

CURRENT AFFAIRS

WEEKLY

WEEK - 4
OCTOBER, 2019

HISTORY

- ② V. D. Savarkar

INFRASTRUCTURE

- ② Power Sector – A Cost-Effective way to Power Generation is the Key

INTERNATIONAL RELATIONS

- ② India-China Relations

INTERNAL SECURITY

- ② An Appraisal of the Red Corridor

POLITY

- ② Re-examining Federalism in India

SOCIAL ISSUES

- ② Mental Health

ECONOMICS

- ② Ayushman Bharat scheme empowering several Indians
- ② Livestock census
- ② Relevance of Wholesale Price Index (WPI)

ENVIRONMENT

- ② Geo-engineering

GOVERNANCE

- ② Food Safety Mitra (FSM) scheme
- ② National Blindness and Visual Impairment Survey
- ② One Nation One FASTag: Govt's RFID solution for digital payment of highway toll

INTERNATIONAL RELATIONS

- ② Chinese President's Mamalapuram Visit (informal) to India

PRELIMS

- ② Implications of Nepal-China road connectivity deal
- ② Indus Waters Treaty

REPORT

- ② The State of the World's Children 2019

MISCELLANEOUS

- ② Global Hunger Index
- ② Jayaprakash Narayan
- ② Chenani-Nashri Tunnel
- ② Top 5 Series: Rivers

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The current affairs articles are segregated from prelims and mains perspective, such separation is maintained in terms of structure of articles. Mains articles have more focus on analysis and prelims articles have more focus on facts.

However, this doesn't mean that Mains articles don't cover facts and PT articles can't have analysis. You are suggested to read all of them for all stages of examination.

CURRENT AFFAIRS ANALYST

WEEK-4 (OCTOBER, 2019)

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SECTION: A
(MAINS)

CURRENT AFFAIRS

V D SAVARKAR

CONTEXT

- The election manifesto of Maharashtra BJP, released recently said the party will ask the NDA government at the Centre to confer country's highest civilian award on Vinayak Damodar Savarkar.

◎ BACKGROUND:

- Vinayak Damodar Savarkar, more commonly known as Veer Savarkar, was one of the most prominent freedom fighters. He was born on May 28 in the year 1883.
- He championed atheism and rationality and also disapproved orthodox Hindu belief. He even dismissed cow worship as superstitious.
- He was instrumental in forming the idea of a **Hindu nation** before the Independence.
- He was **against all foreign things**. In 1905, during Dussehra, he set up a bonfire by burning foreign goods and clothes.
- During his stay in London, he learned about the guerrilla war style along the lines of the 1857 Sepoy Mutiny. He wrote about that in his book, The History of the War of Indian Independence, which was banned across the British Empire.
- He was arrested on charges of plotting an armed revolt against the Morle-Minto Reform of the British Empire in 1909.

◎ ANALYSIS:

Contribution of Savarkar in Freedom Movement:

- After getting into the Fergusson College in Poona, in 1902 Savarkar was moved by the revolutionary ideologies. He started working with **secret revolutionary organizations** in Poona.
- He had convened in 1904 a meeting of some two hundred selected members of the **Mitra Mela** - a revolutionary party. The name of his party was later changed to **Abhinava Bharat**.
- When he went to England for higher studies, he continued his revolutionary activities and set up a front organization named '**Free India Society**'. He founded this Society to mobilise youths against the colonial rule in India.
- In the Ratnagiri jail his most important work **Hindutva** was written and sent out secretly and was published under the pen name **Mahratta**.
- After his release from the Ratnagiri jail, he joined the **Hindu Mahasabha**. He became the president of the party.
- From 1937 to 1947 he had strained every nerve to keep India united.

Savarkar on Hindutva:

- Savarkar in his important work **Hindutva : Who is a Hindu?** developed the core of his philosophy on the concept of Hindutva.
- According to him, Hindutva was **not a word but a history**. It was not only a history of the spiritual or religious life of the Indian people but a history of the entire civilization. **Hinduism is only a derivative, a fraction, a part of Hindutva**.
- In order to make Hindutva a grand concept Savarkar held that by an 'ism' it was generally meant a theory or a code more or less based on spiritual or religious dogma or system.
- He was of the opinion that Hindutva embraced all the departments of thought and activity of the whole being of the Hindu race.
- According to him, every person was a Hindu who regarded this land as his 'Fatherland' as well as his 'Holyland', i.e. the land of the origin of his religion.
- He held that the followers of 'Vaidicism, Sanatanism, Jainism, Buddhism, Lingaitism, Sikhism, the Arya Samaj, the Brahmo Samaj, the Dev Samaj, the Prarthana Samaj and such other religions of Hindusthani origin', were Hindus and constituted 'Hindudom'.
- He opined that the Indian Muslims, Christians, Jews, Parsees were excluded from the right to claim themselves as Hindus, in spite of India being their 'Fatherland'. Similarly, though the Japanese, the Chinese and other nationals considered India as their 'Holyland', yet they were not considered as Hindu people because this land was not their 'Fatherland', i.e., the land of their forefathers. So, according to him, a person would be considered Hindu, i.e., a normal citizen of Hindusthan, if he or she fulfilled two criteria of Hindutva.

Relevance of his ideologies in today's life:

- Savarkar held that in reality cultural or national unity could not afford to loosen the bonds, especially those of a common name and a common banner, that were the mighty sources of organic cohesion and strength. There was no sign of other 'ism's disowning their special dogmas which landed them into 'dangerous war cries'.

- Savarkar held that the Hindu nation had grown out of the Indian soil and had its roots struck deep and wide in it. He was of the opinion that the idea of Hindu nation was not a fiction invented to antagonize the Muslims. "It is a fact", he declared.
- He called for a unified India on the basis of Hindu principles. He described Hinduism, Jainism, Sikhism and Buddhism as one and the same and outlined his vision of a Hindu Rashtra (nation) as Akhand Bharat (United India).
- He held that Sanskrit should be considered as the sacred language. He opined that Sanskrit was the richest and the most cultured of the ancient languages of the world. He was also of the opinion that the Sanskrit language should be 'an indispensable constituent of the classical course for youths'.
- Savarkar opined that the Hindu Mahasabha was not a communal body. He held that the party should not be condemned as sectional for it tried to defend the just and fundamental rights of the Hindu nation against the unjust and overbearing

aggression of other human aggregates and did not infringe on equal and just rights and liberties of others. He declared that the consolidation and the independence of the Hindu nation were but another name for the independence of the Indian nation as a whole.

◎ WAY FORWARD:

- Savarkar breathed his last on 26 February, 1966, leaving behind him a treasure of theorizations on Hindutva, Indian nationalism and such other themes that are so relevant even today to men and women fighting for a strong, united India.
- His theoretical writings are considered by many to have Hindu revivalist overtones, whereas many others dispute such an evaluation.
- He became involved with Hindu cultural and political nationalism. He propagated the idea of Hinduism in his ideological treatise, 'Hindutva: Who is a Hindu?'



Practice Question

- **V D Savarkar has made significant contributions in the freedom movement. He has brought the ideology of Hindutva which has significant relevance in today's life. Enumerate his contributions in the freedom movement, his Hindutva ideology and how it will improve in making country's future better.**

POWER SECTOR – A COST-EFFECTIVE WAY TO POWER GENERATION IS THE KEY

CONTEXT

- India is on track to achieve 175 GW of renewable energy by 2022.

◎ BACKGROUND:

- Power is one of the most critical components of infrastructure crucial for the economic growth and welfare of nations.
- India's power sector is one of the **most diversified in the world** with thermal coal/gas constituting 66%, nuclear 2%, renewables 13%, and hydro power 19% of installed capacity.
- Electricity demand in the country has increased rapidly** and is expected to rise further in the years to come. In order to meet the increasing demand for electricity in the country, massive addition to the installed generating capacity is required.
- In May 2018, **India is ranked 4th in the Asia Pacific region** out of 25 nations on an index that measures their overall power.
- India is the **third largest producer and the third largest consumer of electricity** in the world. **Electricity production reached 339.14 Billion Units in FY20** (As of June 19). India is ranked **4th in wind power, 5th in solar power and 5th in renewable power** installed capacity as of 2018.

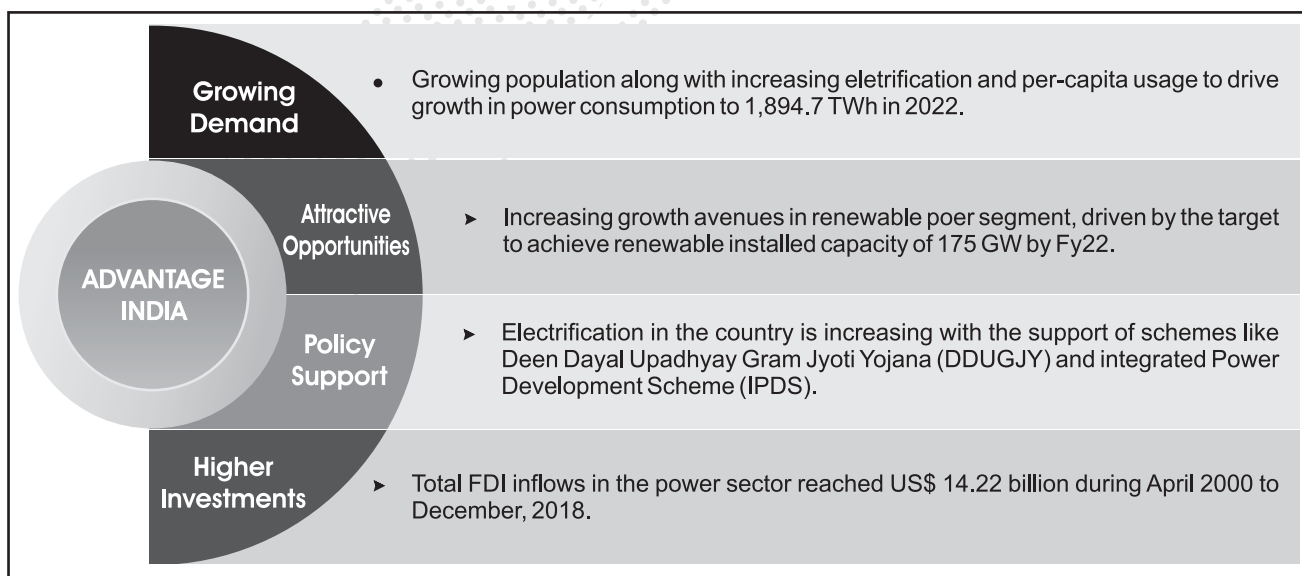
◎ ANALYSIS:

Market Size

- Sustained economic growth continues** to drive electricity demand in India.
- '**Power for all**' scheme has accelerated capacity addition in the country. At the same time, the competitive intensity is increasing at both the market and supply sides.
- Total installed power capacity** in India is **356 Gigawatt (GW)** (as of May 2019).
- In recent years, the major growth drivers have been renewable energy sources such as solar and wind power, and investment from the private sector.
- For the last three years, growth in generation from renewables has been close to 25%. India aims to have a **renewables capacity of 175 GW by 2022 and 500 GW by 2030**.

Investments in Power Sector

- The **private sector accounts for almost half the installed generation capacity**.



- Thermal plant capacities are large** and therefore targeted capacity additions can be achieved by constructing fewer such plants. On average, it would take **18 solar or wind projects to generate the same quantity of power as one thermal**

plant. For the same reason, **switching from fossil fuel to renewables will remain challenging** as the administrative overheads that would have to be incurred in setting up the multiple projects could significantly add to the cost.

- As the capacity of power plants increases, the average cost of power per MW reduces. The **average cost per MW for a thermal plant is about 25% lower than that of a solar plant.** In order to surmount the cost advantages that large thermal plants enjoy today, we must focus on developing larger solar and wind power plants that can also exploit similar economies of scale.

Challenges for Power Sector

- **Power deficit:** Some of the issues leading to the power deficit situation in the country include
 - Shortage of fuel,
 - High Aggregate and commercial (AT&C) losses,
 - A differential tariff structure
 - Delays in tariff revisions.

High AT&C losses and losses arising due to issues with tariff affect the ability of distribution companies (discoms) to buy power to supply to the consumers.

- **Generation capacity increasing, but utilization of generation capacity is still low:**
 - Historically, inadequate generation capacity was the key contributor to power deficit. However, generation capacity has improved in the last few years due to high participation by the private sector.
 - Over the years, the capacity to generate electricity has increased, however the actual generation of electricity has not been commensurate with this increased capacity. Key reasons for the low utilization of generation capacity are: (i) shortage of fuel, especially coal, and (ii) unviable Power Purchase Agreements.
 - The coal sector has failed to match production with the growth in coal-based generation capacity. This has created a gap between the demand and supply of coal. As a result, India's coal imports have risen from 59 to 168 million tonnes from 2008-09 to 2013-14 (185%). Shortage of coal affects the generation of power, leading to power deficits.
- **Aggregate Technical and Commercial (AT&C) loss:**
 - The **Accelerated Power Development Program** was launched in 2002-03 with the main objective of reducing AT&C losses. However, reduction in AT&C losses (1.1% per annum) has been slower than the target (3% for utilities with losses above 30%; 1.5% for others).

- **Aggregate Technical and Commercial (AT&C) loss** is the **percentage of power procured by the discom for which it did not receive any payment. The national average for AT&C losses for 2012-13 was about 25%.** In countries such as UK and US, AT&C losses are about 6-7%.
- **Technical loss is the energy lost as heat when electricity is carried over wires.** Poor equipment increases this loss. **Commercial losses are caused by theft and pilferage of power, and lack of metering and poor billing and collection systems.**

- **Differential tariff, delays in tariff revisions lead to financial losses**
 - The differential tariffs for commercial, industrial and agricultural consumers are prevalent in India due to direct subsidies received from the state government and cross-subsidisation by commercial and industrial consumers.
 - Supplying electricity at tariff lower than the cost to supply, along with delay in tariff revisions has led to discoms facing huge financial losses.
- **Borrowings by state owned discoms has been increasing**
 - The accumulated losses of state-owned discoms (without subsidies) rose from Rs 11,699 crore in 2004-05 to Rs 71,271 crore in 2013-14. These losses have resulted in state discoms relying more on short-term loans to fund their operations.
 - Consequently, the interest cost on these loans worsens the poor finances of state discoms. Poor finances of the discoms affect their ability to buy power, thus leading to power deficits.
- **Renewable energy pricing per unit is costly**
 - The thermal power is still cheaper than renewable power due to the small size and huge costs of renewable power plants.
 - The implementation of intended nationally determined goals under Paris climate Agreement requires India to shift from thermal to renewable power.
- **Efficient Power storage technology not available**
 - India is not having the efficient power storage technology. There are four types of approaches adopted towards power saving in the world:
 - **Batteries** – a range of electrochemical storage solutions, including advanced chemistry batteries, flow batteries, and capacitors
 - **Thermal** – capturing heat and cold to create

energy on demand or offset energy needs

- **Mechanical Storage** – other innovative technologies to harness kinetic or gravitational energy to store electricity
- **Solar cells** – converts sunlight into electricity.
- **Hydrogen** – excess electricity generation can be converted into hydrogen via electrolysis and stored
- **Pumped Hydropower** – creating large-scale reservoirs of energy with water

Government Initiatives for promoting Power Sector

The Government of India has identified power sector as a key sector of focus so as to promote sustained industrial growth. Some initiatives by the Government of India to boost the Indian power sector:

- **Structural changes in the regulatory framework:**
 - ▶ The power sector in an economy is typically broken into three segments: Generation, transmission and distribution. These three segments and power trading are regulated in India under a consolidated and modernized Electricity Act of 2003.
 - ▶ A draft amendment to Electricity Act, 2003 has been introduced. It discusses separation of content & carriage, direct benefit transfer of subsidy, 24*7 Power supply is an obligation, penalisation on violation of PPA, setting up Smart Meter and Prepaid Meters along with regulations related to the same.
- **Ujwal Discoms Assurance Yojana (UDAY):**
 - ▶ It was launched by the Government of India to encourage operational and financial turnaround of State-owned Power Distribution Companies (DISCOMS), with an aim to reduce Aggregate

Technical & Commercial (AT&C) losses to 15 per cent by FY19.

- ▶ The power deficit situation in the country has improved in the past few years. From 2008 to 2014, energy deficit (shortfall in energy supply during a day) has reduced from 11.0% to 3.6% and peak deficit (shortfall in supply during highest consumption period in a day) has reduced from 11.9% to 4.7%.
- **Power tariffs:** As of August 2018, the Ministry of New and Renewable Energy set solar power tariff caps at Rs 2.50 (US\$ 0.04) and Rs 2.68 (US\$ 0.04) unit for developers using domestic and imported solar cells and modules, respectively.
- **National Policy on Biofuels-2018:** The Government of India approved National Policy on Biofuels – 2018, the expected benefits of this policy are health benefits, cleaner environment, employment generation, reduced import dependency, boost to infrastructural investment in rural areas and additional income to farmers.

◎ WAY FORWARD

India aims to have a renewables capacity of 175 GW by 2022 and 500 GW by 2030. Solar and wind power plants would account for much of the targeted capacity from renewables. How can this be achieved? A cost-effective way to power generation is the key:

- Create generation assets with the lowest unit cost by optimising plant capacities and encouraging private sector investment.
- Build large capacity plants so that cost-effective power generation is realized
- Declining marginal cost for capacity provides opportunities for replacing existing capacity with newer capacity that are more efficient.

INDIA-CHINA RELATIONS

CONTEXT

- Recently, Chinese President Xi Jinping visited India for the second Informal Summit with Prime Minister Narendra Modi.

◎ BACKGROUND

- India and China both the countries started off on cordial note post-independence with signing of Panchsheel. However the relations turned cold post 1962 war which created mistrust between the two countries since then.
- India-China relationship is dotted with competition, cooperation, and discord. In 2017 these played out in India's critique of China's Belt and Road Initiative (BRI), India's entry into the Shanghai Cooperation Organisation (SCO), the dramatic crisis in Doklam, the acceleration of multilateral cooperation in the BRICS and attempts to foster economic engagement.
- Both the countries have similar attributes and problems including large population, huge rural-urban divide, rising economy and conflict with neighbours.

◎ ANALYSIS

Cooperation

◦ Economic Relations

► Trade:

- The India-China bilateral trade reached **\$84.44 billion in 2017**.
- India has emerged as the **seventh largest export** destination for Chinese products and the **24th largest exporter to China**.
- India's top exports** to China include **diamonds, cotton yarn, iron ore, copper and organic chemicals**.
- India **imports electrical machinery and equipment, fertilizer, antibiotics and organic compounds**.
- The **trade deficit had crossed \$52 billion in 2017**. India has been **pressing China to open IT and Pharmaceutical sectors for Indian firms to reduce the massive trade deficit**.

► Investment and Banking:

- Seven Indian Banks have opened branches in China. Chinese bank and ICBC have opened branches in India.

- Cumulative **Chinese investment** in India till March 2017 stood at **US\$ 4.91 billion**. The cumulative **Indian investment in China** till March 2017 reached **US\$ 705 million**.

- **E-business visa:** More recently, in April 2017, e-business visa has been introduced to encourage more number of business people from China travelling to India. It will give push to the trade and business cooperation.

- **Dialogue Mechanisms:** The India-China Economic and Commercial Relations are shaped through various dialogue mechanism:

- **Joint Economic Group** led by the Commerce Ministers of both sides
- **Strategic Economic Dialogues** led by the Vice Chairman of NITI Ayog and the Chairman of National Development and Reform Commission of China
- NITI Ayog and the Development Research Center Dialogue and the Financial Dialogue led by Secretary Department of Economic Affairs of India and Vice Minister, Ministry of Finance of PRC.

◦ Cultural relations

- India-China cultural exchanges date back to many centuries and there is some evidence that **conceptual and linguistic exchanges** existed in 1500-1000 B.C. between the **Shang-Zhou civilization and the ancient Vedic civilization**.
- During first, second and third centuries A.D. **several Buddhist pilgrims and scholars travelled to China** on the historic "silk route".
- As a mark of the historical civilizational contact between India and China, **India constructed a Buddhist temple in Luoyang, Henan Province**, inside the White Horse Temple complex which was said to have been built in honour of the Indian monks Kashyapa Matanga and Dharmaratna.
- **Yoga is becoming increasingly popular in China**. China was one of the co-sponsors to the UN resolution designating June 21 as the International Day of Yoga.
- **Indian Bollywood movies were popular in China** in the 1960s and 1970s and the popularity is being rekindled in recent times

again. **India and China have entered into an agreement on co-production of movies**, the first of which based on the life of the monk Xuan Zang hit the theaters in 2016.

◉ Education Relation

- ▶ India and China signed **Education Exchange Programme (EEP) in 2006**, which is an umbrella agreement for educational cooperation between the two countries. Under this agreement, government scholarships are awarded to 25 students, by both sides, in recognized institutions of higher learning in each other's country.
- ▶ Chinese students are also annually awarded scholarships to study Hindi at the Kendriya Hindi Sansthan, Agra to learn Hindi
- ▶ **BRICS Network University and BRICS Think Tank Council** are institutional networks for engaging with each other in education research and innovation.

◉ Indian Diaspora In china

- ▶ The Indian community in China is growing. Present estimates put the community strength to around 35,500. A major part of this comprises of students (over 18000), who are pursuing courses in various universities in China.
- ▶ A number of Indians and PIOs are also working as professionals with various multinational and Indian companies.
- ▶ Indian diaspora will help in further strengthening our ties with China.

Mutual Interests of India and China

- ◉ Both are members of BRICS, which is now establishing a formal lending arm, the New Development Bank.
- ◉ India is a founding member of the China-backed Asian Infrastructure Investment Bank.
- ◉ China welcomed India's full membership of Shanghai Cooperation Organization, an Eurasian political, economic, and security alliance.
- ◉ Both countries have advocated democratization of international institutions such as World Bank, IMF, etc.
- ◉ China and India have similar stand during WTO negotiations.
- ◉ China and India, being the main targets of criticism by the US and its friends, have so far successfully coordinated their strategies in the environmental summits

Major irritants

- ◉ **Trade imbalance** is skewed in China's favour viz. **\$52 billion when total trade volume was of the value of \$84.44 billion in 2017**

- ◉ **Border Disputes** – India and China share about 3,488-km long border which is yet to be fully delineated. The skirmishes between the security forces of the two countries in Dokhlam, Aksai Chin and Arunachal Pradesh are common in this disputed state of borders.
- ◉ **India supports a Tibetan govt.** in exile formed by Dalai Lama which is unacceptable to china. China recently opposed to the Dalai Lama's visit to Arunachal Pradesh, particularly Tawang, which it considers as Southern Tibet. On recent Visit of President Xi Jinping, Tibetan leaders in India were arrested.
- ◉ China began the **practice of issuing stapled visa to residents of Arunachal Pradesh and Pakistan occupied Jammu & Kashmir**, though it stopped it for PoK but continues for AP.
- ◉ China has an **undeclared policy of String of Pearls to encircle India**, which involves building of ports and naval bases around India's maritime reaches. While India has been trying to develop closer arrangements with the countries surrounding China viz. Japan, South Korea & Vietnam.
- ◉ China has been **building dams in Tibet part of Brahmaputra**. India has objected but there has been no formal treaty over sharing of the Brahmaputra water.
- ◉ China has been blocking India's entry to NSG & has also blocked India's attempt at the UN for sanctions against Jash-e-Mohammad chief Masood Azhar many times but finally Masood Azhar was put on UN blacklist.
- ◉ India considers **building of the CPEC as China's interference in India's sovereignty** and territorial integrity.

India's Three-Pronged Strategy towards China

- ◉ **The first prong** is to engage in bilateral and multilateral forums such as BRICS, SCO and the Russia-India-China trilateral, in order to maintain overall stability, deepen economic ties, and foster diplomatic cooperation on regional and international issues.
- ◉ India has also sustained efforts to enhance its military and deterrent capabilities as the **second prong of policy**.
- ◉ There is an emerging **third prong** in India's China policy in the form of new external balancing effort. The evolution of India-US relations in particular but also of India's relationships with Japan and Australia as well as the quadrilateral cooperation among them indicates a growing convergence in their views regarding stability in the Indo-

Pacific region particularly with respect to China's intentions in laying territorial claims to more than 80 per cent of the South China Sea as well as to the sovereign territories of India and Japan.

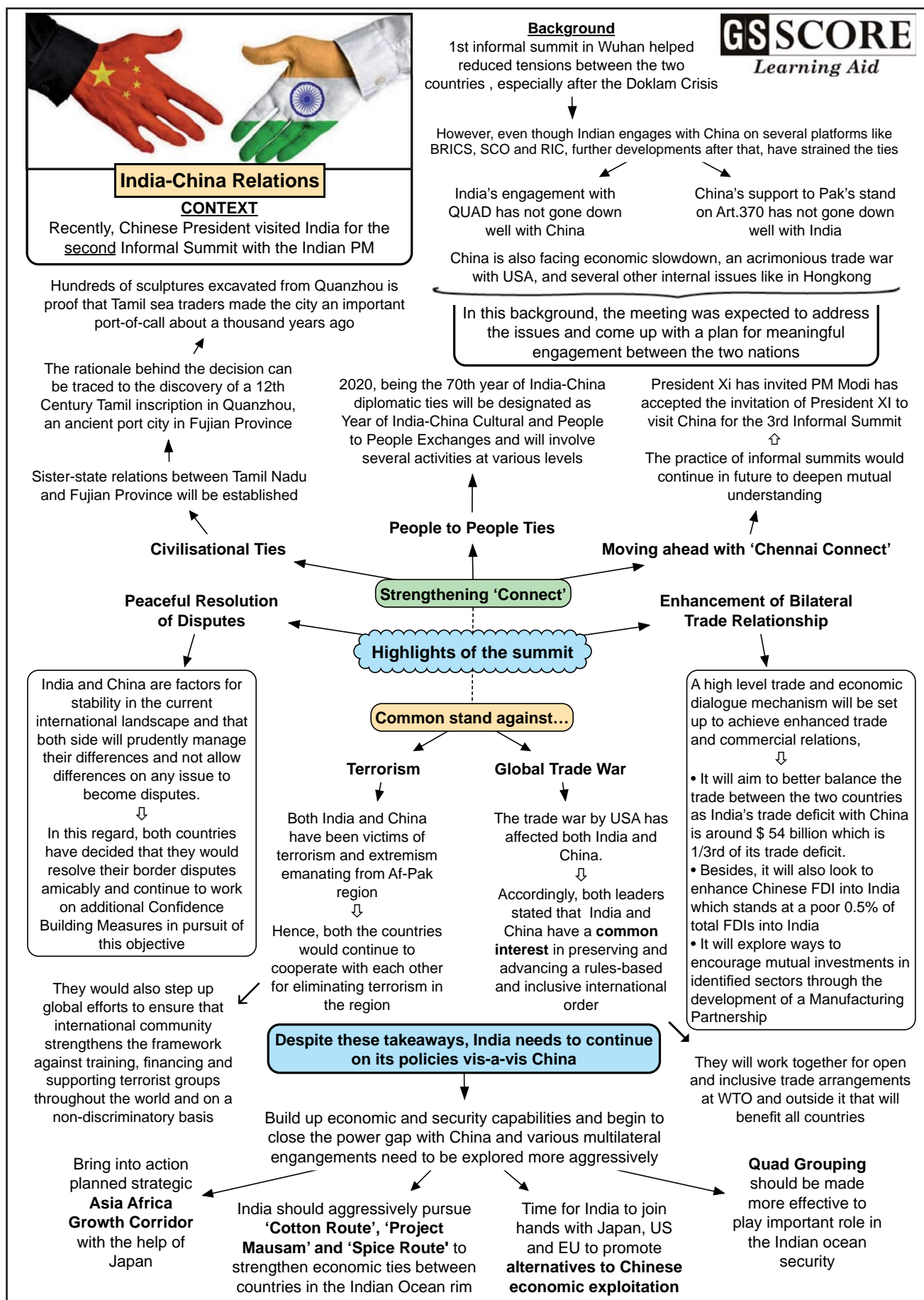
◎ WAY FORWARD

- Necessary to build up economic and security capabilities and begin to close the power gap with China.
- India's foreign policy formulations on China and Pakistan need no longer be considered as separate instead one hyphenated strategic entity.
- Time for India to join hands with Japan, US and EU to promote alternatives to Chinese economic exploitation.
- India should aggressively pursue 'Cotton Route', Project Mausam and Spice Route to strengthen economic ties between countries in the Indian Ocean rim.
- Bring into action planned strategic Asia Africa Growth Corridor with the help of Japan.
- Quad Grouping should be made more effective to play important role in the Indian ocean security.
- Wuhan and Mamalapuram like summits should continue to ease the tension between India and China.



Practice Question

- **There are major irritants in India-China relationship. Informal summits have evolved as a new tool to ease stress in the Indo-China relationship. In the light of this examine the Wuhan and Mamalapuram summits as a tool for strengthening the relations between two countries.**



AN APPRAISAL OF THE RED CORRIDOR

CONTEXT

- Special Secretary at the Chief Minister's Office Ramakant Singh has instructed to pay scholarship in a week under the skill development scheme in the Left Wing Extremism affected districts to the ITI-trained students.

◎ BACKGROUND

- Left Wing Extremism (LWE) is recognised as one of the most serious threats, not only to India's internal security but indeed to the very basic values of the democratic, pluralistic political order enshrined in our Constitution
- Since 1967, when the movement started in a few 'Parganas' in West Bengal, it has gradually spread its tentacles into nearly 90 districts in nine states.
- Over the past 51 years, the armed activists of the movement have accounted for widespread death and destruction.
- Later, over the decades that followed, the movement assumed alarming proportions,
- Threatening peace and security over a vast stretch of land spread across 10 states, described as 'Red Corridor'.

- In 2017, a total of 263 fatal casualties were recorded and 1888 CPI-Maoists cadres were arrested, which is the highest till now.
- The state-wide classification of the most affected districts is as below.

LWE Most Affected Districts		
No.	States	Districts
1.	Andhra Pradesh (1)	Vishakhapatnam
2.	Bihar (4)	Aurangabad, Gaya, Jamui, Lakhisarai
3.	Chhattisgarh (8)	Bastar, Bijapur, Dantewada, Kanker, Kondagaon, Narayanpur, Rajnandangao, Sukma
4.	Jharkhand (13)	Bokaro, Chatra, Garhwa, Giridih, Gumla, Hazaribagh, Khunti, Latehar, Lohardaga, Palamu, Ranchi, Simdega, West Singhbhum.
5.	Maharashtra (1)	Gadchiroli
6.	Odisha (2)	Koraput, Malkangiri
7.	Telangana (1)	Bhadradi-Kothagudem

◎ ANALYSIS

The Naxalite movement prominently focuses on major issues like:

- Reallocation of land resources;
- Ensuring minimum wages for the labour working in the farms;
- Running a parallel government and impose tax and penalties;
- Run parallel Kangaroo Courts;
- Destruction of government property and abduct its officials;
- Attacks on police and law enforcing machinery;
- Enforce its own social code of conduct

Current Status

- Over the years, at the peak of the LWE movement, nearly 40 per cent of India's land mass, covering approximately 35 per cent of its population, was affected.
- According to a recent security review by the Ministry of Home Affairs, (MHA), violence in LWE affected region is now spans 90 districts across 10 states.

Mobilisation of LWE Supporters in Urban Areas

- Concurrently, even when the LWE movement is under intense pressure, because of a combination of proactive security and effective development measures, a steady rise in pro-Naxal activities in urban India is being observed.
- The recent trend of strong coordination between parent organisations like the CPI-Maoists and other like-minded organisations is being reflected in the various programmes carried out by these organisations, against the alleged state violence and for protection of democratic rights like displacement of local communities.

- It remained the main rationale for mobilisation for civil society organisations like the Niyamgiri Suraksha Samitee, actively agitating in the Niyamgiri Hills area and the Jharkhand Visthapan Virodhi Jan Vikas Andolan, a front of CPI-M agitating against amendments to the Chhotanagpur and Santhal Pargana Tenancy Acts.
- In this backdrop, a systematic approach was initiated by the CPI-M to mobilise resources and achieve the following objectives through urban mobilisation, taking advantage of their anonymity in the urban centres.
 - Mobilise masses and strengthen organisational structures:** Under this programme, the Maoists mainly targeted students, workers, middle-class employees, and focused on social issues like women's rights, the grievances of Dalits, and religious minorities and politicised issues in accordance with the communist ideology.
 - Develop a United Front:** Another component of the above strategy was to unify like-minded organisations of workers, students from urban localities, organisations opposing globalisation, etc and to consolidate them.
 - Military Task:** The military wings of CPI-M, PGI and PLGA, were to carry out the military tasks in the rural and least developed regions of the country while the urban Naxals were to complement their efforts by recruiting cadres and sending them into the countryside, infiltrating 'enemy' ranks, creating unions in crucial industries, sabotaging actions with the

support of armed cadres, arranging financial and logistical support for armed cadres hiding in the remote localities.

Government of India's Approach

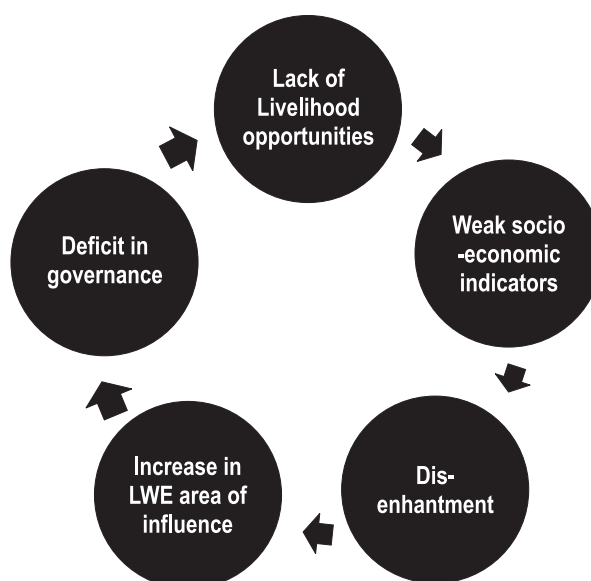
- Review Mechanism:** For effective implementation of the NPAP, the MHA established a robust mechanism under which timely reviews are conducted and policies and strategies are amended or fine-tuned.
- SAMADHAN-A Comprehensive Policy Tool:** an integrated strategy through which LWE can be countered with full force and competence. This is a compilation of short term and long-term policies formulated at different levels.
- Tracking Flow of Weapons:** Real-time technical intelligence plays a decisive role in any proactive counter-insurgency force and its timely receipt defines the strength of that force. In developing these capabilities, the MHA has deployed at least one Unmanned Aerial Vehicle (UAV) or Mini-UAV for each CAPF battalions. More helicopter support is provided for CAPFs to rush in supplies and reinforcements.
- Tracking Finances:** Apart from robust kinetic measures, a pre-emptive approach warrants limiting the resources of LWE movement and its cadres through effective coordination and thorough investigation.
- Multi-agency Approach:** the Ministry of Home Affairs has set up a Multi-Disciplinary Group (MDG) comprising officers from the Intelligence

CYCLES OF DEVELOPMENT AND EXTREMISM

Development-Virtuous Cycle



Extremism-Vicious Cycle



Bureau (IB), Central Bureau of Investigation (CBI), Enforcement Directorate, Directorate of Revenue Intelligence (DRI), NIA, Central Board of Direct Taxation (CBDT), CRPF and the state police as well as their Special Branches, Criminal Investigation Departments (CIDs) and other state units. This group is utilised by the MHA as a forum for evolving a well-coordinated approach for handling prolonged national security challenges.

- **Bastariya Battalion:** the CRPF has decided to enhance local representation in its combat layout deployed in the Bastar area to provide the 'Bastariya' youth better avenues of employment under its Civic Action Programme.

Development Initiatives by Government of India

- **Road Connectivity Schemes:** The Road Requirement Plan is being implemented by the Ministry of Road Transport and Highways with the objective of better connectivity in 34 LWE affected districts of nine states.
- **Data Connectivity:** The Department of Telecom is proactively implementing schemes for better data connectivity of LWE affected states with the rest of the country. These efforts are yielding constructive results, helping the security forces with better data connectivity for executing counter-insurgency operations successfully.
- **Electrification Initiatives in LWE Districts:** The Ministry of Power has proactively started the electrification of the villages in the LWE affected

districts under Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY).

- **Employment Initiatives:** Along with several infrastructural schemes, the Government of India is also executing several schemes under the Pradhan Mantri Kaushal Vikas Yojna (PMKVY) that are empowering the citizens with the required skill sets to earn their livelihood. Under this programme 47 Industrial Training Institutes (ITIs) and 68 Skill Development Centres (SDCs) are to be established.

◎ WAY FORWARD

- Ensuring effective governance for the well-being of the affected sections of the population.
- Transforming the state police into an effective counterinsurgency force.
- Timely execution and completion of development schemes.
- Further, the states can also improve governance by playing a constructive role in: Suggesting specific, actionable interventions in existing schemes which are being run by the Central Government in the state.
- Encouraging civil society and youth to act in a constructive way rather than resorting to mere right based agitations.
- Unleashing the competitive spirit among all stakeholders.
- Timely sharing of information on district-specific issues.

Practice Question

- A Permanent solution to Naxalism lies in knowing the needs of the tribals & to reverse the sense of Alienation they feel. Analyze.

An Appraisal of the Red Corridor**Context**

A Special Secretary at the Jharkhand CM's Office has instructed to pay scholarship in a week under the skill development scheme in the Left Wing Extremism (LWE) affected districts to the ITI-trained students

A brief history of repeated revivals of LWE

1st phase of LWE: 1967-72

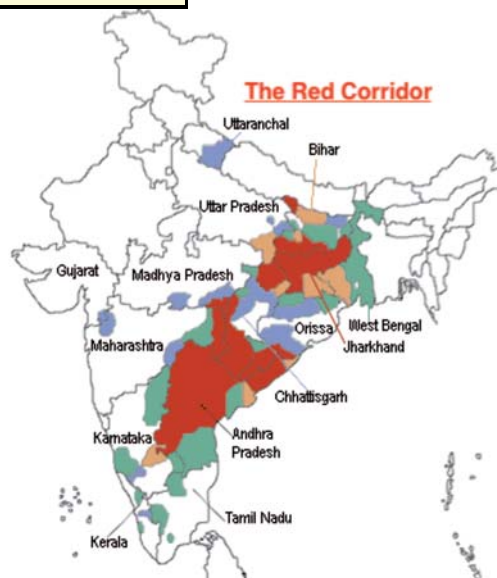
Operation 'Steeplechase' by GoI leading to death of Charu Majumdar

Formation of People's War Group in 1980 in Andhra → **2nd phase** started

In 1990s, operations by forces and internal dissensions weakened LWE

3rd phase : People's Guerilla Army formed in 2000 and eventually, merger of People's War and Maoist Communist Centre in 2004 to form CPI(Maoist)

philosophy to overthrow govt through armed insurgency

**Govt's Counter Strategy****National Policy and Action Plan (since 2015)****Security**

All affected districts identified

covered under **SRE** (Security Related Expenditure Scheme) ⇒ reimbursement of security related expenses by MHA to states

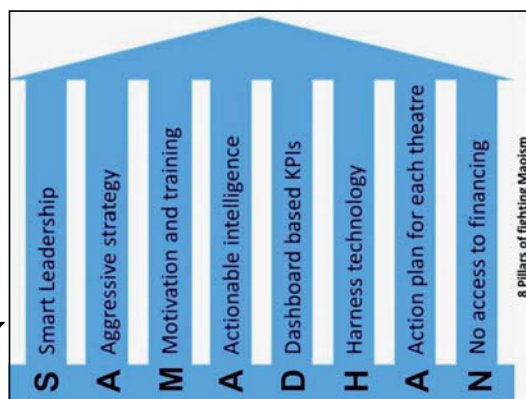
Provision of Central forces, modernisation of security infrastructure, intelligence sharing, etc

Use of Samadhan strategy

Development

Reduction in poverty
(By PDS system, MSP and other schemes)

Construction of roads & railways, banks, schools, etc



Effect of the various measures have been that **violent incidents and deaths** have reduced 20% and 34% respectively in 2017 compared to 2013

There is also a decrease in geographical spread with list of affected districts has going down to 90 from 126

What more can be done

Ensuring effective governance for the well-being of the affected sections of the population

Transforming the state police into an effective counterinsurgency force

Further, the states can also improve governance by playing a constructive role in: Suggesting specific, actionable interventions in existing schemes which are being run by the Central Government in the state

However, as seen from the repeated revivals of Naxalism over the decades, the seeds for further revival continue to exist...

Inequalities in India have sharpened over the years and may be used by Maoists to further their agenda

Agrarian distress continues to be a concern

Systemic corruption is also a cause of popular dissatisfaction

Repression of tribal people by maoist authoritarianism and also by some state actions (like now defunct Salwa Judum)

These need to be addressed/mitigated to a significant extent and should form part of the overall strategy of the government in further strategies to root out LWE.

RE-EXAMINING FEDERALISM IN INDIA

CONTEXT

- Recent developments in Indian economy and polity have made stronger the case for India's move towards greater decentralization. This has started a debate on re-examining federalism in India.

◎ BACKGROUND:

Basis of Indian Federalism:

- Indian freedom movement and the unity between different provinces and states represent the basic character of Indian federalism.
- The **Government of India Act 1935** provides to establish India as a Federation of States. However, it also provided for a **powerful Centre**.
- The core of India's federal structure stems from the **Seventh Schedule** of Indian constitution, which has **three lists—Union, concurrent and state**.
- An item from the state list moving to the concurrent list, or an item from the concurrent list moving to the Union list, represents centralization. A movement in the opposite direction represents decentralization.
- Institutions like finance commission, National integration Council and recently the NITI aayog shows the federal character of India.

◎ ANALYSIS:

- Today, in a **liberalized environment**, the ideological position behind a case for federalism is different than what it was at the time of independence.
- Globalisation** process has generated a **phase of 'competitive federalism'**, where provincial governments compete among themselves, and with the centre, to attract investment, capital and technology. New concepts of federalism like '**cooperative federalism**' have also evolved.
- It is important to choose the right model of federalism as suiting the new times and age, because, the mal-functioning of federal structure, can even give rise to **secessionist, inter-state, border-related, ethnic and nationalistic strife**.

Fault lines in the Indian model of Federalism:

- Ambiguity in distribution of Subjects:**
 - At the time of making of the constitution there was **no guiding principle** that clarified the position as to why an item was placed in the Union, concurrent or state lists.

- And once the item was placed under a list, there has been **little adherence to it**. For example, while health is an entry under state list, union government undertakes various initiatives in health.

- Multi-layered character of the Local Governments (LGs):**

- The **73rd and 74th amendments** which were essentially meant to **deepen federalism** in India, added **three tiers of Panchayati Raj Institutions**— Gram Sabha (village level), Mandal Parishad (block level), Zila Parishad (district level). This turned Indian federation into a multi-level federal system with a **multi-level public finance**.

- Because the **fiscal space of LGs was left ill-defined**, it created multiple channels of transfer arrangements, resulting in **conflicting priorities and distorted outcomes**.

- Tussles between the agencies:**

- Conflict between agencies of **central government and state government** stress cohesive functioning of centre and states.

- For example, states often do not allow smooth functioning of **central investigation agencies within their states**.

- Institutions like the **Supreme Court, RBI, CBI, Election Commission, and academic institutions** are pillars of the republic. **Overbearing interference** in their functioning can disturb their autonomy and create centralist tendencies.

- Existence of **emergency provisions** in the constitution, though passed as a safeguard, if misused, can amount to centralisation of power.

- Differences in the way some states and union territories relate to the Centre:**

- Some Union Territories have **legislature** (Delhi and Pondicherry) while others don't.

- Unlike any other, **Pondicherry** despite being a single administrative unit, is '**non-contiguous**'.

- Delhi** has three further exceptions: **police, land and public order** are outside its purview.

- '**Special provisions**' empower some state **Governors** to discharge some special responsibilities (Maharashtra, Gujarat, Manipur,

Nagaland, Sikkim and Arunachal Pradesh).

- ▶ This creates a **notable asymmetry** in the way Indian federalism works.
- ◉ Another case in point is that of **community resources** like water. Role given by the Constitution to the Centre in regard to **inter-state rivers** has not been made much use of to devise effective **conflict-resolution mechanisms**.

How to strengthen federalism in India?

- ◉ It is important to have a **clear division** of labour, functions, responsibilities and regulatory role of various levels of governments.
- ◉ There is need to **re-look and redistribute entries in the Seventh Schedule**.
 - ▶ **The principle of subsidiarity** can be used as a relevant guiding principle. Which states, what can be done best (**with minimum transaction and coordination costs**) at a particular level should be done at that level and not at a higher level or lower level. This approach could be the most optimal.
- ◉ **Sarkaria Commission Recommendation:** Union government must consult the states before legislating on items in the concurrent list.
- ◉ **Punchhi Commission Recommendation:** Greater flexibility to states in relation to subjects in the state list and 'transferred items' in the concurrent list.
- ◉ LGs should have a **predictable flow** of **untied**

funds with the freedom to plan and prioritize. It is also important to incentivize LGs to **mobilise their own source revenue**, like, property tax.

- ◉ **Lessons can be learnt from Kerala** which realised the operational difficulties in 73rd/74th amendments, and tried to disaggregate the subjects given under schedules XI and XII into activities and sub-activities.
- ◉ An **activity mapping drive** at the state level should be carried out for all tiers of local government, and this democratic bottom-up planning exercise should be taken up as a national goal.
- ◉ **Autonomy** of institutions must **not be compromised**.
- ◉ **New mechanisms rather than tribunals** should be considered as solution to the problem of Inter-State River Water Disputes in India. Focus should shift **from Conflict Resolution to Enabling Cooperation**.

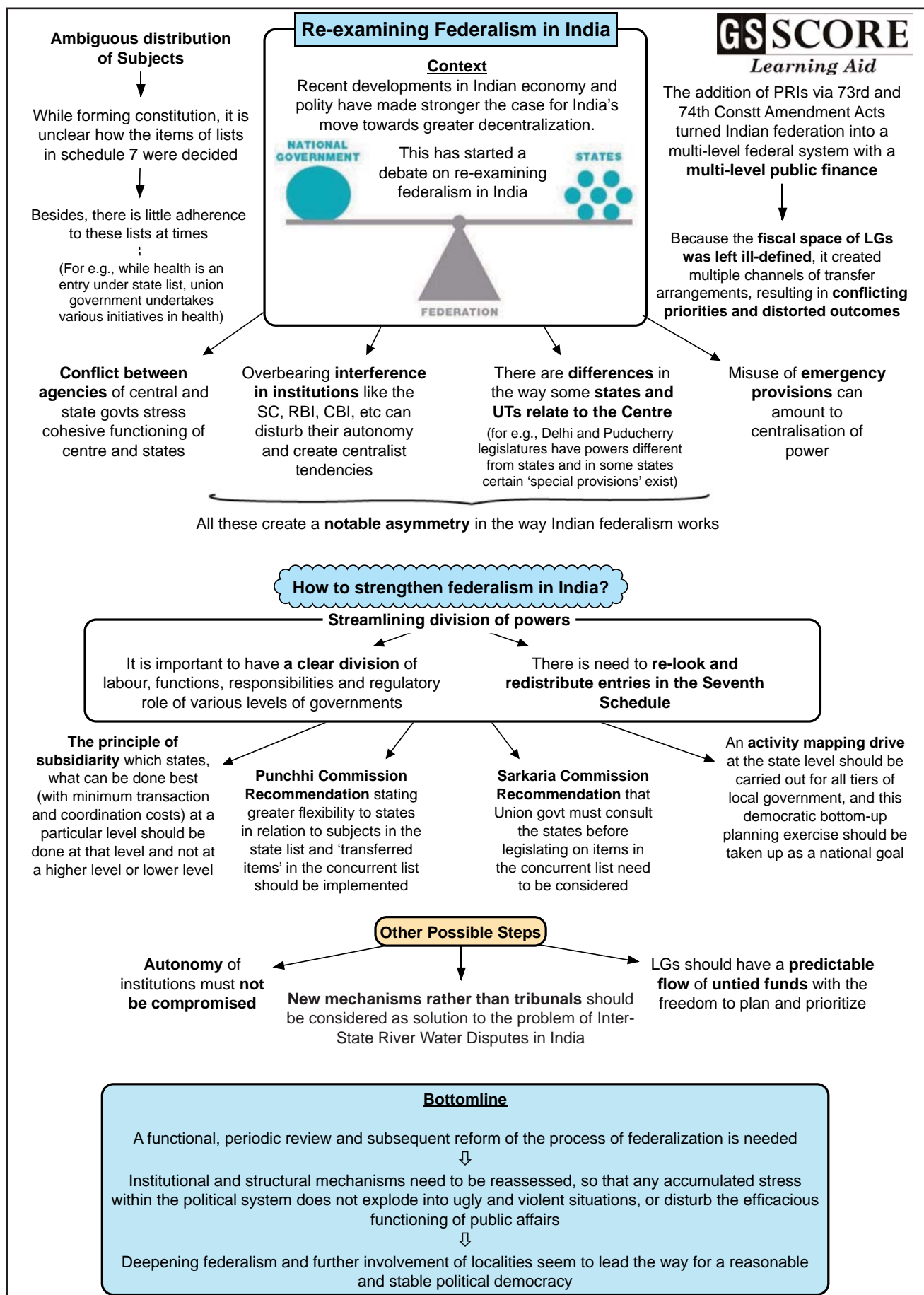
CONCLUSION:

A functional, periodic review and subsequent reform of the process of federalization is needed. Institutional and structural mechanisms needed to be reassessed, so that any accumulated stress within the political system does not explode into ugly and violent situations, or disturb the efficacious functioning of public affairs. Deepening federalism and further involvement of localities seem to lead the way for a reasonable and stable political democracy.



Practice Question

- ◉ What are the fault lines in Indian model of Federalism, and how should they be overcome?



MENTAL HEALTH

CONTEXT

- 10th of October every year is observed as World Mental Health Day. The purpose of which is to spread awareness about mental health issues around the world and mobilize efforts in support of mental health.

◎ BACKGROUND:

- Mental health is an integral and essential component of health. It is fundamental to our collective and individual ability as humans to think, emote, interact with each other, earn a living and at the same time, enjoy life. The level of mental health of a person is determined by multiple social, psychological, and biological factors.
- This year, the theme of World Mental Health Day was "Suicide Prevention".
- As per WHO data, every 40 seconds, someone loses their life to suicide. In fact, suicide is the principal cause of death among people in the age group of 15 to 29.
- In India, close to 14 percent of India's population required active mental health interventions, as per the 2016 National Mental Health Survey.

◎ ANALYSIS:

What is mental health?

- The World Health Organization defines mental health as "a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community".
- The absence of mental disorder does not necessarily mean the presence of good mental health. People living with mental disorder can also achieve good levels of wellbeing – living a satisfying, meaningful, contributing life within the constraints of painful, distressing, or debilitating symptoms.

The reasons for increasing cases of mental health:

- Changing lifestyle patterns:** In last two decades there have been so many changes in lifestyle. There have been advances in information technology; the global virtual mobility has become much easier. In this period there has been more virtual communication and person to person communication has been going down which leads towards the mental illness.
- Social stigma and discrimination:** People do not accept the fact that they are suffering from mental illness. This mindset helps aggravate the health issues related to mental distress.
- Career driven mindset of parents:** Parents see unfulfilled dreams of them into the eyes of their

children. Hence they push children to achieve the desired goals of them without taking in to the consideration the will of their children. This leads to the mental health issues in many students. This could be the one of the reason for India having the highest number of suicides among youth.

- Extensive use of smartphones:** Extensive use of mobile phones affects the sleep pattern of person which indirectly leads to the mental stress. Younger generation is mostly the victim of this.
- Demographic Determinants:** Gender inequality, racial, regional and ethnic discrimination etc. could lead to the mental health problems.
- Environmental Determinants:** Natural hazards, industrial disasters, armed conflict, displacement, and disasters triggered by ecosystem hazards due to climate change or increased population.

In India WHO says that 7.5% of Indian population suffers from some form of mental disorder.

Different types of mental disorders:

- Depression:** Depression is characterized by sadness, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, tiredness, and poor concentration. People with depression may also have multiple physical complaints with no apparent physical cause. Depression can be long-lasting or recurrent, substantially impairing people's ability to function at work or school and to cope with daily life. At its most severe, depression can lead to suicide.
- Bipolar affective disorder:** This disorder affects about 60 million people worldwide. It typically consists of both manic and depressive episodes separated by periods of normal mood. Manic episodes involve elevated or irritable mood, over-activity, pressure of speech, inflated self-esteem and a decreased need for sleep. People who have manic attacks but do not experience depressive episodes are also classified as having bipolar disorder.
- Schizophrenia and other psychoses:** Schizophrenia is a severe mental disorder, affecting about 23 million people worldwide. Psychoses, including schizophrenia, are characterized by distortions in thinking, perception, emotions, language, sense of self and behaviour.
- Dementia:** Worldwide, approximately 50 million people have dementia. Dementia is usually of a chronic or progressive nature in which there is deterioration in cognitive function (i.e. the ability to

process thought) beyond what might be expected from normal ageing. It affects memory, thinking, orientation, comprehension, calculation, learning capacity, language, and judgement.

What should be done to tackle the increasing menace of mental health?

• Individual awareness:

Individual should take care of own mental health instead of depending on others.

- ▶ **Relaxation exercises and prayer can improve the state of mind and outlook on life.** In fact, research shows that meditation may help you feel calm and enhance the effects of therapy.
- ▶ **Taking care of self physically** can improve one's mental health.
- ▶ Eating nutritious meals, avoiding cigarettes, drinking plenty of water will help decrease depression and anxiety and improve moods.
- ▶ **Individuals themselves should Keep alcohol use to a minimum and avoid other drugs.** Sometimes people use alcohol and other drugs to "self-medicate" but in reality, alcohol and other drugs only aggravate problems.
- **Policies to reduce alcohol and drug consumption:** There should be a comprehensive policy which focuses on measures to reduce the consumption of alcohol.
- **By providing affordable as well as easily accessible services** like psychiatry by governments and providing basic health care facilities at the door step.
- **There should be proper training of persons who treat and handle the patients** and take care of mental health patients. E.g. How to interact and communicate with mentally ill patients etc.
- **Reducing treatment gap:** There is need to enhance the availability and distribution of skilled human resources for mental health to reduce the treatment gap.
- **Actions to support mental health among children and adolescents:**
 - ▶ Schools play an integral role in nurturing development in terms of social, emotional, academic, and cognitive ability; the effects of which can influence children's short- and long-term mental health.
 - ▶ Make mental health a part of school curriculum.
- **To support mental health among older:** Promoting interventions which prolong and/or improve older people's social activities, life satisfaction, and quality of life can significantly

reduce depressive symptoms and protect against risk factors, such as social isolation.

Government initiatives to tackle mental health problem:

- **National Mental Health Programme:** The Government of India launched the National Mental Health Programme (NMHP) in 1982, keeping in view the heavy burden of mental illness in the community, and the absolute inadequacy of mental health care infrastructure in the country to deal with it. Three main components of NMHP are:
 - ▶ Treatment of Mentally ill
 - ▶ Rehabilitation
 - ▶ Prevention and promotion of positive mental health.
- **District Mental Health Program:** It envisages provision of basic mental health care services at the community level. Its objectives are:
 - ▶ To provide sustainable basic mental health services to the community and to integrate these services with other health services.
 - ▶ Early detection and treatment of patients within the community itself
 - ▶ To reduce the stigma of mental illness through public awareness.
 - ▶ To treat and rehabilitate mental patients within the community.
- **The Mental Health Care Act 2017:** It is an act to provide for mental healthcare and services for persons with mental illness and to protect, promote and fulfil the rights of such persons during delivery of mental healthcare and services and for matters connected therewith or incidental thereto.
- **The National Institute of Mental Health (NIMH):** It is the lead federal agency for research on mental disorders. NIMH is one of the 27 Institutes and Centres that make up the National Institutes of Health (NIH), the largest biomedical research agency in the world.

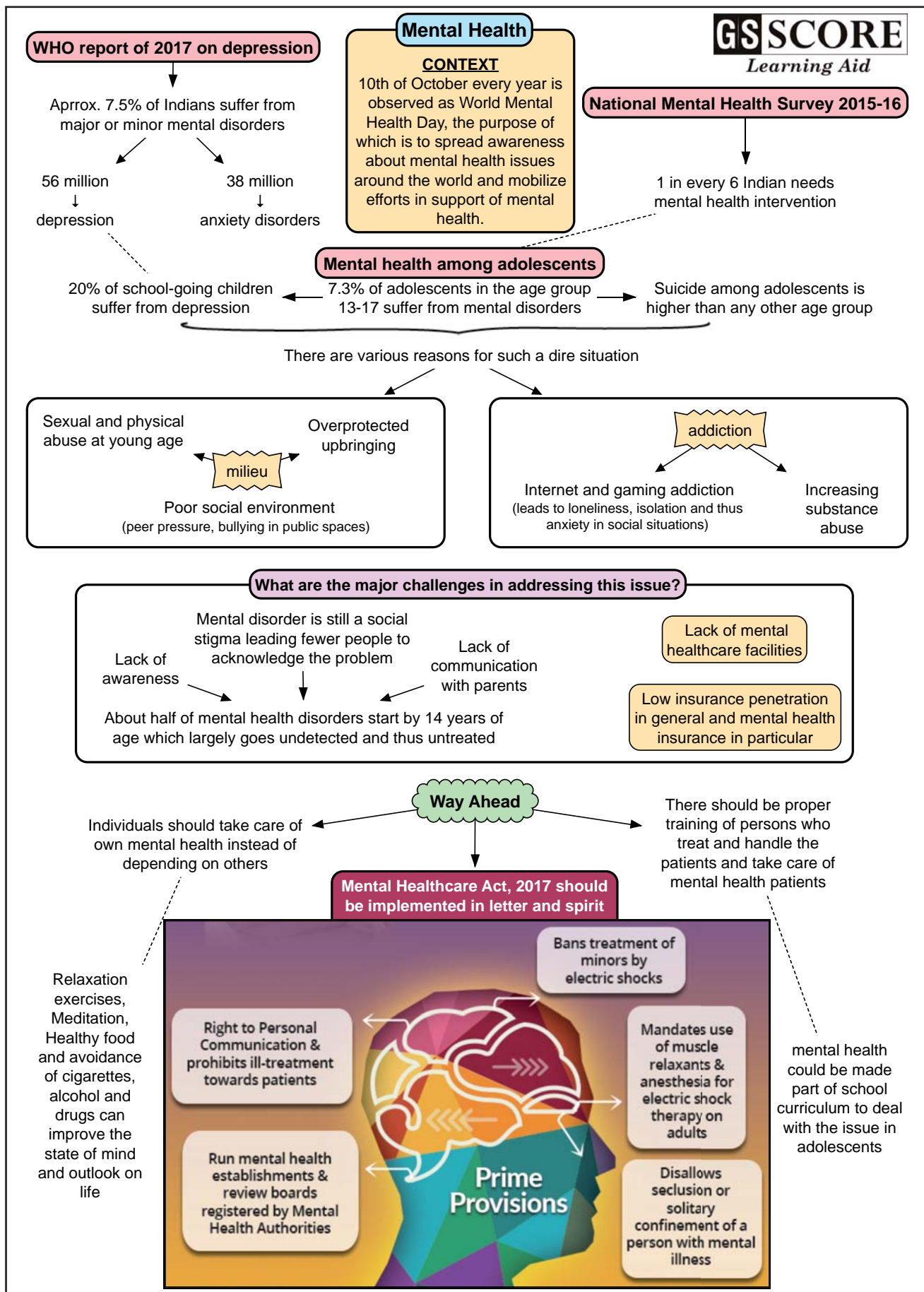
• CONCLUSION:

The biggest problem today is the discovery of mental illness is often followed by denial and hesitations to seek help. Despite its enormous social burden, mental health today remains a taboo, stigma, prejudice and fears. So there is a need to educate people about the reality that the mental illness is more common than the people realises. It is the society's responsibility to make people aware of the mental illness and get people more talking about it.



Practice Question

- What are the reasons for increasing cases of mental health issues in India? What steps government has taken to tackle the mental health menace? Suggest some measure for improved mental health.



SECTION: B
(PRELIMS)

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AYUSHMAN BHARAT SCHEME EMPOWERING SEVERAL INDIANS

◎ CONTEXT

- Prime Minister highlighted the progress made by the government's flagship Ayushman Bharat programme under which 50 lakh beneficiaries have been treated free of cost. It is described as an "important milestone" towards a healthy India.

◎ ABOUT

- Ayushman Bharat Yojana, also known as the Pradhan Mantri Jan Arogya Yojana (PMJAY), is a scheme that aims to help economically vulnerable Indians who are in need of healthcare facilities.
- The Ayushman Bharat Yojana - National Health Protection Scheme, which has now been renamed as Pradhan Mantri Jan Arogya Yojana, plans to make secondary and tertiary healthcare completely cashless.
- PM Jan Arogya Yojana beneficiaries get an e-card that can be used to avail services at an empanelled hospital, public or private, anywhere in the country. With it, you can walk into a hospital and obtain cashless treatment.

Salient Features

- Ayushman Bharat - National Health Protection Mission will have a defined benefit cover of Rs. 5 lakh per family per year.
- Benefits of the scheme are portable across the country and a beneficiary covered under the scheme will be allowed to take cashless benefits from any public/private empanelled hospitals across the country.
- Ayushman Bharat - National Health Protection Mission will be an entitlement based scheme with entitlement decided on the basis of deprivation criteria in the SECC database.
- The beneficiaries can avail benefits in both public and empanelled private facilities.
- To control costs, the payments for treatment will be done on package rate (to be defined by the Government in advance) basis.
- One of the core principles of Ayushman Bharat - National Health Protection Mission is to co-operative federalism and flexibility to states.
- For giving policy directions and fostering coordination between Centre and States, it is proposed to set up Ayushman Bharat National Health Protection Mission Council (AB-NHPMC) at apex level Chaired by Union Health and Family Welfare Minister.
- States would need to have State Health Agency (SHA) to implement the scheme.
- To ensure that the funds reach SHA on time, the transfer of funds from Central Government through Ayushman Bharat - National Health Protection Mission to State Health Agencies may be done through an escrow account directly.
- In partnership with NITI Aayog, a robust, modular, scalable and interoperable IT platform will be made operational which will entail a paperless, cashless transaction.

LIVESTOCK CENSUS

◎ CONTEXT

- The Ministry of Fisheries, Animal Husbandry & Dairying has released the 20th livestock census.

◎ ABOUT

- Livestock census provides headcount data of **domesticated animals in the country**.
- India has been conducting **livestock censuses** periodically **since 1919-20**.
- The **last livestock census** was conducted in **2012**.

- India **leads the world in livestock population.**
- Various species of animals possessed by **households, household enterprises or non-household enterprises and institutions (like cooperatives and religious places)** were counted at site — **both in rural and urban** areas in this census.

CATTLE marginally UP, GOATS AND SHEEP RISE SHARPLY

CHART 1: LIVESTOCK POPULATION (MAJOR SPECIES)

Category	2019 Population (in million)	% Growth
Cattle	192.49	0.83
Buffalo	109.85	1.06
Sheep	74.26	14.13
Goat	148.88	10.14
Pig	9.06	-12.03
Mithun	0.38	26.66
Yak	0.06	-25
Horses & Ponies	0.34	-45.58
Mule	0.08	-57.09
Donkey	0.12	-61.23
Camel	0.25	-37.05
Total Livestock	535.78	4.63

CHART 2: CATTLE POPULATION (MAJOR STATES)

Category	2019 Population (in million)	% Growth
West Bengal	19.0	15.18
Uttar Pradesh	18.8	-3.93
Madhya Pradesh	18.7	-4.42
Bihar	15.3	25.18
Maharashtra	13.9	-10.07
Rajasthan	13.9	4.41
Jharkhand	11.2	28.16
Assam	10.9	5.29
Chhattisgarh	10.0	1.63
Odisha	9.9	-15.01

CHART 3: CROSSBRED POPULATION GROWING FAST; INDIGENOUS DECLINING

Category	2019 Population (in million)	% Growth
Total Exotic/Crossbred	50.42	26.9
Total Indigenous/Non-Descript	142.11	-6

- **Animals and birds** counted in livestock census include domesticated animals (cattle, buffalo, mithun, yak, sheep, goat, pig, horse, pony, rabbit and elephant) and **poultry birds** (fowl, duck, emu, turkeys, quail and other poultry birds).
- For the first time, livestock data has been **collected online through tablet computers** procured under **NMBP Scheme**.

Key Findings

- **Indigenous cattle** population is further **down**. In 2019, **the total livestock population is 535.78 million; cattle (192.90 million) is the largest animal group in the country followed by goats (148.88 million), buffaloes (109.85 million), sheep (74.26 million) and pigs (9.06 million).**
- West Bengal has emerged as the state with the largest number of cattle in 2019, followed by Uttar Pradesh, and Madhya Pradesh.
- Population of **exotic /crossbred species** numbers have **gone up**.
- **West Bengal overtakes UP with largest cattle** population
- **Share of dairy animals** in total number of milch cattle has **gone down**.
- **Camel numbers are the lowest in Rajasthan in 7 decades.**
- Population ranking of livestock population is as follows: Cattle > Goats > Buffaloes > Sheep > Pigs > Other (All other animals taken together contribute just 0.23 per cent of the total livestock population in the country).

What are the implications?

- Due to continuous **fall in productivity, indigenous breeds** of cattle have become **liabilities**.
- Farmers find other animals such as buffaloes, goats and sheep more productive. Unlike cows, if they become unproductive, they can **be sold and slaughtered** for further processing.
- Fall in indigenous breeds can have **long term health and environmental impact**; because the **milk of indigenous breed has higher nutritional value** than that of crossbreeds.
- There is a **danger of losing these indigenous breeds**.
- **Decrease in cattle population in Uttar Pradesh** comes despite several steps taken by the state.
- Some increase in cattle population owes to the **ban on cattle slaughter**, which could have led to increase in cattle owners abandoning unproductive animals.
- This has caused **disruption in cattle economy** which **may adversely impact farm incomes** also.

RELEVANCE OF WHOLESALE PRICE INDEX (WPI)

◎ CONTEXT

- As Indian economy experiences demand slowdown and quashing of growth forecasts, a close look at the WPI can help gauge the extent of this slowdown.

◎ ABOUT

- **Wholesale Price Index (WPI)**-based inflation used to be the nominal anchor for the Reserve Bank of India's (RBI's) **monetary policy**.

Definitions

• Consumer Price Index

- CPI is a measure that examines the weighted average of prices of a basket of consumer goods and services, such as transportation, food, and medical care.
- Changes in the CPI are used to assess price changes associated with the cost of living.
- In India, CPI (Rural/Urban/Combined) is published by the **Central Statistics Office (Ministry of Statistics and Programme Implementation)** and CPI (IW/AL) is published by **Labour Bureau** in the Ministry of Labour and Employment. It is published on **monthly basis**
- The base year is 2012.

• Wholesale Price Index (WPI)

- WPI is an index that measures and tracks changes in prices of goods; at the factory, *mandi*, and essentially at various levels in the supply chain, before they reach the end consumer (retail level).
- In India, WPI is prepared by **Office of Economic Adviser, Ministry of Commerce and Industry on a weekly basis**.
- The base year is **2011-12**.

• Monetary Policy

- Monetary policy is the policy mostly drafted by a competent monetary authority of a country.
- The objectives include; controlling inflation, consumption, growth, and liquidity.

- These are achieved by actions such as modifying the interest rate, buying or selling government bonds, regulating foreign exchange rates, and changing the amount of money banks are required to maintain as reserves.
- **Inflation-Targeting**
 - Inflation targeting is a monetary policy where a central bank follows an **explicit target for the inflation rate** for the medium-term and announces this inflation target to the public.

- With the adoption of **inflation targeting**, RBI changed its nominal anchor to **Consumer Price Index (CPI)**-based inflation.
- This change made sense because **services** constitute a big component of demand, and **was not captured by WPI**.
- Recently, **WPI** is witnessing a persistent **downward trend**. **Manufactured products** inflation have become negative, and slipped into **deflation**.
- **Falling WPI corroborates with slowdown in Economy**.

What does declining trend in WPI mean?

- WPI captures the pricing power of manufacturers. A prolonged period of low WPI indicates **erosion in pricing power of manufacturers**/Indian companies.
- A sharp fall in WPI indicates that the **demand slowdown is pervasive** in all parts of the economy.
- The depressed demand conditions mean **producers cannot raise prices**, and may have to offer discounts to break the trend of falling sales, as witnessed in the **auto sector** already.
- The reason behind WPI collapse is **fall in global commodity prices** (mostly basic metals prices).

How is WPI more relevant today?

- CPI often mimics WPI trends, but lately **WPI- and CPI-based inflations are digressing away** from each other. This is mostly due to their **varied compositions**.

- **Imported Inflation**
 - Imported inflation is a general and sustainable **price increase** due to an **increase in costs of imported products**.
- **Bearish expectations**
 - A **negative outlook** on business activity for a future period of time.
 - A bearish market points to an **expectation that the prices will go down**.

- The large **weightage of 64%** accorded **to manufactured products in WPI**, helps WPI **capture the current demand slowdown** in the economy more accurately, than does CPI.
- This makes **WPI more relevant today** than before.
- WPI can be used in **assessing economic growth**, since it **captures the imported inflation/ disinflation**.
- Most multilateral organizations have slashed their forecast on India's economic growth for FY20.
- Against this backdrop, perhaps a **focus on WPI's trajectory can help determine the depth of demand slowdown, and the extent of bearishness in expectations** of both business and consumer.

GEO-ENGINEERING

◎ CONTEXT

- With intensified debate on climate change, alternate methods like geo-engineering can be considered.

◎ ABOUT

- Also known as “**climate engineering**”, geo-engineering is the intentional large-scale intervention in the Earth’s climate system to counter climate change.
- It includes techniques to **remove carbon dioxide** from the atmosphere, and technologies to rapidly **cool the Earth by reflecting solar energy** back to space.

Types of geo-engineering proposals

- **Carbon dioxide removal techniques (CDR)**: techniques to remove carbon dioxide from the atmosphere.
 - **Ocean fertilisation using phytoplankton and iron:**
 - Phytoplankton in the ocean use photosynthesis to capture CO₂.
 - When they die, they **sink deep** into the ocean, taking all that CO₂ with them.
 - Phytoplankton **needs iron to grow**.
 - Increasing the ocean’s iron content will cause the phytoplankton population to increase, thereby removing more CO₂.
 - **Biochar production:**
 - Biochar is a type of charcoal made from animal wastes and plant residues (such as wood chips, leaves, and husks) which can **sequester carbon by circumventing the normal decomposition process** or acting as a fertilizer to enhance the sequestration rate of growing biomass.
 - **Artificial trees:**
 - Artificial trees essentially would be a series of **sticky, resin-covered filters** that would **convert captured CO₂ to a carbonate called soda ash**.
 - Periodically, the soda ash would be washed off the filters and collected for storage.
 - **Carbon filtering:**
 - **Carbon burial:** For example; **burning large quantities of wood in power plants** with carbon-capture technology, grazing cattle in a way designed to turn **grasslands into giant carbon sinks**, or **converting CO₂ into stones**.
 - **Direct Air Capture:** This technology uses huge fans to **suck air through a filter to which CO₂ chemically bonds**. When heated, the filter releases the CO₂, which can then be sold for other uses, such as growing vegetables in greenhouses, making carbonated drinks or even fuel.
- **Solar geo-engineering, or “solar radiation management” (SRM)**; technologies to rapidly cool the Earth by reflecting solar energy back to space.
 - **Stratospheric Aerosol Injection:**
 - The idea is to **simulate the cooling effects of volcanic eruptions**, and enhancing the reflectivity of marine clouds.
 - When volcanoes erupt, they spread into the atmosphere tiny particles, commonly known as “**aerosols**.”
 - Light-coloured aerosol particles can reflect incoming energy from the sun in cloud-free air, and dark particles can absorb it.

- ▶ A small fleet of aircraft, for example, could **conceivably inject sulphate-aerosols or other reflecting particles into the stratosphere** and drive large-scale cooling.
- ◉ **Marine Cloud Brightening:**
 - ▶ Another idea is to increase the **Earth's 'albedo'**, which is the measure of amount of solar radiation the planet reflects back than it absorbs.
 - ▶ Because **whiter surfaces reflect more light** than darker ones, a whiter Earth will reflect more of the Sun's energy back into space, helping to keep temperatures cooler.
 - ▶ One way to do this is to **make clouds brighter and whiter**.
 - ▶ This can be done by **spraying sea water into clouds over the ocean**. The salt water will cause them to grow bigger and brighter.
 - ▶ Other proposals to increase the Earth's albedo **include painting houses white, planting crops that are pale** and perhaps even laying out **reflective sheets in deserts**.
- ◉ **Cirrus Cloud Thinning (CCT):**
 - ▶ CCT is almost the **opposite of marine cloud brightening**. High-altitude Cirrus clouds are thin and wispy, so they don't reflect much solar radiation back into space, and instead trap long-wave radiation on earth.
 - ▶ CCT proposes **thinning** them further **through cloud seeding, letting more long-wave radiation escape**.
 - ▶ The **problem** with CCT is that the cloud seeding can have the exact opposite effect, **thickening the Cirrus formations**.
- ◉ **Space reflectors:**
 - ▶ Technologies like **giant mirrors in space or umbrellas in orbit** can be built to reflect sunlight away and keep the planet cooler.
 - ▶ All these ideas have been proposed, but would be so expensive that no one really thinks we could afford them.

FOOD SAFETY MITRA (FSM) SCHEME

◎ CONTEXT

- Recently, the Union Minister of Health and Family Welfare launched the Food Safety Mitra (FSM) scheme at the occasion of World Food Day.

◎ ABOUT

- The apex food regulator **Food Safety and Standards Authority of India (FSSAI)** launched Food Safety Mitra (FSM) scheme.
- **FSM Scheme aims to support small and medium-scale food businesses so as to comply with the food safety laws** and will facilitate them with the licensing and registration process, hygiene ratings and training programme.
- The scheme will also **improve ease of doing business by creating a transparent and organized ecosystem** supporting food businesses wherein food businesses will be able to get trained service providers at fair prices - lowering the costs of compliance.

Similar Initiatives

- **'Eat Right Jacket'**, and **'Eat Right Jhola'** were launched to strengthen food safety administration and scale up the **'Eat Right India'** movement.
- **Eat Right Jacket'** has a smart design to hold tech devices like tablets/smart phone, a QR code and RFID tag for identification and tracking.
- **Eat Right Jhola** is a reusable cloth bag that is expected to replace plastic bags for shopping purpose in various retail chains.

- **A Food Safety Mitra is an individual professional certified by FSSAI who assists in compliances related to FSS Act.**
- The **FSMs would undergo training and certification** that will be conducted by the Food Safety and Standards Authority of India (FSSAI), in order to get paid by food businesses for their services.
- The **scheme would also create new employment opportunities for youth** (particularly with food and nutrition background).
- FSSAI has **partnered with the Domestic Workers Sector Skill Council (DWSSC) under the Ministry of Skill Development and Entrepreneurship to launch a training course** for domestic workers and homemakers across the country.

Significance

- FSM opens a new dimension to food safety administration by augmenting government capacity and providing services to food businesses, particularly small and medium food businesses in the area of registration and licensing, training and hygiene rating. Through FSM, FSSAI plans to engage motivated individuals with the food safety ecosystem at ground level.
- The use of technology would bring in the efficiency, professionalism, and transparency in food safety administration.
- The FSMs would undergo training and certification by FSSAI to do their work and get paid by food businesses for their services.

NATIONAL BLINDNESS AND VISUAL IMPAIRMENT SURVEY

◎ CONTEXT

- Recently, Union Health Minister released the National Blindness and Visual Impairment Survey 2019.

◎ ABOUT

- The survey was conducted by the **AIIMS, Delhi and Union Ministry of Health and Family Welfare.**
- The survey was conducted between **2015 and 2019.**
- The survey was conducted in 31 districts of 24 states and the results were **extrapolated** for the entire country.
- India is the **first country to launch National Program for Control of Blindness in 1976.** The aim of the program is to reduce the blindness prevalence to 0.3% by 2020.
- **Key findings of the report**
 - **Cataract is the leading cause of blindness** in people above 50 years, according to the survey.
 - The prevalence of blindness in India is **1.99%.**
 - **Bijnor, Uttar Pradesh** has the highest population suffering from blindness.
 - Around 3.67% of the districts are blind and 21.82% suffer visual impairment.
 - **Blindness is more pronounced among illiterates as compared to literates.** Around 3.23% illiterates are blind and 0.43% literates are blind.
 - Blindness is more prevalent **in rural population (2.14%) as compared to urban (1.8%)**
 - Approximately 93% of cases of blindness and 96.2% visual impairment cases in this age group were avoidable.

Causes of blindness

- Aphakia – Absence of lens in the eye
- Untreated non-infectious corneal opacity-scarring of cornea
- Cataract related surgical complication was the second highest cause for blindness.
- The outcomes of cataract surgery are not good everywhere. Around 40% of cataracts were done in government facilities. Rest of the surgeries took place in private and non – profit facilities. Of these, only 57.8% saw good visual outcome. Cost was the biggest barrier in accessing cataract surgeries.
- Around 22.1% of blindness was caused because of cost as a barrier. Around 22.1% of blindness were caused due to lack of awareness.

Barriers to accessing treatment

- Among men, the most important barriers are financial constraints (31%) and local reasons (21.5%).
- Among women, local reasons (23.1%) and financial constraints (21.2%) were the most important barriers.

ONE NATION ONE FASTAG: GOVT'S RFID SOLUTION FOR DIGITAL PAYMENT OF HIGHWAY TOLL

◎ CONTEXT

- Minister of Road Transport and Highways Nitin Gadkari inaugurated the “One Nation One FASTag” scheme at the Indian Mobile Congress in New Delhi. The plan aims to integrate the collection of toll digitally and ensure seamless mobility of vehicles across India.

◎ ABOUT

- FASTags are stickers that are affixed to the windscreen of vehicles and use RFID technology to enable digital, contactless payment of tolls without having to stop at toll gates.
- The tags are linked to bank accounts and other payment methods.
- As a car crosses a toll plaza, the amount is automatically deducted, and a notification is sent to the registered mobile phone number.
- Sensors are placed on toll barriers, and the barriers open for vehicles having valid FASTags.
- A FASTag is valid for five years and needs to be recharged only as per requirement.
- According to the National Highways Authority of India (NHAI), these devices will make passing through tolls considerably smoother since drivers will no longer have to carry cash or stop to make a transaction.

Advantages of Using FASTag in the Indian Transportation Industry

- FASTag enables one to drive through toll squares nonstop.
- There would be no need to stop for cash transaction.
- By employing Radio Frequency Identification (RFID) technology, it makes toll fares payment possible directly from the prepaid accounts linked to it.
- Long queues of vehicles waiting and honking while cumbersome cash exchanges occurring at the counter can be avoided.
- It also helps in reducing fuel wastage and emanating pollution due to long waiting times at the toll plazas.
- A successful implementation of Electronic Toll Collection system on all the major national highways would help save approximately 87,000 crore INR annually.

- Various options like debit card, credit card, NEFT/ RTGS, and even net banking are available for recharging FASTag online.

What are the challenges faced by FasTag?

- **FasTag charge is high for multi-axle vehicles** – Multi-axle vehicle owners are hesitant to opt for FasTag as the toll charges for such vehicles are quite high. A truck requires more than Rs. 2,000 for 10 trips while a car can make 10 trips at a much lower value. This gives people the ideas for deploying car tags in trucks.
- **FasTag may not be approved** – When there is no amount in the account, no credit is given to the users. Then the user has to pay in cash. Moreover, at times, the RFID scanner goes through technical issues, leaving a FasTag user in a fix to pay the toll amount in cash.
- **FasTag can be stolen or lost** – Since the FasTag comes in a tag form, it can easily be stolen or lost. In such a situation, one should never forget to request the agency to block the FasTag account instantly and process re-issuance.
- **FasTag can be wrongly charged** – Due to technical flaws, at times, a FasTag user may be wrongly charged. And, the user is only left with the option to report the matter as soon as he/she comes to know about it and asking for reimbursement.
- **FasTag may face malfunction or damage** – A user can report about the same and ask for a replacement.
- **FasTag faces the issue of discipline at all most every toll plaza** – Vehicles without the FasTags enter the designated lane while the ones with FasTags wait for their turn, behind these vehicles.
- **Same lane for electronic toll collection (ETC) and very important person (VIP)** – There should be a dedicated ETC lane at every toll plaza. Not having a dedicated ETC lane means the purpose of FasTag fails as it causes a delay in the journey of FasTag users.

CHINESE PRESIDENT'S MAMALAPURAM VISIT (INFORMAL) TO INDIA

◎ CONTEXT

- Recently, Chinese President, Xi Jinping paid an informal visit to India.

◎ ABOUT

Outcomes of the Mamallapuram Summit are:

- Exchange of views on **long-term and strategic issues of global and regional importance**.

Wuhan Summit

- Wuhan Summit is an informal summit held in China in 2017 after a 73-day-long standoff Doklam conflict in Sikkim.
- This informal summit helped in easing the tensions between the two countries.
- Second Informal summit at Mamallapuram is the continuation of the informal mechanism to resolve major irritants in the Indo-Sino relations.

- Shared their **respective approaches towards national development**.
- Discussed **how India-China bilateral interaction can be deepened** to reflect the growing role of both countries on the global stage.
- India and China share **the common objective of working for a peaceful, secure and prosperous world** in which all countries can pursue their development within a rules-based international order.

- They **reiterated the consensus reached during the first Informal Summit in Wuhan**, China in April 2018, that India and China are factors for stability in the current international landscape and that both side will prudently manage their differences and not allow differences on any issue to become disputes.
- The Leaders recognized that India and China have a **common interest in preserving and advancing a rules-based and inclusive international order**.
- Concerns to **address global developmental challenges, including climate change and the Sustainable Development Goals**.
- Both recognized the importance of continuing to make joint efforts to ensure that the international community strengthens the framework against training, financing and supporting terrorist groups throughout the world and on a non-discriminatory basis.
- As important contemporary civilizations with great traditions, both Leaders deemed it important to **enhance dialogue in order to foster cultural understanding between the two peoples**.
- They also agreed on the importance of **concluding negotiations for a mutually-beneficial and balanced Regional Comprehensive Economic Partnership**.
- The two leaders agreed on **establishment of sister-state relations between Tamil Nadu and Fujian Province**, exploring the possibility of establishing an academy to study links between Mahabalipuram and Fujian province on the lines of the experience between Ajanta and Dunhuang and conducting research on maritime links between China and India in view of our extensive contacts over the centuries.
- The two Leaders shared their **mutual vision on goals for development of their respective economies**. They agreed that the simultaneous development of India and China presents mutually-beneficial opportunities.
- In pursuit of their efforts to **further deepen economic cooperation and to enhance their closer development partnership**, the two Leaders have decided to establish a High-Level Economic and Trade Dialogue mechanism with the objective of achieving enhanced trade and commercial relations, as well as to better balance the trade between the two countries
- The two Leaders have **exchanged views on outstanding issues, including on the boundary question**.

© SIGNIFICANCE

- It is **an advance over Wuhan** and has **established a bilateral grid that suits the security and economic strategy of India**.
- It is a **"new set of consensus" including "guiding principles" on giving a new direction to the bilateral ties**.
- The two biggest nations could successfully **explore the areas of detente and cooperation independently of the third party influence**.
- The two summits acknowledge that **India and China were not 'adversaries'** but two large economic powers open to a healthy competition in a multipolar world.
- Speed breakers that the Trump Presidency has created for the unfettered advantage accruing to China in its trade with US in the past would lead President Xi Jinping to an effort to retrieve whatever trade benefit it could continue getting from the Indian market. A trade deficit of over \$52 billion confronting India in relation to China should get Xi to realise that things would not be the same again and that a pragmatic approach to India-China trade relations alone could serve the interests of China.
- India has activated its participation in QUAD but the focus of this US-Japan- India-Australia convergence is so far on maintenance of 'rules based regime' in the Indo-Pacific maritime zone.
- Since Wuhan, India's **Look East policy has strengthened our friendship** with many countries in the East and this also works to India's advantage.
- India's willingness to work for a **'balance of power'** to ensure global peace has been in evidence in the recent period. All of this provided a backdrop to the Mamallapuram summit that favoured the pursuit of understanding and de-emphasised friction.

IMPLICATIONS OF NEPAL-CHINA ROAD CONNECTIVITY DEAL

◎ CONTEXT

- Recently, Nepal and China ink road connectivity deal when Chinese President Xi Jinping visited China.

◎ ABOUT

- Nepal and China have decided **to construct rail link connecting the Tibetan capital Lhasa to Nepal's capital Kathmandu**
- A 28-km **Kerung-Kathmandu road tunnel** is also proposed to cut the distance short between Kathmandu and Chinese border.
- President Xi promised **Upgradation of the Arniko highway** that links Kathmandu with Tatopani transit point which was badly damaged in 2015 earthquake.
- Assistance to the tune of 56 billion** (Nepalese) rupees over the next two years to help Nepal's development programmes.
- Nepal and China has also signed around **20 deals covering water supply, trade, traditional medicines.**
- China wants to support Nepal **in realizing its dream to become a land-linked country from the landlocked country.**

Concerns for India

- Nepal is a wedged between China and India.** So being a landlocked nation, Nepal is trying to diversify its relations and less dependence on India.
- For Nepal, **China serves as a potential supplier of goods and assistance** that it badly needs in order to recover its economy. Indian companies in Nepal will face stiff competition from Chinese companies.
- The Madhesi agitation in 2015 had forced Nepal to explore trade links with China** and reduce its long term dependence on India.
- Lastly, another factor to increase the interest is **China card** which most of the south Asian countries are playing with India to gain the mileage in negotiations & counter India's Big Brother approach.

Why China can't replace India in Nepal?

- Geographical Advantage:** India has an advantage of geography on its side. Chinese rail and port connectivity projects are not very feasible owing to the difficult terrain.
- Indian Ports are cost-effective than Chinese:** The nearest Chinese ports will be over 3000 km away while Kolkata and Visakhapatnam ports which Nepal currently uses are relatively closer.
- Cultural Connections:** India and Nepal has deep linguistic & cultural and religious affinity, whose trade or economic ties with China alone cannot entirely takeover.

INDUS WATERS TREATY

◎ CONTEXT

- Union minister Nitin Gadkari said the government, under the Indus Waters Treaty, has decided to stop its share of water which was used to flow to Pakistan.

◎ ABOUT

- The Indus Waters Treaty is a water-distribution treaty between India and Pakistan, brokered by the World Bank to use the water available in the Indus System of Rivers located in India.

- The Indus Waters Treaty (IWT) was signed in Karachi on September 19, 1960 by the first Prime Minister of India Pandit Jawaharlal Nehru and then President of Pakistan Ayub Khan.
- According to this agreement, control over the water flowing in three "eastern" rivers of India the Beas, the Ravi and the Sutlej was given to India.
- While control over the water flowing in three "western" rivers of India the Indus, the Chenab and the Jhelum was given to Pakistan.
- Since Pakistan's rivers receive more water flow from India, the treaty allowed India to use western rivers water for limited irrigation use and unlimited use for power generation, domestic, industrial and non-consumptive uses such as navigation, floating of property, fish culture, etc.

History and background

- The waters of the Indus System of Rivers begin mainly in Tibet region of China and the Himalayan Mountains in the states of Himachal Pradesh and Jammu and Kashmir.
- They flow through the states of Punjab, Haryana, Rajasthan and Sindh, etc before emptying into the Arabian Sea south of Karachi and Kori Creek in Gujarat.
- The partition of British India created a conflict over the waters of the Indus basin.
- The geography of partition was such that the Source Rivers of the Indus basin were in India. Pakistan felt its livelihood threatened by the prospect of Indian control over the tributaries that fed water into the Pakistani portion of the basin.

Why is the Indus Waters treaty important for Pakistan?

- Indus, Chenab and Jhelum are the lifelines of Pakistan as the country is highly dependent on these rivers for its water supply.
- Since these rivers do not originate from Pakistan but flow to the country through India, Pakistan fears the threat of drought and famine.
- While Chenab and Jhelum originate from India, Indus originates from China, making its way to Pakistan via India.

How is India utilising the waters of Eastern Rivers?

- It allows India to use only 20 per cent of the total water carried by the Indus River.
- To utilise the waters of the Eastern Rivers which have been allocated to India for exclusive use, India has constructed the Bhakra Dam on Satluj, Pong and Pandoh Dam on Beas and Thein (Ranjitsagar) on Ravi.
- These storage works, together with other works like Beas-Sutlej Link, Madhopur-Beas Link, and Indira Gandhi Nahar Project have helped India utilise nearly the entire share of the eastern river waters.
- About two MAF of water annually from Ravi is reported to be still flowing unutilised to Pakistan.
- Centre is currently taking three steps - resumption of construction of Shahpurkandi project; construction of Ujh multipurpose project; and a second Ravi-Beas link below Ujh.

THE STATE OF THE WORLD'S CHILDREN 2019

◎ CONTEXT

‘Alarmingly high’ number of children malnourished worldwide: UNICEF report

◎ ABOUT

- For the first time in 20 years, UNICEF's flagship report examines the issue of children, food and nutrition, providing a fresh perspective on a rapidly evolving challenge.
- One third of children under age 5 are malnourished stunted, wasted or overweight while two thirds are at risk of malnutrition and hidden hunger because of the poor quality of their diets.

- At the center of this challenge is a broken food system that fails to provide children with the diets they need to grow healthy.
- This report also provides new data and analyses of malnutrition in the 21st century and outlines recommendations to put children's rights at the heart of food systems.

Major highlights

- Around 200 million children under-five are either undernourished or overweight, while one-in-three globally - and almost two-thirds of children between the fragile ages of six months to two years - are not fed food that nurtures proper development
- The lack of adequate nutrition increases youngsters' vulnerability to health problems, namely poor brain development, weak learning, low immunity, increased susceptibility to infections and in many cases, premature death.
- Despite growing technological advances to address health and nutrition, the world has lost sight of "the most basic fact: If children eat poorly, they live poorly"
- It is not just about getting children enough to eat; it is above all about getting them the right food to eat.

The problem of 'hidden hunger'

- Report describes the "triple burden" of malnutrition: Under nutrition, overweight, and deficiencies in essential nutrients.
- Hidden hunger is a chronic lack of vitamins and minerals that often has no visible warning signs, so that people who suffer from it may not even be aware of it. Its consequences are nevertheless disastrous: hidden hunger can lead to mental impairment, poor health and productivity, or even death.
- While 149 million youngsters under-five have stunted growth, 50 million are too thin for their height which is a common signs of under nutrition.
- Though breastfeeding is shown to be lifesaving, only 42 per cent of children under-six months of age are exclusively breastfed, with a growing reliance on infant formula.
- Breastfeeding has demonstrated it can supply a range of benefits, including lowering the likelihood of infant mortality, being overweight and obesity; and improving school performance.

A changing world

- Children living in poverty, bear the greatest burden of all forms of malnutrition, with poorer families more inclined to purchase lower-quality, less costly food options.
- The lack of healthy food perpetuates families' poverty status across generations, with the challenges posed by environmental changes worsening the problem.
- More families have abandoned the countryside to become city dwellers, more women have joined the workforce, while also balancing motherhood, and with the crisis of climate change, biodiversity, water, air quality and soil have all been degraded.

UNICEF has laid out recommendations for nutritious, safe and affordable diets for children across the world

- Empower families to reduce demand for unhealthy food.
- Incentivize food suppliers to provide healthy, affordable food.
- Create accurate, easy-to-understand labelling.
- Scale up nutrition by protecting water and sanitation systems.
- Collect and analysing quality data to track progress.

MISCELLANEOUS

CURRENT AFFAIRS

GLOBAL HUNGER INDEX

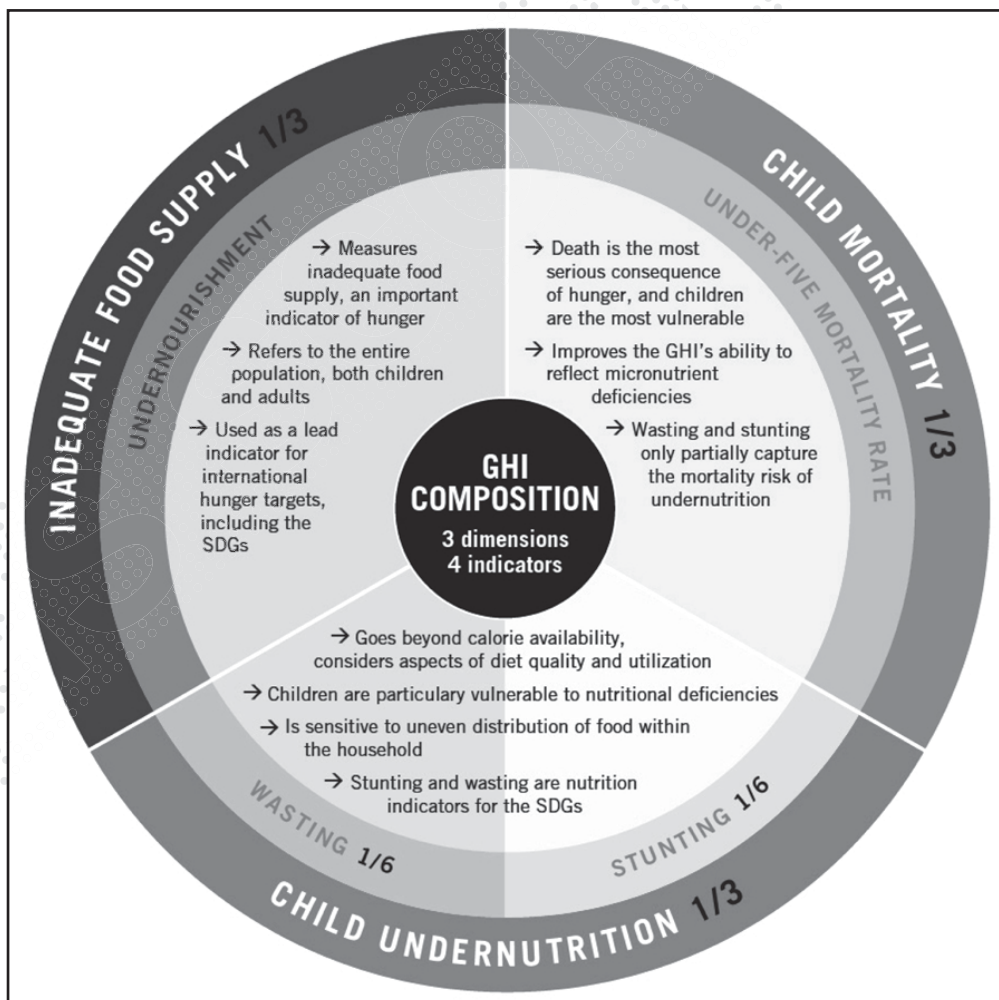
◎ CONTEXT

◎ ABOUT:

- India has ranked 102 among 117 countries in Global Hunger Index 2019.
- The Global Hunger Index (GHI) is a tool designed to comprehensively measure and track hunger at global, regional, and national levels.
- The International Food Policy Research Institute (IFPRI) calculates GHI scores each year to assess progress, or the lack thereof, in combating hunger.
- The GHI is designed to raise awareness and understanding of the struggle against hunger, provide a way to compare levels of hunger between countries and regions, and call attention to those areas of the world where hunger levels are highest and where the need for additional efforts to eliminate hunger is greatest.

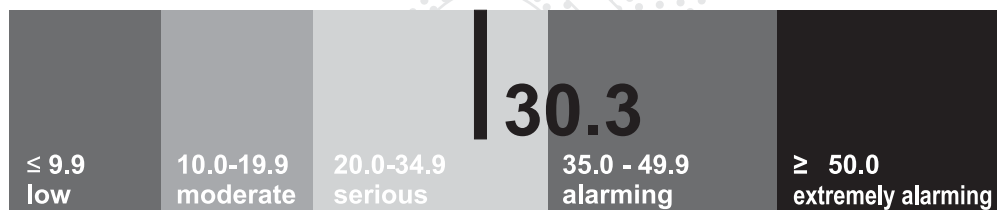
How are the GHI scores calculated?

- GHI scores are calculated using a three-step process that draws on available data from various sources to capture the multidimensional nature of hunger.
- **First step:** For each country, values are determined for four indicators:



- **Undernourishment:** the share of the population that is undernourished (that is, whose caloric intake is insufficient).
- **Child Wasting:** the share of children under the age of five who are wasted (that is, who have low weight for their height, reflecting acute undernutrition).

- **Child Stunting:** the share of children under the age of five who are stunted (that is, who have low height for their age, reflecting chronic undernutrition).
- **Child Mortality:** the mortality rate of children under the age of five (in part, a reflection of the fatal mix of inadequate nutrition and unhealthy environments).
- **Second step:** Each of the four component indicators is given a standardized score on a 100-point scale based on the highest observed level for the indicator on a global scale in recent decades.
- **Third step:** standardized scores are aggregated to calculate the GHI score for each country, with each of the three dimensions (inadequate food supply; child mortality; and child undernutrition, which is composed equally of child stunting and child wasting) given equal weight.
- This three-step process results in **GHI scores on a 100-point GHI Severity Scale, where 0 is the best score (no hunger) and 100 is the worst.** In practice, neither of these extremes is reached.
- **A value of 0 would mean that a country had no undernourished people in the population, no children younger than five who were wasted or stunted, and no children who died before their fifth birthday.**
- **A value of 100 would signify that a country's undernourishment, child wasting, child stunting, and child mortality levels were each at approximately the highest levels observed worldwide in recent decades.**
- The GHI Severity Scale shows the severity of hunger - from low to extremely alarming - associated with the range of possible GHI scores.



About IFPRI:

- The International Food Policy Research Institute (IFPRI) provides research-based policy solutions to sustainably reduce poverty and end hunger and malnutrition in developing countries.
- Established in 1975, IFPRI currently has more than 600 employees working in over 50 countries.
- It is a research center of CGIAR, a worldwide partnership engaged in agricultural research for development.

GHI 2019 findings:

- India has slipped to 102 on the Global Hunger Index, way behind its South Asian neighbours: Pakistan (94), Bangladesh (88), Nepal (73), Sri Lanka (66) and China (25).
- With a score of 30.3, India suffers from a level of hunger that is serious.
- While India was 103rd in 2018 on the GHI, it was out of 119 countries surveyed, compared to a total of 117 countries this year. So, the country moving up to 102 cannot really be seen as an improvement.
- India's child wasting rate is extremely high at 20.8 percent—the highest wasting rate of any country in this report for which data or estimates were available. Its child stunting rate, 37.9 percent, is also categorized as very high in terms of its public health significance. In India, just 9.6 percent of all children between 6 and 23 months of age are fed a minimum acceptable diet. As of 2015–2016, 90 percent of Indian households used an improved drinking water source while 39 percent of households had no sanitation facilities (IIPS and ICF 2017).

- At the regional level, South Asia and Africa South of the Sahara have the highest 2019 GHI scores in the world, at 29.3 and 28.4, respectively. These scores indicate serious levels of hunger according to the GHI Severity Scale.
- In contrast, the 2019 GHI scores of Eastern Europe and the Commonwealth of Independent States, Latin America and the Caribbean, East and Southeast Asia, and the Near East and North Africa range from 6.6 to 13.3, indicating low or moderate hunger levels.

JAYAPRAKASH NARAYAN

◎ CONTEXT

- Prime Minister Narendra Modi paid tribute to Lok Nayak Jayaprakash Narayan on his 117th birth anniversary and termed him a source of inspiration for all Indians.

◎ ABOUT:

- Jayaprakash Narayan (JP) whose name means, "Victory to the light" was born in the early hours of October 11, 1902 in the remote Bihar village of Sitabdiara.
- Narayan was educated at universities in the United States, where he became a Marxist.
- Upon his return to India in 1929, he joined the **Indian National Congress (Congress Party)**.
- In 1932 he was sentenced to a year's imprisonment for his participation in the civil disobedience movement against British rule in India.
- Upon release he took a leading part in the **formation of the Congress Socialist Party, a left-wing group within the Congress Party**, the organization that led the campaign for Indian independence.
- He was imprisoned by the British again in 1939 for his opposition to Indian participation in World War II on the side of Britain, but he subsequently made a dramatic escape and for a short time tried to organize violent resistance to the government before his recapture in 1943.
- After his release in 1946 he tried to persuade the Congress leaders to adopt a more militant policy against British rule.
- In 1948 he, together with most of the Congress Socialists, left the Congress Party and in 1952 formed the **Praja Socialist Party**.
- Soon becoming dissatisfied with party politics, he announced in 1954 that he would thenceforth devote his life **exclusively to the Bhoodan Yajna Movement, founded by Vinoba Bhave**, which demanded that land be distributed among the landless.
- His continuing interest in political problems, however, was revealed when in 1959 he argued for a **"reconstruction of Indian polity" by means of a four-tier hierarchy of village, district, state, and union councils**.
- When Indira Gandhi was found guilty of violating electoral laws by the Allahabad High Court. JP Narayan called for Indira and the CMs to resign and the military and police to disregard unconstitutional and immoral orders. He advocated a program of social transformation which he termed **'Sampoorna Kranti' (total revolution) in 1974 against corruption in public life**.
- **Total revolution:**
 - Total Revolution is a combination of seven revolutions, viz., political, social, economic, cultural, ideological or intellectual, educational and spiritual.
 - The main motive was to bring in a change in the existing society that is in tune with the ideals of the Sarvodaya.



- Jayaprakash Narayan was posthumously conferred with India's highest civilian award, the Bharat Ratna, for his "invaluable contribution to the freedom struggle and upliftment of the poor and downtrodden".

CHENANI-NASHRI TUNNEL

◎ CONTEXT

- The Chenani-Nashri tunnel, the longest tunnel in Jammu and Kashmir, will be renamed after Bharatiya Jana Sangh founder Shyama Prasad Mukherjee.

◎ ABOUT:

About Chenani-Nashri tunnel:

- Prime Minister Narendra Modi inaugurated this tunnel in April, 2017.
- This tunnel **links Kashmir Valley with Jammu** by an all-weather route.
- This 9 km long, twin-tube, all-weather tunnel between Udhampur and Ramban in Jammu & Kashmir is not only **India's longest highways tunnel but also Asia's longest bi-directional highways tunnel**.
- **Built at an elevation of 1200 metres** on one of the most difficult Himalayan terrains, the tunnel cuts the travel time between Jammu and Srinagar by two hours, bypassing about 41 kms of road length.
- It also ensures an all-weather passage on a route that often sees heavy traffic jams and disruptions due to landslides, snow, sharp curves, breakdown of vehicles and accidents.
- **The tunnel is a part of the 286-km-long four-laning of the Jammu-Srinagar National Highway.**
- **The tunnel has an efficient, transverse ventilation system.** There are inlets bringing fresh air at 8 metre intervals and outlet for exhaust every 100 metres.
- **There is also a fully-integrated control system with ventilation, communication, power supply, incident detection, SOS call box and fire fighting.**
- Fitted with intelligent traffic mechanism, the **tunnel has fully automatic smart control and no human intervention will be required for its operations.**
- **The tunnel is also equipped with advanced scanners to ward off any security threat. Very few tunnels in the world have this kind of fully integrated tunnel control.**



About Shyama Prasad Mukharjee:

- Shyama Prasad Mukherjee was born in a Bengali family in 1901.
- At the age of 33, Shyama Prasad Mukherjee became the youngest vice-chancellor of Calcutta University in 1934.
- During Mukherjee's term as Vice-Chancellor, Rabindranath Tagore delivered the university convocation address in Bengali for the first time, and the Indian vernacular was introduced as a subject for the highest examination.
- Mukherjee demanded the partition of Bengal in 1946 to prevent the inclusion of its Hindu-majority areas in a Muslim-dominated East Pakistan.
- In May 1947, Shyama Prasad Mukherjee wrote a letter to Lord Mountbatten telling him that Bengal must be partitioned even if India was not.

- After he left the Indian National Congress due to difference of opinion with the then-Prime Minister Dr Jawaharlal Nehru on Jammu and Kashmir issues, he co- founded Janata Party in the year 1977-1979, which later on became the Bharatiya Janata Party.
- He was the independent India's first Minister of Industry and Supply.
- Shyama Prasad Mukherjee died after 40 days of being arrested by the Jammu and Kashmir State police for entering the state without permit. He passed away in jail under mysterious circumstances.

TOP 5 SERIES: RIVERS

◎ ABOUT

Following are the top five longest rivers in the world:

- Nile river
- Amazon river
- Yangtze river
- Mississippi river
- Yenisei river

Nile river:

Continent	Africa
Countries it flows through	Egypt, Ethiopia, Sudan, Burundi
Length	6,695 kilometres
Source	Burundi, central Africa
Mouth	Egypt into the Mediterranean Sea

- **The River Nile is in Africa.** It originates in Burundi, south of the equator, and flows northward through northeastern Africa, eventually flowing through Egypt and finally draining into the Mediterranean Sea.
- It is the main source of water in two countries: Egypt and Sudan.
- **The Blue and the White Nile are the two tributaries of the river with the latter having a greater length than the former.**
- The **source of the White Nile is not yet fully determined** but is believed to be somewhere in Burundi or Rwanda. **According to some reports, Lake Victoria is considered to be the source of the White Nile which is, in turn, fed by the Kagera River** whose two major tributaries are the Ruvyironza and the Nyabarongo rivers of Burundi and Rwanda, respectively.
- The Kagera is formed at the confluence of these two rivers near the Tanzania-Rwanda border.
- The Blue Nile has a more defined origin in Lake Tana in Ethiopia. The two tributaries meet near the Sudanese capital of Khartoum.
- The Nile River's final course is through Egypt before it forms a delta and drains into the Mediterranean Sea.
- The Nile basin is huge and includes parts of Tanzania, Burundi, Rwanda, Congo (Kinshasa), Kenya.

• **Amazon River:**

Continent	South America
Countries it flows through	Peru, Brazil, Venezuela, Ecuador, Bolivia, Colombia, Guyana
Length	6400 kilometres
Number of tributaries	Over 200
Source	Lago Villafrío in the Andes Mountains, Peru
Mouth	Brazil into the Atlantic Ocean (delta)

- **The Amazon River runs 4,000 miles from the Andes to the sea, and is the second longest river in the world.**
- It is also the largest in terms of the size of its watershed, the number of tributaries, and the volume of water discharged into the sea.
- **The headwaters of the Apurímac River were considered to be the origin of the Amazon River. However, a recent 2014 study claims that the origin of the Amazon can be traced to the Cordillera Rumi Cruz from where Peru's Mantaro River originates.**
- This river then confluences with the Apurímac River (whose headwaters were earlier regarded as the source of the Amazon) and then other tributaries join the river downstream to form the Ucayali River which finally confluences with the Marañón River to form the main stem of the Amazon River.

• **Yangtze river:**

Continent	Asia
Countries it flows through	China
Length	6,378 kilometres
Source	Kulun mountains
Mouth	Yellow Sea at the port of Shanghai

- **The Yangtze River is the world's third longest river and the longest to flow entirely within one country.**
- **It is also Asia's longest river.**
- The river basin of the Yangtze houses one-third of the population of China.
- Two origins of the Yangtze River have been suggested. Traditionally, the government of China recognizes the Tuotuo tributary located in the Tanggula Mountains as the source of the river.
- According to new data, however, the source of the Yangtze River is located in the Jari Hill from where the headwaters of the Dam Qu tributary originate. These tributaries and more join to form the mighty Yangtze River which finally drains into the East China Sea at Shanghai.
- The Yangtze River has over 700 tributaries but the principal tributaries are the Hun, Yalong, Jialing, Min, Tuo Jiang, and Wu Jiang.

- **Mississippi river:**

Country	USA
Length	6,274 km
Source	Lake Itasca in Minnesota
Mouth	Louisiana into the Gulf of Mexico

- The river system comprising of the Mississippi, Missouri, and Jefferson rivers, is regarded as the world's fourth longest river system.
- The Mississippi River begins in northern Minnesota where Lake Itasca is believed to be the origin of the river and drains into the Gulf of Mexico.
- When we regard the Jefferson River as the furthest source of the Mississippi River, then we get the Mississippi–Missouri–Jefferson river system.

- **Yenisei river:**

Continent	Asia
Countries it flows through	Mongolia, China
Length	5,539 km
Source	Mungaragiyn-Gol ridge, Mongolia
Mouth	Kara sea, Central Siberia

- This is the world's fifth-longest river system and the largest draining into the Arctic Ocean.
- The source of the river is Mungaragiyn-Gol, which is located at the ridge of Dod-Taygasyn-Noor, Mongolia. The Selenge River is regarded as the headwaters of this river system. The Selenge River is 992 km long and drains into Lake Baikal.
- The Angara River rises from Lake Baikal near Listvyanka and flows through the Irkutsk Oblast of Russia and finally joins the Yenisei River near Strelka.
- The Yenisei finally drains into the Kara Sea, Arctic Ocean.
