal access to key social goods, such as employment, health care, education and housing, but it also marginalizes them in society and makes them one of the vulnerable groups who are at risk of becoming socially excluded.

IMPACT OF EXCLUSION & DISCRIMINATION

- Dropping out of school earlier
- Leaving Home and Family
- Unable to find regular jobs, have less options than others.
- Being ignored in the community and isolated
- Unable to access various services and unaware of their rights
- Forced to move to other areas and other countries
- Lack of family and social support
- Higher prevalence of suicide
- Decide to follow their parents to marry opposite sex and then divorce.
- Victims of hate crime
- Subject to institutional abuse in hospitals etc.

SUPREME COURT ON SECTION 377 IPC

- Five Judge Constitution Bench of Supreme Court in the in **Navtej Singh Johar case** has decriminalized sexual relations between consenting homosexual adults, heterosexuals, lesbians and other sexual minorities making section 377 of IPC not applicable to them.
- However, Section 377 continues to apply to BESTIALITY AND NON-CONSENSUAL SEXUAL ACTS.
- This judgment has resulted in striking down of the Victorian era law and has effectively pushed diversity and pluralism back into the centre stage of India's public discourse.

SECTION 377 OF IPC

Homosexuality was criminalised in India under Section 377 of the Indian Penal Code, a relic enacted by British rulers in 1861, which had described same sex acts as "carnal intercourse against the order of nature" and allowed for jail terms of up to 10 years.

IMPORTANT HIGHLIGHTS OF THE 2018 SC JUDGMENT

INDIAN CONSTITUTION IN CHANGING TIMES

- The rights that are guaranteed as Fundamental Rights under our Constitution are dynamic. Rights of 'liberty' and 'equality' are timeless and changing times illustrate and illuminate the meaning of the expressions used in the Constitution as it is a living and dynamic document, which cannot be framed in time.
- Constitution fosters and strengthens the spirit of equality and envisions a society where every person enjoys equal rights including LGBTIQ community which enables them to grow and realize their potential as an individual.

CONSTITUTIONAL MORALITY VS SOCIAL MORALITY

- The concept of constitutional morality must be in consonance with the constitutional rights of the citizens.
- In situations of transgression or dereliction in the sphere of fundamental rights, which are also the basic human rights, howsoever small part of the society they may be, then with the aid of judicial engagement

CONSTITUTION, POLITY AND GOVERNANCE

and creativity constitutional courts have ensured that constitutional morality prevails over social morality.

- In the garb of social morality, the members of the LGBT community must not be outlawed or given a step-motherly treatment by the society.
- Constitution allows state to take affirmative action to eradicate the systematic discrimination against the backward sections of the society and the expulsion and censure of the vulnerable communities including the LGBT.
- A country or a society which embraces constitutional morality has at its core the well-founded idea of inclusiveness.

HUMAN DIGNITY

- Dignity is that component of one's being without which sustenance of his/her being to the is inconceivable. Dignity of all is a sacrosanct human right and sans dignity, human life loses its substantial meaning.
- The fundamental idea of dignity is regarded as an inseparable facet of human personality. Dignity has been duly recognized as an important aspect of the right to life under Article 21 of the Constitution.
- In the international sphere, the right to live with dignity had been identified as a human right way back in 1948 with the introduction of the Universal Declaration of Human Rights. The first article of UDHR declared that '**All human beings are born free and equal in dignity and rights**'.
- Dignity and liberty are a twin concept. A society that cares for both, smoothenes the atmosphere by promoting peaceful co-existence and thereby makes the administration of justice easy.

SECTION 377 OF IPC & PRIVACY

- SC observed that while testing the constitutional validity of section 377 of IPC, the idea of privacy as part of fundamental rights of life and personal liberty must be understood.
- Autonomy is individualistic and it is expressive of self-determination and such self-determination includes sexual orientation and declaration of sexual identity.

Such an orientation or choice that reflects an individual's autonomy is innate to him/her.

- SC later in Puttuswamy case held that sexual orientation is also a facet of a person's privacy and that the right to privacy is a fundamental right under the Constitution of India.
- **Universal Declaration of Human Rights and the International Covenant of Civil and Political Rights** highlight the right to privacy of all individual explicitly.
- **Right to privacy** is implicit in the right to life and liberty guaranteed to the citizens of this country by **Article 21** and it is a "right to be let alone".
- Thus, **LGBT community has a right to realisation of its basic right to companionship**, so long as such a companionship is consensual, free from the vice of deceit, force, coercion and does not result in violation of the fundamental rights of others.
- The Court held that even if the percentage of LGBT community is less, their right to privacy must be protected. Thus, the **Court found section 377 of IPC violative of their fundamental rights including that of privacy**.
- **Section 377 amounts to an unreasonable restriction**, for public decency and morality cannot be amplified beyond a rational or logical limit and cannot be accepted as reasonable grounds for curbing the fundamental rights of freedom of expression and choice of the LGBT community.
- Consensual carnal intercourse among adults, be it homosexual or heterosexual, in private space, does not in any way harm the public decency or morality.
- The Court distinguished between consensual and non-consensual sexual activity between individuals. The Court held that so far as **section 377** penalised any **consensual sexual activity** between two adults, be it homosexuals (man and a man), heterosexuals (man and a woman) and lesbians (woman and a woman), cannot be regarded as constitutional.
- However, the Court held that part of **section 377 as constitutional and valid** which penalises for the act of bestiality and where any sexual activity between individuals has resulted **without due consent**.

DECRIMINALISE SUICIDE IN INDIA

#RIGHTS ISSUES #SUICIDE #EUTHANASIA

PRIMARY
SOURCE

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pib

CONTEXT

Mental Health Care Act, 2017 (MHA) provides for presumption of severe stress on the person attempting suicide and asks the government to provide care, treatment and rehabilitation to such person having severe stress. MHA also states that such person attempting suicide shall not be tried under Section 309 of Indian Penal Code (IPC) which provides for punishment upto one year along with fine.

This Article stresses on the need and importance to decriminalize "attempt to suicide" by repealing or striking down Section 309 of Indian Penal Code. Let us understand the dichotomy along with an understanding of suicide, attempt to suicide, euthanasia and right to die as part of Article 21 of the Indian Constitution.

INDIAN PENAL CODE

Section 309 - Attempt to commit suicide

Criminalizes attempts to suicide. Person to be punished with simple imprisonment for a term which may extend to one year or with fine, or with both.

THE MENTAL HEALTHCARE ACT, 2017

Section 115 - Presumption of severe stress in case of attempt to commit suicide

(1) Notwithstanding anything contained in section 309 of the Indian Penal Code any person who attempts to commit suicide shall be presumed, unless proved otherwise, to have severe stress and shall not be tried and punished under the said Code.

(2) The appropriate Government shall have a duty to provide care, treatment and rehabilitation to a person, having severe stress and who attempted to commit suicide, to reduce the risk of recurrence of attempt to commit suicide.

PROBLEM WITH THE DICHOTOMY

- The Mental Healthcare Act applies only to those suffering from mental illness or severe stress. So, there is presumption of severe stress in case of an attempt to die by suicide.
- However, there can be cases of attempt to suicide where the aspect of "severe stress" is missing or cannot be proved. In such circumstances, *attempt to suicide can be treated as a criminal offence desirable for punishment under Section 309 of IPC.*
- Thus, this dichotomy needs a reformative stance which can be achieved by repealing Section 309 of the Indian Penal Code or striking it down.
- We can follow suit of Britain where suicide was decriminalized in 1961 through **the Suicide Act**. However, the legislation ensures criminal liability for complicity in another's suicide.

LAW COMMISSION'S REPORT ON HUMANIZATION AND DECRIMINALIZATION OF ATTEMPT TO SUICIDE

- **Attempt to suicide is more a manifestation of a diseased condition of mind deserving of treatment and care rather than punishment.** It would not be just and fair to inflict additional legal punishment on a person who has already suffered agony and ignominy in his failure to commit suicide.
- **Section 309 of the Indian Penal Code amounts to double punishment** for a person who has already got fed up with his own life and desires to end it.
- **Section 309 is also a stumbling block in prevention of suicides** and improving the access of medical care to those who have attempted suicide.
- **It is unreasonable to inflict punishment for attempt to suicide** upon a person who on account of family discord, destitution, loss of a dear relation, fear of natural or medical calamity, overcomes the instinct of self-preservation and decides to take his own life. In such a case, the unfortunate person deserves sympathy, counseling and appropriate treatment rather than prison.
- **Section 309 needs to be effaced from IPC** because the provision is inhuman, irrespective of whether it is constitutional or unconstitutional. Accordingly Commission is of the view that while assisting or

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encouraging another person to (attempt to) commit suicide must not go unpunished, the offence of attempt to commit suicide under section 309 needs to be omitted from the Indian Penal Code.

UNDERSTANDING SUICIDE, EUTHANASIA & RIGHT TO DIE THROUGH LANDMARK JUDGMENTS

→ P. RATHINAM V. UNION OF INDIA & ANOTHER (1994)

- Case looked into the constitutional validity of attempt to suicide (section 309 of Indian Penal Code) and right to die.
- While referring the question whether right to die can be included as an integral part of Article 21, the Court relied on the case of **Maruti Shripati Dubal v. State of Maharashtra**, where Bombay High Court held that fundamental rights have their positive as well as negative aspects.
- Citing an example, it had stated, *"freedom of speech and expression includes freedom not to speak and similarly, the freedom of association and movement includes freedom not to join any association or move anywhere. Accordingly, it stated that logically it must follow that the right to live would include the right not to live, i.e., right to die or to terminate one's life."*
- Thus, the Supreme Court in **P. Rathinam v. Union of India & Another** ruled that right to life embodied in Article 21 also embodied in it a right not to live a forced life, to his detriment, disadvantage or disliking.
- **Supreme Court further declared Section 309 IPC (criminalises attempt to suicide) ultra vires as it violated Article 21** - The Court emphasised that attempt to suicide required medical help and not punishment and held that it deserved to be removed from the statute book to humanize the penal laws in India.

→ GIAN KAUR VS. STATE OF PUNJAB (1996)

- **The ruling of P. Rathinam v. Union of India & Another was challenged in the case of Gian Kaur vs. State of Punjab.**
- The question arose that if attempt to commit suicide was declared void and unconstitutional, then how can

"Abetment to Commit Suicide" (Section 306 IPC) could be considered as a punishable offence.

Section 306 - Abetment of suicide - *If any person commits suicide, whoever abets the commission of such suicide, shall be punished with imprisonment of either description for a term which may extend to ten years, and shall also be liable to fine.*

- A five Judge Constitutional Bench held that the "right to life" is inherently inconsistent with the "right to die" as is death with life. In furtherance, the right to life, which includes **right to live with human dignity, would mean the existence of such a right up to the natural end of life.**
- The Court further said that **right to life is a natural right embodied under Article 21 but suicide is an unnatural termination or extinguishing of life and is therefore incompatible and inconsistent with the concept of right to life.**
- The Court therefore held **Section 306 (abetment of suicide) and 309 (attempt to suicide) of IPC to be valid and constitutional.**
- Thus, **Gian Kaur vs. State of Punjab** effectively overruled the previous judgment of **P. Rathinam v. Union of India** and declared that right to die does not form part of Article 21.

DISTINGUISHED EUTHANASIA & ATTEMPT TO SUICIDE

- Supreme Court in Gian Kaur judgment also distinguished **euthanasia & attempt to suicide**. The Court observed that right to life including the right to live with human dignity would mean the existence of such a right up to the end of natural life. Whereas euthanasia is termination of life of a person who is terminally ill or in Permanent Vegetative State (PVS) or post-coma unresponsiveness state.

Euthanasia is basically an intentional premature termination of another person's life either by direct intervention (active euthanasia) or by withholding life-prolonging measures and resources (passive euthanasia).

Active euthanasia also referred as positive or aggressive euthanasia, occurs when death is brought

about through a positive act or affirmative action or an act of commission entailing the use of lethal substances or forces to cause the intentional death of a person by direct intervention (lethal injection given to a person with terminal cancer who is in terrible agony).

Passive euthanasia, on the other hand, also called negative or non-aggressive euthanasia, entails withdrawing of life support measures or withholding of medical treatment for continuance of life. Eg: Withdrawing ventilator support from a person in coma for years.

- Thus, euthanasia is not a case of “extinguishing life naturally but only of accelerating the process of natural death which has already commenced.
- However, the Court held that permitting termination of life in such cases to reduce the period of suffering during the process of certain natural death cannot be included under Article 21 as it amounts to curtailing natural span of life.
- The Court held that the **“right to live with human dignity” cannot be construed to include within its ambit the right to terminate natural life, at least before the commencement of the process of certain natural death.**
- **Thus, the Court did not allow passive euthanasia as it terminated natural life.**
- **Aruna Shanbaug (2011)**
- The controversy related to **attempt to suicide** and **abetment of suicide** was decided but the issue of euthanasia still remained.
- Aruna Shanbaug suffered brain stem and cervical cord injury and remained in Persistent Vegetative State for the rest of her life since 1973 till her death in 2015. In 2009, a writ petition was filed under Article 32 before the Supreme Court of India, seeking passive euthanasia for Shanbaug.
- The Court appointed a team of three very distinguished doctors to examine the petitioner thoroughly and to submit a report about her physical and mental condition. The team submitted a joint report.
- In a landmark judgment in 2011, the Court held, **“there is no right to die under Article 21 of the**

Constitution and the right to life includes the right to live with human dignity but in the case of a dying person who is terminally ill or in permanent vegetative state, he may be allowed a premature extinction of his life and it would not amount to a crime.”

- Supreme Court allowed doctors to stop force-feeding Shanbaug and withdraw life support to deliberately end her life, on the discretion of the doctors. Thus, Supreme Court allowed withdrawal of life-sustaining treatment from patients not in a position to make informed decision.
- **This was the first time after Gian Kaur case, when Supreme Court had allowed passive euthanasia under strict guidelines and conditions.**
- However, **Supreme Court did not allow active euthanasia** and held that ending life through use of lethal substance' is not permitted in any circumstance.

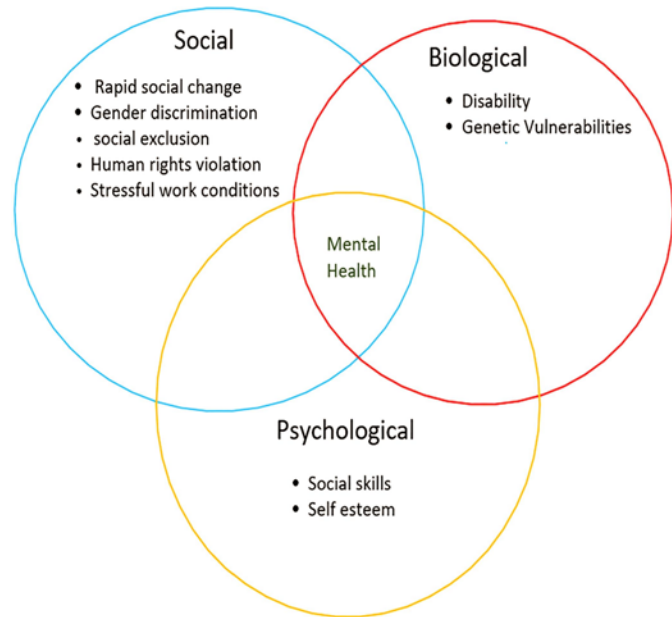
COMMON CAUSE V. UNION OF INDIA AND ANOTHER (2018)

- Supreme Court in **Common Cause case** held that fundamental right to life and dignity under Article 21 includes right to die with dignity. Dignity is lost if a person is allowed or forced to undergo pain and suffering because of unwarranted medical support.
- To deprive a person of dignity at the end of life is to deprive him of a meaningful existence. Meaningful existence includes a person's right to self-determination and autonomy to decide their medical treatment.
- The respect for an individual human being and in particular for his right to choose how he should live his own life is individual autonomy or the right of self-determination.
- It is the right against non-interference by others, which gives a competent person who has come of age the right to make decisions concerning his or her own life and body without any control or interference of others.
- In the context of health and medical care decisions, a person's exercise of self-determination and autonomy involves the exercise of his right to decide whether and to what extent they are willing to submit themselves

to medical procedures and treatments, choosing amongst the available alternative treatments or, for that matter, opting for no treatment at all which, as per their own understanding, is in consonance with their own individual aspirations and values.

- **Dignified Procedure of Death** - The Court also agreed that right to a dignified life includes a “*dignified procedure of death*.” SC distinguished passive euthanasia from suicide and active euthanasia and drew a judicial line between the two as it called passive euthanasia as a “mere acceleration of the inevitable conclusion” whereas it declared active euthanasia as unlawful and illegal.
- Suicide involves “overt acts” which culminates in an unnatural death. Supreme Court invoked its inherent power under Article 142 to grant legal status to Advance Directives until Parliament enacts legislation on the matter. Advance Directive refers to a legal will of the people, on how to treat them, in the event that the person becomes incapacitated.

his or her community. Multiple social, psychological, and biological factors determine the level of mental health of a person at any point of time.



MENTAL HEALTHCARE ACT, 2017

#LEGISLATIONS #MENTAL HEALTHCARE

**PRIMARY
SOURCE**

THE HINDU

**SECONDARY
SOURCE**

Mental Health
Care Act, 1951

IN NEWS

The Act seeks to provide for mental healthcare and services for persons with mental illness and to protect, promote and fulfill the rights of such persons during delivery of mental healthcare and services. Every person shall have the right to access mental health care, treatment from services run or funded by the government, protection from inhuman and degraded treatment and right to confidentiality in respect of their mental health. Let us understand about Mental Health and salient features of the Mental Healthcare Act, 2017.

ABOUT MENTAL HEALTH

Mental health is more than the absence of mental disorders. According to WHO, Mental health is a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to

IMPORTANT DEFINITIONS UNDER MENTAL HEALTHCARE ACT

- **“Mental healthcare”** includes analysis and diagnosis of a person's mental condition and treatment as well as care and rehabilitation of such person for his mental illness or suspected mental illness.
- **“Mental illness”** means a substantial disorder of thinking, mood, perception, orientation or memory that grossly impairs judgment, behaviour, capacity to recognise reality or ability to meet the ordinary demands of life, mental conditions associated with the abuse of alcohol and drugs, but does not include mental retardation which is seen as a disability due to arrested development.
- **“Care-giver”** means a person who resides with a person with mental illness and is responsible for providing care to that person and includes a relative or any other person who performs this function, either free or with remuneration.
- **“Prisoner with Mental illness”** means a person with mental illness who is an under-trial or convicted of an offence and detained in a jail or prison.
- **“Central Authority”** means the Central Mental Health Authority constituted under the Act.

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- **“State Authority”** means the State Mental Health Authority established under the Act.

DETERMINATION OF ILLNESS

- Mental illness shall be determined in accordance with such nationally or internationally accepted medical standards as notified by the Central Government.
- Mental illness of a person shall not be determined on the basis of:
 - political, economic or social status or membership of a cultural, racial or religious group, or for any other reason not directly relevant to mental health status of the person.
 - non-conformity with moral, social, cultural, work or political values or religious beliefs prevailing in a person's community.
- Past treatment or hospitalisation in a mental health establishment though relevant, shall not by itself justify any present or future determination of the person's mental illness.

CAPACITY TO MAKE MENTAL HEALTHCARE AND TREATMENT DECISIONS

- Every person, including a person with mental illness have capacity to make decisions regarding their mental healthcare or treatment if such person has ability to –
 - understand the information that is relevant to take decision for treatment or admission or personal assistance and communicate by means of speech, expression, gesture or any other means;
 - appreciate any reasonably foreseeable consequence of a decision or lack of decision on the treatment or admission or personal assistance;

ADVANCE DIRECTIVES – (AD)

- Every person, who is not a minor, shall have a right to make an advance directive in writing, specifying any or all of the following:
 - The way the person wishes to be cared for and treated for a mental illness.
 - The way the person wishes not to be cared for and treated for a mental illness.

- The individual or individuals, in order of precedence, he wants to appoint as his nominated representative.

- **Invoking Advance Directives** - An advance directive shall be invoked only when such person ceases to have capacity to make mental healthcare or treatment decisions and shall remain effective until such person regains capacity to make mental healthcare or treatment decisions.
- **Overriding Previous AD** - Any decision made by a person while he has the capacity to make mental healthcare and treatment decisions shall over-ride any previously written advance directive by such person.
- **Nominated Representative** shall not be a minor, be competent to discharge the duties or perform the functions assigned to him and give his consent in writing to the mental health professional for discharging his duties.
- **Central Mental Health Authority** shall regularly and periodically review and examine the use of advance directives and make recommendations to protect people with mental illness. The Authority may modify the procedure for making an advance directive to protect the rights of persons with mental illness.

RIGHTS OF PERSONS WITH MENTAL ILLNESS

- **Right to Access Mental Healthcare** - Every person shall have a right to access mental healthcare and treatment from mental health services run or funded by the appropriate Government.
- **Right to Access Mental Healthcare & Treatment mean** – having access to mental health services of affordable cost, of good quality, available in sufficient quantity, accessible geographically, without discrimination and provided in a manner that is acceptable to persons with mental illness and their families and care-givers.
- **Right to Range of Services required by persons with mental illness** –
 - Acute mental healthcare services such as outpatient and inpatient services,
 - Provision of half-way homes, sheltered and supported accommodation,

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- Provision for mental health services to support family of person with mental illness or home based rehabilitation.
 - Hospital and community based rehabilitation establishments and services
 - Provision for child mental health services and old age mental health services.
 - **Government must provide the following services -**
 - Integrate mental health services into general healthcare services at all levels of healthcare and in all health programmes run by the appropriate Government.
 - Provide treatment in a manner that persons with mental illness are able to live in the community and with their families.
 - Ensure that the long term care in a mental health establishment for treatment of mental illness shall be used only in exceptional circumstances (for short duration) and only as last resort when appropriate community based treatment has been tried and shown to have failed.
 - Ensure that as a minimum, mental health services run or funded by Government shall be available in each district.
 - **Right to community living -**
 - Every person with mental illness shall have a right to live in, be part of and not be segregated from society & not continue to remain in a mental health establishment merely because he does not have a family or is not accepted by his family or is homeless or due to absence of community based facilities.
 - If a mentally ill person has been abandoned by his family or relatives, the appropriate Government shall provide support including legal aid and to facilitate exercising his right to family home and living in the family home.
 - **Right to protection from cruel, inhuman and degrading treatment -** Every person with mental illness shall be protected from cruel, inhuman or degrading treatment in any mental health establishment and shall have the following rights:
 - Right to live in safe and hygienic environment
 - Right to have adequate sanitary conditions
 - Right to have reasonable facilities for leisure, recreation, education and religious practices
 - Right to Privacy
 - Right for proper clothing to maintain his dignity
 - Right to not be forced to undertake work in a mental health establishment and to receive appropriate remuneration for work when undertaken
 - to have adequate provision for preparing for living in the community
 - to have adequate provision for wholesome food, sanitation, space and access to articles of personal hygiene, in particular, women's personal hygiene be adequately addressed by providing access to items that may be required during menstruation
 - Right to not be subject to compulsory tonsuring (shaving of head hair)
 - Right to be protected from all forms of physical, verbal, emotional and sexual abuse
 - **Right to equality and non-discrimination -** Every person with mental illness shall be treated as equal to persons with physical illness in the provision of all healthcare which shall include the following:
 - There shall be no discrimination
 - Access to emergency facilities and emergency services for mental illness
 - Living conditions in health establishments
 - Any other health services including Ambulance Services
 - **Right to information -** A person with mental illness and his nominated representative shall have the rights to the following information:
 - Provision of this Act or any other law under which the mentally ill has been admitted including the criteria for admission.
 - Right to make an application to the concerned Board for a review of the admission.
 - Nature of the person's mental illness and the proposed treatment plan which includes the known side effects of the proposed treatment.
- Where the information has not been given to the person with mental illness at the time of the admission or the start of treatment, the medical officer or psychiatrist in

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charge of the person's care shall give the information to the nominated representative immediately.

- **Right to confidentiality** - A person with mental illness shall have the right to confidentiality in respect of his mental health, mental healthcare, treatment and physical healthcare. The right to confidentiality of person with mental illness shall also apply to all information stored in electronic or digital format in real or virtual space. However, certain information can be released:
 - in the interests of public safety and security.
 - if it is necessary to protect any other person from harm or violence.
 - If it is necessary to prevent threat to life.
 - Release of information is ordered by concerned Board or the Central Authority or High Court or Supreme Court or any other government authority.
- All persons with mental illness shall have the **right to access their basic medical records** as may be prescribed. However, mental health professional in charge of such records may withhold specific information in the medical records if disclosure would result in:
 - serious mental harm to the person with mental illness; or
 - likelihood of harm to other persons.
- **Right to Legal Aid for person with mental illness.** It shall be the duty of magistrate, police officer, person in charge of such custodial institution or medical officer or mental health professional in charge of a mental health establishment to inform the person with mental illness that he is entitled to free legal services under *The Legal Services Authorities Act, 1987* or other relevant laws and provide the contact details of the availability of services.
- **Right to make complaints about deficiencies in provision of services** to the medical officer or mental health professional in charge of the establishment and if not satisfied with the response – to the concerned Board and if not satisfied with the response – to the State Authority.

DUTIES OF APPROPRIATE GOVERNMENT

1. **Promotion of mental health and preventive programmes.**

2. **Creating awareness about mental health and illness and reducing stigma associated with mental illness.**
3. **Taking measures to address the human resource requirements of mental health services in the country by planning, developing and implementing educational and training programmes** in collaboration with institutions of higher education and training, to better address the needs of persons with mental illness.
4. **Taking measures to ensure effective co-ordination between services provided by concerned Ministries and Departments** to address issues of mental healthcare.

CENTRAL MENTAL HEALTH AUTHORITY

- **Secretary or Additional Secretary** to the Government of India in the Department of Health and Family Welfare shall be the Chairperson *ex officio* of CMHA.
- **Tenure (3 years) till the age of 70.**

FUNCTIONS OF CENTRAL AUTHORITY

- **Register all mental health establishments** under the control of Central Government and maintain a register of all mental health establishments in the country based and compile update and publish a register of such establishments.
- **Develop quality and service provision norms** for different types of mental health establishments under the Central Government.
- **Supervise all mental health establishments** under the Central Government.
- **Receive complaints about deficiencies in provision of services.**
- **Maintain a national register of clinical psychologists, mental health nurses and psychiatric social workers** based on information provided by all State Authorities.
- **Train all persons** including law enforcement officials, mental health professionals and other health professionals about the provisions of this Act.
- **Advise the Central Government** on all matters relating to mental healthcare and services.

STATE MENTAL HEALTH AUTHORITY

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- **Secretary or Principal Secretary** in the respective Department of Health of State Government shall be the **Chairperson *ex officio***.
- **Tenure (3 years) till 70 years of age.**
- Authority on its own or on the recommendations of the Board may also cancel the registration of such mental health establishment after giving an opportunity of being heard.

MENTAL HEALTH REVIEW BOARDS

- Mental Health Review Boards shall be constituted by State Authority.
- The Board will be headed by a sitting or retired District Judge or equivalent of district judge. The board will also have representation of the district collector, psychiatrist, medical practitioner, and two representatives who are persons with mental illness or care-givers, NGOs working in the field of mental health.
- **The chairperson and members of the Board shall hold office for a term of five years or up to the age of seventy years.**
- The appointment of chairperson and members of every Board shall be made by the Chairperson of the State Authority.
- All proceedings before the Board shall be deemed to be judicial proceedings.

POWERS AND FUNCTIONS OF MENTAL HEALTH REVIEW BOARDS

- Register, review, alter, modify or cancel an advance directive.

- Appoint a nominated representative.
- Receive and decide application from a person with mental illness or his nominated representative or any other interested person against the decision of medical officer or mental health professional in charge of mental health establishment or mental health establishment.
- Receive and decide applications in respect non-disclosure of information.
- Adjudicate complaints regarding deficiencies in care and services.
- Visit and inspect prison or jails and seek clarifications from the medical officer in-charge of health services in such prison or jail.
- Board or the Authority may conduct an inspection and inquiry if mental health establishment violates the rights of persons with mental illness and take action to protect their rights.
- Board or State Authority may impose penalty which may extend up to five lakh rupees on such mental health establishments which does not comply with the orders or directions of the Authority or Board.

APPEAL TO HIGH COURT AGAINST ORDER OF AUTHORITY OR BOARD

Any person or establishment aggrieved by the decision of the Authority or a Board may, within a period of thirty days from such decision, prefer an appeal to the High Court of the State in which the Board is situated.

GOVERNANCE

TWITTER MUST COMPLY WITH IT RULES

#RIGHTS #SOCIAL MEDIA #GOVERNANCE

PRIMARY SOURCE

THE HINDU

SECONDARY SOURCE

The Indian EXPRESS

IN NEWS

The Ministry of Electronics and Information Technology (MEITY) has notified the Information Technology (Intermediary Guidelines and Digital Media Ethics) Rules, 2021 to regulate IT intermediaries such as Twitter, Facebook and digital media outlets. While many IT intermediaries have complied to these rules Twitter has failed to comply with them.

NEED FOR REGULATING IT INTERMEDIARIES

- IT intermediaries and social media sites have come to play a prominent role in the globalised era as it provides a forum for citizens across the globe to share information and ideas in real time.
- IT intermediaries contend that the information posted by users on them is by citizens and they do not have any liability as the information posted is so large pool of people and from across the globe.
- Communications Decency Act of USA gives immunity to social media platforms for content posted on them. In India, the IT (Intermediary Guidelines) Rules, 2011 gave this immunity to social media platforms.
- The present rules update the earlier rules and introduce a soft touch self-regulatory mechanism for use of the social media. This is justified since:
 - (a) Similar protection is not available for newspapers, magazines or websites. Social media companies have argued that they do not have editorial control to regulate content. However, social media companies have increasingly carrying out interventions to regulate content. For ex. Banning posts of President Trump of USA.
 - (b) Freedom of speech under the constitution is subject to reasonable restriction Article 19(2). Thus, social media platforms too can be regulated under the Constitutional scheme.
 - (c) Considering the growing importance of social media platforms. They can be considered as a public utility serving a public function. Hence, some sort of regulation is necessary for security point of view.
 - (d) To check the misuse and protection of citizens.
 - (e) Rights of the sovereign to regulate communications.
- **Breaking End-to-end Encryption** - The traceability obligation in the new rules is problematic as it would amount to breaking end-to-end encryption provided for all users on platforms such as WhatsApp. This will give greater powers of surveillance to state over personal affairs of citizens and tantamount to interference in right to privacy.
- **Data Theft & Hacking** - Breaking of end-to-end encryption will increase chances of data theft and hacking.
- **Traceability clause capable of misuse** - The rule as it's currently drafted is vague and this allows the government to use traceability power in a broad way and therefore open to misuse. Thus, in order to use traceability powers, court must clarify the grounds and circumstances for its use by state authorities.
- **Guidelines Against the law on Subordinated Legislation** - The ability to issue rules under a statute or law i.e. to frame subordinate legislation is by its nature a limited and constrained power. Critics have pointed out that the current rules go beyond the realm of Information Technology Act, and thus in the garb of rule-making, government has rather come up with primary set of legislation.
- **Rules have created new term in the Parent Act** - the executive branch has created new term "significant social media intermediaries" which has not been defined in the Information Technology Act, 2000.
- **Limited Purview of IT Act** - Regarding digital news and media portals, the purview of the Information Technology Act, 2000, is limited. It only extends to the blocking of websites and intermediary liabilities framework but does not extend to content authors and creators.
- **Rules have added New Chapter on Registration of Digital News Sites** before the Ministry of Information and Broadcasting. Such provisions are absent in the parent Act.
- **Pressure on Tech Companies** - Platforms can also be arm-twisted into building in what's called weakness by design into their product.

CONCERNS HIGHLIGHTED ON IT RULES

However, civil society organisations have raised certain concerns over the rules framed.

- **Privacy versus National Security** - The rules only make superficial attempts at balancing privacy and security interests as security interests are being given primacy over both civil liberty interests as well as economic interests.

RIGHT TO BE FORGOTTEN

#RIGHTS ISSUES #DATA PROTECTION

PRIMARY
SOURCE

THE HINDU

SECONDARY
SOURCE

The Indian
EXPRESS

IN NEWS

Delhi High Court while recognising the right to be forgotten has ordered removing one of its own judgments from a leading database platform and search engines as persons should not be perpetually stigmatized for past conduct. The Court has also ordered the database platform to block the judgment from being accessed by search engines. The High Court recognised that the petitioner may have a right to be forgotten, which must be balanced with the right of the public to access courts of record. Right to be forgotten has been codified under the European Union's General Data Protection Regulation (GDPR) in addition to the right to erasure.

WHAT DOES RIGHT TO BE FORGOTTEN MEAN AS PER EU GDPR?

- **Right to get personal data erased:** Personal data must be erased immediately where the data are no longer needed for their original processing purpose.
- **Right to withdraw consent:** If the Data owner has withdrawn his/her consent and there is no other legal ground for processing the data provided by the data owner.
- **Right to object:** If the Data owner has objected to processing of his/her data and there are no overriding legitimate grounds for the processing.
- **Right to know if data is leaked:** If the controller has made the personal data public, and if one of the above reasons for erasure exists, he must take reasonable measures to inform all other controllers in data processing that all links to the personal data, as well as copies or replicates of the personal data, must be erased.
- Data controllers to compare the subjects' rights to "the public interest in the availability of the data" when considering such requests for data removal.

CASE OF GOOGLE IN EUROPEAN COURT OF JUSTICE (ECJ)

The origin of Right to Forgotten is traced to a case against Google in European Court of Justice.

Views Expressed by B.N. Srikrishna Committee - Right to be Forgotten

Important Terms Defined in the Personal Data Protection Bill, 2019

- **"Data Principal"** means the natural person to whom the personal data relates. (Owner of data)
- **"Data Processor"** means any person, including the State, a company, any juristic entity or any individual, who processes personal data on behalf of a data fiduciary.
- **"Data Fiduciary"** means any person, including the State, a company, any juristic entity or any individual who alone or in conjunction with others determines the purpose and means of processing of personal data.
- **Need for Remedy** - If the data principal believes that data processing has unfairly disclosed personal data then she should be able to have a remedy against such disclosure.
- **Right Against Disclosure** - Right to be forgotten should provide data principal the right against the disclosure of her data when the processing of her personal data has become unlawful or unwanted.
- **Need for Balancing Test** - In cases where there is a conflict of assessment as to whether the purpose of the disclosure has been served or whether it is no longer necessary, a balancing test that the interest in discontinuing the disclosure outweighs the interest in continuing with it, must be carried out.
- **Right to Privacy to be balanced with freedom of Speech** - The purpose for a publication may often involve matters of public interest and whether the publication is necessary may depend on the extent of such public interest. The appropriateness of right to be forgotten in these circumstances would require that the right to privacy be balanced with the freedom of speech.

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- **Threat of Permanent Deletion of some Data** - If every individual started exercising a right to be forgotten over various types of personal data or derivatives of personal data, the nature of the public realm of information itself would be brought into question as such information may be permanently deleted.
- **Need to distinguish between Restrictions on Disclosure & Permanent Erasure** - in order to address these free speech concerns, there may be a need to make a distinction between restrictions on disclosure (such as delinking in search results) and permanent erasure from storage, which may not be permitted as a separate individual participation right.
- **Restrictions on free speech & RTI needs to be considered** - While determining whether to allow for the right to be forgotten, the appropriateness of consequent restrictions on the right of free speech and expression and the right to information would necessarily have to be considered.
- The Committee recommended statutory balancing test which may be achieved through the application of a test with **five criteria**:

1. Sensitivity of the personal data sought to be restricted.
 2. Scale of disclosure or degree of accessibility sought to be restricted.
 3. Role of the data principal in public life (whether the data principal is publicly recognisable or whether they serve in public office).
 4. Relevance of the personal data to the public (whether the passage of time or change in circumstances has modified such relevance for the public).
 5. nature of the disclosure and the activities of the data fiduciary (whether the fiduciary is a credible source or whether the disclosure is a matter of public record; further, the right should focus on restricting accessibility and not content creation).
- **Time-period for implementing such rights** by a data fiduciary, as applicable, shall be specified.

"RIGHT TO BE FORGOTTEN" UNDER PERSONAL DATA PROTECTION BILL, 2019 – SECTION 20

Based on the Srikrishna Committee's report, government has included the concept of Right to forgotten under the Personal Data Protection Bill, 2019.

- The data principal shall have the right to restrict or prevent the continuing disclosure of his personal data by a data fiduciary where such disclosure –
 - (a) has served the purpose for which it was collected or is no longer necessary for the purpose;
 - (b) was made with the consent of the data principal and such consent has since been withdrawn;
 - (c) was made contrary to the provisions of this Act or any other law for the time being in force.
- Right to be forgotten under Bill can be enforced by an Adjudicating Officer when an application in that behalf is submitted by the data principal.
- Data Principal must show that disclosure of such personal information overrides the right to freedom of speech and expression and the right to information of any other citizen.

DIGITAL INDIA CAMPAIGN, INITIATIVES & CHALLENGES

#E-GOVERNANCE #DIGITAL INDIA



CONTEXT

The Government has launched Digital India with a vision to transform India into a digitally empowered society and knowledge-based economy. However, there are a number of implementation challenges in the ICT based projects.

DIGITAL INDIA CAMPAIGN

- The Government of India launched the Digital India campaign to ensure that the services of the Government are made available electronically to all citizens.
- Digital India campaign was launched in 2015 to ensure that government services are made available to citizens electronically by

CONSTITUTION, POLITY AND GOVERNANCE

- improved online infrastructure,
- by increasing internet connectivity,
- by making the country digitally improved in the field of technology.
- The initiative includes plans to connect rural areas with high speed internet networks.
- **Digital India consists of three Core Components -**
 - Developments of secure and stable infrastructure,
 - Delivering Digitally
 - Ensuring Universal Digital Living

RESULTS WHICH DIGITAL INDIA (DI) AIMS TO ACHIEVE

DI efforts are laid down to achieve results in two key focus areas:

- **Governance and services on demand** - DI aims to integrate processes and information across departments and jurisdictions seamlessly so to help provide real-time services to citizens both - on online and mobile platforms, digitally enable processes for businesses, creating a digitally enabled cashless economy and creating cloud-based repository for easy access for the citizens as well as better planning and decision-making with the help of GIS.
- **Digital empowerment of citizens** - Provide digital literacy and digital services to all citizens through universally accessible digital resources and services in several Indian languages and introduction of collaborative digital platforms, availability of all documents and certificates online and availability of all entitlements through cloud.

IMPLEMENTATION CHALLENGES

- **Number of Roadblocks** - like digital illiteracy, poor infrastructure, low internet speed, lack of coordination among various departments, data security etc.
- **Digital Literacy** - There should be adequate awareness building for people living in rural areas so that they can be a part of digital India and reap the benefits of the Internet.
- **Poor Readiness:** India fares poorly in the UN E-Government readiness Index due to poor Telecommunication Infrastructure Index and Human Capital Index. Focus must be on bridging the Digital

Divide by enhancing the Rural tele density and imparting digital literacy to the people.

- **Bureaucratic Resistance:** The bureaucratic resistance due the threat of job losses should be overcome by demonstrating the potential benefits of e-Governance.
- **Poor Skill sets:** The technical and managerial skills needs to be improved by focussing on the capacity building and skill development of the government employees.
- **Lack of Business Process Reengineering:** Business process re-engineering is a business management strategy and focuses on the analysis and design of workflows and business processes within an organization. As recommended by 2nd ARC, the government departments must undertake BPR to make their procedures more compliant with ICT projects.
- **Technological Solutions:** - All states must adopt uniform software for release of funds for schemes like MGNREGA.
- **Strengthening Cyber-Security Measures** - Ensuring Cyber Security of e-governance initiatives is necessary for which the government must strengthen cyber security measures.
- **Role of Private Sector Neglected:** The private sector expertise has to be harnessed through implementation of E-governance projects through Public Private Partnership Mode.
- **Local Language content:** The non-availability of digital services in local languages is also a major concern. There is a need to ensure that E-governance projects are also able to support the local languages for the benefit of people.
- **Lack of Monitoring and Evaluation:** Regular monitoring would lead to continuous improvement in the E-Governance projects.
- **Lack of Integrated Database:** As recommended by Economic Survey, there is a need for a single integrated database which is able to provide holistic and complete information about the Indian citizens.

WAY FORWARD

- Rapid investment in Bharatnet project to enable access to internet across the length and breadth of the country.
- Adoption of technologies such as Artificial Intelligence, IoT, Blockchain in governance structures.
- Legislative reforms required for paving way for digital and e-governance:
 - Enactment of Data Privacy Legislation. (B N SriKrishna Committee)
 - Comprehensive e-governance legislation as suggested by 2nd ARC.
- Training and capacity building in government. Collaboration with private sector to develop digital solutions.
- Focus on cyber-security. Need for revision of National Cyber-security policy to make it relevant to current threats of cyber-espionage, cyber-warfare etc.
- Emphasis on awareness and communication, development of content in vernacular languages to make it easier for citizens especially for rural areas to benefit for digital initiatives.
- It is imperative to meet the increasing aspirations and demands of tech savvy citizens, particularly the millennials.
- With significant strides already made in the Digital India programme, it is now time for the government to transform its approach and aspire to become fully digital.
- The success of Digital India will be a major factor in enhancing the country's economic growth by improving social and financial inclusiveness, citizen engagement, as well as efficiency and accountability in governance and delivery of services.

OFFICIAL SECRETS ACT & RTI

#GOVERNANCE #RIGHTS ISSUES



IN NEWS

The Government of India prohibited even retired officials of security and intelligence organisations from publishing anything about their work or organisation without prior clearance from the head of the organisation.

Serving civil servants are barred from expressing their personal opinion on policy matters and criticising the government. But once they retire, many of them take part in public debates and enrich our conversations.

Let us understand about Official Secrets Act, the reasons for tighter norms and concerns about the above decision.

ABOUT OFFICIAL SECRETS ACT

- **The Official Secrets Act, 1923** has its roots in the British colonial era. Its predecessor law, The Indian Official Secrets Act, 1904 was enacted during the time of **Lord Curzon**, Viceroy of India from 1899 to 1905.
- In 1923, a newer version of the Official Secrets Act was notified & was extended to all matters of secrecy and confidentiality in governance in the country.

IMPORTANT PROVISIONS OF OFFICIAL SECRETS ACT

- The OSA, 1923 broadly deals with two aspects
 - Penalty for Spying or espionage
 - Disclosure of other secret information of the government
- Both the person communicating the secret information, and the person receiving the information, can be punished by the prosecuting agency.
- OSA targets officials and civilians who have documents/code/materials etc which can be classified as **"secret information."**
- **Secret Information** - The secret information can be any official code, password, sketch, plan, model, article, note, document or information. Since the classification of secret information is so broad, it is argued that the colonial law is in direct conflict with the Right to Information Act.
- **Spying or leaking information from prohibited place is** also punishable under OSA, 1923. Prohibited Place as per OSA can include the following:
 - Any establishment of military, defence, naval or airforce;

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- Military Telegraph, Wireless Communication or any channel of communication declared as prohibited place by the government;
- A place storing munitions of war, sketch, model, plan etc. Against enemies or otherwise;
- Any channel of communication through land, water, sea declared as prohibited place;
- Any place used for gas, water or electricity work declared as prohibited place
- Such other place declared by the government.

Q. There is a view that the Official Secrets Act is an obstacle to the implementation of Right to Information Act. Do you agree with the view? Discuss. (150 words) – 2019 GS-IV

RTI vs OSA

- **Three provisions of RTI Act, 2005 which clearly overrides the OSA in certain situations:**
 - RTI Act clearly declares that the RTI will have an “overriding effect” over OSA.
 - Even security and intelligence organisations have been obligated to disclose information on corruption and human rights violations.
 - **RTI** compels the government to disclose information “if public interest in disclosure outweighs the harm to protected interests”.

REASON FOR TIGHTER NORMS ON SECRECY

- **Protect National Security** - Some measure of secrecy is necessary to protect authorised national security activities. Leak or disclosure of such information has impact on existing intelligence security operations.
- **Stable Security Policy hard to achieve** - National Security Challenges are dynamic in nature and keep evolving based on circumstances. Hence important documents of the past cannot be revealed. For ex, files on India-China war still secret.
- **Freedom of Expression not Absolute** - No rights to freedom of expression can be absolute and certain information pertaining to secret official documents having implications on national security will always be restricted in certain contexts. Article 19(2) applies reasonable restrictions on account of protection of security of the state, friendly relations with foreign states, public order etc. Thus, for ensuring unity and integrity of India and security of the state government

is fair to exercise control some control over bureaucrats working in critical roles even if they retire.

CONCERNS EXPRESSED ON TIGHTER NORMS

- **Sensitive Informations are left to subjective interpretations of successive governments**
- **Lack of practice of Declassification of Secret Files**
- **Problem of Over-classification**
- **Difficult to demarcate** - clearly the separation line between official secret documents and right to transparency for public.
- **Secrecy Policy needs overhaul** - In the age of social media and internet, the idea of declassification of files needs an overlook.
- **Issues of Governance & Policies can be made public** - Apart from aspects of National Security, issues of general administration, governance issues, policy, etc. and opinion can be revealed by former bureaucrats as they provide hindsight into the working or implementation of such policies and programs.

WAY FORWARD

Civil Servants and Officials must take a balanced approach while revealing important and sensitive documents without jeopardising or hampering national security.

SPLIT MGNREGA PAY FOR SC & ST

#GOVERNANCE #INSTITUTION

PRIMARY SOURCE

THE HINDU

SECONDARY SOURCE

pib

IN NEWS

The Central Employment Guarantee Council has asked the States to split wage payments under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) scheme into separate categories for the Scheduled Castes, the Scheduled Tribes and others from this financial year.

Activists believe that this will complicate the payment system, and expressed fears that it may lead to a reduction in scheme funding. The current system for wages under the scheme has no category wise provision of wage payment.

ABOUT MGNREGA

- The scheme under MGNREGA or the Mahatma Gandhi National Rural Employment Guarantee Act, promises unskilled manual work to every adult for at least 100 days in rural parts of the country. It was introduced in 2005.
- The objective of the programme is to create employment opportunities in the rural areas and prevent distress migration. It seeks to create durable assets to improve livelihood resource base of the rural poor.
- The Act provides that the Central Government could notify wage rates and till such time as the Central Government notified a wage rate, minimum wages for agricultural labour notified by the State would be paid to NREGA workers. The Central Government started notifying wages under MGNREGA from the financial year 2008-09.
- The MGNREGA Wages were linked to Consumer Price Index- Agricultural Labour (CPI-AL) and notified at the start of every financial year.

CENTRAL EMPLOYMENT GUARANTEE COUNCIL

Central Employment Guarantee Council, constituted under the Mahatma Gandhi National Rural Employment Guarantee Act (Mahatma Gandhi NREGA), 2005 is headed by **Union Minister of Rural Development**.

FUNCTIONS AND DUTIES OF CENTRAL COUNCIL

- Establish a central evaluation and monitoring system.
- Advise the Central Government
- Review the monitoring, redressal mechanism and recommend improvements
- Promote the widest possible dissemination of information about the scheme under the act.
- Preparation of annual reports to be laid before Parliament by the Central Government on the implementation of this Act.

ASPIRATIONAL DISTRICT PROGRAMME

#ADP #GOVERNANCE

PRIMARY SOURCE

pib

SECONDARY SOURCE

The Indian EXPRESS

IN NEWS

In an independent appraisal report, United Nations Development Programme (UNDP) India has lauded the Aspirational Districts Programme (ADP) as 'a very successful model of local area development 'that 'should serve as a best practice for several other countries where regional disparities in development status persist for many reasons'.

ASPIRATIONAL DISTRICT PROGRAMME

- The 'Transformation of Aspirational Districts' Programme aims to expeditiously improve the socio-economic status of 117 districts from across 28 states.
- **The three core principles** of the programme are – **1. Convergence** (of Central & State Schemes), **2. Collaboration** (among citizens and functionaries of Central & State Governments including district teams), and **3. Competition among districts**.
- Driven primarily by the States, this initiative focuses on the strengths of each district, and prioritizes the attainable outcomes for immediate improvement.
- Districts will be ranked on their "incremental progress" through **Delta Ranking**.
- The Aspirational Districts programme, through real-time monitoring and proactive course corrections, reinforces the mechanisms of cooperative & competitive federalism between the Centre and the States, down to the Districts.
- NITI Aayog is the nodal agency for the scheme.

FOCUS THEMES - ADP

The programme focuses on 5 main themes which have a direct impact on quality of life and economic productivity of citizens.

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Themes	Weight Allotted
Health & Nutrition	30%
Education	30%
Agriculture & Water Resources	20%
Financial Inclusion & Skill Development	10%
Basic Infrastructure	10%

IMPORTANT HIGHLIGHTS OF THE UNDP REPORT

- **Concerted efforts made under the ADP has resulted in more growth & development for previously neglected districts, including districts affected by Left Wing Extremism.**
- **UNDP** found that the programme has acted as a catalyst for expediting development in these districts. According to the report, while health and nutrition, education, and to a certain extent, agriculture and water resources, have registered massive improvements, the other indicators despite making significant strides offer scope for further strengthening.
- **Aspirational Districts outperforms other districts** on metrics of development, since the launch of program.
- **Helped in tackling COVID** - Continued focus of the programme on health and nutrition has helped them in tackling the Covid crisis with greater resilience.

REASON FOR SUCCESS:

- Monitoring real-time data, convergence across government programmes and schemes and receiving the benefits of the Aspirational Districts Programme by substantial margins.
- **Bringing all Stakeholders together** - including state and local governments, development partners, and citizens, together to achieve goals and targets. It is this key pillar that enabled district commissioners 'to build a strong Covid-19 response and cope with the

challenges of the pandemic by working in close coordination' with the panchayats, faith and community leaders and development partners in their respective districts.

- **3Cs Approach Effective** - Convergence, Competition and Collaboration approach of the ADP served as a motivating factor for districts to increase their efforts and track progress.
- **ADP has strengthened the technical and administrative capacities of the districts.**
- **Delta Rankings Appreciated** - The competitive and dynamic culture fostered by it has successfully pushed several low performing districts (as per baseline rankings) to improve their standing in the past three years. **Simdega (Jharkhand), Chandauli (Uttar Pradesh), Sonbhadra (Uttar Pradesh) and Rajgarh (Madhya Pradesh)** were found to have progressed the most since the beginning of the programme.

SUGGESTIONS

- **The need to revise a few indicators** that are close to being saturated or met by most districts, such as 'electrification of households' as an indicator of basic infrastructure.
- **Special Focus on Least-improved Districts** - the least-improved districts require a special focus on the sectors in which these districts have underperformed.
- **There was a need to focus more on capacity building** - including the appointment of dedicated personnel such as Aspirational District Fellows or Technical Support Units across all the districts or to collaborate with development partners for providing technical expertise, skills training, etc.

WAY FORWARD

The report has appreciated the positive impact of the program and stressed on the need to ensure 'the focus on development is encouraged further, and momentum gained so far in expediting growth is maintained. Based on the findings of the evaluation, it is recommended that the success of the program be scaled up and replicated for other sectors and districts.

ECONOMIC DEVELOPMENT

GS PAPER (PRELIMS) & GS PAPER III (MAIN)

INCLUSIVE GROWTH AND DEVELOPMENT

RURAL INDIA: LEVERAGING STRUCTURAL TRANSFORMATION

#DEVELOPMENT



The Future of India lies in villages- Mahatma Gandhi

CONTEXT

India is predominantly a rural country with two third population and 70% workforce residing in rural areas. The Rural economy constitutes 46 per cent of national income. Despite increase in urbanisation, more than half of India's population is projected to be rural by 2050. Thus, growth and development of rural economy is a key to overall growth and inclusive development of the country.

Rural India is undergoing structural transformation and diversification towards other sectors of the economy. However, this structural transformation is not accompanied by employment creation. In fact, the rural India is witnessing negative Employment growth rate since 2004-05.

In this regard, let us understand about the Structural Transformation in the Rural areas and how to leverage this transformation to bridge the gap between Rural Bharat and Urban India.

PRESENT STATUS OF RURAL ECONOMY

Share of Population: As per the 2011 Census, **68.8% of India's population** and **72% of workforce** resided in rural areas.

Share of GDP and Workforce: The **share of rural areas in GDP** has steadily declined from **62% (1970-71) to 46% (2011-12)**. Similarly, the **share of rural areas in employment** has steadily declined from **84% (1970-71) to 70% (2011-12)**. The **decline in share of GDP without a commensurate reduction in the share of employment** in the last 4 decades shows that most of the increase in the GDP was contributed by the capital-intensive sectors in the Urban India.

Structural Transformation: The rural areas account for **95% of the agriculture output, 50% of the manufacturing output and around 25% of the service sector output**. As can be seen from the table below, the contribution of rural areas to manufacturing output has doubled from 25% (1970-71) to more than 50% (2011-12). In fact, rural areas account for higher share of manufacturing output in comparison to urban areas.

The factors responsible for the growth of Rural Non-Farm Economy (RNFE) are, **lower productivity of farms, sluggish growth rate of agriculture, shrinking farm size, increasing cultivation cost, increased wage rates in non-farm sector** etc.

Table. Share of rural areas in total NDP and workforce across different sectors

Year	Agriculture		Manufacturing		Construction		Services		Non-agri.	
	NDP	Emp.	NDP	Emp.	NDP	Emp.	NDP	Emp.	NDP	Emp.
1970-71	96.2	96.8	25.8	51.5	43.2	64.6	32.8	42.1	32.4	47.3
1980-81	94.9	95.9	31.8	48.1	45.6	58.8	34.0	41.7	35.0	44.9
1993-94	93.9	95.8	29.8	51.3	45.1	57.2	33.6	42.3	34.8	46.6
1999-00	93.2	96.6	41.6	51.5	43.3	57.6	27.1	40.7	31.8	45.8
2004-05	94.1	96.1	42.5	49.6	45.5	64.4	32.7	41.9	36.7	47.2
2011-12	95.1	95.9	51.3	47.4	48.7	74.6	25.9	39.6	35.3	48.7

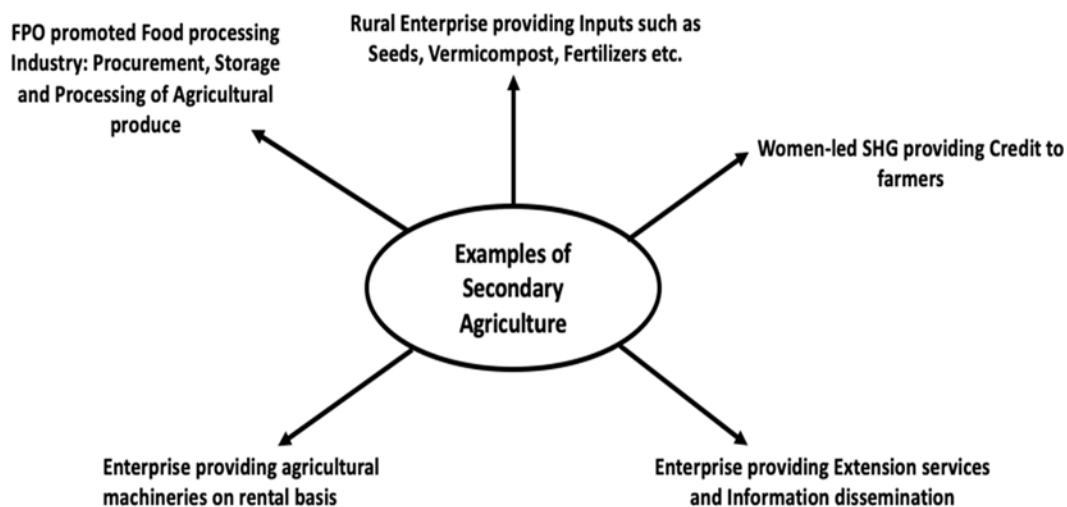
Note: Emp.: Employment, Non-agri. Includes manufacturing, construction, services and other sectors

Jobless Growth: During the four decades from 1970-71 to 2011-12, rural output has increased almost seven times. However, in spite of structural transformation, the overall employment has not even doubled. In fact, between 2005-12, **the rural India witnessed negative employment growth rate of -2.8%**. This shows that the non-farm sector was not able to absorb the labour force leaving the agriculture. Most of these people migrated to urban areas due to lack of employment opportunities in the rural areas.

As highlighted, the structural transformation in the rural India has failed to boost employment opportunities. In this regard, the Dalwai panel has recommended boosting Secondary Agriculture to leverage structural transformation, create employment opportunities and boost rural economy.

According to Dalwai Panel, **Secondary agriculture is defined as cottage industry that (a) utilises agricultural products as raw material or provides various inputs to agriculture (b) deploys locally available skills to produce goods and services; and (c) can be categorised appropriately as MSME.**

Leveraging Structural Transformation through Secondary Agriculture



Benefits:

Holistic development of rural areas by transforming rural areas from consumers to producers of Goods.

Efficient utilisation of resources such as land and labour through various activities such as honeybee keeping, mushroom cultivation, backyard poultry etc.

Contributes to agriculture by providing Inputs, enhancing productivity and reducing post-harvest losses.

Develop human and capital resources to replicate Start-up India at village level.

In year 2011-12 per worker income varied from Rs. 33,937 for agricultural labour to Rs.1,71,836 for rural non-farm workers. Rural non-farm sector offers 2.76 times productive employment than the farm sector

SPECIAL SUPPORT NEEDED FOR SECONDARY AGRICULTURE

- Priority sector status for institutional credit.
- Low-cost skilling and knowledge-based exposure.
- Specialised extension services for enterprises owned by females.
- Priority under rural electrification objectives.
- Fast track procedures to avail benefits under ongoing central sector and centrally supported schemes.
- Geographical Indicator labels to products from village scale secondary production.

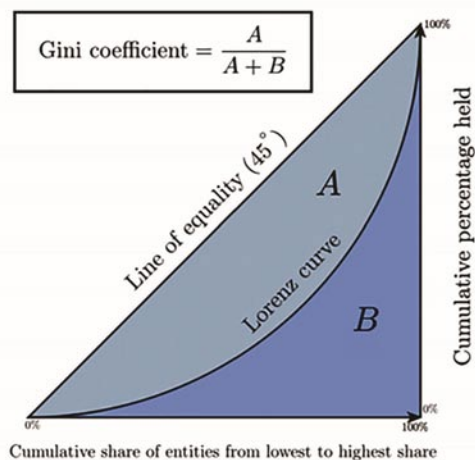
Secondary agriculture would need to be promoted by providing enterprise level support, which can be undertaken by initial setting up of a Division on Secondary Agriculture & Enterprises in the Ministry of Agriculture and Farmers' Welfare.

In this regard, let us look into various indicators used for measuring Inequality.

LORENZ CURVE AND GINI-COEFFICIENT

Lorenz curve shows the percentage of total income earned by cumulative percentage of the population. In a perfectly equal society, the 10% of the population would earn 10% of the cumulative income. Similarly, 25% of the population would earn 25% of the cumulative income.

Hence, as shown in the figure, in a perfectly equal society, the line inclined at 45° is called as "**Line of Perfect Equality**". As inequality increases, the Lorenz curve deviates from the line of equality and shows that income gets concentrated in few sections of the society.



Gini coefficient is defined as $A/(A+B)$, where A is the area between Line of Perfect Equality and Lorenz Curve and B is area between Lorenz Curve and X-Axis (As shown in the figure)

If $A=0$ (i.e., Lorenz Curve lies along the line of Perfect Equality), then Gini-Coefficient $(A/A+B) = 0$, which denotes Perfect Equality.

If $B=0$ (i.e., Lorenz Curve lies along X), then Gini-Coefficient $(A/A+B) = 1$, which denotes Perfect Inequality. **Thus, as Gini-Coefficient increases, the inequality in the country increases.**

Kuznets Curve: Relationship between economic growth and inequality. It is inverted U shaped meaning that initially economic growth leads to greater inequality. Later as the economy becomes more developed, the inequality starts to reduce.

Hoover Index (Robinhood Index): Basically, tells us as to how much income should be transferred from the

MEASURING INEQUALITY

#INCLUSIVE GROWTH



IN NEWS

Recently, NITI Aayog has published the SDG Index to measure the performance of the states in attainment of SDGs. In the previous editions of SDG Index, the NITI Aayog had used the **Gini-Coefficient Index** and **Palma ratio** to measure the extent of income inequality in India.

However, in its latest report, the NITI Aayog has done away with these indices and has instead given greater weightage to social equality indicators such as representation of women and people from marginalised communities in legislatures and local governance institutions, and crimes against SC/ST communities.

richer households to poor households so that there is absolute uniformity of income distribution. Higher values indicate more inequality, and that more redistribution is needed to achieve income equality.

Decile dispersion ratio (or inter-decile ratio): It is the ratio of the average income of the richest x per cent of the population to the average income of the poorest x per cent.

For example, D9/D1 ratio would mean the ratio of the income of the 10 per cent richest to that of the 10 per cent poorest.

Palma ratio: Ratio of Income of the top 10 per cent of households to the bottom 40 per cent.

20/20 ratio: Ratio of the average income of the richest 20 per cent of the population to the average income of the poorest 20 per cent of the population.

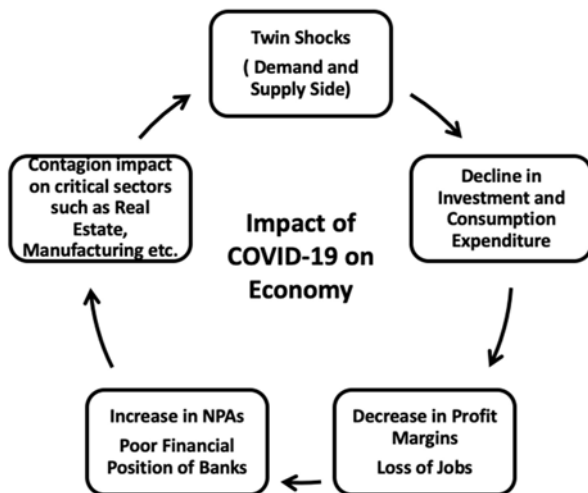
GDP ESTIMATES



IN NEWS

Recently, the National Statistical Office (NSO) has released the provisional estimates of the National income for the year 2020-21. According to the report, the Indian Economy has suffered worst form of "Economic Recession" for the first time in the last 49 years since 1979-80.

UNDERSTANDING THE IMPACT OF COVID-19 ON ECONOMY



NOMINAL GDP VS REAL GDP

The Gross Domestic Product (GDP) refers to the market value of all final goods and services produced within an economy. It can be calculated into two ways:

- **Nominal GDP:** It refers to the GDP at the current market prices i.e., the GDP is calculated as per the market prices for the year for which the GDP is calculated.
- **Real GDP:** It refers to the GDP at base year prices i.e., the GDP is calculated as per the market prices in the base year. Thus, the Real GDP negates the inflation in goods and services.

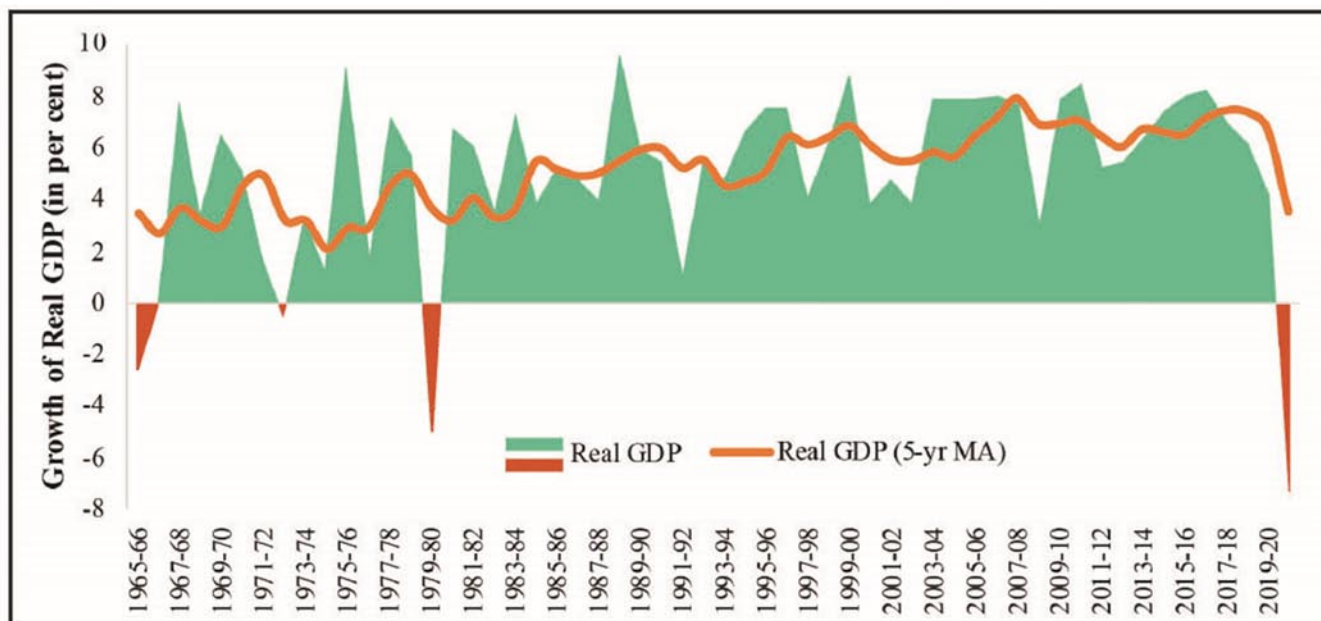
In case of high rate of inflation, the nominal GDP would be higher than the real GDP. However, in case of deflation, the real GDP would be higher than the nominal GDP.

ESTIMATES OF NATIONAL INCOME FOR 2020-21

Real GDP: Real GDP at Constant (2011-12) Prices in the year 2020-21 is now estimated to be at Rs 135 lakh crores in comparison to Rs 145 lakh crores in 2019-20. The GDP growth rate is -7.3% in the year 2020-21 in comparison to 4% growth rate registered in the year 2019-20.

Nominal GDP: GDP at Current Prices in the year 2020-21 is now estimated to be at Rs 197 lakh crores in comparison to Rs 203 lakh crores in 2019-20. The GDP growth rate is -3% in the year 2020-21 in comparison to 7.8% growth rate registered in the year 2019-20.

Figure : Trends in India's Real GDP Growth rate



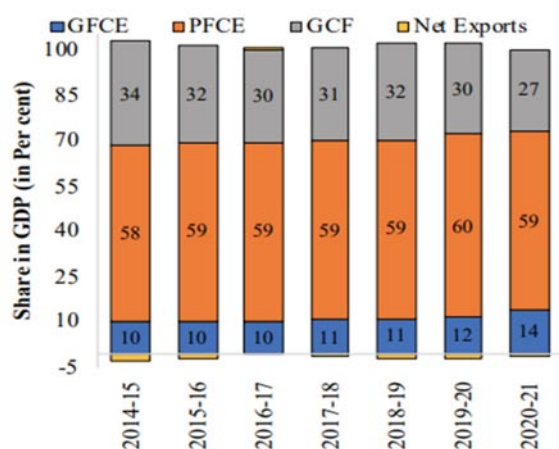
Source: NSO

ECONOMIC RECESSION IN INDIA

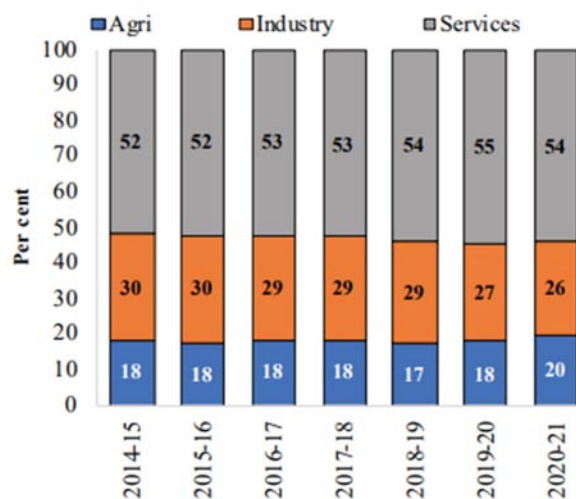
India has recently faced economic recession for the first time in the last 41 years since 1979-80. **Recession is defined as a fall in the overall economic activity for two consecutive quarters (six months) accompanied by a decline in income, sales and employment.**

In independent India's history, **5 such years of negative GDP growth** were registered. They saw contraction of -1.2% (FY58), -3.66% (FY66), -0.32% (FY73), -5.2% (FY80) and present financial year (2020-21).

TRENDS IN SHARE OF DIFFERENT COMPONENTS OF GDP



TRENDS IN CONTRIBUTION OF DIFFERENT SECTORS



Despite, the overall GDP contracting by 7.3% in 2020-21. Not all sectors of the economy contracted. In this respect, let's see how various sectors were impacted:

1. Agriculture and allied sector turned out to be saviour this time. Despite the pandemic, there was growth in the agriculture sector amounting to 3.6%.
2. Manufacturing sector contracted by 7.2%.

Thus, the farmers of the country turned out to be saviours not only ensuring food and nutritional security

but also moderate the economic impact of the pandemic.

AGRICULTURE

BEED MODEL

#AGRICULTURE # INSURANCE

PRIMARY SOURCE

The Indian EXPRESS

SECONDARY SOURCE

BusinessLine

IN NEWS: *Beed district in Maharashtra has emerged as a new and innovative model for implementing Pradhan Mantri Fasal Bima Yojana (PMFBY). This unique model provides for sharing of loss as well as profits between insurance and the State government. Hence, it offers important lessons for us to implement the crop insurance scheme in drought prone districts of India.*

In this regard, we will look into following dimensions:

- Pradhan Mantri Fasal Bima Yojana (PMFBY)- Features and Challenges
- Recent Changes introduced in March 2020 and their implications
- Beed Model of PMFBY- Working Mechanism and Benefits`

Prelims 2016

Q. With reference to 'Pradhan Mantri Fasal Bima Yojana', consider the following statements:

1. Under this scheme, farmers will have to pay a uniform premium of two percent for any crop they cultivate in any season of the year.
2. This scheme covers post-harvest losses arising out of cyclones and unseasonal rains.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Mains 2016

Q. Given the vulnerability of Indian agriculture to vagaries of nature, discuss the need for crop insurance

and bring out the salient features of the Pradhan Mantri Fasal Bima Yojana (PMFBY)

DETAILS ABOUT PRADHAN MANTRI FASAL BIMA YOJANA (PMFBY)

- **What it does?** It provides insurance coverage to the farmers in the event of failure of any of the notified crop as a result of natural calamities, pests & diseases.
- **Coverage of Risks-** Prevented Sowing/Planting, Yield losses due to non-preventable risks, such as Drought, Dry spell, Flood, Inundation, widespread Pests and Disease attack, post-harvest losses, localised calamities etc.

Note: States may consider providing add-on coverage for crop loss due to attack by wild animals.

- **Risks not covered:** Losses arising out of war and nuclear risks, malicious damage and other preventable risks shall be excluded.
- **Premium:** The Premium to be paid by Farmers: Kharif Crops: 2%, Rabi Crops: 1.5%, Commercial and Horticultural Crops: 5%. **The balance premium is paid equally by Centre and States.**
- **Coverage:** Loanee farmers, non-loanee farmers, sharecroppers and tenant farmers (those who farm on rented land).

IMPLEMENTATION CHALLENGES IN PMFBY

- **Negligible coverage of sharecropper and tenant farmers** due to lack of legal recognition of Land leasing.
- **Mixed cropping and crop diversification discouraged:** A limited number of crops are notified by states under PMFBY. Only these crops can avail of insurance.
- **Poor awareness about PMFBY:** Only 30% of the farmers are aware about PMFBY and its benefits.
- **Inadequate and delayed claim payment to farmers:** Only 5-10% of the claims made for crop

losses have been paid on time. Many insurance companies cited delay in receiving the state and Central government subsidies as the main reason for delay in reimbursing claims.

- **Very high actuarial premium rates:** Insurance companies have charged much higher actuarial premium rates in some states and regions.
- **Loopholes in assessment of crop loss:** PMFBY encourages the use of satellite, remote sensing technology and drones to improve the speed and reliability of the Cost Cutting Experiments (CCEs); most of the states have been unable to carry out the crop cutting experiments in a reliable and fool proof manner.

RECENT CHANGES INTRODUCED IN MARCH 2020

- **Limit on the Centre's Premium:** The Centre would contribute its share of the premium amount, provided the premium is up to 30% for unirrigated areas/crops and 25% for irrigated areas/crops. If the premium is above the threshold, then the centre would not provide the additional premium amount. So, in that case, the additional premium amount would be borne by the respective state government.
- **Voluntary enrolment of farmers:** Earlier, the scheme was mandatory for the loanee farmers and optional for non-loanee farmers. The recent changes have made the enrolment under the scheme voluntary even for the loanee farmers.
- **Higher share of centre's contribution in North-Eastern States to 90:10 (earlier 50:50)**
- **Timely payment of Insurance premium by States:** States would not to be allowed to implement the Scheme in subsequent seasons in case of considerable delay in payment of premium in previous season.

IMPLICATIONS OF THE NEW CHANGES

- **Higher Subsidy burden on the States** due to limit on capping on premium contribution by Centre
- **Increase in the insurance premium:** The move to done away with the compulsory enrolment of loanee

farmers would lead to decrease in the area as well as the number of farmers covered under the scheme. This is expected to lead to increase in the insurance premium under the scheme.

BEED MODEL OF PMFBY

Background: Beed district in Maharashtra is highly prone to droughts wherein the farmers repeatedly face huge losses. Hence, providing agricultural insurance in this District is considered as highly risky for any insurance company.

The claims which they are required to pay to the farmers can be higher than the premium which they have collected. For example, if an insurance company has collected gross premium of say, Rs 100 in entire district. But it may be forced to pay Rs 140 in the form of claims due to failure of monsoon. As can be seen from the table below, the claims paid by the insurance company has been higher than the premium it has collected.

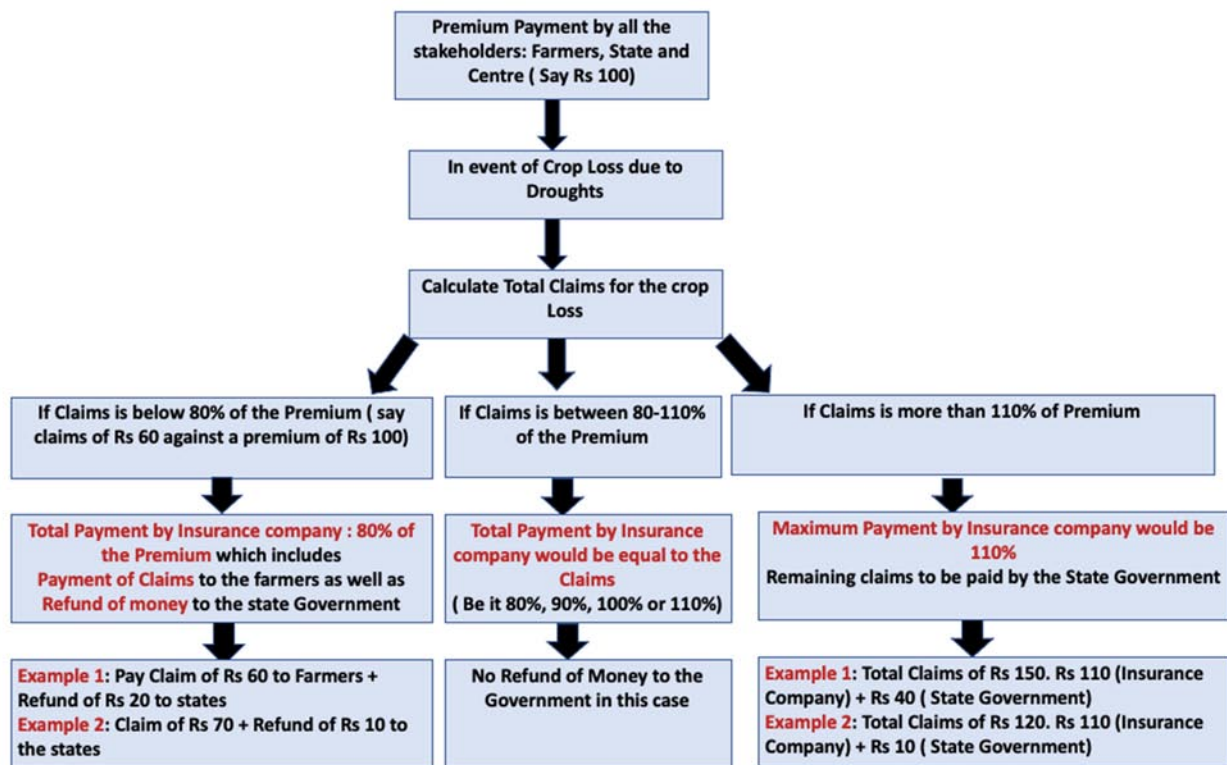
PMFBY IN MAHARASHTRA		
Year	Premium collected	Claims paid
2016-17	₹ 3,995.02 cr	₹ 1,924.72 cr
2017-18	₹ 3,544.33 cr	₹ 2,707.81 cr
2018-19	₹ 4,914.16 cr	₹ 4,655.46 cr
2019-20	₹ 4,925.57 cr	₹ 5,511.68 cr
2020-21	₹ 5,801.73 cr	₹ 823.19 cr*

* Rabi claims for 2020-21 yet to be finalised

This in turn disincentives the private insurance companies from providing insurance under PMFBY. Hence, the Maharashtra government roped in public sector Agriculture Insurance Corporation of India Limited (AIC) to provide crop insurance in Beed district for the next three years under a unique scheme.

HOW THIS MODEL WORKS?

As per the guidelines, the insurance company will assume liability only up to 110 per cent of the premium collected and the rest will be paid by the State. Similarly, if claims are below 80% of the gross premium, the company would have to share a part of its profits with the State government.



BENEFITS OF THIS MODEL

- Risk sharing between Insurance company and State Government--> Incentivise Insurance companies to come forward to provide insurance.
- Sharing of profits with the state Government--> Enable the State Government to build corpus which can later be used in subsequent years to pay compensation to farmers
- Capable of being replicated in other states as well--> Ensure success of PMFBY

Note: There is no direct benefit to the farmers under this model as the insurance premium that is required to be paid by them is same.

MSP REGIME IN INDIA

#AGRICULTURE



IN NEWS

The Cabinet Committee on Economic Affairs has recently approved the increase in the Minimum Support Prices (MSPs) for all mandated Kharif crops for marketing season

2021-22. The highest absolute increase in MSP over the previous year has been recommended for sesamum followed by tur and urad.

DETAILS ABOUT MINIMUM SUPPORT PRICE (MSP) REGIME

Declaration of MSP: The Cabinet Committee on Economic Affairs (CCEA) notifies MSP based on the recommendations of the Commission on Agricultural Costs and Prices (CACP).

Coverage of Commodities: As of now, CACP recommends MSPs of 22 commodities, which comprise 7 cereals (paddy, wheat, maize, sorghum, pearl millet, barley and ragi), 5 pulses (gram, tur, moong, urad, lentil), 7 oilseeds (groundnut, rapeseed-mustard, soyabean, sesamum, sunflower, safflower, Niger seed), and 3 commercial crops (copra, cotton and raw jute).

NOTE: The CCEA declares the Fair and Remunerative Prices (FRP) for the sugarcane. MSP does not enjoy statutory backing. However, **FRP enjoys statutory backing** under Sugarcane (Control) Order, 1966, which is issued under the Essential Commodities Act (ECA), 1955. **Hence, there is statutory binding on sugar factories to pay the minimum announced price and all those transactions or**

purchase at prices lower than this are considered illegal.

HOW ARE THE MSPS FIXED?

The CACP considers various factors such as the cost of cultivation and production, productivity of crops, and market prices for the determination of MSPs. Different methodologies may be used to calculate the MSPs. These are

- **A2 Approach**, which includes cost of inputs such as seeds, fertilizer, labour.
- **A2+FL Approach**, which includes A2 and the implied cost of family labour (FL); and
- **C2 Approach**, which includes the implied rent on land and interest on capital assets and A2+FL. Hence, C2 approach is considered to be the most comprehensive approach which can be used to calculate the MSP.

Note: *The National Commission on Farmers led by M.S. Swaminathan had recommended for the adoption of C2 Approach for fixing the MSP. However, presently, the MSPs are fixed at least 50% more than cost of production as calculated according to A2+FL approach.*

LIMITATIONS IN THE MSP REGIME

The MSP Policy of the Government has come under immense criticism on account of number of reasons. These flaws with the MSP regime have been highlighted by number of committees such as the Committee on Doubling Farmers' income which was headed by Ashok Dalwai and Shanta Kumar Committee on FCI reforms.

- **Promoted Cultivation of Water Intensive Crops:** Even though, the Government declares MSP for 22

crops, the procurement is quite strong only for Rice and Wheat. The procurement of other commodities, particularly Pulses and Oilseeds is quite lower.

- **Lack of Safeguards:** The present MSP regime is not geared to pay compensation to the farmers when they are forced to sell the agricultural commodities in the open market below the MSP. Ideally, the MSP regime should be able to compensate such farmers for the losses incurred.
- **Flawed Approach:** It has been stated that the fixing of MSP based on A2+FL approach would lead to declaration of lower MSP and hence does not adequately compensate the farmers. Accordingly, some of the economists have pointed out that the MSP should be declared based on the C2 Approach as recommended by Swaminathan Committee.
- **Benefitted only Large Farmers:** The Shanta Kumar Committee on FCI reforms has highlighted that the MSP procurement has benefitted only 6% of farmers in India. Hence, only the large farmers which higher surplus of agricultural commodities have got benefitted from MSP. The Small and marginal farmers who comprise of almost 83% of the farming community have failed to get benefitted from the MSP regime.
- **Undue delay:** In some of the cases, the Government has not been able to declare the MSPs as per the schedule. These delays in the announcement of the MSPs have not able to send the price signals to the farmers on time.

BANKING AND FINANCE

MICROFINANCE SECTOR

#FINANCE

PRIMARY SOURCE BusinessLine SECONDARY SOURCE FINANCIAL EXPRESS

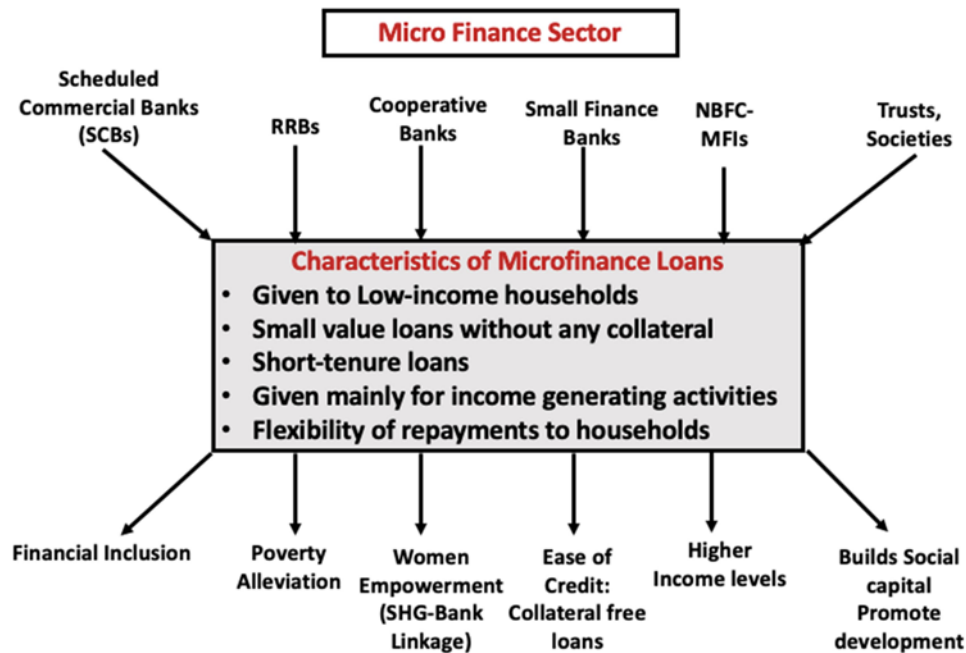
IN NEWS

Microfinance is considered to be a tool to promote financial inclusion, enable the households to come out of poverty and increase their income levels. It can facilitate achievement of

national policies such as poverty reduction, women empowerment, improvement in the standards of living etc. Indian microfinance sector has witnessed phenomenal growth over past two decades. However, it is facing number of challenges such as absence of comprehensive regulatory framework, higher indebtedness, coercive recovery practices etc.

In this regard, recently the RBI has come out with a consultative document on the microfinance sector. Let's take

this opportunity to understand various facets related to Microfinance which becomes quite important from the perspective of both Prelims and Mains Exam.



EVOLUTION OF MICRO FINANCE SECTOR IN INDIA

- **1992:** NABARD's SHG-Bank Linkage programme. Banks started lending to Women-led SHGs based upon the money which these SHGs saved in the bank accounts.
- **1992 to 2010:** No separate RBI guidelines for the Micro finance sector. Facilitated rapid growth of micro-finance institutions (MFIs). These MFIs operated in regulatory vacuum and hence led to their exponential growth. This phase saw the growth of large sized MFIs such as SKS Microfinance, Spandana etc.
- **2010:** Andhra Pradesh Microfinance crisis. MFIs indulged in unethical practices such as charging higher interest rates, adoption of forced recovery techniques, not following due diligence in giving loans etc. Led to suicide by large number of people in the rural areas.
- **2011:** Appointment of **Malegam Committee** on Regulation of MFIs. Committee recommended creation of separate category of MFIs called as **NBFC-MFIs**. Called upon RBI to lay down comprehensive guidelines.

- **2011-2020**
 - RBI created separate category of NBFC-MFIs and has laid down comprehensive regulatory framework.
 - Some of the MFIs have been merged into Banks while some MFIs have been issued license to operate as small finance Bank
 - Bandhan Financial services, which was an MFI earlier, has been issued license for Universal Bank

Present Status: The total micro-finance loans stand at Rs 2.7 lakh crores. The highest share is accounted by the SCBs (40%). The NBFC-MFIs account for 30% of the loans.

RBI'S PRESENT GUIDELINES FOR THE NBFC-MFIS

MFI is defined as a non-deposit taking NBFC that fulfils the following conditions:

- Minimum Net Owned Funds of Rs.5 crore. (For NBFC-MFIs registered in the Northeastern Region of the country, the minimum NOF requirement shall stand at Rs. 2 crore).
- Not less than 85% of its loans are in the nature of "qualifying assets."

ECONOMIC DEVELOPMENT

“Qualifying asset” shall mean a loan which satisfies the following criteria: -

- Loan disbursed by an NBFC-MFI to a borrower with a rural household annual income less than Rs. 1.25 lakh or urban and semi-urban household income less than Rs. 2lakhs.
- Loan amount does not exceed Rs. 1.25 lakh per borrower.
- Loan extended without collateral.
- The aggregate amount of loans, given for income generation should be at least 50 per cent of the total loans given by the MFIs.
- The loan is repayable on weekly, fortnightly or monthly instalments as per the choice of the borrower.

SUMMARY OF THE RBI'S RECOMMENDATIONS ON THE REGULATORY FRAMEWORK FOR THE MFIS

Criteria	Problems in the Present Framework	Proposed Framework
Applicability	<ul style="list-style-type: none"> • RBI's guidelines on microfinance sector is applicable only to the NBFC-MFIs, which account for only 30% of the micro-finance loans. • It is not applicable to SCBs, RRBs, Cooperative Banks etc. 	Guidelines to be made applicable to SCBs, RRBs and Cooperative banks
Definition of Micro finance loan	No Common Definition; RBI's definition of what constitutes Micro-finance loan is applicable only to NBFC-MFIs	Present definition of Micro-finance loan should be extended to SCBs, RRBs and Cooperative Banks
Indebtedness	<p style="text-align: center;">Present Guidelines:</p> <p>A single borrower cannot borrow from more than two NBFC-MFIs.</p> <p style="text-align: center;">Problems:</p> <ul style="list-style-type: none"> • Borrowers take multiple loans from SCBs, RRBs, Cooperative banks etc. leading to over borrowing. • Puts strain on household finances for repayment of principal and interest 	<p>Presently, there is a limit on household borrowings which cannot exceed Rs 1.25 lakh per borrower. Rather than having uniform limit, there is a need to have a limit which is based on the household income.</p> <p>Borrowers should not be allowed to borrow more than 50% of their income.</p>
Interest Rate	<p style="text-align: center;">Present Guideline:</p> <p>The ceiling on the interest rate by the NBFC-MFIs based upon the formula given by the RBI. (<i>No need to know the formula for UPSC Exam</i>)</p> <p style="text-align: center;">Problem:</p> <ul style="list-style-type: none"> • Interest rate applicable only on 30% of the loans given by NBFC-MFIs. Not applicable to SCBs, RRBs etc. • Fixing of ceiling on the interest rates has hampered competition among the NBFC-MFIs 	<ul style="list-style-type: none"> • Interest rates on the micro-finance loans should be left to the discretion of the individual Banks. (<i>With suitable safeguards to ensure that they don't charge higher interest rates</i>) • RBI feels that this will promote competition among the Banks and help us in bringing down the interest rates on the loans.
Collateral free loans	Presently, applicable only to NBFC-MFIs	Must be extended to SCBs, RRBs and Cooperative Banks

RBI'S G-SAP

#SECURITIES

PRIMARY SOURCE BusinessLine

IN NEWS

The RBI has adopted an innovative and unconventional approach known as Government Securities Acquisition Programme (G-SAP) to deal with the present economic crisis. This tool is almost similar to the Asset Purchase Programme (APP) adopted by developed economies such as US post the Global financial crisis.

In this regard, let us understand the various facets related to G-SAP.

WHAT IS G-SAP?

G-SAP is a special kind of Open Market Operations (OMOs) wherein the RBI purchases G-Secs from the Banks. It is different from OMOs in mainly three ways:

- **Firstly**, under the OMOs, the RBI may either purchase or sell G-Secs depending upon the market conditions. But, under the G-SAP, the RBI would only be purchasing G-Secs. The RBI would not be selling the G-Secs.
- **Secondly**, the RBI uses OMOs either to inject or suck out excess liquidity depending upon the liquidity

conditions. But the G-SAP is mainly used for controlling the yield rates on the long-term G-Secs.

- **Thirdly**, the OMOs are carried out as per the discretion of the RBI. Hence, the Banks are not aware as to how much G-Secs the RBI would purchase and when would it purchase. Hence, under OMOs, the market is quite clueless with respect to what action RBI would take. But, under the G-SAP, the RBI comes out with a clear-cut commitment to purchase G-Secs within a definite time period.

WHAT IS RBI'S PLAN ON G-SAP?

The RBI Governor has outlined G-SAP 1.0 for the first quarter (April-June) of the financial year. Under G-SAP 1.0, the RBI has committed upfront to purchase G-Secs worth Rs 1 lakh crores. So far, it has already announced 3 tranches under G-SAP 1.0. In the second quarter of the financial year, the RBI is likely to come out with G-SAP 2.0.

WHY HAS RBI ADOPTED G-SAP?

- **Support Borrowing Programme of Government:** The Central Government seeks to borrow almost Rs 12 lakh crore for the present financial year. The states also want to borrow around Rs 8 lakh crores. Hence, the total borrowing requirement is around Rs 20 lakh crores. These borrowings would be done through the issuance of G-Secs.

However, presently, the annual demand for the G-Secs stand at only around Rs 9 lakh crore, which is much below the required borrowing of Rs 20 lakh crores. By committing upfront to purchase G-Secs, the RBI wants to create demand for the G-Secs among the Banks. If the Banks are confident that the RBI would purchase the G-Secs bought by them, automatically the demand for the G-Secs would increase.
- **Influence the yield rates on the long-term G-Secs:** The higher borrowing requirements by the Government has led to increase in the yield rates on the long-term G-Secs, particularly that of 10-year G-Sec. This can be understood as given below:

As the supply of G-Secs in the market increase--> Lower Demand for G-Secs--> Lower Bond Prices--> Higher Yields on G-Secs--> RBI has to offer higher yields to investors on issuance of new G-Secs--> Higher Borrowing cost for the Government.

Hence, by enhancing the demand for the G-secs among the Banks, the RBI wants to increase the Bond prices and hence lower the yields. (Making cheaper money available to fund their programs)

Global Examples: Central banks usually adopt unconventional tools to deal with economic slowdown. For example, the US Fed Bank and European Central Bank (ECB) had adopted Asset Purchase Program (APP) post the Global Financial crisis. RBI's G-SAP is almost similar to APP adopted by the developed economies.

STATUS OF CRYPTOCURRENCIES IN INDIA

#DIGITAL MONEY

PRIMARY SOURCE BusinessLine

IN NEWS

El Salvador has recently become one of the first countries to make world's largest cryptocurrency, Bitcoin, legal tender in the country. The US Dollar would continue as legal tender along with Bitcoin in El Salvador.

DETAILS

Usage of Bitcoin: According to the law passed in El Salvador, bitcoin can be used for number of purposes such as Payment of taxes, freely converted into dollars and vice-versa, Payment of goods and services etc. The bill passed by congress also calls for the creation of a fund that will be used to guarantee the convertibility of Bitcoin into dollars.

Rationale: Remittances account for roughly 20% of El Salvador's GDP. This mostly comes from Salvadorans working in the U.S. A large chunk of this gets lost in transfer fees, which Bitcoin can help to reduce.

STATUS OF CRYPTOCURRENCY IN INDIA

Cryptocurrencies are not illegal in India. Hence, if a person wants to buy cryptocurrencies and start trading, he can easily do so without any regulatory hurdles. A number of cryptocurrency exchanges such as WazirX have come up in India where investors can buy and trade in cryptocurrencies. However, the Government's stand on Cryptocurrency is still evolving.

April 2018: RBI had issued circular to all the financial institutions not to provide services to the entities which are dealing in virtual currencies. The Banks and other financial institutions were prohibited from offering services such as maintenance of accounts, giving loans, acceptance of virtual currencies as collateral, transfer of money against purchase/sale of virtual currencies etc.

July 2019: The Subhash Chandra Garg Committee (2019) recommended a ban on private cryptocurrencies on account of concerns such as volatility, instability, security risk and risk of funding illegal activities. However, the committee has highlighted that an official digital currency can have number of advantages such as

- Promotes cashless society.
- Increase in Financial Inclusion
- Increase in effectiveness of Monetary Policy
- Push to development of Fintech sector
- Provide a real time picture of economic activity and hence better GDP estimates and efficient monetary policy formulation.
- Traceability of transactions would crack down on corruption and money laundering.
- Counter the monopoly of private sector issued cryptocurrencies.

2020: In its decision in Internet and Mobile Association of India v. Reserve Bank of India, the Supreme Court struck down the circular issued by the RBI in 2018. The SC ruled that while the RBI has the power to regulate Virtual Currencies, the prohibition imposed through the April 2018 circular is disproportionate, and, therefore, ultra vires the Constitution. The SC was of the opinion that the RBI's action would impinge on the Fundamental right of the people to carry on any occupation, trade or business under Article 19(1) (g) of the constitution.

2021: Two important developments have taken place in 2021.

1. RBI has decided to withdraw its April 2018 circular.
2. The Government has sought to introduce the **Cryptocurrency and Regulation of Official Digital Currency Bill, 2021**. This bill seeks to (a) Ban all the private cryptocurrencies (b) Issue official digital currency to be issued by RBI. However, as per the latest media reports, the Government may not completely ban the private cryptocurrencies. A panel of experts is likely to study the subject and determine whether regulating cryptocurrencies is a better option than a complete ban.

The Cryptocurrency and Regulation of Official Digital Currency Bill, 2021 is set to be introduced in the upcoming Monsoon Session of the Parliament. So, let's wait and watch to know about Government's stand on the private cryptocurrencies. The fate of virtual currencies hangs in balance. Will they be banned or they will be regulated??

HEADLINE OR CORE INFLATION?

#INFLATION

PRIMARY SOURCE BusinessLine

IN NEWS

The Wholesale price Index (WPI) has increased to 25-year high of 12.94% in May 2021. The CPI has also increased to 6.3% in May 2021. The CPI has remained above the targeted rate of inflation of 4%. The increase in rate of Inflation is not only putting additional burden on the people, but it would also put economic revival in jeopardy. Some of the economists have already raised concerns about the possibility of "Stagflation" in future.

HEADLINE AND CORE INFLATION

- The headline inflation simply refers to the inflation in the CPI (or WPI) covering all the categories of goods and services. On the other hand, the core inflation excludes the volatile categories such as food and fuel in order to measure the increase in the prices of goods and services.

- Hence, a drastic fall in the food and fuel prices can bring down the headline inflation by a large extent. However, the core inflation may remain unaffected.

Note: Presently, the RBI is targeting the CPI headline rate of inflation (and not Core Inflation)

Base Effect: To calculate the rate of Inflation, the prices of Goods and services in the current month are compared with the prices in the corresponding month of the previous year.

The rate of inflation in the current month is calculated as

$(\text{Prices of Goods in Current Month} - \text{Prices of Goods in Corresponding month of Previous year}) / \text{Prices of Goods in Corresponding month of Previous year} * 100$

As can be seen in the above formula, the denominator (base) is the prices of Goods in the corresponding month of previous year.

So, if the denominator (base) value is lower, the rate of inflation in the current year would be higher. Similarly, if the denominator (base) value is higher, the rate of inflation in the current year would be lower. This can be understood as seen below:

Base effect: Rate of Inflation in the current year depends on rate of inflation in the Previous year. Rate of Inflation = (Prices in current month - Prices in corresponding month of previous year/ Prices in Corresponding month of Previous year) * 100.			
Scenario 1: Higher value of Base/Denominator → Lower Rate of Inflation			
Scenario 2: Lower value of Base/Denominator → Higher Rate of Inflation			
	May 2019	May 2020	May 2021
Scenario 1:	100	150	200
Rate of Inflation		50%	33.33%
Scenario 2:	100	110	200
Rate of Inflation		10%	81.81%

REASONS FOR THE RISING INFLATION IN INDIA

- Imported Inflation:** Increase in global commodity prices such as Crude oil, Edible oil etc.
- Increase in prices of certain food items** such as Egg (15%), Edible oils (30%), Fruits (12%), Pulses (9%)
- Increase in prices of services** such as Health, Transport and Communication etc.
- Low Base effect** as the prices of some of the Goods had declined last year due to the pandemic.

WHAT TO TARGET: HEADLINE OR CORE INFLATION?

Presently, the RBI targets CPI headline rate of inflation and not the Core Inflation. In this regard, the Economic Survey 2020-21 has highlighted that sole focus on CPI headline rate of Inflation may not be appropriate on account of number of reasons. Accordingly, it has recommended that a greater focus on core inflation is warranted.

Reasons:

- Firstly**, Headline inflation may take place due to volatility in prices of Crude oil and Food commodities, over which RBI's monetary policy has no control. For example, failure of monsoons, lack of cold chain infrastructure, supply side bottlenecks etc. usually lead to increase in Food prices.
- Secondly**, most of the time inflation in food commodities is transitory and may not require any policy action by the RBI
- Thirdly**, if the RBI tries to control inflation due to volatility in prices of food commodities, it can prove to be counterproductive. For example, to control inflation, rate of interest would increase--> Decline in Investment and Consumption Expenditure--> Economic Slowdown.
- Fourthly**, to measure inflation correctly, weightage must be assigned to different categories of commodities depending upon their share in the

household expenditure. Higher the share, higher should be weightage. The share of food commodities in the household expenditure has declined since 2011-12, yet the CPI gives a weightage of almost 45% to the food commodities.

IIP STATISTICS

#INDEX



IN NEWS

The National Statistical Office (NSO) has recently released the estimates of Index of Industrial production (IIP) for month of April 2021. According to NSO, the IIP for the month of April 2021 stands at 126. Last year, in April 2020, most of the industries had closed down their operations due to lockdown. Hence, it would not be correct to compare IIP in April 2021 with IIP in April 2020. In comparison to April 2019, the IIP in April 2021 has registered growth rate of 0.08%

Index of Industrial Production (IIP): Measures the quantum of changes in the industrial production in an economy. The current base year for the IIP series in India is 2011-12. It is compiled and published every month by National Statistical Office under the Ministry of Statistics and Programme Implementation.

CATEGORIZATION OF IIP

- **Sectoral Classification:** Industrial production for the purpose of IIP is divided into three sectors, i.e. Mining, Manufacturing and Electricity. **Highest Weightage:** Manufacturing
- **Use-based Classification** Primary goods, Capital goods, Infrastructure/ construction goods, Intermediate goods, Consumer durables, Consumer non-durables

Highest Weightage: Primary Goods

Lowest Weightage: Capital Goods

Index of Eight Core Industries: In India there are eight core sectors comprising of coal, crude oil, natural gas, petroleum refinery products, fertilisers, steel, cement and electricity. The eight core industries constitute

40.27% of the total index of industrial production (IIP). This index is prepared by Office of the Economic Advisor, Ministry of commerce and Industry and is published monthly with the base year as 2011-12.

Weightage of different sectors in the Index

- Highest Weightage: Petroleum Refinery production.
- Lowest Weightage: Fertilizers production.

Note: It is noted that Index of Industrial production (IIP) is published by NSO, Ministry of Statistics and Programme implementation while Index of Eight core Industries is published by Office of Economic Advisor, Ministry of Commerce and Industry.

INTERCHANGE FEE

#BANKING



IN NEWS

Over a period of time, the cost of ATM deployment and expenses on ATM maintenance incurred by banks and white label ATM operators has increased. In this regard, the RBI has recently decided to increase the interchange fee for the ATM transactions. This increase in the Interchange fee is based upon the recommendations of **VG Kannan Committee** which had submitted its recommendations in July 2020.

PRESENT STATUS OF ATMS IN INDIA

Low access to ATMs: Only 22 ATMs per 1 lakh population.

Uneven deployment of ATMs: About 69% (2011 census) of population living in rural areas have only 47% of ATMs.

Stagnation in ATM deployment in last 3 years due to higher cost of deployment and higher expenses on ATM maintenance.

Note: The NPCI's **National Financial Switch (NFS)** links together the country's ATMs in a single network.

TYPES OF ATMS

Bank Owned ATMs	Brown Label ATMs	White Label ATMs (WLAs)
<ul style="list-style-type: none"> Set up and owned by the bank itself. Bank is responsible for their overall operation and maintenance. Banks are given responsibility of Cash Management, Network Connectivity, Security etc. 	<ul style="list-style-type: none"> Work on cost-sharing between Bank and non-Bank service provider The Bank needs to take care of cash management and network connectivity while a service provider (Non-Banking Entity) provides for the ATM machine. 	<ul style="list-style-type: none"> ATMs set up and managed by non-Banking entity. The entire gamut of operations including ATM hardware, Cash Management, Network Connectivity, Security etc. is looked after by the non-banking entity. Ex: Indicash

CHARGES APPLICABLE ON ATM TRANSACTIONS

Interchange Fee: Charge that Bank "A" pays to another bank "B" when the customer of Bank "A" uses the ATM/PoS Machine of the Bank "B". For example, if use your ICICI debit card to withdraw money from HDFC ATM/ Indicash ATM, then in this case, your Bank "ICICI" would be required to pay interchange fee to HDFC/Indicash. The Interchange fee is the main source of revenue for the White Label ATMs.

Customer Charges: Customers are eligible for five free transactions every month from their own bank ATMs. They are also eligible for free transactions from other bank ATMs i.e., three transactions in metro centres and five transactions in non-metro centres. Beyond the free transactions, the customer would be required to pay Rs 20 per transaction.

RBI'S ANNOUNCEMENT

- Increase in Interchange fee** from Rs 15 to Rs 17 for financial transactions and from Rs 5 to Rs 6 for non-financial transactions (which includes balance inquiry, mini statement, PIN change, etc.)

- To compensate the banks for the higher interchange fee and given the general escalation in costs, they are allowed to **increase the customer charges** to Rs 21 per transaction. This increase shall be effective from January 1, 2022.

RATIONALE BEHIND THE INCREASE IN INTERCHANGE FEE

On an average every ATM transaction costs between Rs 15- Rs 16 for the Bank. This cost is incurred for number of expenses such as deployment of ATM machines, maintenance of security guards, loading of Cash, payment of rental space and so on. However, the money which are able to recover for every ATM transaction i.e., Interchange fee was hardly around Rs 15. **Hence, lower interchange fee was making it unviable for the banks and WLAs to operate ATMs. The increase in interchange fee is expected to increase the ATM penetration in India.**

LEVERAGING FINTECH COMPANIES

#FINTECH



IN NEWS

The year 2020 was a critical year for the Indian start-ups. Overall, the start-ups got adversely affected due to the ongoing pandemic. However, start-ups in the fintech sector have been able to attract highest seed funding in India.

UNDERSTANDING FINTECH

Fintech can be defined as **designing and provisioning of financial services by using new technological innovations**. Basically, fintech comprises of technology-based businesses that compete against, enable and/or collaborate with financial institutions. Examples: **Paytm, MobiKwik, Policy Bazaar, Phonepe, Google pay** etc

Growth drivers: Rapid increase in the use of smartphones, internet connectivity, online shopping; Younger population; Advancements in technology such

as Bigdata, AI etc; Improvement in Financial Inclusion; Launch of payment systems such as UPI; Regulatory support given by RBI etc.

EXAMPLES OF INNOVATIVE PRODUCTS OF THE FINTECH COMPANIES

- **Crowd funding** is a way of raising debt or equity from multiple investors via an internet-based platform. Example: Kickstarter, FuelAdream etc.
- **Peer-to-peer (P2P)** lenders connect lenders and borrowers via an internet-based platform. Example: Faircent, Lendenclub etc.
- **E-Aggregators** to compare the prices and features of a financial products. Example: Policy Bazaar
- **Account Aggregators:** An individual may have investments in fixed deposits with ABC Bank which comes under the purview of RBI, mutual fund investments with XYZ AMC which comes under the purview of SEBI and life insurance cover with DEF Insurance Corporation (which comes under the purview of IRDAI). Gathering and consolidating all the scattered data while applying for a loan may prove to be time-consuming. Hence, Individuals can authorize NBFC-aggregators to do this job and provide the information to Banks.

HOW CAN FINTECH COMPANIES BENEFIT THE INDIAN ECONOMY?

- **Increase in digital payments**
- **Improvement in Lending and Investment** through innovative tools such as Peer to Peer (P2P) lending, crowd funding etc.
- **Provide finances to the MSMEs** for trading of their invoices Example: TReDS Platform
- **Provide Insurance and advisory services**
- **Improvement in Credit Creation through the Account aggregator services**

RECOMMENDATIONS OF SUBHASH CHANDRA GARG COMMITTEE ON FINTECH SECTOR (2019)

- **Virtual banking:** RBI should examine the suitability of 'virtual banking system' where banks do not need to set up branches and yet deliver the full scale banking services ranging from extending loans, savings accounts, issuing cards and offering payment services through their app or website.
- **Removing discriminatory regulatory barriers:** In order to boost digital payments in India, the National payment corporation of India should provide non-discriminatory access to fintech firms on par with Banks.
- **Fintech for Cyber Security:** The fintech firms specialising in field of cyber security should be encouraged to set up their businesses in India and provided necessary regulatory approvals for expanding their services in the country.
- **Flow-based lending to MSMEs:** The GSTN data integrated with TReDS exchanges should form the basis of a flow-based lending system for MSMEs by banks and NBFCs.

(In cash flow lending, a financial institution grants a loan that is backed by the recipient's past and future cash flows). There is a need to develop fintech solutions to track the cash flows of the MSMEs.
- **Reforming P2P markets:** The credit needs of MSMEs, households and individuals can be taken care of by creating a marketplace model of debt financing where savers, non-banks and banks are all permitted to lend. The Ministry of Finance should develop a marketplace model of debt financing in India.
- **Remote Sensing and Drone Tech for Credit and Insurance:** Insurance Companies and Lending agencies in Agri sector should be encouraged to use drone and remote sensing technology for crop area, damage and location assessments to support risk reduction in insurance/lending business.
- **Digitisation of Land Records:** The Government should take up modernisation and standardisation of land records in the country on a war footing and complete such an exercise within 3 years.

- **Legal Framework for Customer Protection:** A legal framework for consumer protection should be put in place keeping in mind the rise of fintech and digital services.
- **Development of Regulation Technology (RegTech):** Regtech is a new field within the financial technology industry that utilizes information technology to enhance regulatory processes. It puts a particular emphasis on regulatory monitoring, reporting and compliance. The financial sector regulators (RBI, SEBI, IRDAI, and PFRDA) must develop standards for RegTech by financial sector service providers to make compliance with regulations easier, quicker and more automated for regulated entities.
- **Development of Supervision Technology:** The Supervision technology is the application of technology by the financial regulators so as to strengthen their regulatory and supervisory role. The committee has recommended that financial sector regulators (RBI, SEBI, IRDAI, and PFRDA) must focus on developing supervision technology.

RBI'S MONETARY POLICY DECISIONS

#RBI

PRIMARY SOURCE BusinessLine

IN NEWS

The RBI's Monetary Policy Committee (MPC) has decided to keep the policy rates unchanged and continue with the accommodative policy stance to kick start the Indian economy. Apart from that, the MPC has taken a number of policy decisions to enhance liquidity in the economy and deepen the financial sector.

POLICY RATES OF RBI

Policy Repo Rate	: 4.00%
Reverse Repo Rate	: 3.35%
Marginal Standing Facility Rate	: 4.25%

Bank Rate : 4.25%

Announcement No. 1: Resolution Framework 2.0 for COVID Related Stressed Assets of Individuals, Small Businesses and MSMEs

Background: In August 2020, the RBI had come out with the Resolution framework 1.0 deal with problem of possible increase in NPAs. The framework enabled the Banks to carry out debt-restructuring of the loans given to Corporates as well as Individuals. As part of one-time debt restructuring, the Banks can extend the tenure of loans, sanction additional loans, convert debt into Equity etc. This facility to undertake debt restructuring was available only until the end of December 31, 2020. Now, the RBI has come out with Resolution Framework 2.0 for the entities who did not avail restructuring during the first lockdown.

Conditions for carrying out Debt Restructuring:

- Facility would be extended to only those loans which were classified as Standard Loans as on March 31, 2021.
- Facility to undertake Debt Restructuring would be available to the Banks only until September 30, 2020
- The Loans which have undergone Debt Restructuring would continue to be categorised as Standard Assets by Banks

New Announcement: On May 5, 2021, the RBI had declared that only those loans whose value is less than Rs 25 crores are eligible for debt restructuring. Now, the RBI has decided to increase the maximum threshold to Rs 50 crores.

Announcement No. 2: RRBs to issue Certificates of Deposit

The Regional Rural Banks (RRBs) were permitted to access the liquidity windows of the Reserve Bank as well

as the call/notice money market in order to facilitate more efficient liquidity management by the RRBs at competitive rates. To provide greater flexibility in raising short term funds by RRBs, it has now been decided to permit RRBs to issue Certificates of Deposit (CDs) to eligible investors.

Announcement No. 3: Availability of National Automated Clearing House (NACH) on all days of the week

NACH is payment system developed by NPCI to facilitate interbank, high volume, electronic transactions which are repetitive and periodic in nature. NACH System can be used for making bulk transactions towards distribution of subsidies, dividends, interest, salary, pension etc. and also for bulk transactions towards collection of payments pertaining to telephone, electricity, water, loans, investments in mutual funds, insurance premium etc.

For example, the customers can sign NACH mandate form and authorise the Banks to auto debit their accounts for payment of various monthly transactions such as EMIs, Utility Bills etc.

RBI has proposed to make available NACH on all days of the week throughout the year, effective August 1, 2021.

Announcement No. 4: Liquidity Facility for contact intensive sectors

Total loans to be extended by the RBI: Rs 15,000 crores for a period up to 3 years: rate of interest would be equal to Repo rate.

Entities eligible to avail loans: Hotels and restaurants, tourism, private bus operators, car repair services, rent-a-car service providers, event/conference organizers, spa clinics, and beauty parlors/salons etc.

RBI'S CONSUMER CONFIDENCE SURVEY

#RBI # SURVEY



IN NEWS

Recently, the RBI has published its Bi-monthly Consumer Confidence Survey for May 2021. According to this survey, the consumer sentiment about the Indian economy has declined to an all-time low.

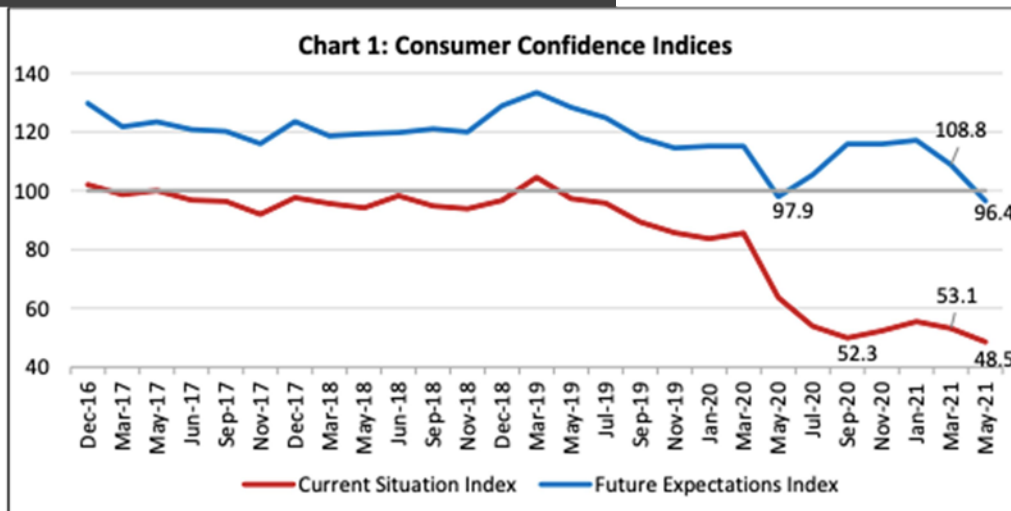
IMPORTANCE OF CONSUMER CONFIDENCE

- The consumption expenditure accounts for almost 60% of India's GDP and hence it is considered to be the major driver of economic growth and development. The main driver of the consumption expenditure is the Consumer Confidence.
- If the consumers are optimistic about the current and future economic state of country, then they would spend more money leading to increase in the GDP. On the other hand, if the Consumer confidence is low, this can lead to decrease in the consumption expenditure and hence impacts the GDP Growth rate.

ABOUT CONSUMER CONFIDENCE SURVEY (CCS)

- The Consumer Confidence survey is conducted by the RBI in 13 major cities of India and covers almost over 5,000 respondents. The survey measures consumer perception (current and future) on five economic variables - economic situation, employment, the price level, income and spending.
- The Consumer Confidence survey has two main indices - **current situation index and future expectations index**. The current situation index measures the change in consumer perception over an economic issue in the last one year while the future expectations index measures what consumer thinks about the same variables, one year ahead.
- A consumer confidence Index above 100 gives optimistic perception of the consumers while reading below 100 denotes pessimistic perception.

SNAPSHOT OF CONSUMER CONFIDENCE SURVEY- MAY 2021



Summary based on Net Responses						
Main Variables	Current Perception compared with one-year ago			One year ahead Expectations compared with current situation		
	Mar-21	May-21	Change	Mar-21	May-21	Change
Economic Situation	-63.9	-75.0	↓	5.3	-18.3	↓
Employment	-62.4	-74.9	↓	10.7	-13.0	↓
Price Level	-92.6	-89.0	↑	-64.4	-64.3	↑
Income	-53.7	-50.1	↑	33.4	27.0	↓
Spending	38.2	31.4	↓	59.3	50.9	↓
Consumer Confidence Index	53.1	48.5	↓	108.8	96.4	↓
↑	Positive Sentiments with sign of improvement compared to last round		↑	Negative Sentiments with sign of improvement compared to last round		
↓	Positive Sentiments with sign of deterioration compared to last round		↓	Negative Sentiments with sign of deterioration compared to last round		
↔	Positive Sentiments with no change compared to last round		↔	Negative Sentiments with no change compared to last round		

GOVERNMENT POLICIES

ETHANOL BLENDING

#GOVTPOLICIES # BIOFUEL



IN NEWS

On the occasion of World Environment Day, 5 June 2021, the Prime Minister released the report of the Expert

Committee on Roadmap for Ethanol Blending in India by 2025.

- According to the report, 20% ethanol blending is within reach. The report further lays out an annual plan for the gradual rollout of E20 ethanol in the country. It suggests specific responsibilities of Union Ministries, State Governments and vehicle

manufacturers for the production, supply and gradual rollout of 20% ethanol blending in petrol by 2025.

- Immense benefits can accrue to the country by 20% ethanol blending by 2025, such as saving Rs 30,000 crore of foreign exchange per year, energy security, lower carbon emissions, better air quality, self-reliance, use of damaged food grains, increasing farmers' incomes, employment generation, and greater investment opportunities.

The E-20 roadmap proposes the following milestones:

- Raise pan-India ethanol production capacity from the current 700 to 1500 crore litres.
- Phased rollout of E10 fuel by April 2022.
- Phased rollout of E20 from April 2023, its availability by April 2025.
- Rollout of E20 material-compliant and E10 engine-tuned vehicles from April 2023.
- Production of E20-tuned engine vehicles from April 2025.
- Nationwide educational campaign.
- Encourage use of water-sparing crops, such as maize, to produce ethanol.
- Promote technology for the production of ethanol from non-food feedstock.

Other recommendations include expediting regulatory clearances for ethanol distilleries through a single-window mechanism, unrestricted movement of denatured ethanol all over the country, tax incentives for blended fuel and petrol vehicles.

WHAT IS ETHANOL?

- Ethanol is a biofuel, that is, a fuel produced by processing organic matter. Ethanol in India is obtained primarily from sugarcane via a fermentation process.
- Ethanol is high in oxygen content, which therefore allows an engine to more thoroughly combust fuel.
- It can be mixed with fuel in different quantities and can help reduce vehicular emissions. Also, since it is plant-based, it is considered to be a renewable fuel.

LOGISTICS SECTOR

#INFRASTRUCTURE

PRIMARY SOURCE | pib

IN NEWS

The logistics sector is a key to achieve multi-faceted goals in India- Enhancing India's competitiveness, Boosting exports, Ensuring success of Make in India and thus pave way for Aatma Nirbhar Bharat.

In this regard, NITI Aayog has recently published a report titled "Fast Tracking Freight in India: A Roadmap for Clean and Cost-Effective Goods Transport". This report has identified key challenges in the logistic sector and has accordingly identified certain areas of opportunity where the Government should focus.

CURRENT SITUATION OF LOGISTICS SECTOR

Logistics is the overall process of managing how resources are acquired, stored and transported. It includes industrial parks, warehouses, cold storages and transportation.

- Employs around 22 million people (2016).
- Growth rate in the last decade is around 7.8%
- Higher Logistics costs in India around 14% of GDP (U.S - 9%, Japan- 12%)
- Poor Ranking on Logistic performance Index published by World Bank
- A 10 per cent decrease in indirect logistics cost has the potential to increase exports by 5-8 per cent.

CONSTRAINTS IN LOGISTIC SECTOR

- **Cost of logistics:** India's logistics cost as a share of GDP is 14 percent, which is high when compared to developed nations, where it ranges between eight and ten percent. Higher logistics cost in turn reduces the overall competitiveness of Indian economy.
- **Unfavourable modal mix:** Around 71 percent of India's freight is transported through road, and only 18 percent is through rail. Road transport is more energy intensive, costly, and accident-prone than other modes such as rail and water.
- **Low operational efficiency:** Truck productivity in India is low as compared to global standards. For

example, trucks in India travel about 300 km per day compared to the global average of 500 to 800 km per day. Trucks in India are also smaller and quite often overloaded beyond their capacity.

- **Coordination due to multiple stakeholders' involvement:** Logistics has four key components that account for the majority of the sector: transport, warehousing, freight forwarding and value-added logistics. Each of these falls under different segments of regulatory oversight, which adds complexity to the system. The presence of multiple agencies often leads to duplicate processes. non-uniform documentation across states adds to transaction costs.
- **Warehousing capacity and fragmented structure:** India's current reported warehousing capacity is 108.75 million metric tonnes (MMT) of which the private sector makes up less than 20 per cent. There is low value addition in the warehouse sector. Handling and warehousing facilities are still largely un-mechanized with manual loading, unloading and handling in the case of many commodities.
- **Seamless movement of goods across modes and high dwell time:** The movement of goods across modes suffers from the absence of last mile connectivity and infrastructure. For example, poor road and rail connectivity to most non-major ports lead to delays in travel time. The share of cargo moving through coastal shipping is small, primarily due to the lack of infrastructure and connectivity for feeder ships that operate between smaller container ports.

MEASURES TAKEN BY GOVERNMENT

- Policy measures such as Dedicated freight corridors, Sagarmala Project, Bharatmala and Golden Quadrilateral, Jal Marg Vikas Project, UDAN Scheme etc.
- Draft National Logistics Policy – for higher economic growth.
- Infrastructure status to Logistics sector.
- New Logistics Division in the Ministry of Commerce and Industry (Bibek Debroy committee recommendation)
- E-way bill – reduced truck turnaround time by 20%.
- India has signed International Conventions such as:

- **UN TIR convention**(*Customs Convention on International Transport of Goods*)
- **Trade Facilitation Agreement (TFA) of WTO has been ratified** - which aims to simplify custom procedure.
- LEADS Index – by Ministry of Commerce & Industry
- Setting up of multi-modal logistics parks
- **Logistics Efficiency Enhancement Program (LEEP)** focusses on building 35 multimodal logistics parks as well as introducing technological and digital solutions like goods tracking.

RECOMMENDATIONS

Opportunity 1: Increasing the share of rail transport

Problem: Rail's share in freight transportation has been declining since 1951. In 2020, it stood at merely 18 percent as compared to road's share of 71 percent.

Solutions:

- Increase the rail network capacity by increasing axle loads, increasing train length, and enabling trains to move faster.
- Add new network capacity by developing specialised heavy-haul corridors and dedicated freight corridors

Opportunity 2: Reduce Logistics cost by Optimising truck use

Problem: Higher logistics cost (14%) is due to poor modal mix, old vehicles, Low truck utilisation, High empty running of trucks, obsolete warehousing technologies etc.

Solutions:

- Improve load matching using digital platforms and get freight on the right type of truck
- Maximise vehicle productivity through efficient packaging and loading
- Improve the performance of warehouses by implementing advanced digitised tools
- Ensure warehouses have state-of-the-art practices

Opportunity 3: Fuel-Efficient and Clean Vehicles

Problem: Around 90 percent of road freight movement uses diesel as a fuel, which is a significant source of pollution in India. Poor fuel economy leads to externalities such as high costs, higher CO₂, PM and NO_x emissions

Solutions:

- Use Electric vehicles and cleaner fuels
- Enhance fuel emission standards for the vehicles

MANDATORY HALLMARKING OF GOLD

#GOVTPOLICIES



IN NEWS

The central government has recently announced the phased implementation of mandatory hallmarking of gold jewellery with effect from June 16. In the first phase, gold hallmarking will be available in only in 256 districts and jewellers having annual turnover above Rs 40 lakh will come under its purview.

- **Responsible Ministry:** Ministry of Consumer Affairs, Food and Public Distribution.
- **Hallmarking of gold:** Bureau of Indian Standard (BIS), which operates gold and silver hallmarking scheme in India, defines hallmarking as the “accurate determination and official recording of the proportionate content of precious metal in precious metal articles.” So, it is a “guarantee of purity or fineness” of precious metal articles.
- **Metals covered:** Gold jewellery and gold artefacts; and silver jewellery and silver artefacts.
- **Purity covered:** As per BIS standards, there are three categories of hallmarking based on purity of gold—22 carat, 18 carat and 14 carat. Ministry has announced that “Gold of Additional carats 20, 23 and 24 will also be allowed for Hallmarking.”

WHY HALLMARKING IS MANDATORY:

- Low level of hallmarked jewellery due to non-availability of sufficient assaying and hallmarking centres.
- India is one of the biggest consumers of gold.

SNIPPETS

All India House Price Index (HPI)

According to the RBI, all-India HPI increased by 2.7 per cent in the fourth Quarter of 2020-21.

ABOUT ALL INDIA HOUSE PRICE INDEX (HPI)

- Released by Reserve Bank of India (published quarterly).
- Base year: 2010-11
- Based on the transaction level data received from housing registration authorities in ten major cities (viz., Ahmedabad, Bengaluru, Chennai, Delhi, Jaipur, Kanpur, Kochi, Kolkata, Lucknow, and Mumbai).

ABOUT RESIDEX

Measures the price changes in residential real estate. Developed by National Housing Bank (NHB). New base year: **2017-18**.

It includes include housing price indices (HPI), land price indices (LPI), Building materials price indices (BMPI) and Housing rental index (HRI).

World employment and social outlook

The International Labour Organisation (ILO) has recently published the World Employment and Social Outlook Trends Report 2021. According to this report, almost around 100 million workers have been pushed into poverty due to Covid-19 pandemic.

REPORTS PUBLISHED BY ILO:

- World Employment and Social Outlook
- Global Wage Report
- World Social Protection Report

World Competitiveness Index report

India has maintained 43rd rank on an annual World Competitiveness Index.

ABOUT THE WORLD DIGITAL COMPETITIVENESS RANKING 2019 (WDCR)

It is compiled and published by the Switzerland-based International Institute for Management and Development (IMD)'s World Competitiveness Centre (WCC). It ranks the 64 economies and assesses the extent to which a country promotes the prosperity of its people.

Indicators used: Economic Performance, Government efficiency, Business Efficiency and Infrastructure.

Highlights of the Report

Top Ranked countries: Switzerland, Sweden and Denmark.

India's performance: Maintained 43rd rank for the past 3 years. But has made improvement in Government efficiency.



Thus, the carry trade determines the quantum of foreign inflows and exchange rate in India. Higher level of Carry trading into India would lead to Rupee Appreciation while the reverse would lead to Rupee Depreciation.

RAMP Programme

The World Bank's Board has recently approved \$500 million program known as Raising and Accelerating Micro, Small and Medium Enterprise (MSME) Performance (RAMP) to support the MSME sector.

BACKGROUND

- The MSME sector employs around 111 million people and is the second largest employer after agriculture. It

Carry Trade

The performance of Stock market in India is in stark contrast to GDP growth. On one hand, the Indian Economy has registered one of its lowest GDP growth rates of around -8% in the 2020-21, the stock market index SENSEX has nearly doubled since the low of March 2020.

Obviously, there are number of reasons for this anomaly such as higher liquidity supply, higher participation by retail investors, higher foreign inflows etc. One of the reasons that has contributed to this anomaly is the Carry Trade.

Carry trade is form of trading mechanism wherein the **foreign investors take advantage of difference in the interest rates between the countries** to make profits. Under carry trade, investors borrow money in a country where interest rates are lower and then invest in another country where interest rates are relatively higher.

contributes 28% of India's GDP, 45% of our manufacturing output and 28% of GDP.

- However, MSMEs continue to face challenges of formalization, access to knowledge services, access to timely and adequate finance, improving competitiveness, availability of skilled manpower, access to latest technology and marketing.
- **Around 95 percent of firms have less than 5 workers. In fact, 99 percent of the firms have less than 10 workers and the share of larger establishments is negligible.** This clearly highlights lower productivity of MSME sector.

DETAILS ABOUT RAMP

- Programme designed based upon recommendations of U.K. Sinha Committee.

Main components include:

- Strengthening institutional capacity and coordination by setting up high-level MSME Council.
- Provide better access to finance and working capital for MSMEs
- Promote technology-based solutions, green investments, and access to services for women headed businesses.

Early Harvest Package

UK has recently stated that it wants an early harvest trade package with India prior to finalisation of a full-fledged free trade agreement.

WHAT IS EARLY HARVEST PACKAGE?

Early harvest scheme is a precursor to a free trade agreement (FTA) between two trading partners. This is to help the two trading countries to identify certain products for tariff liberalisation before the conclusion of FTA negotiation. It is primarily a confidence building measure. The EHS has been used as a mechanism to build greater confidence amongst trading partners to prepare them for even bigger economic engagement.

PRACTICE QUESTIONS

MCQS

Q.1) Consider the following statements:

1. Palma ratio is a ration of income of top 10 percent of households to the bottom 40 percent.
2. Hoover index tells how much income needs to be transferred from richer households to the poorer households for absolute income equality.
3. According to Kuznets curve, economic growth leads to inequality in the long run.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Q.2) Consider the following statements about GDP of Financial Year 2020-21:

1. GDP contracted for the full year for the first time since 1979-80.
2. All major sectors of the economy i.e. Agriculture, Manufacturing and Services contracted during the year.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Q.3) Beed Model, recently in news is related to which of the following?

- (a) Watershed development
- (b) Covid management and vaccination
- (c) Farm insurance scheme
- (d) Prevention of Man-Animal Conflict

Q.4) Consider the following statements about NBFC-MFI in India:

1. Currently, only NBFC-MFI give out microfinance loans in India.
2. NBFC-MFI microfinance loans are not backed by collateral.
3. NBFC-MFIs are free to charge the interest rate on the microfinance loans based on market principle.

Which of the statements given above is/are **incorrect**?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Q.5) Consider the following statements about Inflation:

- 1. Core inflation is less volatile as compared to Headline Inflation.

- 2. RBI currently tracks CPI headline for monetary policy.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

DESCRIPTIVE QUESTIONS

- Q1.** The structural transformation in the rural areas needs to be leveraged by boosting Secondary Agriculture. Substantiate by giving logical arguments in support of your answer.
- Q2.** Evaluate the role of Micro-finance sector in poverty alleviation and meeting national priorities. What do you think are the challenges facing this sector?

Answers: 1-a, 2-a, 3-c, 4-d, 5-c

SOCIETY AND SOCIAL JUSTICE

GS PAPER I & GS PAPER II (MAIN)

SAGE

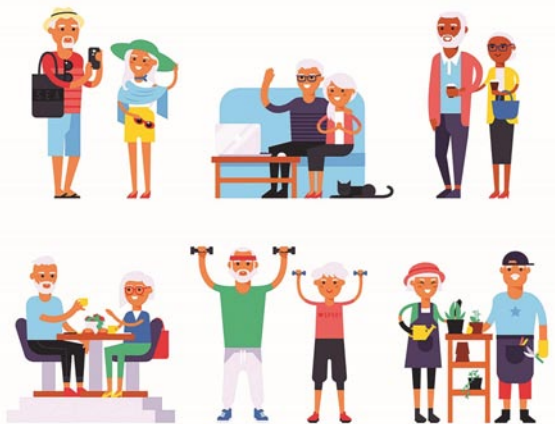
#ELDERLY ISSUES #GOVERNMENT
INITIATIVES

PRIMARY SOURCE | pib

IN NEWS

The Ministry of Social Justice and Empowerment has launched the SAGE (Senior-care Aging Growth Engine) initiative and SAGE portal to help such persons who are interested in entrepreneurship in the field of providing services for elderly care.

ABOUT SAGE



- SAGE has been established as a “one-stop access” of elderly care products and services by credible **start-ups**.
- The start-ups selected under SAGE will be those which will provide new innovative products and services to elderly persons in various areas like health, travel, finance, legal, housing, food among others.
- Based on the recommendation of the committee set up for the purpose, up to Rs 1 crore will be given to Start-ups for elderly care.

- Ministry has allocated an initial sum Rs 100 crore for the promotion of the silver economy.

Note: *Silver Economy* is defined as the system of production, distribution and consumption of goods and services aimed at utilising the purchasing potential of the older and ageing populations, as well as satisfying their consumption requirements and living essentials and healthcare needs.

NEED OF SAGE

- **Growing elderly population:** In 2011 census, the 60+ population accounted for 8.6% of population, accounting for 103 million elderly people. Growing at around 3% annually, the number will rise to 319 million in 2050, according to the **Longitudinal Ageing Study of India (LASI)**.
- **Growing disease burden among elderly:** While 75% of them suffer from one or the other chronic disease, 40% have one or the other disability and 20% have issues related to mental health. Geriatric care infrastructure is not well developed in India.
- **Breakdown of joint family:** Breaking of joint family means that the age old institution of taking care of old age people in India is giving away. There is a need to focus for interventions to take care of old age people.
- **Inadequate penetration of pension and health insurance** means that the old age people are financial vulnerable, also as old age people are more vulnerable to health care problems and diseases, they incur higher out of pocket expenditure.
- **Feminisation of old age** means that higher percentage of old age population is often women who are more often uneducated and do not have savings.
- **Cultural problems of old age:** Old age people often feel that they don't have the same respect as they used to have. Also, the fast change of values in society makes old age people feeling out of place with

millennial population. Also, old age population is often not adept at using technologies such as internet.

- **Safety and security:** There have often increased violence faced by old age people.

RELATED INFORMATION: LONGITUDINAL AGEING STUDY OF INDIA (LASI)

- It is India's first and the world's largest-ever survey commissioned in 2016 that provides a longitudinal database for designing policies and programmes for the older population in the broad domains of social, health and economic well-being.
- It aims to undertake a full-scale national survey of scientific investigation of the health, economic, and social determinants and consequences of population aging in India.
- It is envisioned to be conducted every 3 years for the next 25 years.

SCHEMES FOR ELDERLIES IN INDIA

- **Integrated Programme for Older People (IPO)**

- The main goal of this policy is to improve the quality of life of senior citizens by providing them with various basic amenities such as food, shelter, medical care, and even entertainment opportunities.
- Under it, Government of India provides support in terms of capacity building and financial assistance to different NGOs, Panchayati Raj Institutions and local bodies.
- Upto 90% of the project cost is provided by the government while the remaining 10% is borne by the respective Organization or Institution.

- **Maintenance & Welfare of Parents and Senior Citizens (MWPC Act 2007)**

- The Act makes it mandatory for children or legal heirs to provide the basic amenities to their parents or grandparents (or senior citizens).
- It defines maintenance as including provision for food, clothing, residence, medical attendance, and treatment.
- Unlike claiming for maintenance under Section 125 of CrPC wherein the senior citizen will have to approach

the Court bearing expenses to file and litigate suit and spend a lot of time, under MWPC Act, the process was made simple.

- Maintenance Tribunals have been established to ensure the implementation of the law. The failure to comply with the maintenance orders issued by the Tribunal can also attract imprisonment.

- **Rashtriya Vayoshri Yojana (RVY)**

- It is a central sector scheme funded from the Senior Citizens' Welfare Fund.
- All unclaimed amounts from small savings accounts, PPF and EPF are transferred to this fund.
- Yojana aims to provide aids and assistive living devices to senior citizens belonging to Below Poverty Line (BPL) category who suffer from age-related disabilities.
- The scheme is being implemented by **Artificial Limbs Manufacturing Corporation of India (ALIMCO)**, which is a public sector undertaking under the **Ministry of Social Justice and Empowerment**.

- **Pradhan Mantri Vaya Vandana Yojana (PMVVY) 2017**

- PMVVY is a retirement and pension scheme that is operated and managed by the Life Insurance Corporation of India (LIC).
- It offers an assured rate of return on investment.
- The scheme pays out regular pension and the frequency can be monthly, quarterly, or yearly.

- **Vayoshreshtha Samman 2019**

- It is a scheme of awards instituted by the Ministry of Social Justice & Empowerment and gradually upgraded to the status of National Awards, for institutions involved in rendering distinguished service for the cause of elderly persons especially indigent senior citizens and to eminent citizens in recognition of their service/achievements.
- The awards are intended to be conferred on eminent senior citizens and institutions involved in rendering distinguished services for the cause of elderly persons especially indigent senior citizens.

ENERGY POVERTY

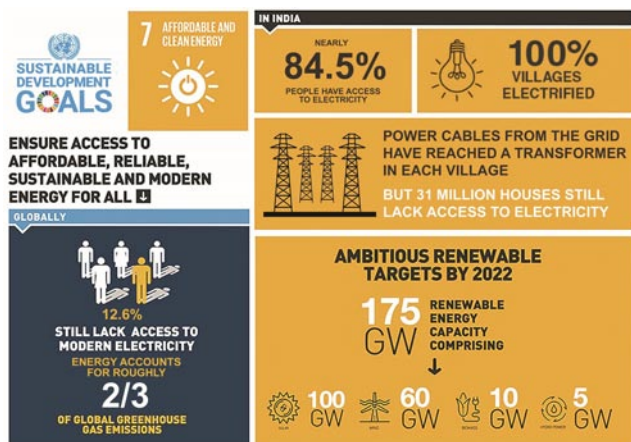
#INCLUSIVE DEVELOPMENT #SUSTAINABLE DEVELOPMENT

PRIMARY SOURCE

THE HINDU

Definition: World Economic Forum has defined energy poverty as the lack of access to sustainable modern energy services and products. To be more precise lack of adequate, affordable, reliable, quality, safe and environmentally sound energy services to support development.

SDG-7 focuses on ensuring access to affordable, reliable, sustainable and modern energy for all.



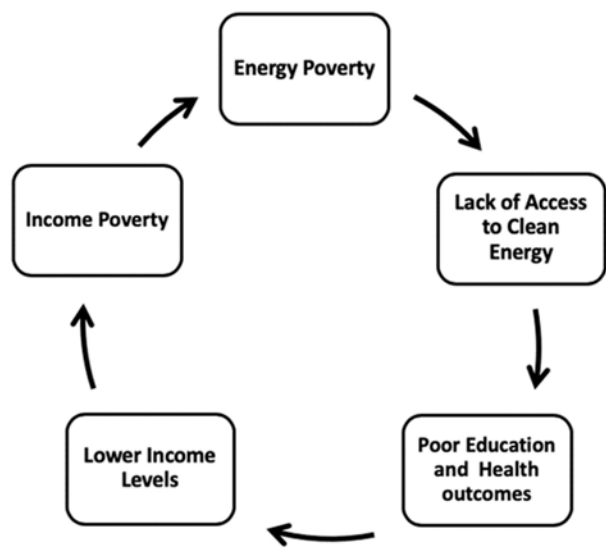
Energy and Gender: Energy poverty disproportionately affect women and girls

- Women are often primarily responsible for collecting fuel in poorer households. **Energy poverty** affects by virtue of the toll it takes on their time, resulting in **'time poverty'** (a lack of time for rest and leisure after considering the time spent working, whether in the labour market or at home)
- Indoor pollution from the burning of solid fuels is a serious health problem for women

STEPS TAKEN TO REDUCE ENERGY POVERTY:

- **Ujjwala Yojana:** Deposit-free LPG Connection.
- **PAHAL Scheme:** DBT for LPG Cylinders

Correlation between Access to Energy and Human Development



- **Saubhagya Scheme:** Electricity connections to all un-electrified households.
- **KUSUM Scheme:** Installation of solar pump-sets.
- Energy Efficiency measures such as **National Mission on Enhanced Energy Efficiency, Ujala scheme, Standards and Labelling** etc

The **Economic Survey 2018-19** has highlighted that India has to increase its per-capita energy consumption by 4 times to achieve higher levels of Human Development. This can be done through:

- Increase subsidy amount under Ujjwala Scheme and use behavioural economics to nudge people to regularly use LPG cylinders.
- Address the issue of frequent power cuts under Saubhagya scheme.
- Promotion of electric induction cookstoves
- Improve financial health of DISCOMs
- Promotion of decentralised solar energy and solar energy-based appliances among households in rural areas.

LIVE-IN RELATIONSHIP

#EMERGING ISSUE

PRIMARY SOURCE THE HINDU

“Live in relationship” refers to a living arrangement in which an unmarried couple lives together in a long-term relationship that resembles a marriage. This concept in India is fairly new but is spreading rapidly.

Reasons for Increasing trend of Live-in relations:

- **Modern education** and **ideas** emanating from it- Freedom, Equality, Autonomy, Individuality
- **Patriarchy in Institutionalised marriages-**
 - **Patrilocal residency** (couple settles in the husband's home or community) thus the women have to leave her house which is unequal.
 - **Gender inequality** in domestic division of labour (Domestic chores considered as wife's domain whereas earning is treated as Husband's duty)
 - **Lack of agency over Reproduction** (when to conceive or how many children to have etc.)

These reasons incentivising modern educated women to prefer Live-in rather than an institutionalised marriage

- Legal and financial complications involved in splitting up of Institutional marriages
- **Economic Independence** and Financial security of women with increased **female labour force participation.**
- Career oriented and highly aspirational youngsters, especially female, treating marriage and children as an impediment to their career growth
- **Globalisation** and Westernisation with increased communication revolution diffused new ideas and concepts of marriages into Indian society
- Marriage Institution in India is deeply rooted in **caste** and **communal** ties. Inter-caste and Inter Religious marriages are still not accepted widely. This made Urban youth to prefer choice based Live-in relationships.

POSSIBLE CONSEQUENCES ON THE SOCIETY

- Change in the family structure.

- Delay in the child birth and resultant change in the Demography structure of the society.
- Instances of Inter religious and Inter-caste marriages will be increased.
- The couple especially the female does not have rights similar to conventionally married wife. For ex. Absence of alimony.
- Care of old age: The conventional structure of India society ensured that the newer age couples took care of the old age especially parents in the society. However, with increasing rates of Live-in couples which seniors don't usually agree with, the care of old age needs to be thought about.

However Live-in relationship concept is not going to threaten the age-old Institution of marriage in India any sooner.

RELATED INFORMATION: LEGALITY OF LIVE-IN RELATIONSHIP

There is no particular law to lay down the rights and commitments for the parties in a live-in relationship in India.

- **Hindu marriage act (1956)** do not recognize Live-in relations.
- **S. Khushboo v. Kanniammal** case- Supreme Court held that a living relationship comes **within the ambit of right to life under Article 21** of the Constitution of India and the act of two major living together cannot be considered illegal or unlawful.
- **Protection of Women from Domestic Violence Act, 2005** covers under its ambit “relationships similar to marriage” or live-in relationships and protects women in such relationships.
- **Justice Malimath Committee** (On reforms in criminal Justice system) suggested the word “wife” as enshrined under CrPC be amended to include “a woman living with the man as his wife” so that even a woman in a live-in relationship would be entitled to alimony.
- **National commission on women** also suggested that Section 125 of the CrPC should include couples living together for years within its ambit.

It is clearly evident that the existing legal framework is inadequate to address the issues arising out of the new concepts of marriage emerging in the society. There is an urgent need to change the law to keep up with evolving societal conditions

PERFORMANCE GRADING INDEX

#INDEX #EDUCATION

PRIMARY SOURCE pib

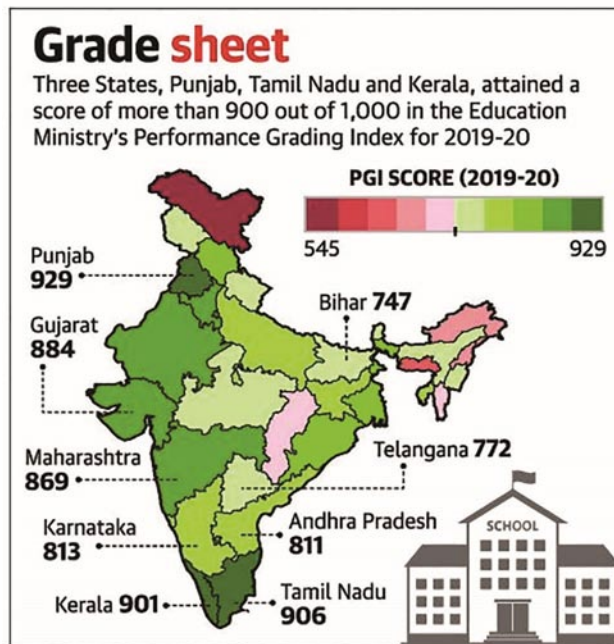
IN NEWS

The Ministry of Education has released the latest edition of the Performance Grading Index with the objective to help the states prioritise areas for intervention in school education.

ABOUT PERFORMANCE GRADING INDEX

- Performance Grading Index (PGI) is a tool to provide insights on the status of school education in States and UTs including key levers that drive their performance and critical areas for improvement.
- PGI is structured in two categories, namely, **Outcomes**, and **Governance & Management**.
- States are scored on a total of 1,000 points based on **five broad categories**:
 - Access (eg. enrolment ratio, transition rate and retention rate);
 - Governance and management;
 - Infrastructure;
 - Equity (difference in performance between scheduled caste students and general category students) and
 - Learning outcomes (average score in mathematics, science, languages and social science).
- States are graded and not ranked to discourage the practice of one improving only at the cost of others.

HOW HAVE STATES PERFORMED?



- In PGI 2019-20, no state or Union Territory could achieve the highest grade.
- Chandigarh, Punjab, Tamil Nadu, Andaman and Nicobar and Kerala have scored more than 90% , which makes them the best performing states. This is the first time that any state has reached Level II.
- Only, UT of Ladakh has been placed in the lowest grade but that's because it was the first time it was assessed after it was carved out of Jammu and Kashmir in 2019.
- A total of 33 States and UTs have improved their total PGI score in 2019-20 as compared to 2018-19, indicating a general upward shift.

GENDER DIGITAL GAP

#WOMEN ISSUES #INCLUSIVE DEVELOPMENT

PRIMARY SOURCE THE HINDU

CONTEXT

Gender digital divide (GDD) reflects inequalities in digital connection due to gender. The COVID-19 pandemic has highlighted the importance of access to technology to ensure public health and safety. Around the world, information and access to health care have largely

moved online, and those left behind face grave disadvantages.

REASONS BEHIND GENDER DIGITAL GAP

- **High levels of gendered digital illiteracy** - NFHS survey (19-20) states that only 42 percent Indian women have ever used the internet, the 2017-18 NSSO confirms the trend that only 8.5 percent women could use the internet.
- **Ownership of digital devices** - Poverty and gender intersect to keep as much as 80 percent of populations — mostly women — offline in developing countries.
- **Limited or no access** - According to, **Global System for Mobile Communications (GSMA)** estimates, over 390 million women in low- and middle-income countries do not have Internet access. In India, only 14.9% of women were reported to be using the Internet.
- **Gender biased belief and value system** - In households with more than one child, boys were generally prioritised over girls, and expected to carry out household chores.
- **Men oriented technology** - Most technologies that are available to the layperson are created by men, for men, and do not necessarily meet everyone's requirements.

WAYS TO IMPROVE WOMEN'S ACCESS TO TECHNOLOGY

- **Making technology engendered, promote digital skills and ICT education** for women and girls.

- **Support women's participation in technology** development, local content creation and ICT innovation
- **Safeguard the online privacy** of women and girls.
- **Promote Feminist technology** (sometimes called "femtech") as an approach to technology and innovation that is inclusive, informed and responsive to the entire community with all its diversity.

POSSIBLE BENEFITS OF A TECHNOLOGY ENGENDERED WORLD

- **Promote females labour force participation rate** - As employability of women will improve with digital revolution.
- **Enhances women empowerment** with enhanced access to digital technology and a world of economic opportunities.
- **Bolster Economic growth** - According to GSMA, closing the gender gap in mobile Internet usage in low- and middle-income countries would increase GDP by U.S.\$700 billion over the next five years.
- **Makes for an inclusive and an equitable society** - The growth of the Indian economy and concepts of sustainable development can become a reality only through the inclusive participation of women in the economy.

In this regard, aligned action between the government, industry and academia while leveraging technology for the delivery and implementation of gender inclusive initiatives will be the game changer. Women need access to skilling, upskilling programmes and knowledge of future ready technologies to emerge as self-reliant and empowered stakeholders in the economy.

PRACTICE QUESTIONS

MCQS

Q.1) Consider the following statements about SAGE portal:

1. It has been launched by Ministry of Social Justice and Empowerment.
2. It aims to provide upto Rs 10 crore to Start-ups for elderly care.

Which of the statements given above is/are correct?

- | | |
|------------------|---------------------|
| (a) 1 only | (b) 2 only |
| (c) Both 1 and 2 | (d) Neither 1 nor 2 |

Q.2) Consider the following statements about Performance Grading Index:

SCIENCE & TECHNOLOGY

GS PAPER (PRELIMS) & GS PAPER III (MAIN)

PHYSICS AND SPACE

VENUS

#SPACE #SCIENCE #TECHNOLOGY

PRIMARY SOURCE NASA

IN NEWS

NASA has selected two missions to the planet Venus, Earth's nearest neighbour. The missions are **DAVINCI+** and **VERITAS**. NASA is expected to launch these missions between 2028-2030.

Later, European Space Agency also announced that it selected **ENVISION** as its next orbiter which will visit Venus sometime in 2030s.



ABOUT VENUS

- Venus has a **solid surface** by virtue of being one of the 3 inner planets besides Mercury and Earth.
 - It is **nearly the same size of the earth**.
 - The atmosphere of Venus is composed of **95% carbon dioxide** and thus high **greenhouse effect**.
 - Hot **Sulfuric acid clouds** envelop Venus due to volcanic eruptions. About 80% of the surface of Venus is composed of flat plains of volcanic origin.
 - Venus is the **second-brightest object in the sky after the moon**. It appears bright because of its thick cloud cover that reflects and scatters light.
- It is the hottest planet in the solar system, despite being second closest to Sun after Mercury.
 - **Unusual thing about Venus is that its rotation period is longer than its orbital period. (Rotation on its own axis – 243 days, Orbital period around the sun - 224.7 days)**
 - It is the only planet which **spins in the direction opposite to the direction in which it orbits the Sun**. (Sun would rise in west and set in east on Venus).
 - Venus also does not have a moon and no rings.
 - Due to slow rotation of Venus, it has **no global magnetic field**. (earth's magnetic field is due to rotation of iron core)

MISSIONS TO VENUS

- The first spacecraft to Venus was the Soviet Union's **Venera series** (the spacecraft, however, could not survive for long because of the planet's harsh conditions).
- As of now, **Japan's Akatsuki mission** is studying the planet from Orbit.
- **ISRO's Shukrayaan-1** is a proposed **orbiter** to Venus to study it's surface and atmosphere.

WHY VENUS IN FOCUS?

Scientists have discovered phosphine gas on Venus's atmosphere. Significance of discovery of phosphine on Venus is:

- Phosphene is considered as a **biosignature gas** as it is natural biproduct of life. (It is either manufactured by us or is produced as a by-product of life.)
- **Phosphene has no abiotic false positives** (nothing but life can naturally produce the gas on earth)

Note: A *biosignature* is any substance – such as an element, isotope, or molecule – or phenomenon that provides scientific evidence of past or present life. On Earth, PH_3 is associated with anaerobic ecosystems, and as such, it is a potential biosignature gas in anoxic exoplanets.

BIOSIGNATURE GASES

1. Oxygen
2. Ozone
3. Methane
4. Nitrous Oxide
5. Methyl Bromide
6. Methyl Chloride
7. Hydrogen Sulfide
8. Carbonyl Sulfide
9. Phosphine
10. Sulfur Dioxide

It is thought Venus started out very similar to the Earth. While on Earth, carbon is mainly trapped in rocks, on Venus it has escaped into the atmosphere - making it roughly 96 per cent carbon dioxide. This has led to a runaway greenhouse effect, pushing surface temperatures up to 470 degree Celsius.

- The planet's history makes it an excellent place to **study the greenhouse effect** atmospheric extremes of Venus.
- Understanding the Venus-Earth difference is really key to understanding how planets evolve in general, and how habitable conditions evolve.

Davinci+ (Deep Atmosphere of Venus Investigations of Noble Gases, Chemistry and Imaging)

- It is a descent mission which will study various layers of Venus atmosphere. It will look out for trace elements, wind patterns, pressure etc.
- **The Davinci probe will take surface images using infrared light during the end of its descent.** It will return the first high resolution pictures of the unique geological features on Venus known as **“tesserae,”** which may be comparable to Earth’s continents, suggesting that Venus has plate tectonics.

- DAVINCI+ will host the **Compact Ultraviolet to Visible Imaging Spectrometer (CUVIS)**. These observations will be used to determine the nature of the unknown ultraviolet absorber in Venus’ atmosphere that absorbs up to half the incoming solar energy.

Veritas (Venus Emissivity, Radio science, InSAR, Topography and Spectroscopy)

It will map Venus' surface in detail from orbit using radar and **monitor infrared surface emissions**, which will reveal how rock type varies from place to place. Such observations will shed light on Venus' geologic history and climate evolution and help researchers determine if the planet hosts active plate tectonics and volcanism today.

EnVision

- EnVision is an ESA-drove mission to Venus. It is probably going to be dispatched at some point during the 2030s.
- The space apparatus will convey a scope of instruments to consider the planet's climate and surface, screen follow gases in the environment and investigations its surface piece.

CHIME

#PHYSICS #SPACE #SCIENCE

PRIMARY SOURCE THE HINDU

IN NEWS

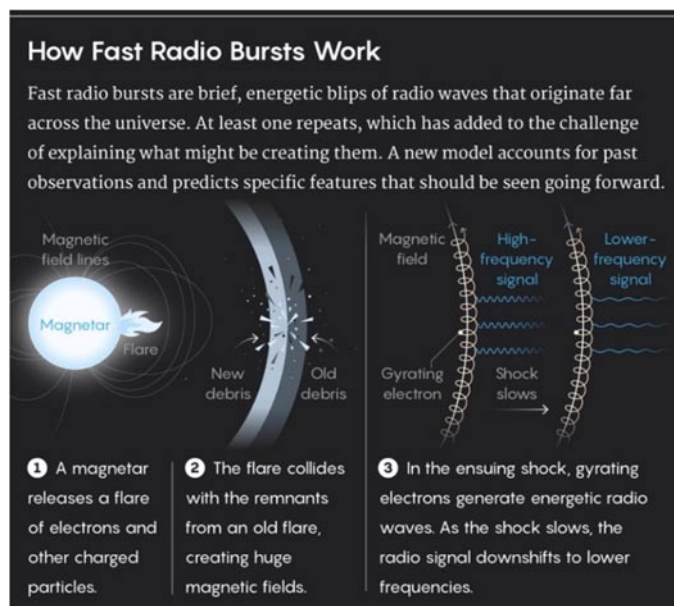
*Scientists with the Canadian Hydrogen Intensity Mapping Experiment (CHIME) Collaboration, who include researchers at the Pune-based Tata Institute for Fundamental Research (TIFR) and the National Centre for Radio Astrophysics (NCRA), have assembled the largest collection of **Fast Radio Bursts (FRBs)** in the telescope's first FRB catalogue.*

ABOUT CHIME

- CHIME is a novel **radio telescope** that has no moving parts. It is located in British Columbia, Canada.
- The digitized signals collected by CHIME will be processed to form a **3-dimensional map of hydrogen density of universe**, which will be used to **measure the expansion history of the universe.**

- **Detecting Fast Radio Bursts:** CHIME will be a unique telescope for discovering new "Fast Radio Bursts in real time. CHIME team will be developing CHIME Outrigger telescopes, which are smaller versions of CHIME to be located at other parts of Earth.
- These Outriggers will enable CHIME detected Fast Radio Bursts to be precisely localized on the sky, enabling astronomers to identify the exact galaxy from which the Fast Radio Burst emerged.
- **Studying Pulsars:** Radio pulsars are rapidly rotating, highly magnetized neutron stars that can act as exquisitely precise cosmic clocks. Pulsars are like **cosmic lighthouses** as they emit beams of radio light from their magnetic poles, which are misaligned with the neutron star rotation axis. Studying pulsars is useful for a wide variety of precision astrophysical measurements such as gravitational waves produced by mergers of supermassive blackholes, test of relativistic theories etc.

ABOUT FAST RADIO BURST



- Fast Radio Bursts are brief (few millisecond) bursts of radio waves coming from **far beyond our Milky Way galaxy**. Their origin is unknown to physics.
- The phenomenon was first reported in 2007.
- There are two kinds of Fast Radio Bursts: **Repeating FRBs** and **non-Repeating FRBs**.

PASIPHAE

#SPACE #SCIENCE #TECHNOLOGY

PRIMARY
SOURCE

The Indian
EXPRESS

IN NEWS

A vital instrument PASIPHAE will be used in **upcoming sky surveys** to study stars.

ABOUT PASIPHAE

- **Polar-Areas Stellar-Imaging in Polarisation High-Accuracy Experiment (PASIPHAE)** is an international collaborative sky surveying project.
- Scientists aim to study the **polarisation in the light coming from millions of stars**.
- The name is inspired from Pasiphae, the daughter of Greek Sun God Helios, who was married to King Minos.
- This data will be used to create tomographic map of Galactic magnetic field.
- The ultimate goal of the program is the detection of the **imprint of inflation of primordial light**. (Just after the Big Bang event).
- Scientists believe that after the Big Bang, the universe initially expanded at a very accelerated pace. However, the universe continues to expand even now, which is evident from the cosmic microwave background (CMB). An obvious result of the expansion phase is that a small part of the CMB must be affected in some form of polarization (scientifically this B-mode signal).
- All previous attempts to detect this signal have failed, mainly because of the complexity of our galaxy, which emits a lot of polarized radiation. Also, a large number of dust clouds in the form of star clusters are present in the Milky Way. When light from stars passes through these dust clouds, these dust clouds will scatter and polarize.
- **PASIPHAE** aims to measure this polarization (B-mode) of starlight giving us clue about early universe. These data and the distance to the star will help create a 3D model of the dust distribution and structure of the galaxy's magnetic field.

- Such data can help eliminate the polarized foreground light of galaxies and allow astronomers to search for elusive B-mode signals.
- Astronomers will perform a maiden magnetic field tomography mapping of the interstellar medium of very large areas of the sky using a novel **polarimeter instrument known as WALOP (Wide Area Linear Optical Polarimeter)**.

ABOUT WALOP POLARIMETERS

- The Wide Field Linear Optical Polarimeter (WALOP) is an instrument installed on two small optical telescopes to detect polarized light signals emitted by stars at high galactic latitudes.
- The working principle of WALOP is to divide the observed sky data into four different channels at any point in time.
- In other words, each star has four corresponding images, when they are combined, it helps to calculate the expected value of the star's polarization.

SHEPHARD ROCKET SYSTEM

#SPACE #SCIENCE #TECHNOLOGY

PRIMARY SOURCE *The Indian EXPRESS*

IN NEWS

Amazon founder and billionaire Jeff Bezos's space company called **Blue Origin** concluded the online auction for the first

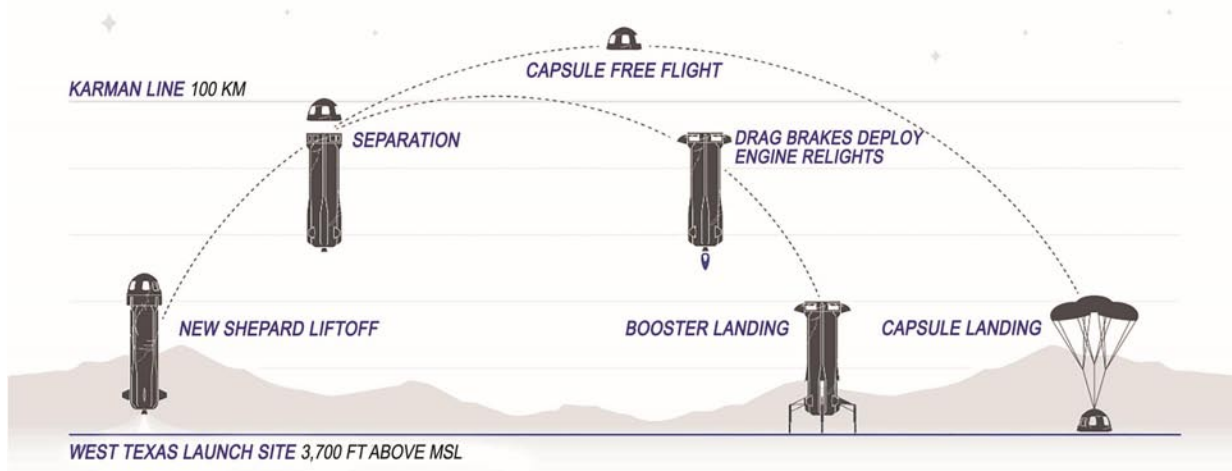
seat on *New Shepard*, a rocket system meant to take tourists to space.

ABOUT NEW SHEPHARD

- New Shepard is named after astronaut Alan Shepard. Alan Shepard was the first American to enter space. It is rocket system that aims to provide space flight and payload placement 100 kilometers from the earth.
- Basically, it is a missile system designed to transport astronauts and research cargo through the **Karman Line** (the internationally recognized frontier in space).
- The idea is to provide easier and more profitable space access for academic research, business technology development, and entrepreneurship.
- In addition to academic and research goals, New Shepard will also allow space tourists to experience microgravity by raising it 100 kilometers above the earth.

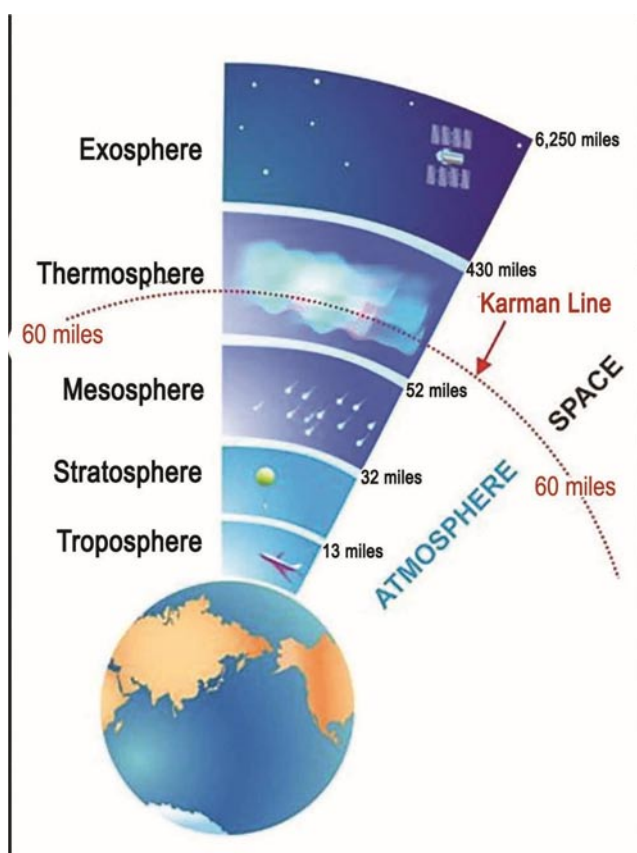
HOW DOES IT WORK?

- The system is a fully **reusable spacecraft** that can accelerate for approximately 2.5 minutes before the engine is turned off.
- After being separated from the engine, the space capsule falls into space unhindered, while the engine performs an autonomously controlled vertical landing to return to the earth, and the space capsule descends with the help of a parachute.



KARMAN LINE

- Karman Line is an internationally **recognized space boundary**.
- This production line is named after Theodor von Karman (1881-1963), a Hungarian-American physicist. He was the first person to calculate the altitude at which the atmosphere became too thin to support air flight, and he reached 83.6 kilometers.
- The Federation of International Aviation (FAI) defines the Karman Line as 100 kilometers above the earth's mean sea level.
- There is no international law to define the boundaries of space.



- Currently, to estimate the number of stars, scientists estimate the number of stars in a galaxy and multiply them with the number of galaxies.
- However, this can be an underestimation as the above model assumes all stars are located inside galaxies.
- CIBER-2 will study the infrared portion of extragalactic background light. The extragalactic light or glow accounts for total light produced over cosmic history.
- By studying the Cosmic Infrared Background, and its divergence from assumed values researchers feel that the extra light must be coming from the glimmer of **stray dwarf stars (stars outside galaxies)**. These stars could have left their home galaxy, when it merged with another, a process called as **tidal stripping**.

SHENZHOU-12

#SPACE #SCIENCE #TECHNOLOGY

PRIMARY SOURCE THE HINDU

IN NEWS

Recently, a Chinese spaceship "**Shenzhou-12**" carrying a three-person crew docked with China's new space station module **Tiangong space station**.

ABOUT THE MISSION

- The three-man crew will spend three months on the **Tianhe module**, which is orbiting at some 340 km to 380 km above the earth. Tianhe core is the first module of Chinese space station, **Tiangong**.
- **China is the third country after the former Soviet Union and the United States to carry out a manned mission on its own.**
- It will help test technologies related to long-term astronaut-stays and health care, the recycling and life support system, the supply of space materials, extravehicular activities and operations, and in-orbit maintenance.

CIBER-2

#PHYSICS #SPACE #IT

PRIMARY SOURCE The Indian EXPRESS SECONDARY SOURCE NASA

- It is NASA program which **aims to look for evidence of extra stars** that have been not yet counted.

CHINA'S SPACE STATION: TIANGONG

- **China is not a participant in the International Space Station (ISS)**, largely as a result of US objections to the Chinese program's secrecy.
- The ISS is a joint project between **five participating space agencies: NASA** (United States), **Roscosmos** (Russia), **JAXA** (Japan), **ESA** (Europe), and **CSA** (Canada).
- However, China has been stepping up cooperation with Russia and a host of other countries, and its station may continue operating beyond the ISS, which is reaching the end of its functional life.
- Tiangong will be placed in low earth orbit. Once completed it will be one-fifth the size of ISS.

BOSE-EINSTEIN CONDENSATION

#PHYSICS #SCIENCE #TECHNOLOGY

PRIMARY
SOURCE

THE HINDU

IN NEWS

Researchers from IIT Madras have come up with an understanding of the **emergence of order in chaotic systems** by drawing an analogy with Bose-Einstein condensation (BEC).

ABOUT BOSE-EINSTEIN CONDENSATE (BEC)

- In **Bose-Einstein condensate** (BEC) particles condense to the lowest energy level when temperature is taken to very low values. The particles in any system ordinarily are in different quantum states, exhibiting the state of complete chaos. As the particles condensate into BEC, all particles come to the same quantum state from different quantum states, leading to the state of order.
- In short, during the transition to the BEC there is transition from the state of chaos to the state of order.
- NASA Scientists recently observed the fifth state of matter in space for the first time as part of Bose Einstein Condensates (BEC) Experiments aboard the

International Space Station (ISS). Solids, liquids, gases and plasma are the other four states of matter.

- This state was first predicted, generally, in 1924–1925 by Albert Einstein following a pioneering paper by Satyendra Nath Bose on the new field now known as quantum statistics.
- BEC is a super cooled gas that no longer behaves as individual atoms and particles, but rather an entity in a single quantum state.
- The most intriguing property of BECs is that they can slow down light. Researchers have **shown how light traveling through a BEC got its speed reduced from its speed in vacuum of 3×10^8 metres per second to a mere 17 metres per second.**
- In 2001, physicists for the first time managed to stop light in a vapor of rubidium gas.

Applications

- Tests of general relativity - *Light can be variable in speed and frequency.*
- *Applying Quantum mechanics at macroscopic level.*
- *Quantum computing as BECs can be used to design qubits which can operate at stably at room temperatures.*
- Searches for dark energy, dark matter and gravitational waves.
- Spacecraft navigation.
- Prospecting for subsurface minerals on the moon and other planetary bodies.
- Applications of superfluidity and superconductivity
- Precision measurement by the development of sensitive detectors

EAST

#PHYSICS #SCIENCE #TECHNOLOGY

PRIMARY
SOURCEThe Indian
EXPRESS**IN NEWS**

Recently, China's **Experimental Advanced Superconducting Tokamak (EAST)** achieved a peak temperature of **288 million degrees Fahrenheit**, which is over **ten times hotter** than the sun. Earlier in 2020, **South Korea's KSTAR**

(Korea Superconducting Tokamak Advanced Research) reactor set a new record by maintaining a plasma temperature of over 100 million degrees Celsius for 20 seconds.

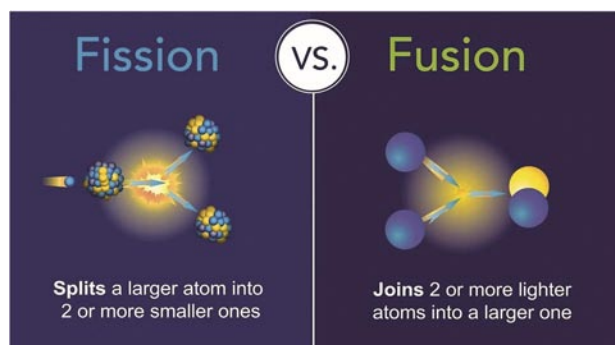
EAST

- EAST, also called **Artificial Sun**, is an advanced nuclear fusion experimental research device based in China.
- The tokamak is designed to **replicate nuclear fusion process** carried out by the sun and stars.
- EAST project is part of the **International Thermonuclear Experimental Reactor (ITER) facility**, which will become the world's largest nuclear fusion reactor when it becomes operational in 2035. ITER also includes India.
- A 'Tokamak' is a reactor design that resembles a donut — a donut that generates powerful magnetic forces to contain unimaginably hot plasma inside the reactor during nuclear fusion. The walls of a tokamak are built to absorb the massive amounts of heat from the continuous splitting of atoms in the reactor's core.
- The challenge for EAST and other Tokamaks across the world is to be able to maintain such higher temperatures for a longer duration of time.

Other China based Tokamaks:

1. HL-2A tokamak reactor
2. J-TEXT tokamak reactor
3. HL-2M **Tokamak reactor** is China's largest and most advanced nuclear **fusion** experimental research device.

Nuclear Reactions: A nuclear reaction is the process in which **two nuclei, or a nucleus** and an **external subatomic particle**, collide to produce **one or more** new nuclides. Thus, a nuclear reaction must cause a **transformation** of at least one nuclide to another.



NUCLEAR FISSION

- The nucleus of an **atom splits** into **two daughter nuclei**.
- This decay can be **natural spontaneous splitting** by radioactive decay, or can actually be simulated in a lab by achieving necessary conditions (bombarding with neutrons, alpha particles, etc.).
- The resulting fragments tend to have a combined mass which is less than the original. The **missing mass** is usually converted into **nuclear energy**.
- Currently, **all commercial** nuclear reactors are based on **nuclear fission**.

NUCLEAR FUSION

- Nuclear Fusion is defined as the **combining of two lighter nuclei** into a **heavier one**.
- Such nuclear fusion reactions are the source of energy in the Sun and other stars.
- It takes considerable energy to force the **nuclei to fuse**. The conditions needed for this process are extreme – **millions of degrees** of temperature and millions of pascals of pressure.
 - Nuclear fusion is arguably the best way for humans to generate energy.
 - The required raw materials — deuterium and tritium — are easily available in the oceans.
 - It creates huge amounts of energy—several times greater than fission.
 - Nuclear fusion also doesn't produce any harmful radioactive waste and hence, is extremely environment-friendly.
- The **hydrogen bomb** is based on a thermonuclear fusion reaction. However, a nuclear bomb based on the fission of uranium or plutonium is placed at the core of the hydrogen bomb to provide initial energy.

SATELLITE INTERNET

#PHYSICS #SPACE #IT

IN NEWS

Various private companies are **aiming to deliver broadband satellite Internet** around the

world **through their fleet of Low Earth Orbit (LEO) satellites**. Also, some companies are planning to develop space based internet through Geostationary Satellite for selective users. Space based internet can help make internet available to parts of the globe where conventional ground based internet cannot reach.

Space based Internet from Low Earth Orbit Satellites:

- **Positioning of Satellites:** LEO satellites are positioned around **500km - 2000km from earth, compared to stationary orbit satellites** which are approximately **36,000km away**.
- **Latency:** Latency, or the time needed for data to be sent and received, is contingent on proximity.
- As LEO satellites orbit closer to the earth, they are able to **provide stronger signals and faster speeds** than traditional fixed-satellite systems.
- Additionally, because signals travel faster through space than through fibre-optic cables, they also have the potential to rival if not exceed existing ground-based networks.
- **Higher Investment:** LEO satellites **travel at a speed of 27,000 kph** and complete a full circuit of the planet in 90-120 minutes.
- As a result, individual satellites can only make direct contact with a land transmitter for a short period of time thus requiring massive LEO satellite fleets and consequently, a **significant capital investment**.
- Due to these costs, of the three mediums of Internet – fibre, spectrum and satellite – the latter is the most expensive.

SPACE BASED INTERNET FROM GEOSTATIONARY SATELLITE:

- **Positioning of Satellites:** Geostationary orbit is **located at a height of 35,786 km over the Earth's surface, directly above the Equator**.
- Most of the existing space-based Internet systems use satellites in geostationary orbit.
- Satellites in this orbit **move at speeds of about 11,000 km per hour, and complete one revolution of the Earth at the same time that the earth rotates once on its axis**.

- To the observer on the ground, therefore, a satellite in a geostationary orbit appears stationary.
- **Coverage:** The signals from one geostationary satellite can **cover roughly a third of the planet** – and three to four satellites would be enough to cover the entire Earth.
- **Easier Connectivity:** As satellites appear to be stationary, it is easier to link to them.
- **Latency Issues:** The transmission from a satellite in geostationary orbit has a **latency of about 600 milliseconds**. The geostationary satellites are located at higher altitudes compared to LEO, thus the longer the distance that needs to be covered results in greater latency.

RELATED INITIATIVES

- **'Five to 50' service (OneWeb):** OneWeb, a private company, has successfully launched constellations of 218 satellites in LEO.
- The company only has one more launch to complete before it obtains the capacity to enable its **'Five to 50' service** of offering internet connectivity to all regions **north of 50 degrees latitude**.
- The Five to 50 service is expected to be switched on by June 2021 with global services powered by 648 satellites available in 2022.
- **Starlink:** It is a venture of SpaceX.
- **Starlink** currently has 1,385 satellites in orbit. Company has started testing in North America.
- However, Starlink's satellites fly closer to the earth and therefore, the company requires a larger fleet to provide global connectivity than OneWeb.
- **Project Kuiper:** It is a **project of Amazon** announced in 2019.
- **Loon Project:** Google launched its 'Loon' project in 2013, using high-altitude balloons to create an aerial wireless network. The project was later abandoned.

ISSUES IN LEO SATELLITES LAUNCH:

- **Regulation Issues:** During the days of the Sputnik and Apollo missions, governments dominated and regulated space-based activities. Most of the LEO based internet initiatives are being developed by private companies. As a result, there are questions

related to who regulates these companies, especially given the large number of nations that contribute to individual projects. It makes the regulatory framework complicated.

- **Logistic Challenge:** There are logistical challenges with launching thousands of satellites into space as well.
- **Difficulty in Space Observation:** Satellites can sometimes be seen in the night skies which creates difficulties for astronomers as the satellites reflect sunlight to earth, leaving streaks across images.

- **Interruptions:** Satellites travelling at a lower orbit can also **interrupt the frequency** of those orbiting above them.
- **Space Junk:** There are already almost 1 million objects larger than 1cm in diameter in orbit, a byproduct of decades of space activities. Those objects, colloquially referred to as 'space junk,' have the **potential to damage spacecraft** or collide with other satellites.

BIOLOGY & BIOTECHNOLOGY

HTBT COTTON SEEDS

#HEALTH #BIOTECHNOLOGY #AGRICULTURE

IN NEWS

The illegal cultivation of herbicide-tolerant (HT) Bt cotton has seen a huge jump this year. Seed manufacturers have claimed that the sale of illegal seed packets has more than doubled.

Domestic seed industry has demanded that action be taken to stop such sales and punish offenders, noting that cultivation of the genetically modified cotton variant has serious environmental and economic consequences.

ABOUT Bt COTTON

- Bt cotton is an insect-resistant transgenic crop (*genetically modified by introduction of a gene from a different species*) designed to combat the **cotton bollworm**, a common pest.
- It was created by genetically altering the cotton genome to express a microbial protein from the bacterium *Bacillus thuringiensis*.
- The transgene inserted into the plant's genome produces toxin crystals that the plant would not normally produce which, when ingested by a certain population of organisms (Bollworm), dissolves the gut lining, leading to the organism's death.

- **Bt cotton is the only transgenic crop that has been approved by the Centre for commercial cultivation in India.**

HTBT COTTON

- HTBT cotton variant adds another layer of modification, making the plant **resistant to the herbicide glyphosate**. Fears include glyphosate having a carcinogenic effect, as well as the unchecked spread of herbicide resistance to nearby plants through pollination, creating a variety of superweeds.
- HTBT cotton has not been approved by government for cultivation. Activists from the *Shetkari Sangathan* have stepped up the reach of their **civil disobedience movement** to demand the legalisation of HTBT cotton by encouraging farmers to plant the seeds in violation of government regulations.
- Seed manufacturers have said that the illegal seeds are sold using the brand name of prominent companies. So,
 - Farmers are at risk with such illegal cotton seed sale as there is no accountability of the quality of seed.
 - Pollutes the environment.
 - Industry is losing legitimate seed sale.
 - Government also loses revenue in terms of tax collection.

- It will not only decimate small cotton seed companies but also threatens the entire legal cotton seed market in India.

NEED FOR USING HTBt COTTON

- **Saves Cost:** There is a shortage of the labour needed to do at least **two rounds of weeding for Bt cotton. With HTBt, simply one round of glyphosate spraying is needed** with no weeding, savings cost for farmers.
- **Support of Scientists:** Scientists are in favour of this crop, and even the **World Health Organization (WHO)** has said it does not cause cancer.

ISSUES EMANATING FROM ILLEGAL SALE OF HTBt COTTON

- As it is not approved by the **Genetic Engineering Appraisal Committee (GEAC)**, illegal sale takes place in Indian markets.
- **Farmers are at risk** with such illegal cotton seed sale as there is **no accountability of the quality of seed, it pollutes the environment, the industry is losing legitimate seed sale and the government also loses revenue** in terms of tax collection.
- It will not only **decimate small cotton seed companies** but also **threatens the entire legal cotton seed market** in India.

GENETIC ENGINEERING APPRAISAL COMMITTEE

- The Genetic Engineering Appraisal Committee (GEAC) functions under the **Ministry of Environment, Forest and Climate Change (MoEF&CC)**.
- It is responsible for the appraisal of activities involving large-scale use of hazardous microorganisms and recombinants in research and industrial production from the environmental angle.
- The committee is also responsible for the appraisal of proposals relating to the release of genetically engineered (GE) organisms and products into the environment including experimental field trials.
- GEAC is chaired by the **Special Secretary/Additional Secretary of MoEF&CC** and co-chaired by a representative from the Department of Biotechnology (DBT).

WAY FORWARD

- Regulators only limit their checking/regulation to licensed dealers and seed companies while illegal activity of HT seed sales is **carried mostly by unorganised and fly-by-night operators**. Thus, focus must be shifted to catching them and taking exemplary and strong punitive action.
- **Collective action** of both centre and state government is required. The Centre has made the policy to ban this variant. But it is the State governments that must also work in tandem with the central government.
- **Environmental impact assessment** should be carried out by independent environmentalists, as farmers do not and cannot assess the long-term impact of GM crops on ecology and health.
- **Awareness among the farmers about the concerns of HTBt cotton.**

H10N3 BIRD FLU

#HEALTH

PRIMARY SOURCE THE HINDU

IN NEWS

Recently, *China has reported the first case of human infection with the H10N3 strain of bird flu.*

- H10N3 is a **subtype of the Influenza A virus** which is **commonly known as the bird flu virus**.
- It is a **low pathogenic, or relatively less severe, strain of the virus in poultry** and the **risk of it spreading on a large scale is very low**. Among animals, it can **spread through respiratory droplets**, similar to flu and Covid-19.
- The **strain is not a very common virus**, only about 160 isolates of the virus have been reported in the past 40 years (till 2018), that too, mostly in wild birds or waterfowl in Asia and some parts of North America.
- **None had been detected in chickens as of now.**
- However, there have been **no significant numbers of human infections with bird flu since the H7N9 strain** killed around 300 people **during 2016-2017**.

Bird Flu: also known as **Avian influenza (AI)**, is a highly contagious viral disease affecting several species of **food-producing birds** (chickens, turkeys, quails, guinea fowl, etc.) as well as **pet birds and wild birds**. Occasionally **mammals, including humans**, may contract avian influenza.

TYPES OF INFLUENZA VIRUSES

- Influenza viruses are grouped into three types; **A, B, and C**.
- **Only type A** is known to **infect animals** and is **zoonotic**, meaning it can also infect humans.
- **Avian influenza virus subtypes** include A(H5N1), A(H7N9), A(H9N2) and A(H10N3).
- Type **B and C** **mostly infect humans** and typically cause mild disease.
- **Impact:** Avian Influenza outbreaks can lead to devastating consequences for the country, particularly the poultry industry. Farmers might experience a high level of mortality in their flocks, with rates often around 50%.
- **Prevention:** Strict **biosecurity measures** and **good hygiene** are essential in protecting against disease outbreaks.
- **Eradication:** If the infection is detected in animals, a **policy of culling infected and contact animals** is normally used in an effort to rapidly contain, control and eradicate the disease. Poultry farmers need to be insured and some government compensation for this needs to be instituted.

India's Status:

- **Fresh cases of bird flu** were reported in different states of India **between December 2020-January 2021** causing alarm across the country.
- **Previously in 2019**, India was **declared free from Avian Influenza (H5N1)**, which had also been **notified to the World Organization for Animal Health (OIE)**.
- Organisation for Animal Health (OIE) is an intergovernmental organisation responsible for improving animal health worldwide. It is headquartered in Paris, France.

GM RUBBER

#BIOTECH #SCIENCE

IN NEWS

World's first genetically modified (GM) rubber plant tailored for the climatic conditions in the Northeast, has been planted in a research farm of Rubber Board near Guwahati. The plant was developed at Kerala-based Rubber Research Institute of India (RRII).

The GM rubber has additional copies of the gene **MnSOD, or manganese-containing superoxide dismutase**, inserted in the plant, which is expected to tide over the severe cold conditions during winter — a major factor affecting the growth of young rubber plants in the north-east region. Natural rubber is a native of warm humid Amazon forests and is not naturally suited for the colder conditions in the Northeast.

BASIC CHARACTERISTICS OF RUBBER CROP

- Natural Rubber is obtained from latex of rubber trees. Latex is white milky liquid, collected by making cut on rubber tree bark. Latex contains 30-40% rubber, rest material is lost during processing.
- The British established the first rubber plantation in India in 1902 on the banks of the river Periyar in Kerala.
- Rubber tree is a fast-growing tall tree acquiring a height of about 20 to 30 meters.
- Rubber tree needs a **hot and humid climate with temperature ranging between 25 °C and 35 °C and the annual rainfall of about 300 cm well distributed throughout the year**.
- Dry spells and low temperature are harmful for rubber trees, daily rainfall followed by bright sunshine is ideal for its growth.
- **Deep, rich and well-drained loamy soil, at an elevation of about 400 meters above the sea level, provides ideal conditions for the growth of rubber trees**.
- Apart from this cheap and adequate supply of skilled labour is needed for this plantation crop.

RUBBER PRODUCTION IN INDIA

- India is the fifth largest rubber-producing country in the world, after Malaysia, Indonesia, Thailand and Brazil.
- State of Kerala has accounted for 76 percent of India's rubber production.
- If the production of other two southern states of Tamil Nadu and Karnataka is added, the southern region produces 85 percent of India's rubber.
- Tripura's contribution to natural rubber production comes to about 8 percent, while the rest of Northeast India contributes 6 percent.

NIPAH VIRUS

#BIOTECH #HEALTH #SCIENCE

IN NEWS

A recent survey, by National Institute of Virology, has found the presence of antibodies against the Nipah virus (NiV) in some bat species from a cave in Mahabaleshwar, a popular hill station in Maharashtra.

ABOUT THE SURVEY

- The NIV team looked at **Rousettus leschenaultii** and **Pipistrellus pipistrellus bats** that are common in India.
- **Pteropus medius bats**, which are large **fruit-eating bats**, are the **reservoir for Nipah Virus (NiV) in India** as both **NiV RNA** and antibodies were detected in the samples of these bats collected during previous NiV outbreaks.
- A **bat's immune system** is especially **adept** at withstanding **viral infection** because of its **ability to limit excessive inflammation** — which uniquely allows viruses to thrive without proving deadly to the mammal.

ABOUT NIPAH VIRUS (NiV):

- It is a **zoonotic virus** (it is transmitted from animals to humans).
- The **organism which causes** Nipah Virus encephalitis is an **RNA or Ribonucleic acid virus of the family Paramyxoviridae, genus Henipavirus, and**

is **closely related to Hendra virus**. Hendra virus (HeV) infection is a **rare emerging zoonosis** that causes severe and often fatal disease in both **infected horses and humans**.

- It **first broke out in Malaysia and Singapore in 1998 and 1999**.
- It **first appeared in domestic pigs** and has been found among several species of domestic animals including dogs, cats, goats, horses and sheep.
- **Transmission:** The disease **spreads through fruit bats or 'flying foxes,' of the genus Pteropus**, who are natural reservoir hosts of the Nipah and Hendra viruses. The virus is present in bat urine and potentially, bat faeces, saliva, and birthing fluids.
- **Symptoms:** The human infection presents as an **encephalitic syndrome** marked by fever, headache, drowsiness, disorientation, mental confusion, coma, and potentially death.
- **Prevention:** Currently, there are **no vaccines** for both humans and animals. Intensive supportive care is given to humans infected by Nipah virus.

RICE BRAN OIL

#HEALTH #SCIENCE

**IN NEWS**

The Department of Food and Public Distribution has launched "NAFED Fortified Rice Bran Oil".

RICE BRAN OIL

- Rice bran oil is the oil extracted from the hard brown outer layer of rice, the so-called straw (rice husk).
- It is known for its high smoke point and mild taste at 232°C (450°F), which makes it suitable for high-temperature cooking methods.
- It is very popular as a vegetable oil in the Indian subcontinent.
- Its ingredients are similar to peanut butter, containing 38% monounsaturated fat, 37% polyunsaturated fat and 25% saturated fat.

- Moderate use is generally safe for most people. However, excessive consumption of rice bran oil can cause indigestion.

WHAT IS NAFED OIL?

- NAFED rice bran oil is rich in and guaranteed to contain additional nutrients and vitamins.
- According to FSSAI, fortified oils can help a person reach 25-30% of the recommended intake of vitamins A and D.
- Rice bran oil will be sold in all NAFED stores and various online platforms.

BENEFITS OF THE NAFED OIL

- This move will greatly reduce the country's future dependence on imported edible oil.
- It provides more opportunities for Indian edible oil producers, and promote the Aatmnirbhar Bharat initiative.

HEALTH BENEFITS OF RICE BRAN OIL

Rice bran oil has many health benefits, including lowering cholesterol due to its low trans-fat content and high monounsaturated and polyunsaturated fat content, and due to its high vitamin E content, it also has stimulants and reduces the risk of cancer.

GENOMIC SEQUENCING

#BIOTECH #HEALTH #SCIENCE

PRIMARY SOURCE THE HINDU

IN NEWS

Emerging variants, with evidence of higher transmissibility and immune escape, demand re-strategized responses to COVID-19 pandemic in India. Genomic sequencing becomes significant in this context.

WHY GENOMIC SEQUENCING IS IMPORTANT?

- To deal with fast mutations in COVID-19 virus, there is a need for monitoring these variations, examining transmissibility and contagiousness of these variants and potential cause of serious infection.

- The experience from USA and UK show that increased amount of genetic sequencing helps to control the COVID-19 pandemic.
- The information from genomic sequencing has both approach and operational ramifications.
- The arising variations — with early proof of higher contagiousness, safe departure and advancement contaminations — request persistent reevaluating and re-strategizing of the pandemic reaction by each country.

INSUFFICIENT GENOMIC SEQUENCING IN INDIA

- In India, Department of Biotechnology has established Indian SARS-CoV2 Genomic Consortia, or INSACOG which is responsible for tracking the genetic variations of COVID-19. The network carries out whole genome sequencing of SARS-COV-2 virus across the country, aiding the understanding of how the virus spreads and evolves.
- There are 10 regional genome sequencing laboratories. The NCDC in Delhi is facilitating the program.
- However, sequencing has stayed at a low level of two or three thousand cases in particular. Information sharing about the strains has further been low.

STEPS NEED TO BE TAKEN

- **Scale-up genomic sequencing:**
 - India needs to step up genomic sequencing, across all States. More genomic sequencing is required from huge metropolitan agglomerations.
 - A public level investigation of examined genomic sequencing information ought to be done consistently and discoveries shared openly.
- **Research on antibody adequacy:**
 - The government needs to contribute and uphold more logical and operational examination on immunization viability.
- **Reconsider immunization strategy:**
 - There are early signs of resistant departure and decreased antibody viability against the Delta variation (particularly after one-shot).

DELTA VARIANT

- The Delta variation was recently known as the "Indian variation", as it was first found in India.
- It is one of three sub-genealogies of the Indian variation, and is otherwise called B.1.617.2.
- Studies have shown that the Delta variation turned into the most prevalent variation in Delhi.
- It additionally brought about a higher extent of advancement disease (individuals previously inoculated getting contaminated).
- The Public Health England (PHE) additionally revealed that the Delta variation has become the most widely recognized flowing strain in the U.K., supplanting Alpha variation (B.1.1.7, first detailed from Kent, England in September 2020).
- The PHE likewise detailed that the viability of a solitary portion of immunization (among suggestive patients) was lower against the Delta strain.

Conclusion: As India plans for the third wave, expanding genomic sequencing and utilization of logical proof for dynamic are not a decision but rather an outright fundamental.

DELTA PLUS

#BIOTECH #HEALTH #SCIENCE

IN NEWS

Scientists are concerned about 'Delta plus', an emerging form of the Delta variant of the novel coronavirus, which allows it to "escape" antibodies in recently approved treatment regimes.

WHAT IS A MUTATION?

- Mutation is change in the genetic sequence of the virus.
- SARS-CoV-2 is a Ribonucleic acid (RNA) based virus. Its mutation means a change in the sequence in which its molecules are arranged.
- A mutation in an RNA virus often happens when the virus makes a mistake while it is making copies of itself.

Most changes have little to no impact on the virus' properties. However, some changes may affect the virus's properties, such as how easily it spreads, the associated disease severity, or the performance of vaccines, therapeutic medicines, diagnostic tools, or other public health and social measures.

The established nomenclature systems for naming and tracking SARS-CoV-2 genetic lineages uses letters of the Greek Alphabet, i.e., Alpha, Beta, Gamma, which will be easier and more practical to discussed by non-scientific audiences.

Variants of Concern : A SARS-CoV-2 variant that has been demonstrated to be associated with one or more of the following changes at a degree of global public health significance:

- Increase in transmissibility or detrimental change in COVID-19 epidemiology; or
- Increase in virulence or change in clinical disease presentation; or
- Decrease in effectiveness of public health and social measures or available diagnostics, vaccines, therapeutics.

Variants of Interest : A SARS-CoV-2 isolate is a Variant of Interest (VOI) if, compared to a reference isolate, its genome has mutations with established or suspected phenotypic implications, and either:

- has been identified to cause community transmission/multiple COVID-19 cases/clusters, or has been detected in multiple countries; OR
- is otherwise assessed to be a VOI by WHO in consultation with the WHO SARS-CoV-2 Virus Evolution Working Group.

WHAT IS THE DELTA PLUS VARIANT?

- Formally known as AY.1 or B.1.617.2.1, it's a variant of Delta (B.1.617.2), which was first identified in India. It has an additional mutation called **K417N**, which has previously been identified in the Beta variant (first found in South Africa) and the Gamma variant (first detected in Brazil). These variants are characterised as being highly infectious and may reduce the potency of vaccines.
- K417N mutations in spike protein of SARS-CoV-2. This mutation had much more pronounced effect and in a

combination with N501Y fully abolished the antibody effect.

- Five Indian labs submitted data on this modified variant to the Global Initiative on Sharing All Influenza Data (GISAID).

WHY IS IT AN AREA OF CONCERN?

- The Delta variant is now regarded as the most prevalent one in India, comprising nearly 31% of the community samples processed until late May. This variant has significant differences compared to the strain that has been used by pharma companies to design vaccines, and tests are needed to check if the existing vaccines continue to be effective against the variants dominant now.
- Tests in the U.K., South Africa, and Brazil have shown that vaccines, while effective, appear to produce **fewer antibodies** when confronted with variants such as Delta.

- According to a database of the CSIR-Institute of Genomics and Integrative Biology (CSIR-IGIB), the mutation was associated with resistance to a newly developed monoclonal antibody treatment drug, Casirivimab and Imdevimab, for those with moderate and severe disease but at high risk.
- The concern is that because the Delta variant has a cavalcade of mutations that have allowed it to dominate in several countries, including India, another form may pose new challenges to the **management of the pandemic** in India.

However, antibody levels are not the only markers of immunity. There is little evidence so far specifically linking AY.1 to large outbreaks and significant disease transmission, which is why it has not yet appeared in the World Health Organization's list of 'Variants of Concern', which includes Alpha, Beta, Delta, and Gamma variants.

MISCELLANEOUS

SUPERSONIC FLYING

#TECHNOLOGY

PRIMARY SOURCE *The Indian EXPRESS*

IN NEWS

United Airlines of USA has announced it was ordering 15 Overture planes with the ability to travel at Mach 1.7, faster than the speed of sound, from the Denver-based start-up Boom.

WHAT IS A SUPERSONIC PLANE?

- Supersonic aircraft are planes that can fly faster than the speed of sound. Generally, supersonic planes can go at the speed of around 900 kmph, double the speed of ordinary airplane.
- Concorde, a European turbojet-powered commercial airliner was the first supersonic plane to carry passengers. Concorde had to discontinue due concerns over cost and sustainability.

ABOUT OVERTURE SUPERSONIC PLANE

- The Overture airplane would go at the speed of Mach 1.7 or 1,805 kmph with a range of 4,250 nautical miles. In a solitary flight, it could convey 65 to 88 travellers and arrive at an elevation of 60,000 ft.
- The organization plans "test" stream prepared by 2022, begin carrying out airplane by 2025 and at last open them for travellers by 2029. It will expand on Concorde's inheritance through quicker, more productive and feasible innovation.
- It is commercial supersonic aircraft being developed by Boom Technologies. The company claims the plane will have 'net zero carbon emissions', as it will fly with 100 percent sustainable aviation fuel.
- Company claims the Overture will aims for zero overland noise.

CHALLENGES WITH SUPERSONIC PLANES

Costly: Very high expenses making flying very costly for flyers as it consumes very large amounts of fuel and energy.

- Concerns over environmental impact: High greenhouse gas emissions. Availability of Sustainable Aviation Fuel (SAF) is very limited. SAF does not completely eliminate emissions. For ex., Concorde

used 8 times fuel used by modern Boeing on per kilometer basis.

Overture

Capacity	55 seats	Altitude	60,000 ft.
Length	46 meters	Round-trip transatlantic fare	Similar to today's business class (~\$5,000)
Maximum speed	Mach 2.2 (1,451 mph)	Demand	1,000 - 2,000 airliners serving 500+ global routes* <small>Based on Boom's research</small>
Flight range	4,500 nautical miles nonstop (9,000 with refueling stop)	Timeline	First flight: Mid-2020s

- **Noise Pollution:** The "Sonic Boom" made by these planes feels like a blast to the human ear. This limits where and when the supersonic planes can fly. They can reach their actual speed only after they are far from people and completely over ocean.
- The supersonic flights will have more regulatory approvals to meet.
- Finally, it would not be monetarily practical for everybody. Just the rich can manage the cost of supersonic planes, as a ticket is probably going to be route costlier than a top-of-the-line ticket of a customary plane.

CONTENT DELIVERY NETWORK (CDN)

#IT #TECHNOLOGY

PRIMARY SOURCE THE HINDU

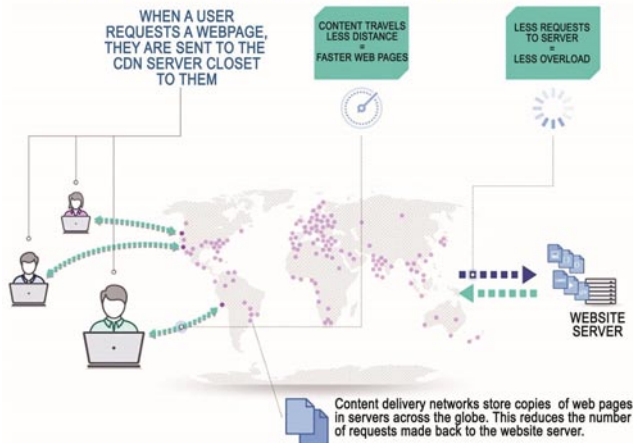
IN NEWS

Several big websites around the world went down for about half an hour because of a major issue with the content delivery network (CDN) of American cloud computing services provider Fastly.

ABOUT CONTENT DELIVERY NETWORK (CDN)

- A CDN refers to a geographically distributed group of servers that work together to provide fast delivery of Internet content.
- They house content near the telecom specialist co-ops' organizations.
- Greater part of web traffic across the present reality is directed through CDNs.

HOW CONTENT DELIVERY NETWORKS WORK



- Stages like Netflix, Facebook, Amazon — ones with enormous amounts of information held in worldwide libraries — have their geologically significant substance nearer to where that substance is to be burned-through. This guarantees the end client can get to the substance quicker.
- Also, CDNs help secure internet companies against traffic spikes, circulated refusal of administration (DDOS) assaults.

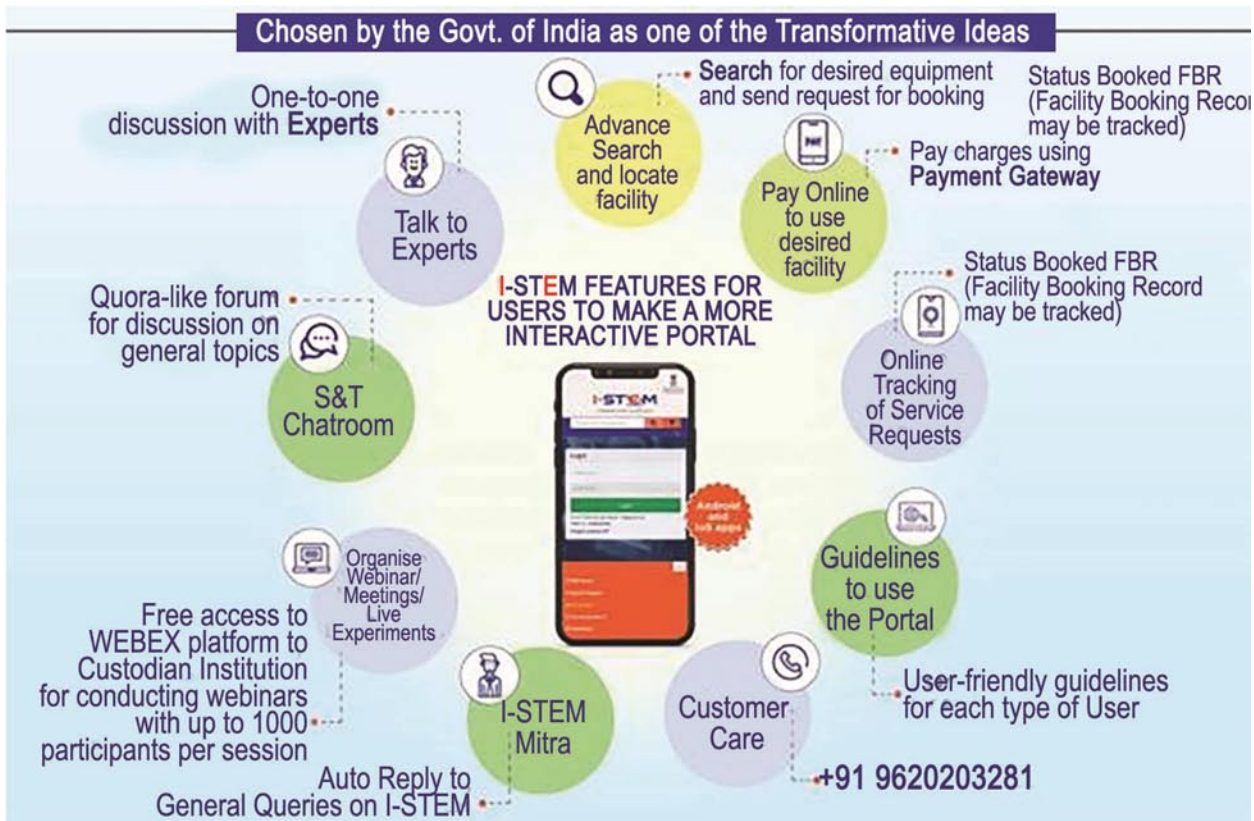
COMSOL

#POLICY #TECHNOLOGY #DIGITALINDIA

PRIMARY SOURCE pib

IN NEWS

Recently, the Office of Principal Scientific Advisor to GoI has announced that India will now be able to access the COMSOL Multiphysics software suite at no cost through the I-STEM portal academic users.



ABOUT INDIAN SCIENCE TECHNOLOGY AND ENGINEERING FACILITIES MAP (I-STEM)

- It is an initiative of Office of the Principal Scientific Adviser to the Govt. of India under the PM-STIAC mission.
- The I-STEM National Web Portal was launched formally in 2020. It protects the IP involved in building the I-STEM Portal.
- The objectives of I-STEM are:
 - Strengthen the R&D ecosystem by connecting researchers with resources;
 - Promoting technologies and scientific equipment development indigenously;
 - Providing necessary supplies and supports to researchers
- It hosts the database of facilities across India so that a researcher desirous of using any of them can search for the same and make a booking online for using it.
- It lists more than 25,000 pieces of equipment from 850 institutions across the country, and has more than 20,000 Indian researchers.
- It features a Digital Catalogue of indigenously developed technologies and products, as well as host the platform for the various City Knowledge and Innovation Clusters.

ABOUT COMSOL PLATFORM

- Developed by the COMSOL Group. It is used worldwide as an indispensable tool for a variety of computer simulations for R&D as well as for learning and instruction.
- It is a general-purpose simulation software package for modelling designs, devices, and processes in all fields of engineering, manufacturing, and scientific research.
- It can be used on its own or expanded with functionality from any combination of add-on modules for simulating electromagnetics, structural mechanics, acoustics, fluid flow, heat transfer, and chemical engineering.
- It is hosted on a secure Azure Cloud and to be used simultaneously by up to 60 users located anywhere in the country.

UNESCO SCIENCE REPORT

#RESEARCH #SCIENCE #TECHNOLOGY

PRIMARY SOURCE THE HINDU

IN NEWS

While India has made 'solid progress' towards the Sustainable Development Goal (SDG) targets concerning the industry, infrastructure, and innovation, the country's investment in research remains unsatisfactory, the UNESCO Science Report has observed.

UNESCO SCIENCE REPORT

- The UNESCO Science Report is a global monitoring report issued regularly by the United Nations Educational, Scientific and Cultural Organization. This report tracks the latest trends and developments in science every five years.
- National and regional politics in the context of social life. -Economic, geopolitical changes and environmental realities.

DATA ON RESEARCH FUNDING IN INDIA

- According to the report, India is one of the BRIC countries with the lowest GERD/GDP ratio.
- Over the years, total inland research expenditure (GERD) has been 0.7% of GDP, although the absolute value of research expenditure has increased.

WHY FLAG SUCH SLOWDOWN?

Since 2014, the intensity of research in India has been declining. The 2003 science and technology policy set a threshold for 2% of GDP to be used for research and development by 2007. However, we have not been able to reach the figure.

RISE OF PRIVATE ENTERPRISES

- Since 2015, R&D in the public sector has been steadily declining, with the share of private companies rising to 42%.
- Although this is a positive trend in theory, R&D is mainly concentrated in fields such as pharmaceuticals and automobiles.

- The report stated that even in these industries, they are concentrated in a few companies, and pointed out that foreign transnational R&D investment is increasing, accounting for 16% of private sector R&D investment.
- The report found that most software-related patents were issued by multinational companies operating in India, while pharmaceutical patents were mainly obtained by domestic companies.

FEW SUCCESSES TO COUNT

- On the bright side, the increase in scientific publications by Indian researchers on cutting-edge technologies is encouraging.
- The green technology published by Indian researchers is 1.5 to 1.8 times the global average, which complements the government's efforts to expand green energy.
- But in India, the number of patents for national companies, research institutions, universities and individuals is still very small.

KEY SUGGESTIONS

- The UNESCO Science Report underscores the need for 'policy bridges' for fostering a more effective interaction between foreign and local research firms.
- Given the large number of multinational corporations now engaged in R&D, it is imperative that the host economy benefits from this activity the report said.
- It also called for improved linkages between the start-up ecosystem and manufacturers to push technological development in sectors where India enjoys a global presence.

RARE EARTH METALS

#SCIENCE #RESOURCES

PRIMARY SOURCE THE HINDU

IN NEWS

China's dominance in rare earth minerals, the key to the future of manufacturing, is a cause for concern for the West.

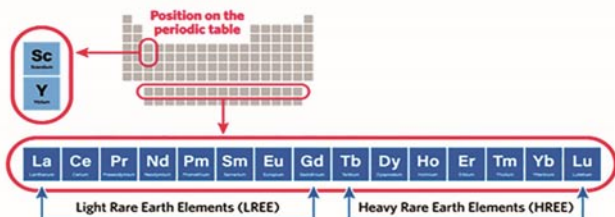
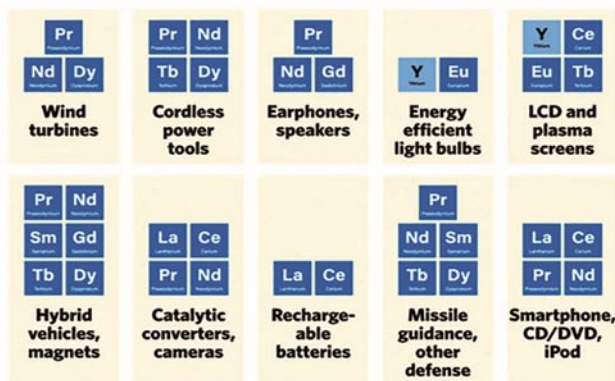
ABOUT RARE EARTH METALS

- They are a collection of 17 metal elements, including 15 lanthanides in the periodic table, plus scandium and yttrium, their physical and chemical properties are similar to lanthanides.
- 17 kinds of rare earth elements: cerium (Ce), dysprosium (Dy), erbium (Er), europium (Eu), gadolinium (Gd), holmium (Ho), lanthanum (La), lutetium (Lu), neodymium (Nd), Pr (Pr), promethium (Pm), samarium (Sm), scandium (Sc), terbium (Tb), thulium (Tm), ytterbium (Yb) and yttrium (Y).
- These minerals have unique magnetic, luminescent and electrochemical properties, so they are used in many modern technologies, including consumer electronics, computers and networks, communications, medical care, national defense, etc.

Uses and Properties of Rare Earth Elements

Unique magnetic and lighting properties, among others, make rare earth elements key in the production of a range of devices. For instance, magnets made with neodymium are far lighter than other magnets, allowing for more efficient motors.

The Rare Earth Elements			
Sc Scandium	Nd Neodymium	Gd Gadolinium	Er Erbium
Y Yttrium	Pm Promethium	Tb Terbium	Tm Thulium
La Lanthanum	Sm Samarium	Dy Dysprosium	Yb Ytterbium
Ce Cerium	Eu Europium	Ho Holmium	Lu Lutetium
Pr Praseodymium			



Source: China Water Risk

Copyright Stratfor 2011

- These REEs are even used by future technologies (such as temperature superconductivity, safe storage)

and transportation of hydrogen after hydrocarbon economy, global warming and energy efficiency).

- Rare earth elements are called so because they are available in trace amounts on Earth. Also, it is technically difficult to extract them from their oxides.
- China dominates the global rare metal production. As tensions rise between the West and China, there is a fear of disruption on rare earth metal supply chains. At one point, China produced 90% of world rare earth metal production, today it produces 60% of world's production.

INDIA'S CURRENT POLICY ON RARE EARTHS

- India has world's fifth largest reserves of rare-earth elements, despite that India's imports its requirement of rare earth metals from China. Most of India's Rare Earth resources are found in Monazite sands found in coastal areas.
- Geological surveys in India are carried out by the Bureau of Mines and the Ministry of Atomic Energy is nodal ministry for their production.
- In the past, mining and processing were done by a few small private companies, but today they are concentrated in the hands of IREL (India) Limited (formerly India Rare Earth Limited), a company owned by the Ministry of Atomic Energy.
- IREL's primary focus has been on exploitation of monazite sands from which thorium is extracted.
- India has granted government companies such as IREL the right to monopolize the main REE mineral monazite beach sand.

- IREL mainly produces rare earth oxides which is low cost, low-reward upstream process. It sells rare earth oxides to foreign firms that extract metals and manufacture high end products (high-cost, technology intensive, high return downstream process) elsewhere.

WAY FORWARD

1. India must open its rare earth mining and processing industry for **private sector**. This will increase competition and innovation.
2. A **Dedicated Cell** focusing of Rare Earths should be created. This cell can focus on policy formulation, attracting investment and promoting R&D and allow private sector companies to process beach and minerals within appropriate environmental safeguards.
3. India could **secure access** to rare earth of strategic importance by offering viability gap funding to companies to set up facilities in the upstream sector.
4. Focus should be on developing **downstream industry** rare earth metals processing industry in India. For ex those manufacturing magnets and batteries.
5. Coordinate with other agencies to partner directly with groupings such as the QUAD, building up a strategic reserve as a buffer against global supply crisis.
6. India has entered into an agreement with Japan for development of Rare Earth Metals. This needs to expanded in actual production and processing

PRACTICE QUESTIONS

MCQS

Q.1) Envision, Veritas and DAVINCI missions recently in news will travel to which of the following?

- (a) Jupiter
- (b) Mars
- (c) Saturn
- (d) Venus

Q.2) Consider the following statements about CHIME:

1. It is telescope developed by NASA.

2. It is particularly efficient in capturing Fast Radio Bursts.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Q.3) Consider the following statements about GM Rubber:

- 1. GM Rubber has been planted in Kerala, which produces most Rubber.
- 2. It will help the Rubber plant to survive the cold conditions in the winter season.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Q.4) Consider the following statements about Biological and Toxin Weapons Convention (BTWC):

- 1. The BTWC bans all countries from developing, stockpiling biological weapons.
- 2. Complaints about the violation of BTWC are made to the Security Council.
- 3. The BTWC has an elaborate verification mechanism to ensure compliance by State Parties.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Q.5) Consider the following statements about Content Delivery Network:

- (a) They are decentralized servers which make access to websites easier.
- (b) They are networks which aim to provide content based on feed settings.
- (c) They are networks developed by logistics companies to deliver goods efficiently at a location.
- (d) They are networks developed for securing critical raw materials.

DESCRIPTIVE QUESTION

- Q1.** Write a short note on the effectiveness of Biological and Toxins Weapons Convention and its effectiveness in addressing the threat of biological weapons.
- Q2.** What are Bose Einstein Condensates? What are their possible applications?

Answers: 1-d, 2-b, 3-b, 4-a, 5-a

GEOGRAPHY, ENVIRONMENT, BIODIVERSITY & DISASTER MANAGEMENT

GS PAPER (PRELIMS) AND GS PAPER I & III (MAIN)

G7 SUMMIT AND CLIMATE ACTION

#CLIMATE CHANGE

PRIMARY
SOURCE

The Indian
EXPRESS

IN NEWS

The Cornwall G7 summit sought to re-establish a common purpose among the richest democracies of the world. It also continued with the recent tradition among the rich to seek more than their "fair" share from the large developing countries. Climate change was a clear case in point.

G7 ON CLIMATE CHANGE

The leaders committed to a "green revolution" that would limit the rise in global temperatures to 1.5C. They also promised to reach net-zero carbon emissions by 2050, halve emissions by 2030, and to conserve or protect at least 30% of land and oceans by 2030

DEVELOPED WORLD'S SUDDEN ENTHUSIASM IS BECAUSE OF TWO REASONS

- Joe Biden becoming the US president who supports actions to mitigate climate change
- G7 accounts for around 60 per cent of greenhouse gases (GHGs) in the atmosphere emitted over time and 25 per cent of current global GHG emissions. In

per-capita terms, G7 emissions are among the highest in the major economies.

WHAT WERE THE OUTCOMES OF THE SUMMIT FOR CLIMATE ACTION?

- The G7 members reaffirmed the previous **\$100 billion a year target** doesn't come close to addressing the urgency and scale of the crisis."
- They also committed to help **nations move away from coal power**. It also includes a plan to phase out coal burning unless it includes carbon capture technology. The G7 will end the funding of new coal generation in developing countries and will provide incentives to countries to stop using the fuel. India, that continues to rely on coal, could face a crunch in assistance in thermal power.
- UK joined Germany and the US to declare that they would provide finance for **protecting the world's vulnerable communities from climate change**
- The G7 agreed "collectively" to **net-zero GHG emissions by 2050** and called on "all countries, in particular, major emitting economies" to join as part of global efforts. Thus, G7 wants major developing countries such as India and China to contribute more for the cause against climate change.
- **ODA (official development assistance)** has been made contingent on net-zero emissions by 2050 and deep cuts in emissions in the 2020s.

WHAT ARE THE MAIN ISSUES IN THE DECLARATION?

- There was an effort to shift the responsibility to the large developing countries, even though “**common and differentiated responsibilities**” is the agreed guiding principle for tackling climate change — differentiation underscores the responsibility of the industrialised countries to lead.
- In the new template, differentiation appears to mean that the **big push on climate change must come from the large developing countries**. So, all eyes will now shift to the G20 summit in October in Italy, where China, India and Russia will be present.
- Developed countries agreed in 2009 to contribute \$100bn a year in climate finance to poorer countries by 2020. But the target was not met, in part because of the Covid pandemic.
- The fund committed by G7 for urging countries moving away from coal power seems insufficient. They did not commit on transfer of technology for adaptation and mitigation.

INDIA'S CLIMATE COMMITMENTS

India has been a leading stakeholder in climate action and is among the few in the G20 in line to meet their commitments under the Paris Accord. It has also taken on a most ambitious target of 450 GW of renewable power by 2030 and has shown the world the way forward on solar power with producers now offering ultra-competitive tariffs.

- BASIC, comprising India, China, Brazil and South Africa, has so far led the efforts of large developing countries in climate negotiations. In April 2021, BASIC countries stated that developing countries require time and policy space to achieve a just transition of their economies. But with possible differences of opinion on net zero — and other differences as well — the jury is out on BASIC's clout in future global negotiations.
- For India, with its huge developmental needs and global high-table aspirations that require carbon and policy spaces, the imperative is strong diplomatic partnerships with large developing economies that

have an inherent interest in GREEN (Growth with Renewable Energy, Entrepreneurship and Nature).

MAHARASHTRA (URBAN AREAS) PROTECTION AND PRESERVATION OF TREES ACT, 1975

#CONSERVATION

PRIMARY SOURCE THE HINDU

IN NEWS

The Maharashtra government will make amendments to the Maharashtra (Urban Areas) Protection and Preservation of Trees Act of 1975, to introduce provisions for the protection of 'heritage trees'.

FEATURES OF THE AMENDED MAHARASHTRA (URBAN AREA) PROTECTION AND PRESERVATION OF TREES ACT:

Determination of age of the tree:

- Trees older than 50 will be termed heritage trees.
- The Environment and Climate Change Department will issue guidelines in consultation with the State Forest Department based on the existing methods for protection of such trees.

Compensatory plantation:

- It will include planting the number of trees equivalent to the age of trees to be cut.
- The saplings need to be six to eight feet in height while planting and they will undergo geo-tagging with seven years of caring period.
- The option of monetary compensation has also been given, instead of compensatory plantation.

Tree Authority:

- A State-level Tree Authority will be formed to protect and preserve heritage trees. The authority will hear applications seeking permission to cut 200 or more trees that are five or more years old.
- These bodies will ensure that the tree census is conducted after every five years.
- The minimum land under plantation in any urban area shall not be less than 33 per cent

What are heritage trees?

- The main criteria for considering a tree as a heritage tree is its **size, form, shape, age, colour and rarity**.
- The **aesthetic, botanical, horticultural, ecological, social, cultural and historical** values are also taken into account.
- A specimen associated with a **historic person, place, event or period** is also treated as a heritage tree.
- A heritage tree can also be a tree associated with **local folklore, myths, legends or traditions**.
- Certain species that are **relatively rare in an area, whether native or not**, may also be granted special status.

Measure to conserve heritage trees

- The **state governments** should enact a special law, **the Heritage Tree Conservation Act (HTCA)** to impose restriction upon removal of these precious trees.
- A **Heritage Tree Conservation Committee** can be established in every district to conserve heritage trees.
- **Create awareness** among the public to increase the tree cover throughout the state. This is because there is no scope to expand the forest cover due to non-availability of land.
- As most of the heritage trees in the state are found in temple premises, **the Hindu Religious and**

Charitable Endowment (HR & CE) department authorities can be trained about how to protect the trees. Health cards can also be prescribed for the identified trees and they can also be used to take action to remove any dangerous trees.

- When the heritage trees are identified in private lands, **land owners can be honoured** with suitable rewards in order to motivate them.

CORALS

#CLIMATE CHANGE #BIODIVERSITY

PRIMARY SOURCE	THE HINDU	SECONDARY SOURCE	Status of Coral Reefs, 2000-24
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CONTEXT

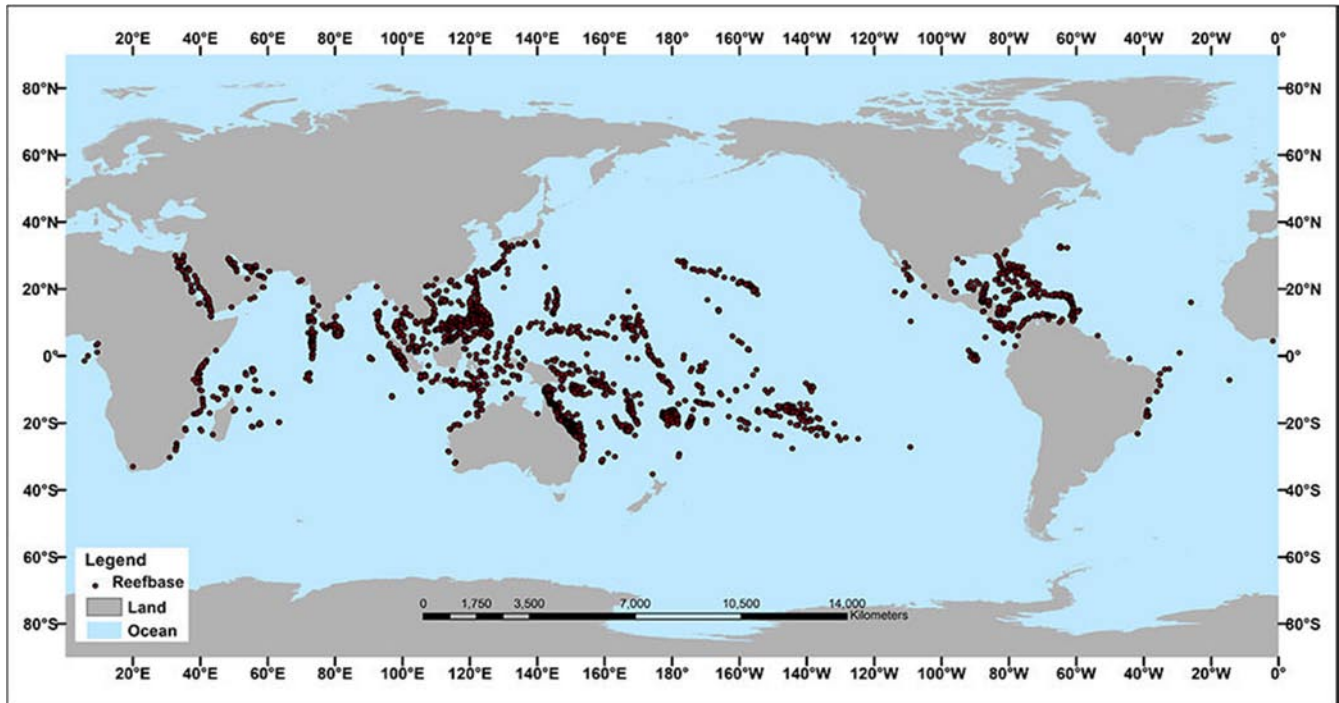
In 2014 and 2015, the brown rice coral in Hawaii was completely bleached, but the blue rice coral recovered quickly after bleaching, and blue coral was unaffected by the elevated ocean temperatures.

WHY DO SOME CORALS WITHSTAND CLIMATE CHANGE BETTER THAN OTHERS?

Geographical Conditions for Coral Growth

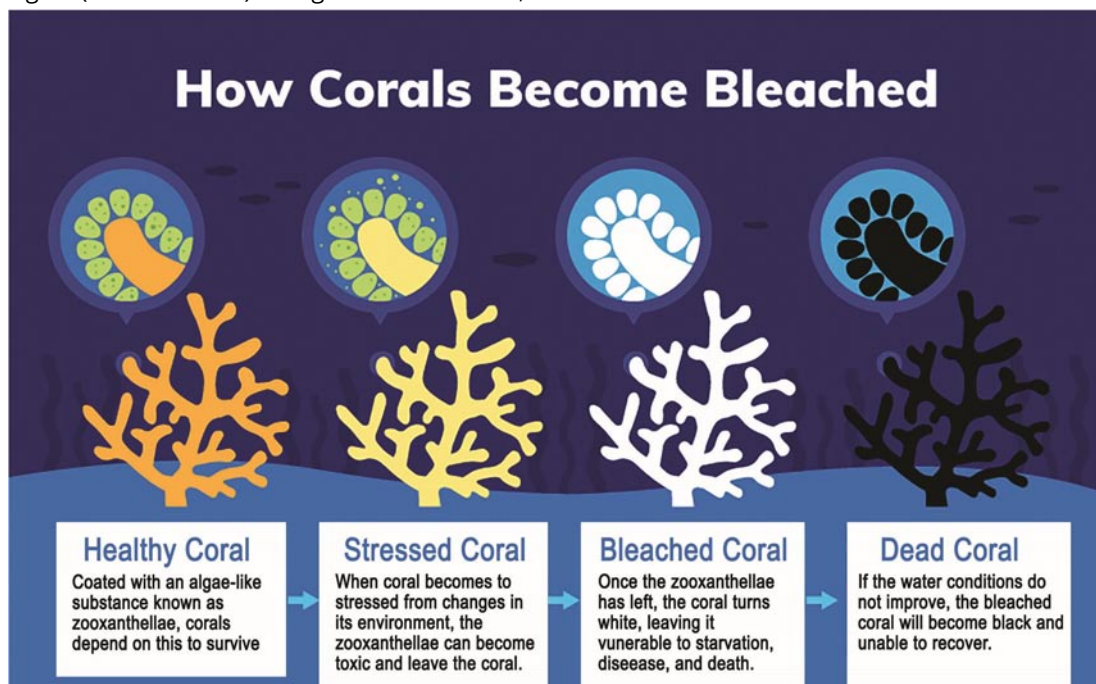
- They grow best in the brightly lighted water about 5 to 10 meters deep. The suspended particles interfere with feeding.
- Coral reef can form up to depth of 90 meters, but growth rate declines rapidly after 5 to 10 meters depths.
- The reef building corals are found within the **21°C isotherm**, Temperature below 18°C causes their death.
- Corals form in **calm and well-lit waters** and so they are not near the mouths of rivers.
- Individual coral organisms are however, found in some cold, high latitudes waters as well (Norway and Cape Verde Island and off New Zealand and Japan)

Coral Reefs distribution



Corals are stressed by changes in sea water conditions such as temperature, light, or nutrients, they expel the symbiotic algae (zooxanthellae) living in their tissues,

causing them to turn completely white. This is called **coral bleaching**.



Causes of coral bleaching

- **Increase in seawater temperature**, particularly when associated with elevated levels of solar irradiance (e.g., ultraviolet radiation)
- **Change in seawater chemistry** (e.g., due to ocean acidification or pollution)
- **Chemicals in sunscreens and other personal care products** can accumulate in areas with significant

marine tourism and recreational use by humans and can promote viral infections in hard corals that lead to bleaching.

- **Increment in levels of sediment** in seawater, or a coral's exposure to sodium cyanide (a chemical used in the capture of coral reef fish).
- **Mining and burning coal pollute the atmosphere and causes global warming.** Increased carbon pollution in our atmosphere traps heat, which causes the temperature to rise on Earth.
- **Deep water trawling**, which involves dragging a fishing net along the sea bottom.
- **Billions of bits of plastic waste are entangled in corals and sickening reef.**

Status of Coral Reefs 2000-24 - International Coral Reef Initiative (Clive Wilkinson's Report)

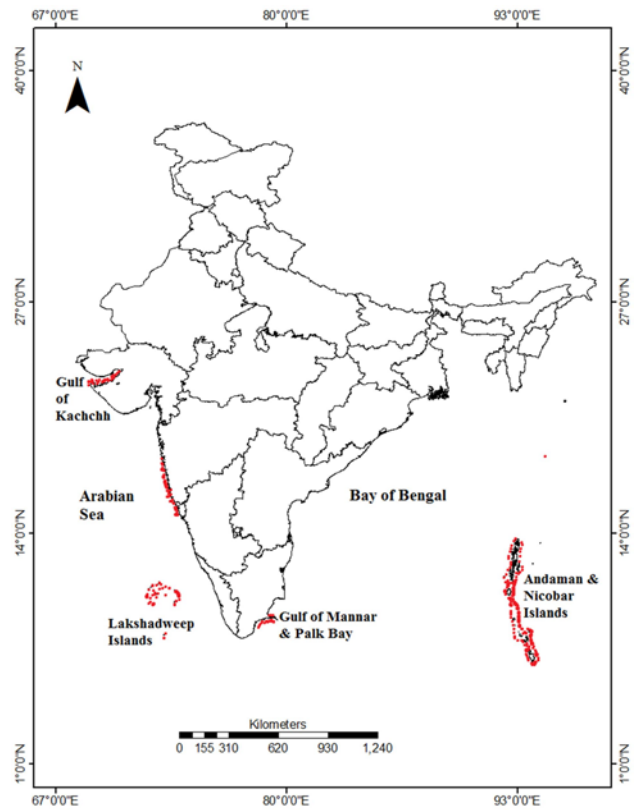
The first report on the 'Status of Coral Reefs of the World' was published in 1998 by the **Global Coral Reef Monitoring Network**. Since then the report was published regularly (2000, 2002, 2004 and 2008) with updates on reef status in different regions and countries of the world. The reports predicted that **almost all the reefs would soon be coming in the threatened stage.**

The initial report focused more on pollution, over-fishing and other human stresses to corals, however, the increasing frequency, scale and the severity of the events led scholars to conclude that coral reefs are one of the first ecosystems where the impacts of unexpected global warming and ocean acidification are clearly visible. Rather, these are just the beginnings of a human-ecological crises waiting to snowball and require strong protective measures to preserve the biodiversity as well as local life systems.

CORAL REEFS ARE CLASSIFIED INTO THREE MAIN TYPES.

- **Fringing reefs** grow close to the shore of a landmass, extending out like a submerged platform.
- **Barrier reefs** also follow a coastline but are separated from it by wide expanses of water.
- **Atolls** are ring-shaped reefs surrounding lagoons.

Coral Reef Distribution in India



EFFORTS FOR CORAL REEF CONSERVATION

- **Global efforts:**
 - **Global Coral Reef Monitoring Network, International Coral Reef Initiative (ICRI), National Oceanic and Atmospheric Administration (NOAA)** are involved in preventing damage to healthy reefs and restoring damaged ones through assessment, conservation and restoration programmes (that include- coral nurseries, marine protected areas and awareness campaigns) world-wide involving local communities.
- **Indian Efforts**
 - In India, the coral reefs come under the **ecologically sensitive areas (Coastal Regulation Zone, CRZ-I)** and **Wildlife Protection Act**. So, no new activities related to construction/ underwater blasting/ use of corals or sand from beaches are permitted. There is a National Committee on Wetlands, Mangroves and Coral Reefs, but it has no strict policies that stop harmful activities or pollution on the seaward side.

- **Coral Restoration:** There are technologies which have been developed to artificially restore corals. For, e.g. Biorock technology is being used for coral restoration in Gulf of Kutch.
- Immediate reductions in CO2 emissions, overfishing, sedimentation and pollution, and promoting sustainable tourism and education are the only ways to save reefs from vanishing completely.

Reasons behind Resilience of Hawaiian Blue rice Corals:

- After the 2014 and 2015 Hawaii bleaching events, the blue rice coral was found to have exceptional reproductive vigour at 90% motility. But the brown coral's motility was only half this.
- Reason for this resilience: **Hawaiian blue rice corals have a deep blue pigment derived from algae called zooxanthellae that live inside the coral tissue.** The researchers found that these algae produce sunscreen for the coral. This pigment has a protein named **chromoprotein** which filters out harmful UV radiation.

FAME SCHEME

#SUSTAINABILITY #POLLUTION

PRIMARY SOURCE

THE HINDU

SECONDARY SOURCE

pib

IN NEWS

The union government has modified India's ambitious scheme to promote electric mobility and allotted the electric three-wheelers and electric buses component of the Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (Fame) scheme to state run Energy Efficiency Services Ltd (EESL).

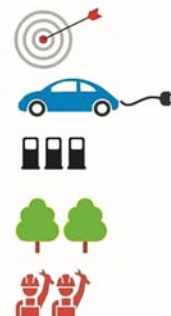
In this context, let us understand the need for Electric vehicles, steps taken by the government to incentivise the manufacturing and sale of electric vehicles and challenges being faced by the sector.

WHAT IS FAME?

Faster Adoption and Manufacturing of Electric (Hybrid) Vehicles in India is a scheme under **National Electric Mobility Mission Plan (NEMMP)**

Target of NEMMP - 2020

- **6-7 million** Hybrid & Electric Vehicle sale by 2020
- **9500 million** litres of estimated cumulative fuel saving
- **2 million** tonnes reduction in pollution & green house gas emissions
- **65,000** Direct & **3,00,000** Indirect jobs



NEED TO SWITCH TO ELECTRIC VEHICLE

- **More Energy Efficiency:** Battery-run vehicles have an efficiency of nearly 85% compared to 20% of gasoline-run engines.
- **Crude Oil Imports:** Nearly 80% of India's oil requirement comes from its crude oil imports.

INDIA A POWER SURPLUS COUNTRY

- **Reforms in Coal Mining:**
 - India has recently liberalized its coal sector by privatizing mining and allowing FDI in Coal mining.
 - Besides India has ended its captive mining regime accelerating the commercial mining of coal in India
- Thrust on renewable power generation in India means that many electric vehicles can be powered by solar and wind energy.
- Higher power demand from the electric vehicles can easily be met by domestic power industry, which currently suffers from overcapacity.

Safe and Clean Urban Mobility: Pollution from Internal Combustion engines can be tackled which degrades quality of life in urban areas. India is home to some of the most polluted cities in the world.

Head Start: Many developed countries are moving away from Internal Combustion based engines. India also needs to plan its transition to electric vehicles and ready its large domestic auto industry for this transition in timely fashion.

FASTER ADOPTION AND MANUFACTURING OF ELECTRIC VEHICLES IN INDIA – FAME - II

- **Based on the experience gained in the Phase-I of FAME India Scheme, it has been observed that sufficient number of charging infrastructure is required to achieve expected outcome of the plan, which is being addressed presently in Phase-II of FAME Scheme.**
- Department of Heavy Industry notified Phase-II of the Scheme in March 2019 with an outlay of Rs. 10,000 Crore for a period of 3 years commencing from 1st April 2019.
- **The main objective of the scheme is to encourage Faster Adoption of Electric and Hybrid Vehicle by way of offering upfront incentive** on purchase of Electric vehicles and also by way of establishing a necessary charging Infrastructure for electric vehicles.
- The scheme will help in addressing the issue of environmental pollution and fuel security. Emphasis is on electrification of the public transportation that includes shared transport.
- The scheme proposes for establishment of charging infrastructure, whereby about 2700 charging stations so that there will be availability of at least one charging station in a grid of 3 km x 3 km. Establishment of Charging stations are also proposed on major highways connecting major city clusters.

THE CHANGES WHICH HAVE BEEN BROUGHT IN THE RECENT NOTIFICATION

- Capped incentives for electric two-wheelers at **40% of the cost of vehicle, up from 20% earlier.**
- **Increased the demand incentive for electric two-wheelers to ₹15,000 per KWh from an earlier uniform subsidy of ₹10,000 per KWh** for all EVs, including plug-in hybrids and strong hybrids except buses.

IMPACT OF THE RECENT CHANGES

- India has a unique mobility pattern which is quite distinct from other countries. The vehicle fleet in India is dominated by two-wheelers which account for almost 80% of vehicles, while premium four-wheelers (costing more than 10 lakhs) account for only 2%.

Hence, incentives have to be designed keeping in mind the unique aspect of vehicle fleet in India.

- The increase in the demand incentive for the electric two wheelers is expected to increase their demand and hence provide fillip to electric mobility in India.

LIMITATIONS OF LI-ION BATTERIES

The complete fleet of EVs currently is run on Lithium Batteries (LiBs) which poses a major challenge for switch to EVs

- LiBs are expensive.
- They are not suitable for long-distance travel.
- The LiBs used in EVs are about 500 Kgs and makes up for bulk of the weight of the cars.
- LiBs use lithium, cobalt, nickel and manganese which are in short supply in the world restricted to Bolivia, Chile.
- Mining for these minerals degrades local environment.
- Charging lithium batteries will demand very high investments in power generation which might not be met from the renewable sources in near future. Using conventional power to charge batteries is again polluting.

OTHER CHALLENGES

- Charging infrastructure
- Battery recycling. For this government has proposed battery swapping stations.
- Possible Job losses: Besides EVs have lesser number of moving parts (about 20 compared to 2000 in gasoline vehicles) in them as compared to gasoline vehicles. This is because of constant torque generated at all speeds. As a result the **transmission system, gearbox, clutch etc** are not needed. This results in loss of jobs in the MSME sector in India which produces many of these auto parts.
- Safety of batteries as some of these batteries are found to have issues of catching fire.

WAY FORWARD

- However, India needs auto industry's active participation to ease electric mobility transition.

- The auto and battery industries could collaborate to enhance customer awareness, promote domestic manufacturing, promote new business models, conduct R&D for EVs and components and must consider new business models to promote EVs.
- Government should focus on a phased manufacturing plan to promote EVs, provide fiscal and non-fiscal incentives for phased manufacturing of EVs and batteries.
- Transformation to EVs will create enormous economic, social and environmental benefits for the citizens of India.

SMOG TOWER

#ENVIRONMENT #POLLUTION



IN NEWS

Delhi Environment Minister has stated that a smog tower being constructed near Connaught Place will be completed by August 15.

WHY WE NEED SUCH MEASURES?

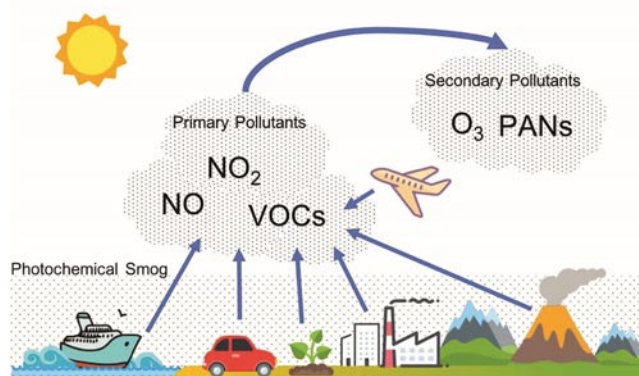
- According to WHO Global Urban Ambient Air Pollution, Delhi is the most polluted of any major city in the world. It also affects the districts around Delhi.
- Air pollution in India is estimated to kill about 2.5 million people every year; it is the fifth largest killer in India.
- India has the world's highest death rate from chronic respiratory diseases and asthma, according to the WHO. In Delhi, poor quality air irreversibly damages the lungs of 50 percent of all children.
- Pollution in Delhi especially rises during the months of October and November due to the burning of rice stubble.

WHAT IS SMOG?

- Smog is basically derived from the merging of two words; smoke and fog. Smog is also used to describe the type of fog which has smoke or soot in it.

- Smog is a yellowish or blackish fog formed mainly by a mixture of pollutants in the atmosphere which consists of fine particles and ground-level ozone. Smog also refers to hazy air that makes breathing difficult.

PROCESS OF SMOG FORMATION



- The atmospheric pollutants or gases that form smog are released in the air when fuels are burnt. When sunlight and its heat react with these gases and fine particles in the atmosphere, smog is formed. It is purely caused by air pollution.
- Ground level ozone and fine particles are released in the air due to complex photochemical reactions between volatile organic compounds (VOC), sulfur dioxide (SO₂) and nitrogen oxides (NO_x).
- These VOC, SO₂, and NO_x are called **precursors**. The main sources of these precursors are pollutants released directly into the air by gasoline and diesel-run vehicles, industrial plants and activities, and heating due to human activities.
- Smog is often caused by heavy traffic, high temperatures, sunshine, and calm winds. These are a few of the factors behind an increasing level of air pollution in the atmosphere.
- During the winter months when the wind speeds are low, it helps the smoke and fog to become stagnate at a place forming smog and increasing pollution levels near the ground closer to where people are respiring. It hampers visibility and disturbs the environment.
- Temperature inversions are situations when warm air does not rise instead stays near the ground. During situations of temperature inversions, if the wind is calm, smog may get trapped and remain over a place for days.

SMOG: CAUSES, IMPACTS AND LONG TERM SOLUTIONS

Smog		
Causes	Effects	Solutions
<ul style="list-style-type: none"> ▪ Overpopulation ▪ Fossil fuels ▪ Private cars ▪ Long transportation distances ▪ Industrial processes ▪ Excessive consumption ▪ Excessive waste production ▪ Fireworks ▪ Burning of agricultural material ▪ Construction activities ▪ Volcanoes 	<ul style="list-style-type: none"> ▪ Pulmonary health issues ▪ Lung damage ▪ Lung cancer ▪ Long-term health issues ▪ Allergies ▪ Asthma ▪ Lower life expectancy ▪ Irritation of eyes ▪ Breathing issues ▪ Lower quality of life ▪ Birth defects ▪ Accidents due to bad visibility ▪ Effect on flora and fauna 	<ul style="list-style-type: none"> ▪ Avoid the use of cars ▪ Home office ▪ Buy from organic food stores ▪ Buy local food ▪ Buy energy-efficient devices ▪ Support green energies ▪ Reduce waste production ▪ Reduce consumption levels ▪ Reuse and recycle ▪ Protect yourself against smog

SHORT TERM SOLUTIONS OF SMOG

Smog towers:



- A smog tower is a large vertical structure designed as large-scale air purifier to reduce air pollution particles.
- It has been fitted with exhaust fans that will help in sucking polluted air.
- The device will be able to take in air from all 360-degree angles and generate clean air.
- The air will be purified by using the highly effective highly effective particulate arrestance (HEPA) filter which can clean up to 99.99 per cent of the particulate matter present in the air in conjunction with a pre-filter and activated carbon.

• Difference with the Chinese smog tower:

- The purifier will be different from China's Smog Tower in the sense that it won't depend on the **ionisation technique to clean the air**. The ionisation of air does not eradicate the pollutants but works by separating the pollutants from the oxygen, which could be a part of the problem itself.

Anti-Smog Guns

- In India, water cannons have been used recently in an attempt to wash out particles.
- The anti-smog gun is a cannon shaped device that sprays atomised water droplets in the air. The gun is

attached to a water tank built on a movable vehicle, which can be taken to various parts of the city.

UNCCD

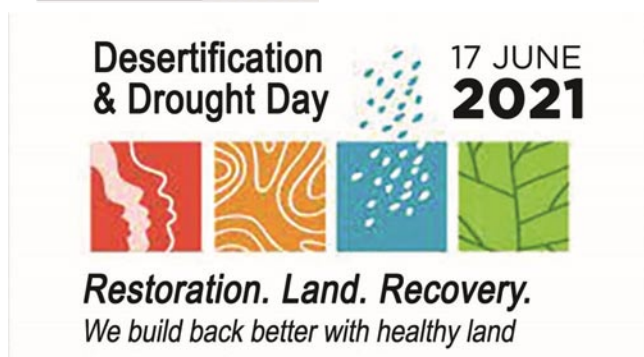
#CONSERVATION #ENVIRONMENT

PRIMARY SOURCE

UNCCD

SECONDARY SOURCE

pib



IN NEWS

Volunteers in 33 panchayats of Taranagar block in Rajasthan planted 5100 saplings as part of **Harit Marubhumi (Green desert land) drive**. This plantation was undertaken to celebrate **World Day to combat desertification drought 2021**.

Species such as **Khejri (state tree of Rajasthan)**, **Rohida (state flower of Rajasthan)**, **Ber** and **Sheesham** were grown.

Shyam Sunder Jyani (recipient of this year's Land for Life Award of UN), guided volunteers in preparing soil, selecting the samplings, and planting them. He was awarded by the UN to promote familial forestry in Rajasthan.

ABOUT THE DESERTIFICATION AND DROUGHT DAY 2021

- **Observed:** It is observed on **17 June** every year.
- **Aim:** The **day's focus** is to turn the degraded land that has lost its natural productivity due to human activity into healthy land.
- **Proclaimed by:** This day was proclaimed by the United Nations General Assembly resolution in

1995, after the day when United Nations Convention to Combat Desertification is drafted.

- **Theme:** This year's **theme is " Restoration. Land. Recovery. We build back better with healthy land"**.

UNITED NATIONS CONVENTION TO COMBAT DESERTIFICATION (UNCCD)

- India ratified the **Convention to Combat Desertification in 1996** and the Ministry of Environment, Forest and Climate Change is the nodal ministry for the convention.
- The UNCCD is one of the three Rio Conventions, the other two being:
 - **Convention on Biological Diversity (UNCBD)**
 - **United Nations Framework Convention on Climate Change (UNFCCC)**
- UNCCD is the **sole legally binding international agreement** linking environment and development to sustainable land management.
- The convention **obliges national governments** to take measures to tackle the issue of desertification. It is committed to **bottom-up approach**, encouraging the participation of local people in combating desertification.
- The new **UNCCD 2018-2030 Strategic Framework** is the most comprehensive global commitment to achieve **Land Degradation Neutrality (LDN)** aiming at:
 - The restoration of productivity of degraded land.
 - Enhancing the livelihoods of people dependent on them.
 - Mitigating the impact of droughts on vulnerable populations
- India is also a part of the **Bonn Challenge**, which is an international effort to bring 150 million hectares of the world's degraded and deforested land into restoration by 2020, and 350 million hectares by 2030.

- India's goals under Land Degradation Neutrality: India aims to restore 26 million of degraded land by 2030.

Land Degradation Neutrality (LDN) has been defined as:

A state whereby the amount and quality of land resources, necessary to support ecosystem functions and services and enhance food security, remains stable or increases within specified temporal and spatial scales and ecosystems.

Case study for Land Reclamation: Different parts of India, have taken to differentiated approaches for increasing land productivity and reducing land degradation. The Banni region of Rann of Kutch, is one such case in point. The region suffered from highly degraded lands and receives very little rainfall. In this region, land restoration is done by developing grasslands, helping achieve land degradation neutrality. The grasslands also help in the pastoral communities in the region. The Banni region is famous for Banni buffaloes and Kankrej cows which are maintained by the local Maldhari community.

ranges, where, it says, glaciers are melting faster than the global average ice mass. The rate of retreat of HKHK glaciers is estimated to be 0.3 metres per year in the west to 1.0 metre per year in the east. BC adds to the impact of climate change.

WHAT IS BLACK CARBON?

- Black carbon is produced both naturally and by human activities as **a result of the incomplete combustion of fossil fuels, biofuels, and biomass**. It is black in colour as its particles strongly absorb sunlight and give soot its black colour.
- Black Carbon (BC) has recently emerged as a major contributor to global climate change, possibly second only to CO₂ as the main driver of change.
- Primary sources include emissions from diesel engines, cook stoves, wood burning and forest fires.
- India is the second largest of black carbon in the world.

Difference between Carbon Dioxide and Black Carbon

- Reducing CO₂ emissions is essential to avert the worst impacts of future climate change, but **CO₂ has such a long atmospheric lifetime that it will take several decades for CO₂ concentrations to begin to stabilize after emissions reductions begin**.
- In contrast, **BC remains in the atmosphere for only a few weeks, so cutting its emissions would immediately reduce the rate of warming**, particularly in those areas which have witnessed fast changes in the level of Black Carbon.
- **BC is a short-lived pollutant that is the second-largest contributor to warming the planet behind carbon dioxide (CO₂). Unlike other greenhouse gas emissions, BC is quickly washed out** and can be eliminated from the atmosphere if emissions stop.
- Unlike historical carbon emissions it is also a localised source with greater local impact.

BLACK CARBON

#ENVIRONMENT #CLIMATE CHANGE
#POLLUTION

PRIMARY SOURCE

THE HINDU

SECONDARY SOURCE

WORLD BANK

IN NEWS

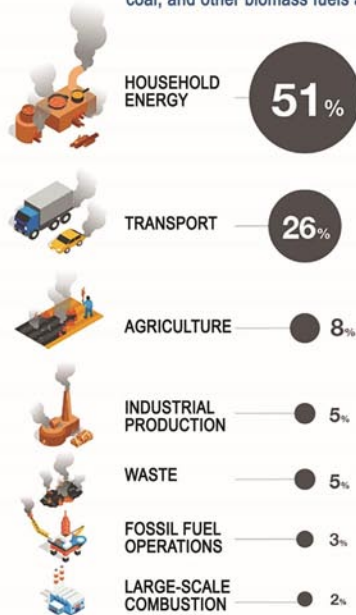
A new research from World Bank states that **Black carbon (BC) deposits produced by human activity, which accelerate the pace of glacier and snow melt in the Himalayan region can be sharply reduced through new, currently feasible policies** by an additional 50% from current levels.

The research report from the World Bank covers the Himalaya, Karakoram and Hindu Kush (HKHK) mountain

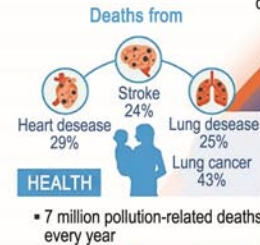
BLACK CARBON (BC)

Black carbon, or soot, is part of fine particulate air pollution (PM_{2.5}) and contributes to climate change.

SOURCES Black carbon is one of many particles and gases that are emitted when diesel, coal, and other biomass fuels are burned.



IMPACTS



CLIMATE
Absorbs sunlight and converts it to heat

LIFETIME IN ATMOSPHERE: UPTO 2 WEEKS

Since black carbon does not last long in the atmosphere, efforts to reduce it will bring immediate benefits for the climate and human health.

WEATHER

- Prevents clouds from being formed
- Alters regional weather patterns and rainfall

SNOW & ICE
Accelerates the melting of snow and ice

AGRICULTURE & ECOSYSTEMS

- Reduces sunlight
- Affects plant health and productivity

WHAT ARE THE IMPACTS OF BLACK CARBON?

CLIMATE IMPACTS

- Black carbon is an important **contributor to warming because it is very effective at absorbing light and heating its surroundings**. Per unit of mass, black carbon has a **warming impact** on climate that is **460-1,500 times stronger than CO₂**.
- When suspended in the atmosphere, black carbon contributes to warming by converting incoming solar radiation to heat. **It also influences cloud formation and impacts regional circulation and rainfall patterns**.
- When deposited on ice and snow, black carbon and co-emitted particles reduce surface albedo** (the ability to reflect sunlight) and heat the surface. The Arctic and glaciated regions such as the Himalayas are particularly vulnerable to melting as a result.

HEALTH IMPACTS

- Black carbon and its co-pollutants are key components of **fine particulate matter (PM_{2.5})** air

pollution, the leading environmental cause of **poor health and premature deaths**.

- Its small size allows them to penetrate into the **deepest regions of the lungs** and facilitate the transport of toxic compounds into the bloodstream.

Impacts on vegetation and ecosystems: Black carbon can affect the health of ecosystems in several ways:

- by depositing on plant leaves and increasing their temperature,
- dimming sunlight that reaches the earth, and
- modifying rainfall patterns.

Deposits of BC act in two ways hastening the pace of glacier melt:

- by decreasing surface reflectance of sunlight
- by raising air temperature

FOCUSSED POLICIES CAN ACHIEVE SUCCESS

- According to World Bank, full implementation of current policies to mitigate Black Carbon can achieve a significant reduction.

- However, by enacting new policies and incorporating them through regional cooperation among countries can achieve enhanced benefits.

CUTTING BLACK CARBON

- Some of the ongoing policy measures to cut BC emissions are
 - Enhancing fuel efficiency standards for vehicles
 - Phasing out diesel vehicles and promoting electric vehicles
 - Accelerating the use of liquefied petroleum gas for cooking and through clean cookstove programmes
 - Upgrading brick kilns
 - Specifically, in the Himalayas, reducing black carbon emissions from cookstoves, diesel engines, and open burning, reducing forest fires would have the greatest impact and could significantly reduce radiative forcing and help to maintain a greater portion of Himalayan glacier systems.

NEW NATIONAL PARKS

#CONSERVATION #PROTECTED AREAS

PRIMARY SOURCE

THE HINDU

IN NEWS

Two new national parks in Assam have got officially notified taking the total number of such protected areas in the state to **seven**. The two new national parks are **Dihing Patkai and Raimona**.



RAIMONA

- It is located in Kokrajhar district of the Bodoland Territorial Region (BTR) in lower Assam. The area of the park includes the northern part of the notified **Ripu Reserve Forest** which forms the western-most buffer to the **Manas National Park** that straddles the India-Bhutan border.
- It is bounded on the west by the **Sonkosh river** along the Assam-West Bengal border running southward from the India-Bhutan border and the **Saralbhanga river**. The **Pekua river** defines its southern boundary.
- It shares contiguous forest patches of the **Phipsoo Wildlife Sanctuary in Bhutan** and the **Jigme Singye Wangchuk National Park** in Bhutan creating a transboundary conservation landscape.
- The secured transboundary ecological landscape will ensure the long-term conservation of endemic species like **the golden langur**, the mascot of Bodoland Territorial Council and endangered species such as the **Asian elephant, the Bengal tiger** and varied other flora and faunal species it supports.
- **Golden Langur** is most iconic species found in the Raimona National Park. IUCN Status of Golden Langur is Endangered. It is endemic to small geographical area of Sikkim, Bhutan, Assam.

DIHING PATKAI

- It was declared a wildlife sanctuary in 2004 and now got upgraded into a national park.
- It is located inside the larger **Dehing Patkai Elephant Reserve**, which spreads across Dibrugarh, Tinsukia and Sivasagar districts of Upper Assam.
- Short stretches of the **Dirak** and **Buri Dihing rivers** have been included in the park.
- It is rich in coal and oil and is believed to be the last remaining contiguous patch of lowland rainforest area in Assam.
- It is said to have the highest concentration of the **rare endangered White Winged Wood Duck**.

MORE FACTS RELATED TO ASSAM

- Assam already had five national parks—**Kaziranga, Manas, Dibru-Saikhowa, Nameri and Rajiv Gandhi Orang National Park**. Kaziranga and Manas are

UNESCO World Heritage Sites. They are also tiger reserves along with Nameri and Orang.

- Assam now is the state with the **second highest** number of national parks(7) in the country, after **Madhya Pradesh's 11 among the States.** The Union Territory of **Andaman and Nicobar has nine national parks.**

ABOUT NATIONAL PARKS

- National Parks can be declared by State Governments or Central Government for the purpose of protecting, propagating or developing wildlife under the **Wildlife Protection Act, 1972.**
- No grazing and no livestock is allowed to enter into a national park.
- All the rights of land for an area declared to be a national park are vested with the State Government.
- No person is allowed to destroy, exploit or remove any Wildlife including forest produce from a National

Park. Wherever, the use of forest produce is allowed, it is only for the purpose of personal consumption of people living in and around the national park, the use of forest produce for commercial purposes is not allowed.

DEEPOP BEEL

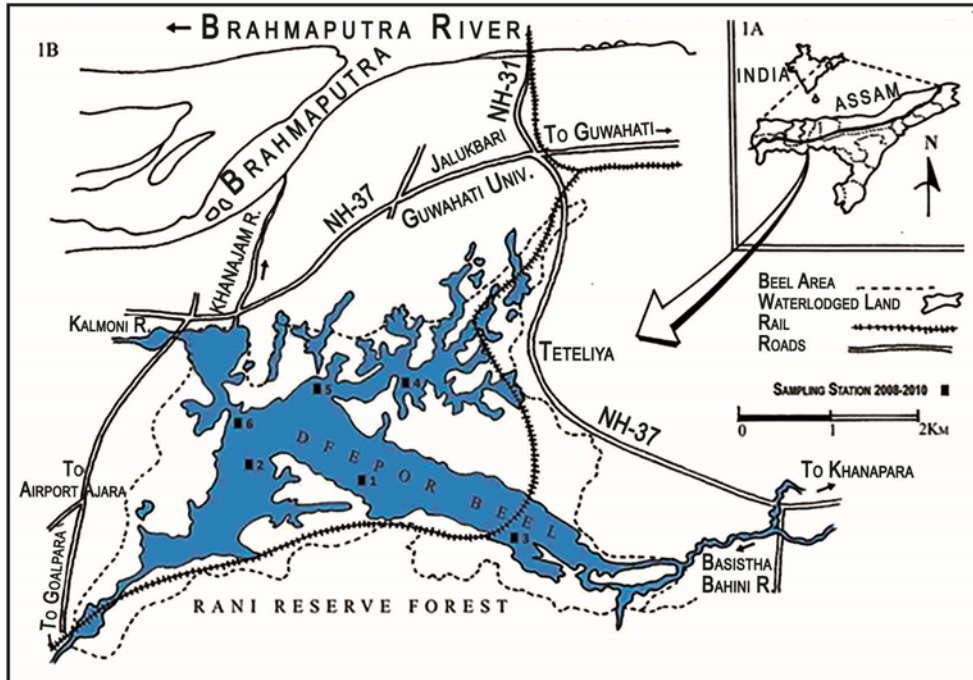
#CONSERVATION #PROTECTED AREAS

PRIMARY SOURCE www.ramsar.org

IN NEWS

The Assam government has proposed the realignment of a broad gauge railway-line through the **Deepor Beel.** The elephants use four corridors crossing the track to often bathe and feed on the aquatic plants in the wetland.

ABOUT DEEPOP BEEL



- The name Deepor Beel is stated to be derivative of the Sanskrit word *dipa* which means elephant, and *bil* means wetland in Assamese language, inhabited by elephants
- It is a **permanent freshwater lake** located to the south-west of Guwahati city, in Kamrup district of **Assam.** Lying in a **former channel of the**

Brahmaputra river, it lies to the south of the main river channel.

- It is the **only wetland in Assam** designated as a site of importance for “conservation and sustainable use” **under the Ramsar Convention on Wetlands**.
- The Rani and Garbhanga hills, the habitat of the **Asiatic elephants** in the southern side of the beel, are part of this ecosystem.
- The beel is a natural habitat to many **varieties of birds**. Some of the globally threatened species of birds like **spot billed pelican, lesser adjutant stork, Baer’s pochard, Pallas’ sea eagle, greater adjutant stork**.
- Among the large number of migratory waterfowl, **the Siberian crane** regularly migrates to this habitat during its annual journey.
- Considering the richness of the bird varieties found in the beel, **the BirdLife International** has declared

Deepor Beel as an **Important Bird Area (IBA)** with high priority for conservation.

- **Potential threats** include over-fishing and hunting pressure upon waterbirds, pollution from pesticides and fertilizers, and infestation by water hyacinth *Eichhornia crassipes*.

PAKKE TIGER RESERVE

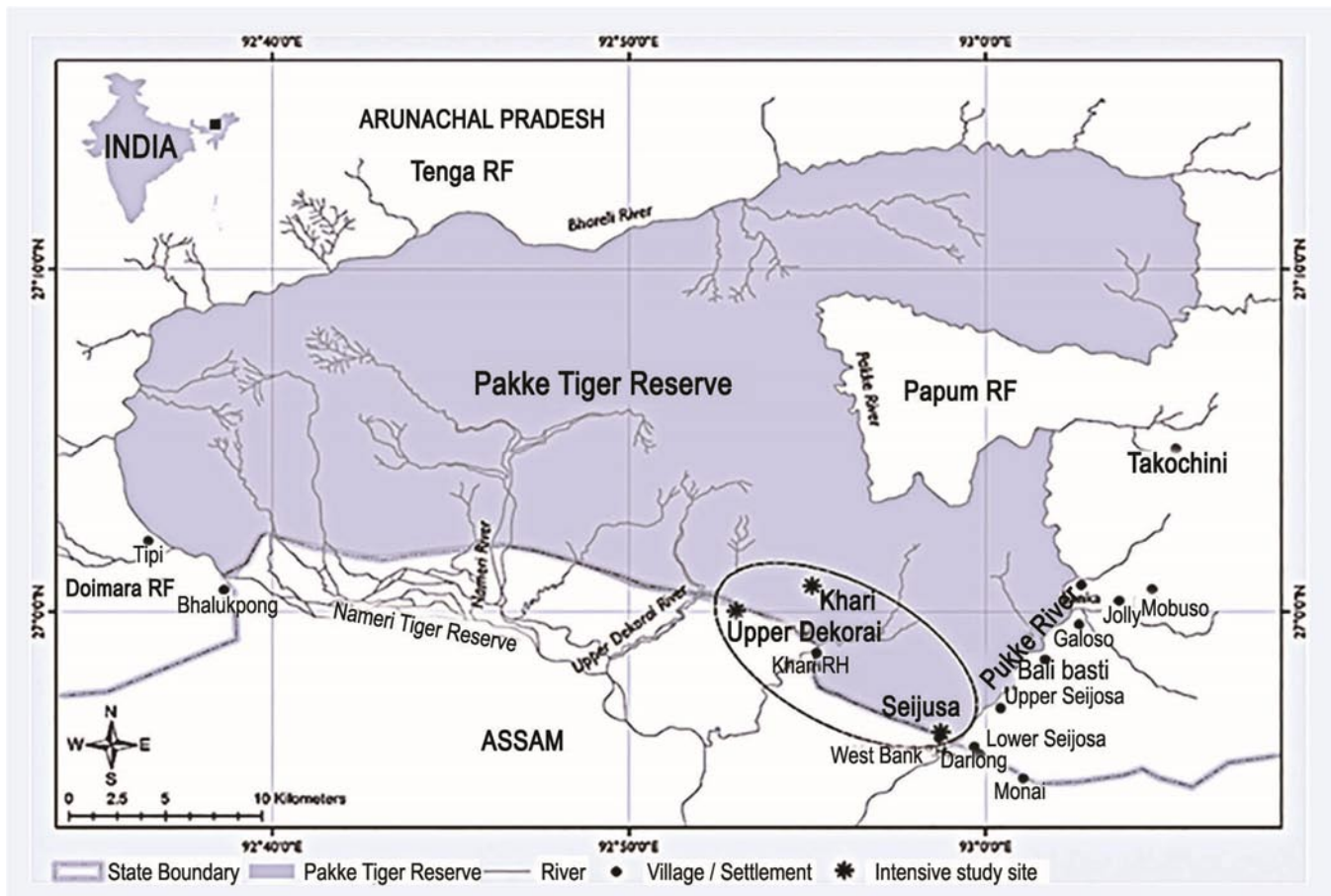
#CONSERVATION

PRIMARY SOURCE THE HINDU

IN NEWS

The Pakke Tiger Reserve Workers’ Union withdrew their indefinite strike after the State government assured payment of four months’ wages within 15 days. The contingency workers of the Reserve in Arunachal Pradesh struck work from June demanding their wages from December 2020.

ABOUT PAKKE TIGER RESERVE



- It is a Project Tiger reserve in the Pakke Kessang district of Arunachal Pradesh. It is bounded by **Bhareli or Kameng River** in the west and north, and by **Pakke River** in the east. To the east lies **Papum Reserve Forest**. Towards the south and south-east, the sanctuary adjoins reserve forests and **Assam's Nameri National Park**. To the west, it is bounded by **Doimara Reserve Forest** and **Eaglenest Wildlife Sanctuary**.
- It comes under **Eastern Himalaya Biodiversity Hotspot**.
- At least 40 mammal species occur in Pakke Tiger Reserve (PTR). Three large cats - the **Bengal tiger, Indian leopard and clouded leopard** share space with two canids - the wild dog and Asiatic jackal.
- It is a habitat to many **varieties of birds**. Some of the **globally endangered** includes- **white-winged wood duck, the unique ibisbill, and the rare Oriental bay owl and hornbills**.

Important Facts: It is **26th Tiger Reserve** under Project Tiger of the National Tiger Conservation Authority. It has won **India Biodiversity Award 2016** in the category of 'Conservation of threatened species' for its **Hornbill Nest Adoption Programme**.

HORNBILLS

#CONSERVATION #BIODIVERSITY



ABOUT HORNBILLS



- India is home to **nine species of hornbills**. The **north eastern region** has the highest diversity of hornbill species within India.
- **Five hornbill species are found here**, with the northeast being the exclusive habitat for three of them, **the wreathed hornbill, the brown hornbill and the Rufous-necked hornbill**. The other two species, **the great hornbill and the Oriental pied hornbill** also occur in other parts of India.
- All species except the Oriental pied hornbill are listed under **Schedule I of the Wildlife Protection Act (1972)**. The **Rufous-necked hornbill** is listed as '**rare**' in the IUCN Red Data Book (1990).
- **The great hornbill is the state bird of Arunachal Pradesh and Kerala. It is 'vulnerable' under the IUCN Red list.**
- **Narcondam Hornbills (IUCN Status: Vulnerable)** is a special species of Hornbill found on the Narcondam islands in Andaman & Nicobar Islands. The Narcondam hornbill has the smallest home range out of all species of Asian hornbills.

INDIAN ROSEWOOD

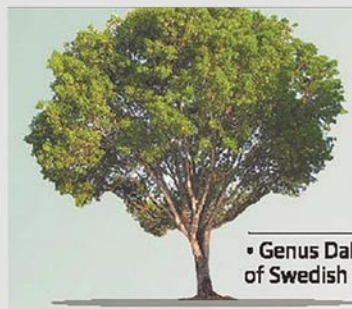
#CONSERVATION #BIODIVERSITY



IN NEWS

Recently Rosewood 'theft' unearthed in Wayanad village in Kerala.

INDIAN ROSEWOOD (DALBERGIA LATIFOLIA)



Rosewood
(*Dalbergia latifolia*)

- It takes **240 years** for a tree to attain a diameter of **220-250 cm** and a height of **30-35 metres**
- **Deep tap roots and long lateral roots**
- Genus *Dalbergia* is named in honour of Swedish brothers **Nicholas Dalberg and Carl Gustav**
- Species *latifolia* is from the Latin word *latiflorus*, which means with broad leaves
- On IUCN's Red List of Threatened Species since 1998

- **Also known as:** Indonesian rosewood, **Bombay blackwood, Malabar rosewood,** and sitsal.
- It is **native to India and Indonesia**, but is also grown in Nigeria, Kenya, Vietnam, the Philippines, and other parts of tropical Africa and Asia as an ornamental plant.
- It is well known for producing **very hard and durable wood** with a long straight bore, which makes it highly valued on the international market. Its bark is also used for **medicinal purposes** in its natural range.
- It is used for furniture, plywood, veneer, decorative wood products, construction, musical instruments, and other wood products. The species is, however, slow-growing, and is threatened by overexploitation for its timber and by illegal logging.
- **Its IUCN Red List status is "vulnerable."**
- It is part of **Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)**, a multilateral treaty to protect endangered plants and animals.
- D. latifolia logs and sawn timber is banned from export under **the Indian Forest Act.**

OLIVE RIDLEY TURTLES

#CONSERVATION #BIODIVERSITY

PRIMARY SOURCE THE HINDU

IN NEWS

Indian Coast Guard's "Operation Olivia" helps protect Olive Ridley turtles as they congregate along the Odisha coast for breeding and nesting from November to December. Operation Olivia was initiated in the 1980s. Orissa Marine Fisheries Act empowers the Coast Guard as one of its enforcement agencies.

OLIVE RIDLEY TURTLES

Also known commonly as the **Pacific ridley sea turtle.**

RANGE

- It is found in warm and tropical waters, primarily in the Pacific and Indian Oceans, but also in the warm waters of the Atlantic Ocean.

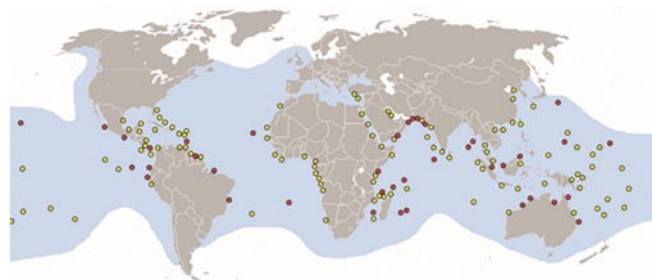
- The olive ridley turtle has a circumtropical distribution, living in tropical and warm waters of the Pacific and Indian Oceans from India, Arabia, Japan, and Micronesia south to southern Africa, Australia, and New Zealand.

MASS NESTING PHENOMENON

- Olive ridley turtles are best known for their behaviour of synchronized nesting in mass numbers, termed **arribadas.**
- Females return to the same beach from where they hatched, to lay their eggs.
- They lay their eggs in conical nests about one and a half feet deep, which they laboriously dig with their hind flippers.
- In the Indian Ocean, the majority of olive ridleys nest in two or three large groups near Gahirmatha in Odisha.
- The coast of Odisha in India is one the largest mass nesting site for the olive ridley, along with the coasts of Mexico and Costa Rica.

- The olive ridley turtles turn up in millions for mass nesting along the Odisha coast every year namely at three river mouths: **Dhamara, Devi and Rushikulya.**
- Gahirmatha beach off Bay of Bengal coast in Kendrapara district is acclaimed as the world's largest nesting ground of these turtles.
- It extends from Dhamra River mouth in the north to Brahmani river mouth in the south.
- The wetland is represented by 3 Protected Areas, **the Bhitarkanika National Park, the Bhitarkanika Wildlife Sanctuary and the Gahirmatha Marine Sanctuary**

DISTRIBUTION OF OLIVE RIDLEY AROUND THE GLOBE



Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Q.4) Consider the following statements about Olive Ridley Turtles:

1. Olive Ridley Turtles engage in practice of mass nesting which is called as Arridaba.
2. The practice of mass nesting by Olive Ridley Turtles is unique to India.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2

(d) Neither 1 nor 2

Q.5) Consider the following statements about Fame Scheme-Phase II:

1. It is a scheme implemented by the Department of Heavy Industries.
2. Under the scheme, per KWh subsidy for two wheelers is less than that of four wheelers.
3. The scheme aims for at least one charging station in 3 km by 3 km area.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

DESCRIPTIVE QUESTION

- Q1.** Electric Vehicles fare much better than conventional internal combustion technology-based vehicles. However, the mass adoption of EVs is also challenging. Discuss.
- Q2.** What are coral reefs? How are they degraded? Suggest some steps for their rejuvenation.

Answers: 1-a, 2-d, 3-d, 4-a, 5-c

HISTORY, HERITAGE & CULTURE

GS PAPER (PRELIMS) & GS PAPER I (MAIN)

P V NARASIMHA RAO

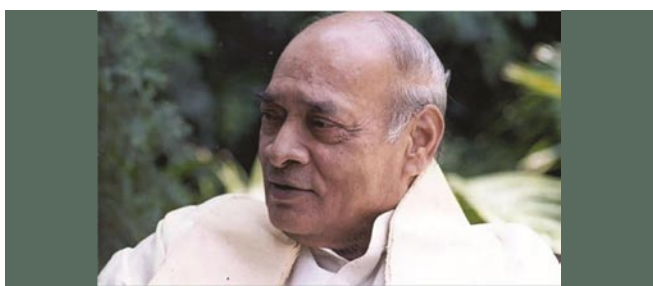
#POST-INDEPENDENCE #PERSONALITY

PRIMARY
SOURCE

pib

PRIMARY
SOURCE

pib



IN NEWS

P.V. Narasimha Rao was born on 28th June 1921. Year 2021 marks his 100th birth anniversary. He served as India's 9th Prime Minister from 1991 to 1996. His ascendancy to the Prime Ministership is significant as:

1. First PM from outside the family lineage of Jawahar Lal Nehru to complete 5 years in office.
 2. First from South India and non-Hindi speaking region to hold the office of Prime Minister.
- Before he became the Prime Minister of India, he held important portfolios as Home Minister and Defence Minister of the country in the Rajiv Gandhi and Indira Gandhi Government.
 - He also served as the Chief Minister of Andhra Pradesh in early 1970s.
 - He participated in the freedom struggle: He contributed in the freedom struggle against the Nizam's of Hyderabad.

LEGACY AS THE 9TH PRIME MINISTER OF INDIA:

1. Economic Reforms of 1991: He is credited with overseeing a major economic transformation from 1991 to 1995. Along with being the Prime Minister, he was also the minister responsible for Commerce and

Industry, where he oversaw the dismantling of license permit raj. LPG reforms were wide ranging and have thus contributed to rapid economic development and lifting millions out of poverty in India.

2. Linguist and Scholar: He was profound scholar with knowledge of several Indian languages including foreign languages. He translated books into Telugu language and also published a Telugu Magazine.

a. He translated the epic Telugu novel '**Veyi Padagalu**' into Hindi titled as '**Sahasra Phan**'.

3. Political Stability: The period before Narsimha Rao saw two governments which could not complete even one year in office. (Chandra Sekhar and V P Singh government). Narsimha Rao was able to complete 5 years in office, which speaks highly of his ability for collective leadership and ability to take everyone along.

4. Foreign policy: His term as Prime Minister, saw wide ranging changes in the international arena. The Cold War was coming to the end. USA emerged as the sole superpower after the end of USSR. This unipolar world order demanded India to realign its foreign policy with changing environment.

a. He established **diplomatic relations with Israel**.

b. Laid the foundation of India's **Look East Policy**.

c. Signed treaty of '**Peace and Tranquility**' along the **Lice of Actual Control with China**, this ensured that India's border with China despite being unsettled remained peaceful at large.

5. Handling of Insurgency:

• He effectively handled the insurgency in Punjab. Elections were held in Punjab.

• Terrorist and Disruptive Activities (Prevention) Act (TADA) was passed which was India's first anti-terrorism legislation.

6. Contributions to India's nuclear program: He has been credited by Late President Abdul Kalam for energizing the nuclear security and ballistic missile program, which ultimately resulted in India's **Pokhran nuclear tests in 1998**.

CONTENTIOUS ISSUES

His term as Prime Minister, saw the **dismantling of Babri Mosque** in the Ayodhya. This compromised the secular credentials of the country.

NATIONAL MARITIME HERITAGE COMPLEX

#ANCIENT HISTORY #ARCHIVES



IN NEWS

An MoU was signed between the Ministry of Culture and Ministry of Ports, Shipping and Waterways for development of **National Maritime Heritage Complex at Lothal**, which is prominent Indus Valley Civilisation site in India.

- It is first of its kind complex in the country dedicated to the **legacy of Maritime Heritage of India**, to showcase India's rich and diverse maritime glory. It would exhibit both the robust maritime history and vibrant coastal tradition of our country in one place. It would be developed as international tourist destination.
- **The funding for the museum will be from the** National Cultural fund, under the Ministry of Culture.

ABOUT LOTHAL

- Lothal is located close Ahmedabad in Gujarat on the **Bhogava River**, tributary of Sabarmati River (near the Gulf of Khambat).
- The word Lothal is a combination of two words: **Loth** and **Thal**, which in Gujarati means 'the mound of the dead'.
- The site is not a World Heritage Site currently. However, India has nominated the site to be listed as World Heritage Site.



- Excavations in Lothal have revealed **world's oldest artificial dock**.
- Artefacts discovered here such as **Persian seals** etc. indicate thriving trade relations between Indus Valley Civilisation and Mesopotamia. Thus, Lothal was part of the global trade network of the times.
- **Unique burial system:** Multiple mechanisms for disposal of dead have been found at different IVC sites. However, archaeologists discovered unique twin burial system in Lothal, where two individuals were buried together.
- A bead factory has been discovered at the site along with ornaments made out of shells and gold indicating advanced metallurgy during Indus Valley Civilisation.
- The town has thick peripheral walls which were probably built to protect the town from tidal waves.
- The town boasts of an acropolis, warehouses and a well-developed drainage system.

INTERNATIONAL YOGA DAY

#CULTURE



- Yoga is an ancient physical, mental and spiritual practice that originated in India. The word 'yoga'

derives from Sanskrit and means to join or to unite, symbolizing the union of body and consciousness.

- Recognizing its universal appeal, the United Nations proclaimed 21 June as the International Day of Yoga.
- Objective was to raise awareness worldwide of the many benefits of practicing yoga.

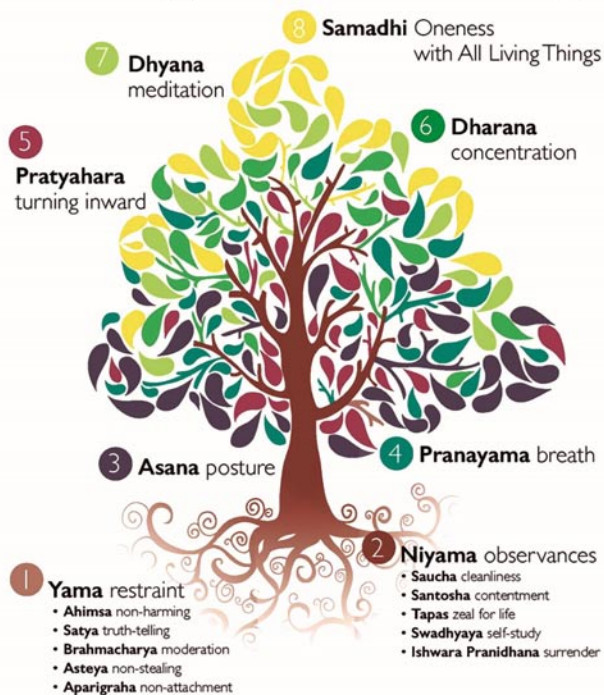
History of Yoga: Though Yoga was being practiced in the pre-Vedic period, the great sage Maharishi Patanjali systematised and codified the then existing Yogic practices, its meaning and its related knowledge through Patanjali's Yoga Sutras.

Schools of Yoga: The different philosophies, traditions, lineages and Guru-shishya paramparas of Yoga led to the emergence of different traditional schools. These include:-

Jñāna Yoga, Bhakti Yoga, Karma Yoga, Pātāñjala Yoga, Kuṇḍalini Yoga, Haṭha Yoga, Dhyāna Yoga, Mantra Yoga, Laya Yoga, Rāja Yoga, Jain Yoga, Bouddha Yoga etc.

Each school has its own approach and practices that lead to the ultimate aim and objectives of Yoga.

The Eight-Limbs of Yoga



PATANJALI PRESCRIBED 8 LIMBS OF YOGA

- 1. Yamas:** They are restraints to be observed by practitioner of Yoga. Patanjali prescribes 5 social observances: Satya (Truthfulness), asteya (non-stealing), brahmacharya (chastity) and aparigraha (non-possessiveness).
- 2. Niyamas:** They are moral observances. These are considered to be pre-requisite for further Yoga practice. They are saucha (purity), santosha (contentment), tapas (self-discipline), svadhyaya (self-study) and ishvarapranidhana (devotion or surrender).
- 3. Asanas:** They aim at bringing about stability of body and mind. They involve various psycho-physical body patterns and giving one an ability to maintain a body position for considerable length of time.
- 4. Pranayam:** It consists of developing awareness of one's breathing followed by wilful regulation of respiration as the functional or vital basis of one's existence.
- 5. Pratyahara:** It indicates dissociation of one's consciousness (withdrawal) from the sense organs which connect with the external objects.
- 6. Dharana:** It indicates broad based field of attention which is usually understood as concentration.
- 7. Dhyana (meditation):** It is contemplation i.e. focused attention inside the body and mind. The practice of dhyāna, which moves one towards self-realisation and leads one to transcendence, is considered the essence of Yoga Sādhana.
- 8. Samadhi:** Refers to enlightenment or bliss.

COMMON YOGA PROTOCOL (CYP)

Ministry of Ayush has developed Common Yoga Protocol which is modern day take on the centuries old tradition of Yoga. It aims to aid beginners to get initiated into Yoga. Since, there are many schools of Yoga, the common protocol makes it less confusing for practitioners. CYP makes sure that a single protocol yields maximum benefit to maximum number of people, through careful selection of the asanas included in it. Common Yoga Protocol is, essentially, a specified sequence of Yoga asanas which lasts 45 minutes.

REVISION FOR CSE (PRELIMINARY)
EXAMINATION, 2021
THEME : ART & CULTURE

MADHUBANI PAINTINGS

- They are produced by village women who make three dimensional images. These pictures tell stories especially about Sita's exile, Ram-Laxman's forest life, or depict the images of Lakshmi, Ganesha, Hanuman and others from Hindu mythology.
- Apart from these, women also paint celestial subjects like sun and moon. Tulsi, the holy plant also is to be found in these paintings.
- They also show court scenes, wedding and social happenings.
- Drawings in Madhubani paintings are very conceptual. First, the painter thinks and then "draws their thought". There is no pretence to describe the figures accurately.
- Visually, they are images that speak in lines and colours and are drawn for some rituals or festivals on household and village walls to mark the seasonal festivals or special events of the life cycle.
- Intricate flora, animal and birds' motifs can also be found along with geometrical designs to fill up the gap.
- The paintings are largely made using powdered rice, colours derived from turmeric, pollen, pigments, indigo, various flowers, sandalwood, and leaves of various plants and trees, etc.
- If the artists come across empty spaces even after completing the painting, they usually fill up those empty spaces with the motifs of flowers, animals, birds and geometrical patterns.
- A double line is usually drawn as the border.

- Madhubani painting has a **geographical indication(G.I.) status** because it has remained confined to a compact geographical area where the skills have been passed on through centuries and the content and style have largely remained the same.

BURRA KATHA

- "**Burra**" is referred to **Tambura**, a musical instrument. "**Katha**" means story.
- It started as devotional songs of nomadic people and became a popular art form.
- It is a narrative entertainment that consists of prayers, solo drama, dance, songs, poems and jokes.
- It preaches, entertains and provides relaxation to the rural folk.
- It is performed in villages of **Andhra Pradesh** and **Telangana**.
- The topic will be either a Hindu mythological story or a contemporary social issue.
- It played an effective role in conveying message to people and awakening them during Indian Independence Movement.
- Most of the stories are in the form of a tribute to freedom fighters from Andhra Pradesh and Telangana.
- A Burra Katha group consists of three artistes one being at the center and the other two acts as assistants under him known as 'Vantalu'.
- The main storyteller (Kathakudu) narrates the story. He plays Tambura and dances to music. He also wears a metal ring called an 'Andelu' on his right thumb, holds another ring in his other hand and adds more music by colliding them frequently.

- The co-performers play 'Gummeta', earthen drums with two heads. All three or only the Kathakudu wear anklets which add even more music when they dance.

HARIKATHA

- Harikatha is a form of Hindu religious discourse in which the storyteller **explores a religious theme**.
- It may be the life of a saint or a story from an Indian epic.
- It is a composite art form composed of storytelling, poetry, music, drama, dance and philosophy most prevalent in Andhra Pradesh and Telangana.
- At its peak Harikatha was a popular medium of entertainment, which helped transmit cultural, educational and religious values to the masses.
- Harikatha commences with an invocation and the singing of God's name. This introductory part of a katha also contains a brief statement of the underlying philosophy of the main story or of some general philosophical truth or truths.
- The second part, which is the main body, is the story itself.
- The main aim of Hari Katha is to imbue truth and righteousness in the minds of people and sow the seeds of devotion in them.
- Another of the aims is to educate them about knowledge of self (atman) through stories and show them the path of liberation.

CHIRALA TEXTILES

- The Chirala textile is made by using a large quantity of oil, which is used in preparing yarn for weaving. After the fabric is ready, it is wrapped with wax & clay before being dyed in selected colours.
- It is a coastal town, situated in **Prakasam District** in the state of Andhra Pradesh. It was also known as 'Kshirapuri'. Chirala town is renowned for handlooms.
- Years passed by, the town gained popularity for its excellent handloom sarees known for the softness and durability.

- The name Chirala means saree in Telugu and so eventually the name of the town got transformed to Chirala.
- The weavers of Chirala produce, cotton sarees, seico sarees which are a fine blend of cotton and silk fibres and kuppadam (Gadwal type).
- Handloom fabrics of Chirala are soft and most comfortable to wear which suits all the climate.

'**Puttapaka Telia Rumal**' has been given the Geographical Indication (GI) tag. It originally belongs to Chirala.

BATHUKAMMA

- Bathukamma is floral festival celebrated predominantly by the Hindu women of **Telangana**.
- It is the festival for **feminine felicitation**. On this special occasion women dress up in the traditional sari combining it with jewels and other accessories.
- In Telugu, 'Bathukamma' means '**Mother Goddess come Alive**' and in this respect Goddess Maha Gauri (Life Giver) is worshipped in the form of Bathukamma, the patron goddess of womanhood.
- Bathukamma refers to a beautiful flower stack, arranged with different unique seasonal flowers most of them with medicinal values, in seven concentric layers in the shape of temple gopuram.
- Every year this festival is celebrated as per the Saka calendar for nine days starting usually in September–October of Gregorian calendar.
- Bathukamma is followed by Boddemma, which is a 7-day festival. Boddemma festival marks the ending of Varsha Ruthu whereas Bathukamma festival indicates the beginning of Sarad or Sharath Ruthu

ARANMULA BOAT RACE

- The Aranmula Boat Race is the oldest river boat fiesta in **Kerala**.
- It is held during Onam (August–September) at Aranmula, near a Hindu temple dedicated to Lord Krishna and Arjuna.

- The snake boats move in pairs to the rhythm of full-throated singing and shouting watched by an exciting crowd.
- Thousands of people gather on the banks of the **River Pampa** to watch the snake boat races.
- The Aranmula Boat Race begins each year on the last day of the Onam festival. It lasts for two days.

GATKA

- Gatka is a weapon-based Indian martial art basically created by the **Sikhs of Punjab**.
- It is displayed during the different celebrations or at fairs in Punjab.
- There are many weapons used in Gatka like, Stick, Talwar, kirpan and kataar.
- The sport form is played by two opponents wielding wooden staves called gatka and these sticks may be paired with a shield.
- Points are scored when contact is made with the stick.

THANJAVUR PAINTINGS

- It is a classical style of South Indian paintings that developed in the region of **Thanjavur in Tamil Nadu**.
- Its origin is considered to be in the **reign of Marathas**.
- Owing to certain influences, it is also considered to be an offshoot of **Nayaka paintings** which were prevalent in the Vijayanagar empire.
- Thanjavur paintings also bore influences from the **Deccani and European styles**.
- The time period ascribed for the development of this tradition is from **1676-1855 AD**.
- This genre of art is essentially religious and broadly comprises two essential themes.
- The first being scenes from the **epics and the puranas** as depicted on the walls and pillars of temples.

- Secondly, the **images of deities** consecrated inside temples, particularly popular among them are **Srirangam and Tirumala**.
- Portraits of kings, who were the patrons of these artists, as well as priests and ordinary individuals also find a place in these paintings.
- The most eye-catching and prominent feature of these paintings includes the relief decoration covered with gold-leaf or gilded paper.

CHHAU DANCE

- The graphic story on the Purulia's famous Chhau dance is called Experiencing Chhau (Dekhe Elam Chhau).
- Chhau dance is a tradition from **eastern India**, popular dance in Odisha, Bihar and Bengal.
- It enacts episodes from epics including the Mahabharata and Ramayana, local folklore and abstract themes.
- Its three distinct styles from the regions of Seraikella, Purulia and Mayurbhanj, the first two using masks.
- Chhau dance is intimately connected to regional festivals, notably the spring festival Chaitra Parva.
- Its origin is traceable to indigenous forms of dance and martial practices.
- Chhau is taught to male dancers from families of traditional artists or from local communities.
- Music is played on the reed pipes mohuri and shehnai accompanied by drums.
- The dancers hold swords and shields and performing vigorous movements and leaps.

RAIBENSHE DANCE

- The book on Raibenshe, folk martial dance form **south Bengal** is called Raibenshe Rocks (Ajo Aache Raibenshe).
- It is a genre of Indian folk martial dance performed by males only.

- This genre of dance was once very popular in West Bengal. Presently, it is performed mostly in Birbhum Bardhaman and Murshidabad districts.
- Traditionally, this dance involves vigorous and manly movements of the body along with the acrobatics of a raibansh (a long bamboo stick), from which its name originated.
- This dance is accompanied by dhols (drums) and Kanshis (cymbals).
- This dance was traditionally performed by Bagdi community, who worked as the bodyguards of the landlords in medieval Bengal.

NADIA PUPPETRY

- The publication on the little-known puppetry from Nadia is titled 'The tale of a lost leg (Harano Payer Kissa)'.
- The **traditional rod puppet** form of West Bengal is known as **Putul Nautch**. They are carved from wood and follow the various artistic styles of a particular region.
- In Nadia district of West Bengal particularly, rod-puppets used to be of human size like the Bunraku puppets of Japan. However, this form is now almost extinct.
- The music and verbal text have close similarity with the Jatra theatre.

MANDANA ART

- The Saharias are highly acclaimed for their art work mainly represented by the painting of Mandana.
- Mandana is drawn on wall, floor and sides as well as upper portion of the doors in houses.
- The occasions include marriage, Holi, Diwali, Govardhan Puja that is cattle caring ceremony and so on.
- We find a wide use of geometric design; floral and faunal pattern is some of the speciality of their painting tradition.

- Anthromorphic forms such as some human figures, plants, natural scene, different birds, peacock, adobe of deities, abstract designs etc. can also found in their painting.
- Their wall painting depicts the scenario of **Swang dance** which is a typical dance of the Saharias.

RELATED INFORMATION: SAHARIA COMMUNITY

- The Saharia also spelt as Sahariya and Seharua is the only **Particularly Vulnerable Tribal Group (PVTG)** or Primitive Tribal Group (PTG) of **Rajasthan**.
- The term 'Saharia' is derived from the Arabic word 'Sehara' means wildness.
- They are mainly distributed in **Sahabad and Kishanganj** Tehsil of **Baran district** of Rajasthan as well as **Guna and Shivpuri** districts of **Madhya Pradesh**.
- The Saharias speak **Hadauti**, an Indo- Aryan family of languages. Their dialect is also influenced by Braj and Hindi to a large extent.

THANJAVUR DOLLS

- The Thanjavur doll is a type of **Indian bobblehead or roly-poly toy** made of **terracotta** material.
- The doll is known as **Chettiar bommai** which is used for *golu* during **Navratri**.
- They have been recognized as a **Geographical Indication by the Government of India as of 2008-09**.
- The centre of gravity and total weight of the doll is concentrated at its bottom-most point, generating a dance-like continuous movement with slow oscillations.
- These toys are traditionally handmade, finished with detailed, painted exteriors.

KULLU NATI DANCE

- Nati dance is a **local folk dance** of **Kullu** district of **Himachal Pradesh**.

- The folk dance entered the **Limca Book of Records in 2014** and made it to the **Guinness World Records Book** as the **largest folk dance** in the world in **2016**.
- This dance is performed during the **Kullu Dussehra** which is a centuries-old festival i.e. dedicated to the girl child.
- It begins on **Vijaya Dashami**, the day when the festivities end in rest of the country.
- The dance depicts **ras lila** or dances concerning **Hindu God Krishna and Gopis** and the entertaining plays of **Chandravali**.
- This dance was traditionally performed by men but now it has been performed by women mostly.
- This dance belongs from **Lasya variety** and considered as a dance of slow-movement.
- Earlier there were separate groups for men and women but now they are allowed to dance together.
- Dancers clad in traditional dresses dance along with the procession, on the tunes of musical instruments such as **Narsingha, Karnal, Shehnai, Dhol** and **Nagara**.

BEHDIENTKHLAM FESTIVAL

- It is a major festival of the people in the Jaintia Hills, Meghalaya.
- During the festival, decorated and colourful raths are immersed in 'Wah Ainar,' a muddy pool.
- It is popular at Jowai, the District headquarters of Jaintia Hills District, Meghalaya.
- The Behdienkhlam literally means driving away the plague as "Khlam" means 'Plague' and "Beh Dein" means to drive away the plague.
- It is the ritualistic expression of the relentless struggle of mankind to overcome the destructive forces of nature, including diseases, since the dawn of civilization.
- In this festival, women offer sacrificial food to the spirits of the ancestors.

MONGMONG FESTIVAL

- Mongmomg is a major festival of the **Sangtams tribe**.
- This festival is celebrated every year from 1st to 6th September.
- It is a festival of togetherness, forgiveness and prayer for a bountiful harvest.
- Sangtam is the largest of the three principal tribes in Kiphire district bordering Myanmar.

GOTMAR FESTIVAL

- The annual "Gotmar" festival is a stone-pelting festival and is considered as a 300-year-old festival.
- It is celebrated at Pandhurna in **Madhya Pradesh's Chhindwara district**.
- During this festival, people of Sawargaon and Pandhurna gather on either side of **Jaam River** and, while throwing stones, race to snatch a flag hoisted on top of a dead tree situated in the middle of the river.

BAGWAL FESTIVAL

- The Bagwal festival, is a popular attraction of Raksha Bandhan day in **Uttarakhand**.
- The festival is famous for its annual ritual of 'stone pelting.'
- However, after the intervention of the Uttarakhand high court in 2013, stones were replaced with flowers.
- It is celebrated by the members of the four clans of Devidhura namely Gaharwals, Chamyals, Lamgharias and Waliks.

BUDHAMAL FESTIVAL

- The Budhamal festival is celebrated in Dhupguri village on the outskirts of Guwahati.
- This festival is held once in five years.
- During this festival people pray for well-being and a good harvest.

VRISCHIKOLSAVAM FESTIVAL

- This festival lasts for **8 days** with features of traditional folk-art forms such as **Ottanthullal, Kathakali, Thayambaka, Chenda melam, Kacheri**.
- It is the colourful procession of **Lord Sree Poornathrayeesa**, accompanied by caparisoned elephants and 'panchari melam.
- Sree Poornathrayeesa Temple is the only temple in South India where an **odd pose of Lord Vishnu** can be seen, sitting under the shade of five royal hoods of the divine serpent, Ananthan, whose folded body itself acts as the throne for the God.
- Besides 'panchari melam' other traditional orchestrations like '**maddala pattu**', '**kombu pattu**', '**kurumkuzhal pattu**', '**parisha vadham**' and '**edakka pradakshinam**' are also held during festival days.
- The festival also showcases **carnatic music concerts**, thayamb, kathakali, ottanthullal, kurathiyaattom, kolkali and aksharashlokam.

CHETAK FESTIVAL

- Sarangkhedha Chetak festival is the **oldest horse fairs** in the country.
- It's an annual fair and this tradition can be traced from about **350 years** ago.
- This festival is named after the favourite **horse of Maharana Pratap** i.e. **Chetak**.
- This fair is organized in the Sarangkhedha village in the **Nandurbar district** of the state of **Maharashtra**.
- Sarangkhedha is located on the banks of **river Tapi**.
- This fair attracts horse traders and buyers from as far as **Arabia and Baluchistan**.
- The horse breeds found in the fair are **Marwari, Kathiawadi, Punjabi and Sindhi**.

MAKARAVILAKKU FESTIVAL

- Makaravilakku is a **21-day annual festival** celebrated in **Kerala**.
- It is held on **Makar Sankranti** at the shrine of Sabarimala.
- The festival includes the **Thiruvabharanam** (sacred ornaments of Ayyappan) procession and a congregation at the hill shrine of Sabarimala.
- Historically, Makaravilakku is the religious practice which was performed by the tribes in the forest of **Ponnambalamedu**.
- Once the Cyrus star (Makara Jyothi) appears in the sky during the day of the Makara Sankranti festival, the tribes perform their rituals in a temple at **Ponnambalamedu forest**.
- As part of the ritual, the tribes perform aarati by lighting camphor and ghee in a vessel and circling around the idol at the temple in the Ponnambalamedu forest 3 times.
- This Aarathi performed by the tribes is referred to as Makaravilakku.

THAKURANI JATRA FESTIVAL

- The Thakurani Jatra festival is celebrated **biennially in Berhampur Ganjam district, Odisha**.
- The festival is celebrated in honour of **Goddess Budhi Thakurani** who is considered as the **istadevi of Silk city Berhampur**.
- During the festival, Goddess Budhi Thakurani is taken from the main temple at **Thakurani Temple Street** to her temporary abode at **Desibehera Street**, where she stays till the festival ends.
- Originally the goddess was worshipped by the **Dera people, a weaver community of Rajmuhendry** on their set up at Brahmapur in its early days.
- The hereditary head of the festival, who is also regarded as the head of the weaver Dera community

of the city, Desibehera, dressed in his traditional attire, visits the Budhi Maa Thakurani temple.

- He then invites the goddess to her parental abode at his home.
- Berhampur is famous for its silk sarees and handloom cloth.
- The **Berhampur patta sari and joda** (dhoti) has been accorded with **GI tag**.

DOUL UTSAV

- Holi which is 'played' in most parts of India but this festival is 'sung' in a part of **Assam**, where it goes by another name known as **Doul Utsav**.
- Doul Utsav is celebrated at **Barpeta in western Assam** particularly in **Barpeta Satra**.
- Barpeta Satra is a **Vaishnav monastery** which was established by **Madhabdev in 1583**.
- Madhabdev was the prime **disciple of Srimanta Sankardeva**, the saint-reformer who inspired the Bhakti movement in Assam around the time Guru Nanak, Kabir and Chaitanya Mahaprabhu.
- Madhabdev wrote a few Doul songs for ritualistic celebration of this festival.
- The traders of Barpeta (a major commercial centre for centuries) have made the common man's Doul songs popular.
- These traders introduced Holi songs which were borrowed heavily from **Bengali folk music**.
- More than a century ago, a group of nationalist poets, writers and musicians began writing **Assamese Holi songs** that are divided into **two categories** of Holi songs — **folk and monastic** — that people sing while playing with colours.
- However, the folk songs have no place in the Barpeta Satra where the monastic songs accompany rituals.
- Doul generally lasts for **three or five days**, depending on the Hindu month — **Chaitra or Faagun** — and **planetary positions**.

THEYYAM DANCE

- A Theyyam is a **ritualistic dance performance** belonging to the state of **Kerala**.
- In this art form, pantheistic deities are summoned to the body of the performing man, one who is almost always from a subaltern community.
- This performing man himself is known as **Theyyam** and it is believed that while performing deities possess his body.
- These performances are carried in the ancient **sacred groves of Kerala called kaavu**, which is a small rainforest.
- The ritualistic art form is ancient, predating organised Hinduism and going back to a time of **tribal animism**.
- Spirit-worship, ancestor-worship, tree-worship, animal worship, serpent-worship, the worship of the goddesses of disease and the worship of the *Graamadevata* or village god, all are part of the Theyyam cult.
- This cult has been a folk religion for millions and the number of major deities surviving now is about 100, while the number of Theyyams is more than 400.
- Theyyams are performed in sacred groves and other places usually once in a year and is known as **Kaliyattam**. That which is performed after many years is known as **Perumkaliyattam**.
- There has always been an unmistakable umbilical link between Theyyam and nature.
- A Theyyam as discussed performs within the heart of the groves which in turn are protected as the residence of the deities.
- This dance form thus has proved to be instrumental in arresting the destruction of the groves even in modern times.

PRACTICE QUESTIONS

MCQS

Q.1) Which of the following is the correct objective of Azadi ka Amrit Mahotsav?

- (a) Celebrating 75 years of Quit India Movement.
- (b) Celebrating 75 years of victory in second world war.
- (c) Celebrating 75 years of Indian Independence.
- (d) Celebrating 100 years of victory in first world war.

Q.2) Consider the following statements with respect to Ram Prasad Bismil.

- 1. He was responsible for the formation of Hindustan Republican Association.
- 2. He was also involved in Kakori conspiracy.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Q.3) With respect to the Lothal, one of the Indus valley civilisation, consider the following statements.

- 1. It is situated on the Sabarmati river.
- 2. It is known for being the ancient dockyard.

- 3. Government has proposed to build a maritime museum at the site.

Which of the statements given above is/are correct?

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) 1, 2 and 3

Q.4) Which of the following organisation declared 21st June as International Yoga Day?

- (a) UNESCO
- (b) United Nation General Assembly
- (c) NAM
- (d) World Economic Forum

Q.5) Consider the following statements with respect to National Maritime Heritage Complex:

- 1. The complex would-be built-in state of Gujarat.
- 2. This project would be undertaken by Ministry of Shipping and Ministry of Culture.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Answers to above MCQs: 1(c), 2(c), 3(b), 4(b), 5(c)

PART TWO

**ETHICS, INTEGRITY
& APTITUDE**

Coverage from varied sources

REJUVENATING CIVIL SERVICES

#ETHICS #INTEGRITY #APTITUDE
CIVIL SERVICE REFORMS

► **Note:** On the basis of above topic, let us start with a viewpoint extracted from the 'Indian Express' where the writer has highlighted various lacuna that have emerged in the Civil Services.

VIEWPOINT

Indian civil services run the risk of producing just clones

(Courtesy: Indian Express)

Irreverence has its place. Especially if it is coupled with integrity and there is no serious breach in discipline. I am talking of the civil services and with particular reference to the sudden and before-time shift of the Chief of Enforcement Directorate, Western Zone. The government has been prompt in avoiding the prolonged and painful tussle that the country witnessed in the fight between the two powerful blocks of the Central Bureau of Investigation (CBI). To that extent, the citizens have been spared the turmoil, but the reasons for the sudden action have not been made public and may never come out either. Despite the Right to Information Act, governments — irrespective of the party in power, are wary of disclosing anything as they feel threatened. So, lesson number one is that the Right to Information is a long battle and the citizens have won only the first round.

The sudden “shunting” of civil servants is bewildering to many, especially if the officer has been performing well. At such times the topic of “political interference” in administration invariably crops up. Politicians are painted as darker than black. **It is a fact that if officers bend, politicians make them bend even more:** But if they do not bend, they indeed are “shunted out” or not given prize postings. That is the price one pays for holding one’s spine straight. However, nowhere have we questioned the culture prevailing within the civil services

— whether it is conducive to civil servants taking value-based personal positions, and colleagues standing by such officers and supporting them.

The sad truth is, the civil services induct some of the most talented and intelligent individuals in the country, and then labour hard on making them mediocre. **We want clones in each of our departments. Original thinkers?** The word does not exist in the dictionary of civil servants. Our **prime focus is “safety”, and to be in the good books** of the party in power: We feel insecure, very often, especially at the slightest departure from “precedence”, that holy word. We convey the same sentiment to the political bosses, too. Though they are a little more adventurous initially, soon they fall in line. The result is an opaque governance, the slow chugging train of Indian democracy.

An officer who dares to think different or breaks the stagnant, unproductive routine with any new initiatives, is first looked upon with suspicion. And if he goes at a speed that is decidedly not “ours”, he is shunted out so that we feel secure in our own slow bumpy ride. That has been the story for the last 72 years, and yet we wonder why India is still a developing country. Recently, Sabeer Bhatia of Hotmail fame, along with some others, moaned about the non-accountability of civil servants. The truth is that civil servants are as much responsible, if not more, for India missing many achievable goals given the political leadership of different parties: It takes much more to succeed as a nation than the tardy routine that most bureaucrats boast about. If that had been enough, we would have been a happy and healthy nation, decades earlier.

What the civil services need is a culture that accepts and values questioning and the irreverence of bold officers: The ultimate objective, of course, is to have

integrity in one's work ethic, and a steady commitment to the common good. If an officer is honest but different, let her be. If the officer has a different viewpoint, it is alright — in fact, that is what we need to take the country out of the rut. We, in the civil services, have been non-performers because we are clones of each other, unable to think differently.

When Harvard University studied the extraordinary response of the staff of the Taj hotel in Mumbai to the 26/11 crisis, they found that "What the Taj Group looks for in managers is integrity, along with the ability to work consistently and conscientiously. to respond beyond the call of duty, and to work well under pressure". While integrity, consistency, and conscientiousness are essential for civil servants, equally important is their ability to think positive, to think different and to be able to implement their thought process to ensure the good of the citizens. If these original thinkers are irreverent of seniority, let it be, as long as they show results. If they question, let us reply to them in full sincerity instead of putting them down. If they have views and opinions of their own, let's forget our cumbersome protocol and listen to them wholeheartedly. They may, and do have substance, most of the time. If they look fearless, let's not feel threatened. Fearlessness comes only if you have a spine and most of us have lost it some time back.

In India, the colonial culture gave way to the **culture of "cloneism"** in the civil services. That's the reason why the country is stuck the way it is. There are many ways out of it, and one important solution is to make the civil services listen to the voices with a "difference", from among their own. Another is to have a culture that rewards performance and not repetitive motions or "precedence". Encourage officers who offer different solutions, even if they fail. If they are grounded to the field realities, they will come up with new ones. They may be irreverent and outspoken, and yet be the solution. In

the "shunting out" of the Enforcement Directorate chief of the Western Zone, the prevalent system has, once again, failed to appreciate and value an officer who dares to think differently.

► **Note:** *On the above topic, let us see a couple of the questions asked by UPSC.*

- Q. Initially Civil Services in India were designed to achieve the goals of neutrality and effectiveness, which seems to be lacking in the present context. Do you agree with the view that drastic reforms are required in Civil Services. Comment. (UPSC 2017)**
- Q. Traditional bureaucratic structure and culture have hampered the process of socio-economic development in India." Comment. (UPSC 2017)**

The questions above seem melancholic because there is huge contrast between [what is expected] and [what are we witnessing] in the manner civil servants work.

Do we have a solution?

From where this solution starts?

Let us start by reading, and pondering on the text given below.

WHAT IS ACTUALLY EXPECTED?

A civil servant should act like a (Wisdom Tree) working relentlessly for promoting resilience, and wellbeing throughout. And, This expectation emerges from seven cardinal principles desired from a civil servant. These are--selflessness, integrity, accountability, openness, leadership, objective and honesty.

Cardinal Principle	Meaning
Selflessness	Selflessness refers to the feeling of serving others without thinking of oneself.
Integrity	Integrity refers to the absence of any outside influence from the organization in decision making.

Accountability	Accountability refers to answerability of the civil servant to the public.
Openness	Openness refers to transparency in decision making and facilitating flow of information.
Leadership	Leadership infers that a civil servant should lead by example by following all the principles.
Objectivity	Objectivity refers to the principle of merit where selections would not be based on other considerations.
Honesty	Honesty refers to the act of civil servant in such a way so as to avoid conflict of interest.

(Note: All the above terms are asked in GS PAPER IV)

In addition to these fundamental principles an ideal civil servant should have **empathy i.e. compassion for the people**. He/She **should be politically neutral** and should have courage to withstand undue pressures. In addition, he/she should have temperance in order to be **patient enough** to take decisions. He/she should **use public funds prudently** and is the best of the interest of public.

Apart from such virtues, a civil servant must **possess intellectual capability to take decisions**. He/She **acts as an interface between the people and government**; needs to **follow the decisions** taken at the top and respect hierarchy; needs to work **within the four walls of the law**; and if conditions arise that there might be violation of law in carrying out any instructions from top then it should be clearly brought out to the notice of seniors.

If still insisted on to carry out such instructions, then it should be carried out **only through written orders** and not through mere oral orders. It should be mentioned that illegal orders which hinder one's authority to exercise powers or is against any statute should be ignored. A civil servant only needs to act according to the law even if he/she finds it unfair or unjust. The best he/she can do is to put forth his/her reasons about its drawbacks.

In addition, a civil servant should never criticize government policies in public discussions. He/She is a part of the government and such act reduces the credibility of the government as well as his /her own merit. A civil servant **should never hesitate to put forth his/her views** even if it goes against the advice of

ministers, and the views **should be coupled with logical reasons and lucid presentations**.

Similarly, a civil servant should be **open to any new suggestions**, open to **accept new challenges** at work, try to **develop innovative approaches** to implement orders, should not hesitate to take tough decisions and should try to make a note in writing of all his/her actions in order to be transparent.

One of the toughest jobs for a civil servant is to **maintain balance in his/her personal and professional life**. There are numerous challenges to a civil servant when there is pressure of family members and close friends. He/She should be able to maintain such space so as not to allow any influence which hinders improvement in governance and transparency. He/She should try to **include civil society in decision making so as to make governance more participatory**. A civil servant needs to take along with himself/herself private as well public institutions. He/She should maintain **transparency in dealing with private sector and should avoid favouritism**. A civil servant should not blindly follow any law but implement it considering all dimensions. The nature of today's administration is more people centric approach. He/she should be **able to judge repercussions of allowing more competition or giving space to private entities on poor sections**. This should be clearly brought out at policy discussions. This needs more of assessing ground level realities which requires open public discussions and bottom up governance.

The globalised world of today makes the task of civil servant more difficult. The increasing role of private sector, decreasing social sector public investment, high

competitiveness, increasing marginalization of lower sections of society, increased awareness of the citizenry, requirement of flexibility and broad knowledge network has made it necessary for a civil servant to come out from a narrow outlook and update himself/herself according to changing needs. He/She **needs to be more communicative by developing good inter-personal skills** in dealing with multinational companies. He/She should be **well versed with the power of information technology** and make its sufficient use to broaden his/her knowledge and improve service delivery.

The **principle of utilitarianism suggests benefit of majority is superior to minority loss**. However, this approach violates the principle of equal justice where each member of the society should be able to enjoy his/her rights. In such cases, rights based approach that follows non-violation of anyone's universal rights needs to be followed. However, such ethical dilemma needs to be sorted out at the individual level according to one's discretion. Clearly such decisions need critical analysis and in-depth knowledge in order to be able to take effective decisions which a civil servant should possess.

The high work pressure and expectations often stresses a civil servant. In such cases, careful handling of situations is required. A civil servant should be equipped with the ability to **maintain his/her cool and calm façade and follow laid out rules and regulations for maximum effect**. He/she should try to **include all stakeholders in decision making** and should stand up against illegal directions. It may hamper one's career growth but in the longer run a civil servant is respected for his/her uprightness and strong commitment. His/Her attitude must be reflected in the behaviour which requires strong conscience. For this, he/she needs to have **clear objectives, feedbacks from stakeholders, patient listening and articulation of right thoughts**. He/she needs to ensure responsibility for his/her work and should be ready to accept accountability in case of failures.

Thus an efficient and upright civil servant ensures public service delivery to the best of his/her ability. It leads to a shift **from responsive to proactive administration**.

However, inspite of such importance, civil service today is not what an aspiring nation like India would want. It is

marred with inefficiency, corruption, lack of accountability and transparency, apathy towards public. India has continuously been rated lower in international indexes such as corruption index, world competitiveness index, social index, education and health indexes, and ease of doing business index etc. However, it is not that government is not acquainted about such issues as it has taken numerous steps to make civil servants more accountable, and responsive initiatives such as e-governance, social audits, right to information and mandating citizen charter have also been instituted to make it more impactful.

Hence only a change in mindsets, where a civil servant should not think himself/herself as a ruler but a provider of government service, and where public acts as a customer of these services is the key. A shift to the approach where **'Customer is king'** is echoed in public administration, is required. This needs proper sensitization of civil servants and effective training and skill enhancement initiatives. Every civil servant should remember Gandhiji's Talisman before taking decision:-

"Whenever you are in doubt to take decisions follow this approach. Recall the face of the poorest man you have ever seen and ask yourself, if the step you contemplate is going to be of any use to him/her. Will he/she gain anything?"

But the question remains....**Is this possible?**
Are we disillusioned?
What creates this disillusion?

SO, EXACTLY.....WHAT ARE WE WITNESSING?

The philosophy of power and prestige

(Courtesy: Open Page, The Hindu)

The way the steel frame functions and thinks: a critical view from deep within it, from one among the fraternity.

A recent advertisement inviting applications for lateral entry into the bureaucracy at the level of Joint Secretary caused quite a ripple amongst the Indian Administrative

Service fraternity. Social media groups on Facebook, WhatsApp and so on were awash with opinions and counter-opinions. Some were critical, very few were pro, and some were angry.

But mostly, guarded. Because that's what most IAS officers are — guarded.

They weigh their words very carefully before they speak. Most choose to not speak at all — on critical matters. On anything else, they can hold forth forever, to those below them. To those above, well, they are the silent yeasayers.

And that is what is possibly causing their temporary setback, too.

Irony: The biggest “quality” attributed to an IAS officer is that he or she will anticipate political will and run to obey/ comply before words are even out of his political masters’ mouth. The best IAS officer is one that has no opinion of his own, or even if he does, keeps it to himself. As the years go by and the lines between bureaucracy and politics, between right and wrong, between truth and lies become fainter and fainter, an IAS officer will have lost all original thought. In matters of governance. And since by then he has almost stopped listening to anybody except his pompous self, his opinion or knowledge becomes all but redundant — it is neither real nor current. His figures are all fudged to show what the ones in power want to see and project. His opinions are only a confused muddle of what “appears correct” or “conveys the right message.”

Far from reality. But he doesn't care. He's got his salary, perks, club membership, car, driver, domestic help, spruced-up home, dinner parties, discounted vacations, foreign trips, and the silly, mean-minded “power” to dole out small favours to friends and relatives.

And now probably the politician, always answerable to the people, has a nagging suspicion of being taken for a ride. Fed with the belief that the real experts are those that come from years of working in the “field” — a euphemism used by IAS officers as an indication of their superior experience over their counterparts in other central services — he may have realised he is not getting his money's worth. So why not get in some real experts

who actually know something and are not scared to voice it.

The IAS officer feels cheated. He who let his spine to rot and said only what the masters wanted to hear, being moved out because the masters no longer want a rebound of their thoughts but something else? What a sheer waste! All those years of realisation that his “expertise” was a prerequisite only till he got in — later it was to hang at the window till it ran dry. Nobody asked for it, nobody wanted it. What was required to nab those coveted postings was a whole different set of skills — and he spent valuable years cultivating them.

Pun...will bounce back with vengeance

What now? Is he irrelevant? Well, one thing the IAS has cultivated in good measure is resilience. He will wait quietly in the wings. He knows that truths are much more inconvenient than post-truths. He will wait till the masters get uncomfortable with the opinions and the barefacedness of the experts. They'll look around for someone comfortable to work with. Someone who can tell them the sun shines brightly and all's right with the world. They'll wait for the masters' discomfort to set in.

And then they'll move in again quietly. I told you so, they'll say. And this time they'll fortify their citadel better.

Never is it easy to dislodge the steel frame in half measure.

IAS: The common belief system, and some truths

These are the assumptions an IAS officer lives with, and the reality there:

- ❖ We are in this service to serve. The truth is, we scarcely behave as servants.
- ❖ We handle vast sums of money and human resources; we do not possess any expertise for this task. We are not trained accordingly.
- ❖ We have a very high opinion of ourselves and our “intelligence” and “experience”, and think people respect us for what we are. In reality, people

genuflect before us due to the power we wield to either do benefit or damage.

- ❖ Over the years we have developed the tendency to distribute largesse, whether in kind or in ideas. In reality, we do not own what we distribute.
- ❖ We are paid to manage things efficiently and create systems. In actuality, we thrive on mismanagement and chaos because that gives us the power to choose some over others.
- ❖ We are supposedly the steel frame. In reality, we have no long-term vision. We take ad hoc decisions, looking to what the authority above us wants.
- ❖ We exploit the system for preferential treatment — for ourselves and people known to us. We are hypocritical enough to say we do it to “help” people.
- ❖ We know if we create systems where everyone has easy access to services, we shall become superfluous. So we let things be.
- ❖ We love to expand and enhance our sphere of work. We do not bother to place systems to bring in the needed efficiency.
- ❖ Worst of all, we are the most pompous, officious and ill-bred set of people. And we have the nerve to say we work for the people of this country.
- ❖ In reality we have no stakes in this country — our children often study abroad and we have created a niche cocoon of the luxuries this system can give us.
- ❖ We have no empathy with the larger populace, though we are always careful to make the right noises.
- ❖ If there were any justice, we would have long been extinct. But we are too powerful to let ourselves be annihilated.
- ❖ We are the IAS.

WHAT IS THE IMPORTANCE OF A NEUTRAL, EFFECTIVE AND WELL MANAGED CIVIL SERVICES TO INDIA?

This ANSWERS why the time is ripe for the evolution of Civil Services.

A well-managed Civil Services strikes to achieve an egalitarian and just society. It removes inequality and marginalization and makes economic growth inclusive. India, with high demographic dividend needs to take up the challenge to utilize this dividend. This needs proper imparting of skills, medical and education infrastructure and right legislations. Clearly, the role of civil servant is preeminent in the facilitation of such national objectives as it would help in elimination of social and economic injustice, improve standards of living and make India economically developed. To achieve these, the key attributes that are of utmost importance are:

Key attributes of a Civil Servant

Professional face	<ul style="list-style-type: none"> • Should have empathy for the people • Should act as an interface between the people and government • Should be politically neutral
Upright and proactive	<ul style="list-style-type: none"> • Should never hesitate to put forth his/her views • Views should be coupled with logical reasons and lucid presentations • Should more communicative by developing good inter-personal skills • Open to any new suggestions • Open to accept new challenges at work
Approach	<ul style="list-style-type: none"> • Develop innovative approaches to implement orders • Should have patience to take non-judgemental decisions. • Include all stakeholders in decision making • Promotes and support team work • Well versed with the power of information technology
Promoting transparency and	<ul style="list-style-type: none"> • Should use public funds prudently • Transparency in dealing with private sector and should avoid favouritism

accountability	• Upholds Rule of Law
Balanced life	Maintain balance in his/her personal and professional life.

All of the above can only be achieved through **drastic reforms in Civil Services** resulting in preparation of our society for India's global leadership role.

► *On the basis of above, please find below assignment for practice.*

ASSIGNMENT FOR SELF-PRACTICE

Q. Suggest drastic reforms that are required to install neutral, effective and well managed Civil Services in India?

Q. Do you possess the key attributes of a civil servant? If not, then what are the steps that you plan to undertake to develop those attributes.

CASE STUDIES FOR PRACTICE

MAINS GS PAPER IV

Case 1: You are the head of the Human Resources department of an organization. One day one of the workers died on duty. His family was demanding compensation. However, the company denied compensation because it was revealed in investigation that he was drunk at the time of the accident. The workers of the company went to strike demanding compensation for the family of the deceased. The Chairman of the management board has asked for your recommendation. What recommendation would you provide the management?

Discuss the merits and demerits of each of the recommendations. (250 words, 20 marks)

The case presents an ethical dilemma to choose between objectivity and compassion. Basing decision on objectivity and rule of law, compensation must be denied but on compassionate ground it must be given.

Following are other issues and values involved in the case:

- Value of fraternity among the workers;
- Workers safety at the work place;
- Feeling of injustice among workers;
- Accountability of administration for drunken worker getting inside the workplace;
- Threat of strike and loyalty of the workers to the organization;
- Sound worker-management relation for higher productivity;
- Work culture as a common good.

Based on the above consideration I will make following recommendations:

a) Give the compensation: Compensation will not put heavy financial burden on the company. It will express management's compassion for the workers leading to

greater social capital. Loyalty and motivation of workers will increase and also their productivity. Any present and future threat of strike will also be averted.

However, fulfilling the demand for compensation may lead to more such demands in future and encourage lackadaisical attitude of workers. Discipline at workplace may be hampered as a bad precedent will be set. Work culture may also get destroyed because of such techniques of collective blackmailing.

b) Give fifty percent compensation: Grievance of workers may be satisfied partially by this option and it may also lead to a win-win situation for both the parties. Some relief will be there for the family of the deceased as it was not their fault.

However, this will not provide a permanent solution to the problem. Unprofessional attitude of some workers may still continue in future. Unjustified demands in future may also see a rise.

c) Ask workers to contribute in the compensation: This will allow the value of fraternity to get expression. This will also lead to combined responsibility of all the workers leading to check on each other in future. It may also provide a long-term solution as a combined employees welfare fund can be created with contributions from both sides.

However, it may cause delays in the proceedings thus extending the strike. It may also bring negative publicity in media, damaging its social capital. Company can also be accused for putting undue burden on the workers.

I will stress to the management to accept my **first recommendation** as it includes the acceptance of management's fault as well to fail to stop drunken worker from entering the work place. Gandhiji said that corporate are trustees of workers. The decision that company takes must be in the spirit of this philosophy of Gandhiji.

Apart from this long-term measure has to be taken like:

- Ethical training of workers;
- Gate check for alcohol consumption;
- Random check at work place;
- Safety audit;
- Improvement in worker-management relation through dialogues and events like social gathering etc.

Case 2: Emirati Plastic Works (EPW), a manufacturing company provides jobs for many people in a small town where employment is not easy to find. The company has stayed in the town even though it could find cheaper workers elsewhere, because workers are loyal to the company due to the jobs it provides. Over the years, the company has developed a reputation in the town for taking care of its employees and being a responsible corporate citizen. The manufacturing process used by the company produces a by-product that for years has flown into the town river. The by-product has been considered harmless but some people who live near the river have reported illnesses. The by-product does not currently violate any anti-pollution laws.

Critically analyse the story of EPW and state the ethical issues involved. Do you consider EPW as a role model for development of backward areas? Give reasons. (250 words, 20 marks)

Solution:

The company is acting consistently with its reputation as a good corporate citizen by:

- I. providing job
- II. taking care of its employee
- III. environment friendly

Though, EPW has been a responsible corporate citizen some of the ethical issues exist in terms of:

- I. **Integrity:** for non-investigation of reasons for people those living near the river falling ill.
- II. **Accountability and Responsibility:** for failing to address/act towards the people found ill.
- III. **Environmental Ethics:** Failed to work on effective criteria for disposing off the by-product rather than letting it flow into the town river.

IV. Absence of principle of utilitarianism and public service: For not taking care of people other than its employees.

State's ineffectiveness and people's incompetence to take development to the front stage that has led to the current situation, such as worker loyalty caused by scarce employment and the power the company holds over the town. **This brings forth ethical issues with respect to State's and people in terms of:**

- **Inequality and disparity** caused by the state's lack of focus on development
- Lack of State's **accountability & responsibility** towards citizen
- **Morally wrong** of people not raising voice against the present state of people falling ill

EPW can be considered as a role model for development of backward areas:

- **Duty** of a non-state actors to develop underdeveloped areas
- Creating source of **livelihood** by providing employment
- Prioritizing and rewarding people over one's own profit
- Environmentally sound by not violating any anti-pollution laws

However, things to be considered are:

- Giving back to the society (Social Responsibilities: **Gandhi's Trusteeship doctrine**)
- Proper implementation of laws
- Active citizen's participation in the process of governance – social audit, RTI etc
- Good and ethical governance

Trust is the most important element in social capital. Corporates must proactively take steps to remove doubts and fears among customers and citizens. Welfare of companies lies in the welfare of the society.

Case 3: You are working as the Sub-Divisional Magistrate (SDM) in a district facing recurring droughts every year. This year also, the same situation has occurred and most of the area under your jurisdiction has been declared drought hit. Following Standard Operating Procedure

(SOP), you had floated tenders and awarded contracts for the supply of relief material in fair and transparent manner, well in advance.

However, a group of people, led by a local politician have been protesting against poor quality of food grains and dirty water provided to drought hit people. They have blocked national highway by a sit-in protest.

However, you suspect that the real motive of the politician is to jeopardize relief efforts and to build general opinion against your efficiency, because the contracts were not awarded to him.

The moment media started covering the news, you get a call from your senior questioning your handling of relief operations. As a senior officer entrusted with the responsibility of handling this issue with prudence, how are you going to address it? (250 words, 20 marks)

The case highlights the difficulty faced by an honest officer in performing his duty. Following are the important ethical issues in the case –

- a) Empathy and compassion towards those suffering from draught.
- b) Test of my courage and fortitude.
- c) Efficient supply of relief material as part of good governance
- d) Immoral intent of seeking profit in a disaster.
- e) Impartial and objective news reporting by the media.

First of all, I need to remain firm on my goal of providing efficient and effective relief to the draught hit areas. I

must control my emotion and work with objectivity. I must not be distracted by charges and insinuation or questions from media. I must put the philosophy of *Nishkama Karma, selfless action*, to work.

Next, I will take specific measures to handle the issue –

- a) Procedure of tender allocation must be transparently put in public domain for confidence building among the public and media. I must convey the same to my senior.
- b) National Highway must be immediately cleared of blockage. It must be highlighted that it is creating hindrance in relief operation.
- c) An independent audit committee must be constituted to check the quality of relief products. A credible report must be set in public domain to remove misconceptions and answer the allegations.
- d) Grievance redressal measure, like dedicated phone number or portal to register complain, must be established.
- e) The politician's private interest in taking the tender must be made known to the seniors and the department.
- f) I must work more on the ground to motivate the relief team to work with dedication.

I must keep my self-motivated by recounting the old Indian philosophy, *Satya Mav Jayte, truth alone triumph*.

PART THREE

ESSAYS

of

THE MONTH

Selected essays from Rau's GSI students

ESSAY 1: QUICK BUT STEADY WINS THE RACE

PHILOSOPHICAL

SUBMITTED BY: SHUBHANKAR PRATYUSH PATHAK

Disclaimer: The viewpoints in the topic are strictly personal of the writer above. The role of Rau's IAS Study Circle is to present the write-up in its original form, hence the study circle neither endorses nor rejects any viewpoint in the submission. The purpose is only to showcase the manner of writing.



Therefore, it is the sole responsibility of the reader to use his/her intellect to check the veracity of viewpoints.

The 21st century is the age of the internet and driven by Industrial Revolution 4.0. In the story of the rabbit and the tortoise, the rabbit, after gaining a considerable lead, proceeds to rest and allows the tortoise to win due to his complacency.

Today, however, life is fast, and people have big ambitions. Those who are in the lead want to extend it, and those who are behind in the race are running faster than ever before. Sky is the limit today, and nobody can afford a moment to take a pause.

The age-old proverb – “Slow and steady wins the race” has been modified for the 21st century – “Quick and steady wins the race”.

In this context, let us analyse whether the phrase still holds true for the world today, or has it lost relevance.

Historical Perspective – The Portuguese were the first Europeans to arrive in India. The Dutch and the British took more than a century to arrive after them. Despite having such a vast experience of India, how did the Portuguese lose ground in India?

Similarly, after the second Carnatic War, the French were in firm control of Hyderabad and Arcot. But, within a few years, they lost all the advantages to the Britishers.

If we analyse carefully, the British supremacy over their fellow Europeans was due to their quick decision-making abilities. The likes of Robert Clive provided the leadership which the others could not muster.

The importance of swift action and foresightedness can be seen throughout history – from Industrial Revolution till WWII, and later during the Cold War.

It thus becomes important to observe how the contemporary world is the outcome of rapid, but careful, decision-making, and quick implementation.

Contemporary World: Faster than ever before –

During the 1980s, few professors in an academic institution in USA, were working for a project sanctioned by the US military. They gave birth to the “World Wide Web”, which was later declassified, and the internet was born.

The internet revolution required hardware that people could use to access the vast information on the virtual world. Three men in a garage started a company that built smart hardware solutions. The company was Apple, and it captured the imagination of the time.

To run the hardware, many software companies were born which included the likes of Microsoft, Cisco Systems.

Similarly, using all above mentioned technologies, Mark Zuckerberg built Facebook and connected people with each other. It is not difficult to identify the theme. The US raced ahead of the world in terms of technology and maintained and strengthened its position as the world superpower.

Let us look at another case study – China. China's economy was in shatters post failed experiments of the

Great Leap Forward and cultural Revolution initiated by Mao Zedong.

Deng Xiaoping introduced several changes in the Communist economy of China. He allowed private ownership of land and industries, modernised agriculture, strengthened defence forces and encouraged science and technology.

With consistent policies and quick actions, China became the manufacturing hub of the world within two to three decades. The standard of living improved and the faltering economy became one of the largest in the world.

What do we find common in USA and China? Both these revolutions have taken place in the last 30 years, with results being witnessed within a decade of proper implementation. Long-standing vision, quick decision-making, effective implementation, and adequate support are the key ingredients in their success.

Let us now turn our attention towards India. What have been our achievements and efforts in this regard, and where does India stand in a fast-changing and complex world.

The story of India -

India has seen major progress on many indicators, and especially socio-economic ones, in the last few decades. India is among the fastest growing economies in the world, it has pulled a minimum of 273 million people out of poverty since 2005-2015 as per UNDP and the world is looking at India with a sense of hope and opportunities.

However, India has had its share of struggles.

During the 90s, India faced a major economic crisis. With less than a week's import cover left, India had to accept the conditional support of IMF and change its economic structure. In the same decade, India faced political instability and the world blockade led by the US post the Pokhran tests. India also had to fight a war with its hostile neighbour in probably the most challenging terrain of the world. Despite all the hurdles India sailed through the waves of uncertainty.

With the leadership of PM Narasimharao and the ambitious vision of Manmohan Singh, Indian economy

transformed from being government dictated to being facilitated and enabled by the government.

Indian democracy proved its mettle time and again during the 90s to always being represented by the popular wishes of the public.

India successfully conducted operation SHAKTI under the able leadership of PM A. B. Vajpayee and APJ Abdul Kalam. India also won the war against Pakistan and till date controls the highest battlefield in the world – the Siachen Glacier.

All these incidents and achievements were possible due to visionary leadership and quick action under immense pressure.

However, instead of learning from its recent past, India has somehow managed to lay behind in many arenas – India was extremely late in adopting 4G and seems to be missing the bus in the race for 5G implementation. Similar issues like the late boom of start-up industry in India, the slow decision-making on future of sick PSUs such as BSNL and Air India and the late adoption of Crypto Currency etc. call for attention.

What can be the solution to these challenges? How should India tackle the challenges?

India: Looking forward to sea of opportunities –

Many problems can be associated to slow decision-making capacity of the political and permanent executive due to risk-averse nature and red-tapism. The 21st century requires a 21st century bureaucracy – an entrepreneurial bureaucracy. It is also important for the political executives to back the officers in driving the change and create a healthy atmosphere for bureaucracy to make a difference.

India has worked on these aspects in the recent years. The most remarkable being the immediate announcement of Chandrayaan – 2 after heart-breaking fate of Chandrayaan – 1. This decision was fully backed by PM Narendra Modi who congratulated ISRO and Chairman K. Sivan and encouraged them for their endeavours.

Similarly, the recent strategic disinvestment policy announced in the Budget 2021-22, growth of IT and services sector in India, the rise of urbanisation from

11% in 1901 to estimated 42% in 2021, introduction of PM Jan Dhan Yojana, UPI, Bharat Net and adoption of the progressive National Education Policy 2020 are signs of positive attitude towards firm and quick policy decision-making.

However, at the same time, it is extremely important to not lose moral values and ethics in the zeal of taking fast decisions and quick implementation.

We have discussed the historical aspect of quick decision-making followed by two recent case studies of US and China. We then moved on to the specific case of India, looking at the challenges and how to tackle the decision-making paralysis.

21st century is often said to be the Asian century dominated by the dragon and the elephant.

While China is on its way to make this a reality, India still has a lot of catching up to do. However, India has shown a lot of courage and determination, especially in the fight against climate change, Covid-19 pandemic where it chose to save lives in the short term and livelihood in the medium term.

The world today recognises the strength of India. With demographic dividend on its side, India will realise the dream of becoming a super-power with quick decision-making and effective implementation.

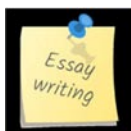
ESSAY 2: WHAT IS CRUCIAL IN DEALING WITH LOSS IS NOT TO LOSE THE LESSON.

ETHICS

SUBMITTED BY: VIKAS MEENA

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Babur came to India three times to capture Delhi. Each time his army had to face loss. He understood that Delhi cannot be captured with simple attack and capture strategy.

He again regrouped his army and this time introduced canon and two-side war on Ibrahim Lodi's army. This time Delhi was won, and this started the Great Mughal Era. Like Babur, everyone has to face loss in her life many times. But the significance of the loss is that it

teaches lot more than success. In fact, it is a pre-requisite to achieve glory.

Loss is a psychological condition or event one feels when she can not achieve what she wants. It can be of different magnitude for everyone in a similar condition. Every person feels it in different way and get affected on different scales.

Types of Losses:

- **Personal**
- **Social**
- **Financial/Economical**
- **Respect/Fame**
- **Time**
- **Health**

As the above, represents various types of losses, we shall discuss them in a bit more detail and how to learn from them.

a) Personal Loss: It can be anything a person wants to achieve in her life. Every person sets a goal and have a dream for her life. But not all, could see the day of success. E.g. – A person preparing for UPSC CSE competes with Lakhs of students and only a few could clear it.

In such a condition, what is important is to keep faith in yourself and explore other similar fields.

Learning through the process of failure and retrying the same thing can only guarantee triumph.

b) Social: This can be defined as loss of a relative, family member or friend. Going through this loss can be very tough in some conditions. E.g. – People losing family members during COVID times.

The lesson one can learn definitely is to respect, behave and love the other person in a better way.

We should be in good terms and forgive others whenever we get chance.

c) Economical: One of the most common loss is economic; individuals, groups and even countries go through this loss. E.g. – Financial loss of India during 2020-2021 financial year is huge. GDP contracted by - 7.3% during this time.

Economic loss can be very painful as it threatens to reduce social status, economic security of a family/person.

As the reasons for this loss can be diverse, one should analyse at proper level. Understanding the economical cycle, basics can help avoid this situation.

d) Health: 'Health is Wealth' is an old proverb but still extremely useful.

Without adequate health, the mind is of no use. There are many examples where a healthy person addicted to unhealthy practices. Like – Drinking, Smoking, Fast foods etc. It turns the person in a dead man sooner or later.

However, there are persons like Rishabh Pant (cricketer), who loses his weight and performed

brilliant in matches. In this loss too, if one can learn quickly can improve his conditions.

e) Time: 'Time is Money' is a phrase we often listen. Arguably the biggest loss a person, have is time.

With passing of age, time never comes back. The most you can invest in sometimes is time. However, teenagers and youth waste a lot of time on smart phones and PCs. And often wasting their time, people start blaming other things. Learning from others or oneself can be of great use in analysing – how to use time.

f) Respect: People strive for lifetime, work hard to earn respect in family and society.

Losing respect often comes with shame, boycott, and social distancing from other members of the society. If a person can learn – what causes that situation. And if he/she can learn and pledge not to do the same again, he can gain respect again. The different types of losses can teach a person different thing. They help in making a person mature.

Often people who do not try new things do not fail. And if a person in not failing – it means that he is not learning. One of the ways to learn is by taking a pause/break every week or day. Try to analyse your life in that span and try to find your mistakes.

Once we start accepting our faults – only then can we learn from them. However, it cannot be always possible to do all activities alone. So, we should also learn from other's mistake i.e., read autobiography, read historical mistakes – their impact etc.

Sports can also be a great teacher. It teaches us how to improve, focus and correct our mistakes. Having said enough, the most important thing is to learn to enjoy the process of learning – trying – improving. Once we start enjoying the process, learning from loss will be natural.

Remember

"Learning is same as Redoing the Task."

ESSAY 3: NEARLY ALL MEN CAN STAND ADVERSITY, BUT IF YOU WANT TO TEST A MAN'S CHARACTER GIVE HIM POWER

ETHICS

"Power tend to corrupt,

Absolute power corrupts absolutely."

- Lord Acton

'Adversity' is a state or substance of serious or continued difficulty or misfortune. It might be a debilitating injury or illness, or an abusive relationship or crushing poverty.

Every person face adversity in life but some use adversity for learning lessons and transforming it into opportunity. It tests ones character. When someone face adversity, most pressing need is survival and nearly all can stand adversity.'

It is better to give power to someone to taste the character. Mahatma Gandhi and Adolf Hitler faced adversities and rose differently in their respective countries. Gandhi chose the path of non-violence, on the other hand Hitler is hated as an embodiment of evil responsible for genocide of millions of Jews.

Adversity and misfortune makes us more mature, humble in life. The goal here is survival, whether a person is in injury, prison or living in poverty. On the other hand, 'power' as seducing as might seem, has succeeded in changing the behaviour of many people. It make a person the centre of attraction where everyone asks for favours, this makes a person not only corrupt but also uppish and big-handed. So, "power is referred as character tester." Fall of "Godman" in recent pasts shows how money, influence and power turned them criminals. India's biggest corporate scam, ' Satyam' showed how 'Ramalinga Raju', founder of Satyam computers indulged into the corrupt practices.

Power can also be misused for killing animals, spoiling biodiversity and environment. Example - When Eskimos were given guns by Americans, they hunted animals and spoiled the environment and resources in the ecosystem. Today, man with the help of technology has immense control over nature. However, human greed is responsible for making life on earth unsustainable by causing global warming, climate change, pollution, shortage of portable water, etc.

Unlike adversity with only few options, power offers many options to survive. Those having power have choices. The more power one has, greater options are available. Power may come along with large amount of money, a position of authority, or physical strength, freedom to choose options. Example - A powerful person can choose to be the ally of other person or, make decisions that help others or hurt others. But people with unshakable character are also there who held power for common good. "People with good intentions make promises, while people with good character keep them."

Mughal Emperor "Akbar" despite having enormous power used it for welfare of his subjects and maintains religions tolerance. Another example could be of "Gautam Buddha" who was born in a royal family having all comforts, but he abandoned it for the search of truth. He had so many followers, but he never deviated and focused on finding the cause of sorrow in the world and advocated enlightenment. Also in present time we have officers like "U Sagyam IAS," son of a farmer who was first IAS to upload asset details on district website. As a great civil servant of character, he slept in a graveyard to

guard important evidence in a multi-crore quarrying scam of Madurai.

Many people use power to advance their own agenda and fulfill their own selfish ends. So, it's their power which reveals their character not the adversity. So, question arises – how to build such sound characters? People with sound characters are assets to society. Such characters are developed through moral upbringing. Gandhiji observed - "Literacy education is of no value, if it is not able to build up a sound character". This character

building is possible by setting up examples by teachers, political leaders, bureaucrats, journalists, scientists, spiritual leaders etc. Rewarding such people will create positive influence on others.

Only a man of strong character uses power for wider social aims. "Nothing discloses real character like the use of power. It is easy for the weak to be gentle. Most people can bear adversity. But if you wish to know what a man really is, give him power. This is the Supreme test."

ESSAY 4: SIMULTANEOUS ELECTIONS: CAN THIS BE A FEASIBLE OPTION FOR INDIA?

GOVERNANCE

The call for holding simultaneous elections have grown recently and the incumbent government has advocated holding simultaneous elections to Lok Sabha and State Assemblies to utilise maximum time for governance which is otherwise lost due to political campaigns and rallies.

India got independence on 15th August, 1947, adopted its Constitution on 26th January, 1950 and held its first general election between October 1951 and March 1952 under the guidance of Sukumar Sen who was the first Chief Election Commissioner of India. It was a stupendous and colossal task of gigantic proportion to conduct election for around 4500 seats including the Parliament and State Assemblies for the first time in India. This process of simultaneous elections continued till the year 1967. One thing to remember here is that Congress governed both at the Centre and in majority of the states and it became easy to conduct such simultaneous elections till Congress enjoyed stupendous majority. However, with time, clout of Congress as a political party reduced giving rise to political instability both at the centre and in the states.

This instability and rising local demands also led to the emergence of many regional parties across India. This led to instability of many state governments and slowly this process of simultaneous elections came to a pause due to the constitutional need of having a majority in the state assemblies. Even Lok Sabha got prematurely dissolved in 1970 and this disrupted the chain of holding simultaneous elections completely.

On this, let us now understand the feasibility of conducting simultaneous polls in present times where multi-party democracy, centre-state relations and use of technology through social media have assumed greater importance as compared to our distant past.

The Constitution of India establishes a two-tier government system with the Union Government at the Centre and respective State governments at the provinces. The Constitution has demarcated each level of government by devising an elaborate scheme of distribution of legislative, administrative and financial powers between the Centre and the States. In this respect, **Article 246** of the Constitution clearly **enumerates the Federal character** of the Indian Constitution. It empowers Parliament to make law under

Union List, States to make law under State List and both the Parliament and States to make law under Concurrent List. Thus, the Constitution through its Articles has created a separate existence for the state government independent from the existence of the Centre. Thus, elections are conducted every five years in different states as per their constitutional existence. Over the period of years, stability of the various governments at state level has been lost. Coalition politics have emerged slowly over a period of years and now we are witnessing coalition government in various states. Compulsion of coalition politics have often resulted in premature dissolution of both Central and respective state governments. This has led to different election years for different states. On this note, let us understand the merits and demerits of conducting simultaneous elections of such gargantuan level in a culturally and topographically diverse country.

Possible Merits: Simultaneous elections to Lok Sabha and all State Assemblies will provide continuity, consistency and stability in governance throughout the country. The entire country after the completion of election process can focus on governance for an uninterrupted period of five years. It will reduce the massive expenditure done during elections throughout the year. Every year some states witness assembly elections and even the political party in power at the Union gets involved during the election process. This diverts much of Central Government's time from important national and domestic concerns and it consumes energy and resources to ensure victory in such state assemblies. Elections in states lead to the imposition of Model Code of Conduct which effectively restricts introduction of new development programmes and schemes in the state. Irregular elections at different time of the year affect productivity and have an adverse impact on the economy of the nation as a whole.

If all elections to state assemblies and Lok Sabha are held at one time, it will give a stable five-year term to the political parties in power to focus towards implementing their political manifestos and government schemes. This will prove beneficial both for the government and the public. Finally, simultaneous election would reduce the type of manpower and resource deployment necessary for the conduct of elections. This will also help in

controlling corruption to a large extent as use of unaccounted money through illegal sources such as hawala is very common. Even though Election Commission with the help of other administrative and regulatory bodies keeps a tight vigil, yet to do so continuously through the year becomes burdensome. It also deviates much of the resources and manpower into such regulations which in general course of event can be utilised for their regular work.

Demerits: India has a federal structure and a multi-party democracy where elections are held for State Assemblies and the Lok Sabha separately. The voters are better placed to express their voting choices keeping in mind the two different governments which they would be electing by exercising their franchise. This **distinction gets blurred somewhat when voters are made to vote for electing two types of government at the same time**, at the same polling booth, and on the same day. When state assembly elections will be held along with Lok Sabha, then the local issues concerning the state may get swept by emotive issues of national importance. Voters in such a scenario in the past have always went for the same party whenever simultaneous elections were held. Assembly elections are fought on local state issues and, in the true spirit of federalism, parties and leaders are judged in the context of their work done in the state.

Clubbing them with the general election could lead to a situation where the **national narrative submerges the regional problems and issues**. In case of simultaneous polls, **bigger political parties who are better funded have advantage** over smaller regional parties. Even the **corporates would favour a uniform government throughout India for their benefit** hence could pour their entire fund in one or two strong national political parties. This may act as a huge disadvantage for the smaller political parties thereby distorting the very idea of federalism in India. There are other situations which may arise and cannot be pre-empted currently due to lack of practical experience. One such instance that can happen is that due to **constitutional failure in a state, the state assembly has to be dissolved**. Then, will the state be allowed to carry on or **President's rule under Article 356** will be imposed? Similarly, **if Union government dissolves** prematurely due to coalition

politics or passing of no-confidence motion or some other reasons, then will this **amount to dissolution of all state governments**? Thus these are certain practical constraints in having simultaneous elections. There will be other practical difficulties in terms of logistics and movement of personnels involved in the election process.

Recommendations of various Reports: Law Commission of India has suggested that election of Legislation Assemblies where term is ending six months after the General election to Lok Sabha can be clubbed with it but election result can be declared at the end of their tenure. This can be possible with the cooperation of political parties.

The Standing Committee on Personnel, Public Grievances, Law and Justice noted that the Representation of People Act, 1951 **permits the Election Commission to notify general elections six months prior** to the end of the terms of Lok Sabha and state assemblies. The Committee recommended that elections could be held in two phases. It stated that elections to some Legislative Assemblies **could be held during the midterm of Lok Sabha**. Elections to the **remaining legislative assemblies could be held with the end of term of Lok Sabha**.

The NITI Aayog in its Three Year's Action Agenda has suggested that all elections in India should happen in a free, fair and synchronised manner so as to cause minimum campaign mode disruption to governance. In this direction, NITI Aayog has suggested to move

towards switching to a **synchronised two-phase election to the Lok Sabha**. This would require a maximum one-time curtailment or extension of some state assemblies. To implement this in the national interest, a focused group of stakeholders comprising constitution and subject matter experts, think tanks, government officials and representatives of various political parties should be formed to work out appropriate implementation related details. This may include drafting appropriate constitution and statutory amendments, agreeing on a workable framework to facilitate transition to simultaneous elections, developing a stakeholder communication plan and various operational details.

Any proposal to strengthen the roots of democracy is always a welcome step and all stakeholders must be willing and accommodative to explore options for the same. In this respect, the proposal to introduce simultaneous elections in India both to Lok Sabha and State Assemblies is a bold reform and must be carried forward with the consensus of all state assemblies. Simultaneous elections if at all possible should be complied within the constitutional constraints and without disturbing the federal structure of India as it is also a Basic Structure of the Indian Constitution. However, if any state is unwilling to come to the terms of simultaneous elections then, the Central Government shall patiently listen to their concerns. If the concerns are genuine, then effective steps and alternatives must be suggested so as to bring all stakeholders at one common platform.

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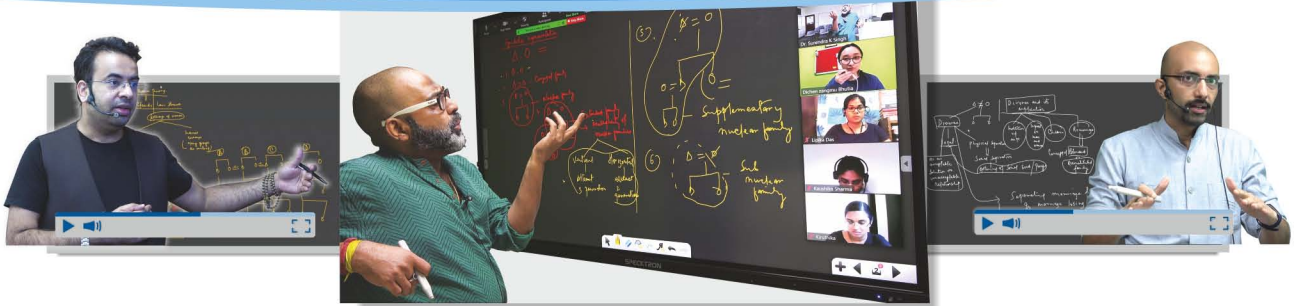
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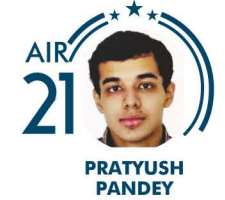


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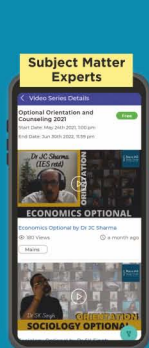
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