

9pm

Compilation

15th to 21st December, 2020

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General Studies Paper - 1

General Studies - 1

1. Inter community Relationships

Source: The Indian Express

Syllabus: GS-1- Society

Context: Campaigns against inter-community relationships are a way to redirect anxieties over large-scale structural disruptions.

What is patriarchy? Discuss the recent expressions of patriarchy in society.

- **Patriarchy:** A social system that places men, women and other genders in hierarchies learns to perceive the plurality of genders as unnatural and views women with suspicion.
- **Potential sign of anarchy:** Lack of control over women's sexuality is an example of such anarchy that concerns not only the women's so-called guardians but the society at large.
 - Recent political campaigns geared towards restricting intimate relationships across communities, even as a fictional plot for jewellery advertisements, reveal how deep the fear of women's choices runs.
- **Beliefs of dominant sections:** The dominant sections believe that societies will collapse if women don't stay in their pre-designated place and if the plurality of gender and sexual expressions somehow finds representation in popular culture.
- **Governance machinery:** Allegedly, governance machinery, that today includes the previous autonomous institutions, as well as the media, have successfully redirected anger to old civilisational fears, especially those surrounding the potential anarchy fuelled by women and their sexuality.

Expressions of patriarchy has been a part of public discourse since 1947. Discuss.

- **Special marriage bill:** In the early 1950s, when the Special Marriage Bill was being debated in the Indian Parliament, similar civilisational fears had surfaced amongst our early lawmakers.
 - The fears were predominately represented in the discussions on age of consent and divorce with comments which were mildly apprehensive.
 - Kishen Chand's claim that women between 18 and 22 are emotional and "high-strung" (Rajya Sabha Debates 1954).
 - Tajamul Husain's contention that older parents would be better capable of reproducing strong and brave Indians "who can defend the country in times of need" (Council of States Debates, 1954).
 - S Mahanty's allegation that the women in Parliament "have lowered marriage to the morass of sex" under the pretext of equality of rights and status (Council of States Debates 1954).
- **Unease with women's sexual freedom:** Even those who passionately advocated for women's equality were not able to shed their unease about sexual freedoms. The then law minister, CC Biswas, argued:
 - "Suppose two young persons have made up their minds to marry and you place all these obstacles in their way. Certain very undesirable consequences may follow (Council of States Debates, 1954)
- **Women's sexuality:** According to the early parliamentarians, women's sexuality carried both the responsibility to reproduce the race and the power to bring civilisations down if their reproductive abilities are left ungoverned.

Way forward

- Those pushing forward ordinances that aim to overturn the rights guaranteed by the Special Marriage Act carry the patriarchal baggage borne by the lawmakers. But their moves also reflect a lack of courage to work against one's own patriarchal impulses for the sake of a better future, a courage shown by the lawmakers in the 1950s.

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General Studies Paper - 2

General Studies - 2

1. Issues faced by Nursing sector in India

Source: [The Hindu](#)

GS2: Issues Relating to Development and Management of Social Sector/Services relating to Health.

Context: Nursing education in India suffers poor quality of training, inequitable distribution, and non-standardised practices.

In News:

- The year 2020 has been designated as “International Year of the Nurse and the Midwife”.
- Nurses and midwives will be central to achieving universal health coverage in India.

What are the structural challenges affecting nursing sector in India?

- **Low number of nurses:** India's nursing workforce is about two-thirds of its health workforce. Its ratio of 1.7 nurses per 1,000 population is 43% less than the World Health Organisation norm. It needs 2.4 million nurses to meet the norm.
- **Inequal Distribution:** Though the number of nursing education institutions has been increasing steadily, there are vast inequities in their distribution. Around 62% of them are situated in southern India.
- **Vacancies:** The faculty positions vacant in nursing college and schools are around 86% and 80%, respectively.
- **Higher qualifications of postgraduate nurses are not recognised:** There is a lack of job differentiation between diploma, graduate, and postgraduate nurses regarding their pay, parity, and promotion. Consequently, higher qualifications of postgraduate nurses are underutilised, leading to low demand for postgraduate courses.
- **Outdated and fails to cater to the practice needs:** The education, including re-training, is not linked to the roles and their career progression in the nursing practice. There are insufficient postgraduate courses to develop skills in specialties, and address critical faculty shortages both in terms of quality and quantity.
- **Lack quality training:** Multiple entry points to the nursing courses and lack of integration of the diploma and degree courses diminish the quality of training.
- **Largely unregulated:** The Indian Nursing Act primarily revolves around nursing education and does not provide any policy guidance about the roles and responsibilities of nurses in various cadres. Nurses in India have no guidelines on the scope of their practice and have no prescribed standards of care.
- **Lack of accountability for nurses:** The Consumer Protection Act which protects the rights and safety of patients as consumers, holds only the doctor and the hospital liable for medico-legal issues; nurses are out of the purview of the Act. This is contrary to the practices in developed countries where nurses are legally liable for errors in their work.

What is the way forward?

- A common entrance exam, a national licence exit exam for entry into practice, and periodic renewal of licence linked with continuing nursing education would significantly streamline and strengthen nursing education.
- Transparent accreditation, benchmarking, and ranking of nursing institutions too would improve the quality.

- The Indian Nursing Council Act of 1947 must be amended to explicitly state clear norms for service and patient care, fix the nurse to patient ratio, staffing norms and salaries.
- The exodus of qualified nurses must be contained by Incentivising to pursue advanced degrees to match their qualification, clear career paths, opportunity for leadership roles, and improvements in the status of nursing as a profession.
- A live registry of nurses, positions, and opportunities should be a top priority to tackle the demand-supply gap in this sector.
- The National Institution for Transforming India (NITI) Aayog has recently formulated a framework for public-private partnership in medical education that could be referred to develop a model agreement for nursing education.

The disabling environment prevalent in the system has led to the low status of nurses in the hierarchy of health-care professionals. The National Nursing and Midwifery Commission Bill currently under consideration should hopefully address some of the issues highlighted.

2. NFHS findings

Source: The Hindu

Syllabus: GS-2- Nutrition

Context: The Ministry of Health and Family Welfare has released data fact sheets for 22 States and Union Territories based on the findings of Phase I of the National Family Health Survey-5 (NFHS-5).

What are the worrying findings?

- **Malnutrition:** Of the 22 States and UTs, there is an increase in the prevalence of severe acute malnutrition in 16 States/UTs (compared to NFHS-4 conducted in 2015-16).
 - The percentage of children under five who are underweight has also increased in 16 out of the 22 States/UTs.
 - There is also an increase in the prevalence of other indicators such as adult malnutrition measured by those having a Body Mass Index of less than 18.5kg/m² in many States/ UTs.
- **Anaemia:** Anaemia levels among children as well as adult women have increased in most of the States with a decline in anaemia among children being seen only in four States/UTs.
- **Obesity:** Most States/UTs also see an increase in overweight/obesity prevalence among children and adults, once again drawing attention to the inadequacy of diets in India both in terms of quality and quantity.
- **Stunting:** The data report an increase in childhood stunting in 13 of the 22 States/UTs compared to the data of NFHS-4.
 - There was a 10 pp decline in stunting among children under five between 2005-06 (NFHS-3) and 2015-16 (NFHS-4), from 48% to 38%, averaging 1 pp a year. This was considered to be a very slow pace of improvement.
- **Starvation:** Volunteers of the Right to Food campaign have listed over 100 starvation deaths based on media and/or verified fact-finding reports since 2015.
- **Food insecurity:** Field surveys such as 'Hunger Watch' are already showing massive levels of food insecurity and decline in food consumption, especially among the poor and vulnerable households.
 - In the Hunger Watch survey carried out in 11 States, two-thirds of the respondents reported that the nutritional quality and quantity of their diets worsened in September-October compared to before the lockdown.

What are the steps to be taken?

- **Improvements:** There are some improvements seen in determinants of malnutrition such as access to sanitation, clean cooking fuels and women's status, a reduction in spousal violence and greater access of women to bank accounts.
- **Interventions:** Direct interventions such as supplementary nutrition, growth monitoring, and behaviour change communication through the ICDS and school meals must be strengthened and given more resources.
- **Progress on maternity entitlements:** Universal maternity entitlements and child care services to enable exclusive breastfeeding, appropriate infant and young child feeding, recognising women's unpaid work burdens have been on the agenda for long, but not much progress has been made on these.
- **Strategy:** An employment-centred growth strategy which includes universal provision of basic services for education, health, food and social security is imperative.
- **Expansion in social protection schemes:** Such as the Mahatma Gandhi National Rural Employment Guarantee Scheme, the Public Distribution System, the Integrated Child Development Scheme (ICDS), and school meals have contributed to reduction in absolute poverty as well as previous improvements in nutrition indicators.

Way forward

- It is hoped that the experience of the pandemic as well as the results of NFHS-5 serve as a wake-up call for serious rethinking of issues related to nutrition and accord these issues priority.

3. New technology coalitions

Source: [Indian Express](#)

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

Context: India must actively participate in new technology coalitions to secure its geopolitical interests.

Why India needs Tech-coalition?

- Reducing economic and digital dependence on China.
- China's use of newly acquired technological muscle in support of its expansionist aims.
- To promote and regulate advanced technologies.
- India is also now a member of the Wassenaar Arrangement that regulates the flow of dual-use technologies and the Missile Technology Control Regime.
- The size of India's market as well as technological capabilities make India an attractive partner in the effort to build "technology coalitions of the capable and willing".
- Developing trusted global supply chains that are not vulnerable to Beijing's weaponisation of economic interdependence.

How issue-based coalitions are growing?

- Biden promised to convene a "**Democracy Summit**" with multiple objectives, including the promotion of human rights and protection of democracies from new digital technologies.
- Britain has been discussing the merits of a "**Democracy Ten**" that brings India, South Korea and Australia with the G-7 to build telecom products to reduce the current global reliance on China.
- European Union has offered to **rebuild the transatlantic alliance** with a special focus on technological cooperation.

- France and Canada launched the **Global Partnership on Artificial Intelligence** to promote responsible development and use of AI. India was among the 15 founding members.
- **“Digital Nations”** that was founded in 2014 by Britain, Estonia, Israel, South Korea and New Zealand to mobilise digital technologies to enhance the quality of life for their citizens.
- **“Artemis Accords”** which outline a set of principles for the cooperative and transparent exploration of outer space. The founding members of the Artemis Accords are Australia, Canada, Italy, Japan, Luxembourg, United Arab Emirates, United Kingdom, and the US.

What are the future prospects for India-USA coalition?

- **New presidency in USA:** Restoring multilateralism is among Biden’s top priorities.
- **USA’s technological objectives:** for example, the US negotiated arms control agreements with the Soviet Union, during the Cold War. Also, USA worked in multilateral forums to produce the Nuclear Non-Proliferation Treaty and exclusive groupings like the Nuclear Suppliers Group to regulate the flows of civil nuclear technology.
- **India’s growing significance:** USA devoted much energy to the consolidation of the Quad and idea of a “Quad Plus” to discuss the coordination of national responses to the pandemic.
- **Against China’s assertion:** USA mobilised allies and partners to shun China’s telecom companies in the rollout of 5G or “fifth-generation” wireless technology and promoted the **idea of a coalition of “clean networks”**.
- **Intelligence sharing:** USA expanded the ambit of Five Eyes (US, UK, Canada, Australia and New Zealand) by initiating consultation with Japan and India on addressing the tension between encryption, privacy and law enforcement.

What is way forward?

- Appreciate the **value of issue-based coalitions** in producing more productive outcomes in the technological arena.
- Coalitions will complement India’s traditional focus on multilateralism. For example, International Solar Alliance and the Coalition for Disaster Resilient Infrastructure.
- Like-minded countries can come together to cope with emerging global challenges, including the **governance of emerging technologies** that are reshaping relations within and among societies.

4. Justice delivery system

Source: The Hindu

Syllabus: GS-2-Polity

Context: Inadequacies in the justice delivery system extends beyond the Supreme Court.

What are the various issues faced by the judiciary?

- **Spending on judiciary:** It is equated with a call for increasing the salaries of judges and providing better court infrastructure. Such perceptions are unfortunate.
- **Issues under The Legal Services Authority Act of 1987:** Under this law, all women, irrespective of their financial status, are entitled to free legal aid.
 - **Free legal aid:** Scheduled Castes and Scheduled Tribes and children too are entitled to free legal aid. This means that a significant proportion of the population falls under a free legal aid regime.

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- **Lack of well-trained individuals:** There has been little effort on the part of successive governments to provide a task force of carefully selected, well-trained and reasonably paid advocates to provide these services.
- The system of legal aid in the U.K. identifies and funds several independent solicitor offices to provide such services.
- **The judge-population ratio:** It provides one of the most important yardsticks to measure the health of the legal system.
 - The U.S. has about 100 judges per million population. Canada has about 75 and the U.K. has about 50.
 - India has only 19 judges per million population. Of these, at any given point, at least one-fourth is always vacant.
 - Hardly any attention is focused on this gaping inadequacy in lower courts which is where the common man first comes into contact with the justice delivery system.
 - In *All India Judges Association v. Union of India* (2001), the Supreme Court had directed the Government of India to increase the judge-population ratio to at least 50 per million population within five years from the date of the judgment. This has not been implemented.
- **Other issues:**
 - Increasing tribunalisation of the justice delivery process;
 - the extortionate court fees payable to access justice in civil suits in some States; and
 - the poor integration of technology into the system are some issues that readily come to mind.

What can be done?

- **Access to justice:** Though 'access to justice' has not been specifically spelt out as a fundamental right in the Constitution, it has always been treated as such by Indian courts.
 - In *Anita Kushwaha v. Pushpa Sadan* (2016), the Supreme Court held clearly that if "life" implies not only life in the physical sense but a bundle of rights that make life worth living, there is no justice or other basis for holding that denial of "access to justice" will not affect the quality of human life.
 - Further, the court pointed out important components of access to justice:
 - Existence of adjudicatory mechanisms.
 - Conveniently accessible in terms of distance and
 - The process of adjudication must be speedy and affordable to the disputants.
- **National policy:** The executive, judiciary and the legislature are yet to draw out a national policy and road map for clearing backlogs and making these concepts real.

5. Rise of corporate nationalism

Source: [Indian Express](#)

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

Context: The Rise of 'corporate nationalism' empowers Indian companies at expense of consumers.

Instances where the Sentiments of corporate nationalism has been raised against foreign corporates?

- **Amazon-Reliance Dispute:** The counsel for Future Retail accused Amazon of behaving like “the East India Company of the 21st century” and calling it “Big Brother in America.”
- **Whatsapp pay still pending for approval before the Supreme Court:** Even though Whatsapp has obtained all requisite approvals. Multiple oppositions claim that permitting foreign entities to launch payment apps would endanger the country’s financial data. This is despite the National Payments Corporation of India’s approval of WhatsApp’s data localisation practices.
- **Severe restrictions on Chinese investments:** By mandating prior approval for Chinese FDI, banning several Chinese apps and restricting Chinese bidders from participating in public procurement contracts.

Why shifting the focus to the foreignness of a company for regulatory assessment is problematic?

- Foreign investors hold majority stakes in most of these “Indian” startups which make complaints of losing market share to foreign companies. **For example,** while complaining Amazon as a foreign company, Reliance, too, doesn’t shy away from receiving investments from Google.
- It alters the legal jurisprudence by placing the foreign identity of a party at the centre of regulatory assessments, ultimately subverting the objective of commercial laws.
- It increases the risk associated with doing business in India by creating cause uncertainty in an already chaotic legal environment.

There is no doubt that the practices of many foreign companies are suspect. Not only foreign companies, many domestic conglomerates too have equally deep pockets and more political sway than their foreign counterparts, and a questionable track record of regulatory compliance.

Indians need to be protected from its domestic corporate giants as much as any foreign company. This can be guaranteed only if regulators and courts consciously stay true to the statutorily mandated objectives of their respective regimes.

6. PM-WANI: Revolutionise the way India accesses the internet

Source: [Indian Express](#)

GS2: Government Policies and Interventions for Development in various sectors

Context: PM-WANI has the potential to revolutionise the way India accesses the internet.

What are the needs of PM-WANI?

- To create value for the consumer.
- To quickly reach countrymen in the remotest areas.
- India’s tele-density of landlines never exceeded 7 per 100 people but due to mobile it exceeded to 90 per 100 people.
- India grew from 302 million internet subscribers to 750 million.
- India is one of the fastest growing internet markets in the world.
- To deliver a resilient and reliable connection to every Indian and reliable access everywhere.
- Despite excellent advances in 4G technology, wired connections still offer superior quality, reliability and throughput.

What are the key features of Pradhan Mantri Wireless Access Network Interface (PM-WANI)?

- Bring large scale deployment of Wi-Fi hotspots through the country to drive up connectivity options and improve digital access.

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- The scheme envisages setting up of public Wi-Fi networks and access points by local Kirana and neighbourhood shops through public data offices (PDO will be set up on the lines of Public Call Offices (PCOs)) that will not involve any licence, fee or registration.

How PM-Wani can revolutionise access to internet?

- UPI created common payments infrastructure that unbundled whose app you use to pay from which bank your money was in.
- This resulted in 3 Cs — **greater convenience, higher confidence and lower costs.**
- PM-WANI unbundles whose wired connection you use from who you pay to use that connection.
- It allows them to interoperate and focus on connecting the last user. It is built on unbundling three as — access, authorisation and accounting.

What are the dimensions along which PM-WANI has broken away from the past?

- PM-WANI has **liberalised the resale of bandwidth.** Earlier only licensed players could become Internet Service Providers and resell bandwidth.
- This has led to the **top 5 ISPs owning 75 per cent of the volume of all wired subscribers.**
- PM-WANI allows anyone — a kirana shop owner, a tea-stall vendor, or a Common Service Centre to resell internet to its customers without a licence and without fees.
- By installing a wireless router, they can get on the PM-WANI network and start selling connectivity.
- These small vendors will be called Public Data Offices (PDOs), in a deliberate hark back to the Public Call Offices of yore.
- Due to this deregulation, the distribution of endpoints of PM-WANI will be selected by entrepreneurs rather than being decided top-down.

How PM-WANI is forward-looking in its design?

- Presence of robust identity infrastructure in the form of Aadhaar and DigiLocker. It will help to authenticate its users.
- This architecture also allows a central data balance and central KYC, that users can use inter-operably across all PDOs.
- The network operators then settle accounting between them, much like how telecom operators settle call termination charges.
- Indians can log in once and enjoy access on all available WiFi networks.
- It also allows international travellers to take advantage of India's connectivity, without paying exorbitant roaming charges to their home networks.

7. Child nutrition

Source: The Indian Express

Syllabus: GS-2- Development issues

Context: New evidence on child nutrition calls for radical expansion of child development services.

What are the various issues found by several survey reports on child nutrition?

- **NFHS-4:** Leaving aside two or three countries like Niger and Yemen, India has the highest proportion of underweight children in the world: a full 36 per cent according to the National Family Health Survey 2015-16 (NFHS-4).
 - The corresponding proportion is much lower in other South Asian countries, including Bangladesh (22 per cent) and Nepal (27 per cent).

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- **NFHS-5:** Early data from the National Family Health Survey 2019-20 reveals another alarming fact: Child nutrition indicators have not improved between 2015-16 and 2019-20.
 - In fact, in seven out of 10 major states for which data has been released, the proportion of underweight children increased in that period. In six of these 10 states, stunting increased.
- **Hunger watch:** In the latest survey, Hunger Watch, two-thirds of the respondents (adults from India's poorest households) said that they were eating less nutritious food today than before the lockdown.
- **Lockdown impact:** Mid-day meals in schools and anganwadis were discontinued from the lockdown onwards, to this day. Many states did try to make some arrangement for distribution of cash or "take-home rations" in lieu of cooked meals, but these measures were mostly haphazard and inadequate.
- **Disruption of routine health services:** Children have also suffered from the massive disruption of routine health services including immunisation during the lockdown, evident from the official Health Management Information System.
- **Closure of anganwadis:** The prolonged closure of anganwadis and schools possibly had other, less well-documented consequences, such as an increase in child labour and child abuse.
- **Budget allocation:** In annual Budget for 2015-16, there were staggering cuts in financial allocations for mid-day meals and the Integrated Child Development Services (ICDS). The central budget for mid-day meals (Rs 11,000 crore) is lower than what it was in 2014-15 (Rs 13,000 crore).
 - The central allocation for ICDS is also lower today than it was six years ago. Poshan Abhiyaan, government's flagship programme for child nutrition, has a minuscule budget of Rs 3,700 crore.

What are the steps to be taken?

- **Pregnant women's right to maternity benefits:** Rs 6,000 per child under the National Food Security Act 2013. The benefits were illegally restricted to one child per family and Rs 5,000 per child under Pradhan Mantri Matru Vandana Yojana.
 - Extending maternity entitlements to all births, not just the first living child, is a legal obligation under NFSA, and the spirit of the Act also calls for raising their amount well above the outdated norm of Rs 6,000 per child.
- **Reviving and revamping mid-day meals:** In schools and anganwadis would be a good start.
 - For example, inclusion of eggs (not only in mid-day meals but also in take-home rations for young children and pregnant women), with a fruit option or such for vegetarians.
- **The ICDS programme also needs a shot in the arm:** India has an invaluable network of 14 lakh anganwadis managed by local women. Most of these anganwadi workers and helpers are capable women who can work wonders with a supportive environment.

Way forward

- The southern states, and some other states like Himachal Pradesh and even Odisha, have amply demonstrated the possibility of turning anganwadis into vibrant child development centres at the village level.

8. Uttar Pradesh's strategies to contain the pandemic

Source- [The Indian Express](#)

Syllabus- GS 2 - Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

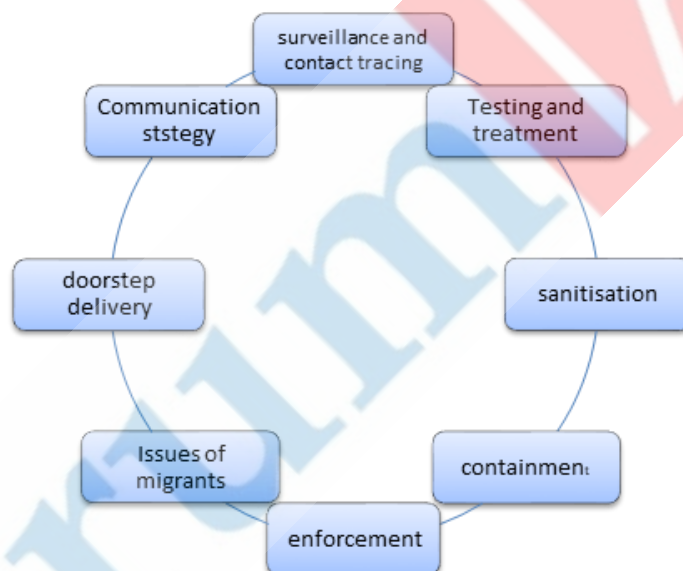
Context- Early and systematic tracking of high-risk contacts helped Uttar Pradesh step up the fight against COVID-19.

What were the measures taken by UP government to control the outbreak?

Uttar Pradesh is the largest state in the country in terms of population and hence, the battle against COVID-19 becomes more challenging. Several factors distinguish the handling of the pandemic in the state such as –

1. Setting up of 'Team 11' - Team 11 (which is a cluster of 11 committees) at the state level that comprises top officials and report on a daily basis to the chief minister on the corona situation. The daily review meeting has kept the state machinery on its toes.

- Ministers in charge of Health and Medical Education are also present at these meetings.
- This committee tasked with managing different aspects like –



2. ICCC set up in every district- Integrated COVID Command and Control Centre (ICCC), This is the nerve centre of pandemic management in the district which helps in-

- Sending testing teams to different areas as per plan.
- Ensuring surveillance and contact tracing.
- Sending positive patients to different Covid hospitals or placing them under home isolation.

3. Integrated data management portal- UP government launched an integrated Covid-19 portal ([upcovid19tracks.in](#)), set up a digital mechanism that can help the state government combat the pandemic while controlling community transmission of the virus.

- It provides us with the ability to crunch and analyse data on a daily basis.
- Also cajole the districts lagging behind to improve their performance.
- Provide test results to citizens.
- Informs citizens about the nearest COVID-19 test centres where they can get themselves tested free of cost.

4. **Widespread use of the drug, Ivermectin** - The Uttar Pradesh government has issued a government order for not only use of Ivermectin drug to treat COVID-19 patients but also as prevention too.
- The state government provides free medicines to all patients.
 - The combination of ivermectin and doxycyclin to successfully treat over three lakh home-isolated patients with mild symptoms so far.
5. **Target testing-** The strategy of testing of selected groups helped assess the level of infection in the general population and identify and isolate super-spreaders.
- **For example-** Before festive season, the administration tested mehndi artists, sweet shop workers, jewelers, those working at places of worship, roadside cracker vendors and were able to isolate more than 12,500 infected persons.

Way forward-

Heavy testing, strategic containment, new innovative ideas and management ideas and Government relied measures helped Uttar Pradesh to keep the positivity rate below 5 per cent throughout the pandemic.

- Continuous monitoring of patients in home quarantine has been an extremely helpful step.
- A combination of government policies and technology-based solutions has been put in place to ensure the safety and well-being of people along with the smooth functioning of the state.

9. Nutritional agenda

Source: The Hindu

Syllabus: GS-2- Health

Context: The fifth round of the National Family Health Survey (NFHS 2019-20) factsheets on the burden of child under nutrition is not encouraging.

How is under nutrition measured?

- **Relied on the measure of a child's anthropometry:** Children are defined as stunted, underweight or wasted if their standardised height-for-age, weight-for-age or weight-for-height is more than two standard deviations below the (WHO) Child Growth Standards median.
 - However, under nutrition can also be measured by observing the adequacy and sufficiency of food or dietary intake among children.

What is the status of under nutrition in the fifth round of NFHS report?

- **NFHS-4 (2015-16):** The percentage of children (aged 6-23 months) who do not meet the minimum dietary adequacy as defined under the Infant and Young Child Feeding (IYCF) practices by WHO is 83.9%; a decline of just over 2 percentage points.
 - Thus, eight out of 10 children appear to be experiencing a dietary shortfall.
 - Analysis based on NFHS-4 has shown that consumption of protein-rich food as well as fruit and vegetables were substantially low.
- **Dietary adequacy:** Goa experienced the largest percentage point decline (11.1%), and Jammu and Kashmir observed the highest increase in its percentage of children not meeting dietary adequacy over the last three years (76.5% to 86.4%).
 - While there are some variations, in every State more than 75% of the children do not receive the minimum adequate diet.
- **Anaemia prevalence:** Anaemia prevalence among children increased by about eight percentage points from 51.8% to 60.2%. The prevalence of anaemia in childhood increased in 18 of the 22 States/Union Territories.

- In the majority of the States, two out of three children have possible iron-deficiency. The State-wise trends for adults are mixed, although it is clear that women are substantially at a far greater risk for anaemia than men.

What are the steps to be taken?

- **Initiatives:** (POSHAN) Abhiyaan and the Anemia Mukht Bharat or AMB Strategy was launched in 2018 with efforts to improve Iron and Folic Acid (IFA) supplementation.
 - Behaviour change and anaemia-related care and treatment across six target groups including pregnant women, lactating mothers, and children, and the provisional verdict is mixed for women and concerning for children.
- **Typology:** A classification of nutritional status using a combined typology based on children who experience dietary failure and anthropometric failure is crucial.
 - A recent NFHS-4 based study using this typology found that 36.3% of children who experienced a dietary failure do not show anthropometric failure.
- **Nutrition agenda:** Dietary factors can clearly be a major determinant of stagnancy in the nutritional status of Indian children. Therefore the nutrition agenda needs to be considered from “food as a right” perspective.
- **Quality data:** Data available in a timely manner and in public domain, is empowering, as the NFHS has demonstrated over the last 25-plus years. But systematic and quality data on what Indians eat remains largely unknown.
 - A modern data initiative leveraging and combining aspects of the NFHS, the National Nutrition Monitoring Bureau and the National Sample Surveys that collected data on detailed household-level consumption and expenditure on various food items should be considered.

Way forward

- Decluttering our current approach to reducing the burden of child under nutrition and keeping it simple with a policy goal to providing affordable (economic and physical) access to quality food items, particularly for lower socioeconomic populations groups, should be prioritised.

10. Eliminating Tuberculosis (TB)

Source- [The Indian Express](#)

Syllabus- GS 2- Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

Context- The pandemic provides learning opportunity and opens up possibilities of accelerating Tuberculosis (TB) elimination venture.

More in news-

- Covid-19 has derailed the painstaking efforts of decades and diverted scientific attention from killer diseases like tuberculosis
- COVID-19 lockdowns have resulted in a 30 per cent decline in tuberculosis diagnosis and reporting.
- Researchers estimate that over the next five years, an additional 1.19 million TB cases and 3,61,000 TB deaths may occur in India.

What is Tuberculosis?

Tuberculosis (TB) is caused by bacteria (*Mycobacterium tuberculosis*) that most often affect the lungs.

- TB causes respiratory illness and spread from person to person through the air.
- Mortality rate of 13 per cent — far worse than the 1.3 per cent for COVID-19.

How combating COVID-19 pandemic can help eradicate TB?

1. **Raise the awareness of the general masses-** The leaders and individuals have realized the devastation an infectious respiratory disease can cause.
2. **Behavioural changes-** The changes acquired during the pandemic such as cough hygiene, use of masks, physical distancing will further help reduce the transmission of tuberculosis, which is a respiratory illness.
 - Doctors and nurses will be less complacent about these measures.
3. **Raise investments in the healthcare sector-** investments in health systems infrastructure, infection control equipment and personal protection equipment will ensure better airborne infection prevention and control.
4. **Boost testing scale-**
 - COVID-19 has changed the landscape of testing and surveillance.
 - The speed of research on new COVID-19 tests and the scale at which testing was applied are lessons to be learned by TB programmes.
 - **Bi-directional” TB and COVID-19 testing** - Greater identification of cases will lead to more persons being isolated and treated.
5. **Speed of vaccine development-**
 - The success of various COVID-19 vaccine platforms and the speed at which the vaccine has been brought to the market gives tremendous hope for TB vaccine candidates.
 - Fast-tracking of research, advance purchasing, and research sharing by countries witnessed during the pandemic could apply to the TB vaccine.
6. Several dedicated infectious diseases hospitals have come up as a part of the pandemic response measures, which would contribute in a major way towards tuberculosis care and management.
7. **The molecular diagnostic capacity has increased** - These multi-platform devices based on cartridge and chip-based technology can decentralize TB diagnosis.
8. COVID-19 has taught to prioritize public health as much as curative and preventive health.
9. The increased uptake of telemedicine and teleconsultation during the pandemic will provide channels of consultation for tuberculosis

What is the way forward?

COVID-19 is likely to expedite the trajectory of TB elimination.

- COVID-19 pandemic has provided an opportunity to boost TB elimination activities through health system strengthening and infectious diseases control.

General Studies Paper - 3

General Studies - 3

1. Innovations to curb air pollution

Source- [The Hindu](#)

Syllabus- GS 3 - Conservation, environmental pollution and degradation, environmental impact assessment.

Context-It is important to have systemic changes at the policy and strategy levels to curb air pollution in India.

Why air quality monitoring is essential?

Monitoring helps in assessing the level of pollution in relation to the ambient air quality standards. Robust monitoring helps to guard against extreme events by alerting people and initiate action.

- There are more than 250 continuous ambient air quality monitoring stations and more than 800 ambient air quality monitoring stations operating across the country.

What are the Government initiatives to combat air pollution?

1. **Union Budget 2020-21** allocated Rs.4400 crore for cities having populations above one million to formulating and implementing plans for ensuring cleaner air.
2. **Delhi-NCR air quality commission-** A new ordinance to form a commission for air-quality management in the National Capital Region (NCR) and adjoining areas.
 - This erases all other authorities that were set up under judicial and administrative orders, seeks to limit the role of the judiciary and creates a supra-centralized framework for air-quality management in the region.
3. The government has taken various other initiatives to address the issues related to air pollution such as the **National Clean Air Program, the Pradhan Mantri Ujjwala Yojana** and the **Bharat Stage-VI (BS-VI) emission norms**.

However, these measures will have a major impact in the long term. India needs innovations to deliver on the promise of cleaner air in the immediate future.

What are the new innovations to curb air pollution?

1. **PUSA bio-decomposer-** an effective way to prevent stubble burning.
 - Pusa bio-decomposer is a solution developed by the scientists at the Indian Agricultural Research Institute, Pusa, which can turn crop residue into manure in 15 to 20 days and therefore, can prevent stubble burning.
2. **Filter-less retrofit device-** for cutting particulate matter at source in industries and vehicles.
3. A nature-based solution to amplify air purification through breathing roots technology for improving indoor air quality.
4. Geospatial technology and AI- To upgrade capacities to identify, monitor, regulate and mitigate air pollution hotspots.

Example –

The Geo-AI platform for brick kilns - is supporting environment regulators to identify non-complaint brick kilns from space.

- The platform has already mapped over 37,000 brick manufacturing units across the Indo-Gangetic plains.

What else need to be done to curb air pollution?

1. **Create an innovation framework-** Government should provide an enabling ecosystem for innovations to address context-specific air pollution challenges and

resources need to be allocated to support testing, certifying and scaling of innovative solutions.

2. **Mobilize private sector participation** - Businesses and enterprises need to innovate their operations and functioning to reduce carbon footprint.

What is the way forward?

- The new budgetary step, which is also a tacit political acknowledgement of the public health emergency, has to gather momentum to step up fiscal solutions for killer air.
- India needs context-specific innovations not only in the technological but also in the economic, social, legal, educational, political and institutional domains to mitigate the challenges of air pollution.
- The private sector has strong potential to develop commercially viable products to combat air pollution and boost the innovation ecosystem.

2. Farm and Banking Reform

Source: [Indian Express](#)

Gs3: Indian Economy and issues relating to Planning, Mobilization of Resources, Growth, Development and Employment.

Context: There is some risk necessary to reform Banking and Agriculture sector.

What are the recently announced reforms in Farming and Banking sector?

- The three farm bills legislated by the government recently, which are in the early stages of implementation.
- The second is a proposal by RBI to let corporates/industry own banks.

Can MSP ensure farm income and Agri-growth?

- **No guarantee of income:** Farmers don't get a remunerative price for their products, with the exception of a minority whose produce, mostly wheat and rice, is covered by the Minimum Support Price policy.
- **Prevalence of middlemen:** Most farmers toil on tiny, suboptimal acreage and have no bargaining power vis-vis the APMC middlemen. Choice in buyers gives them some leeway to bargain for a better price.
- **MSP is not a guarantee:** even those who get MSP are suffering from a fast depletion of the water table.
- **Excessive use of pesticides/fertilisers due to faulty policy:** the high prevalence of cancer in rural parts of Punjab and a higher cost of other foods like vegetables and fruits which are in short supply since everyone who can is planting MSP crops.
- **Post-harvest loss:** every year a lot of wheat and rice rots in the Food Corporation of India's limited warehouses.

What do the laws propose to do?

- **End the monopoly of APMC mandis** where farmers had to compulsorily sell their produce.
- End limits on stock-keeping and **allow contract farming** by the private sector.

What is immediate response of common people?

- The new farm laws have brought the farmers of Punjab and other parts of north India to the streets of Delhi.
- The volume of protest tells us that some of us are afraid of change and unable to see what may be good for all of us a decade from now.
- Farmers will no longer get a remunerative price for their produce

How future will be different for Agriculture?

- Growth in demand for non-cereal foods, like vegetables, fruits and proteins will outstrip demand for cereals.
- Remunerative price for farmers cannot be at the expense of rampant food inflation for the consumer.

What can be the possible consequences if industries house own banks?

- It will channel lending from that bank to its own business at the expense of better, more efficient fund allocation.
- It will be much easier for regulators to track any lending to connected entities than it is for them to track the unofficial connectedness, which has led to the NPA problem.

What is the way ahead?

- Balance the interests of farmers and consumers.
- Bring policy change as the farm reforms are already 10 years late.
- Industry houses are the most obvious source of domestic capital to build such banks.

3. Hazardous ideas for Himalayas

Source: The Hindu

Syllabus: GS-3- Environment

Context: China's major hydropower project as a part of its 14th Five-Year Plan (2021-25), on the Yarlung Zangbo River, in Mêdog County in Tibet.

More on news:

- The hydropower generation station is expected to provide 300 billion kWh of electricity annually. The Chinese authorities say the project will help the country realise its goal of reaching a carbon emission peak before 2030 and carbon neutrality before 2060.
- Indian counterparts were quick to restate their plans to dam the Himalayas on this side of the border. India is reportedly considering a 10-GW hydropower project in an eastern State.

What are the various misadventures that can happen due to building of hydropower dams?

- **Unviability of dams:** Both countries ignore how unviable such 'super' dams projects are, given that they are being planned in an area that is geologically unstable.
- **Competing dams:** Over the past 20 years, both China and India have been competing with each other to build hydroelectric dams in this ecologically fragile and seismically vulnerable area.
 - There are two hydropower projects in the works in Arunachal Pradesh on the tributaries of the Brahmaputra: the 600 MW Kameng project on the Bichom and Tenga Rivers and the 2,000 MW Subansiri Lower Hydroelectricity Project.
 - China has already completed 11 out of 55 projects that are planned for the Tibetan region.
- **Overestimating economic potential:** In executing these hydroelectric projects, the two countries have overestimated their economic potential and grossly underestimated the earthquake vulnerability of the region.
- **Earthquakes in the region:** High seismic zones coincide with areas of high population concentration in the Himalayan region where landslides and glacial lake outburst floods are common.
 - About 15% of the great earthquakes of the 20th century occurred in the Himalayan region. The northeast Himalayan bend has experienced several

large earthquakes of magnitude 7 and above in the last 100 years, more than the share from other parts of the Himalayas.

- The 2015 Gorkha earthquake of magnitude 7.8 in central Nepal resulted in huge losses in the hydropower sector. Nepal lost about 20% of its hydropower capacity consequent to the earthquake.
- **Landslides:** The main mechanisms that contributed to the vulnerability of hydropower projects were found to be landslides, which depend on the intensity of seismic ground shaking and slope gradients.
 - Heavy siltation from giant landslides expected in the project sites will severely reduce the water-holding capacity and life expectancy of such dams.
 - Even without earthquakes, the steep slopes made of soft rocks are bound to slide due to deforestation and road-building.

What can be done?

- **Nature reserve:** In recent years, the Himalayas have seen the highest rate of deforestation and land use changes. The upper Himalayas should be converted into a nature reserve by an international agreement.
- **Himalayan river commission:** The possibility of a Himalayan River Commission involving all the headwater and downstream countries needs to be explored.

Way forward

- India and China, the major players in the region, would be well advised to disengage from military adventurism and seek ways of transforming this 'roof of the world' into a natural reserve for the sake of humanity. Carbon neutrality should not be at the expense of the environment.

4. Modernise India's archaic tax laws

Source: [The Hindu](#)

GS3: Inclusive Growth and issues arising from it.

Context: Need to modernise India's archaic tax laws.

Background:

- The Income Tax Act was framed in 1961 and has been amended several times.
- The government constituted the Akhilesh Ranjan Task Force to suggest reforms to the Income Tax Act.
- The report has been submitted to the government but has not yet been made public.

People who gained during the Pandemic?

- **India's super rich:** Between January and June 2020, 85 new Indians were added to the list of High Net worth Individuals (with a net worth of more than \$50 million).
- **Stock dealers:** When the Indian GDP was contracting, some stocks surged to phenomenal heights thereby benefitting those dealing in stock exchanges.
- **The corporate houses, Internet service providers, laptop makers and scientists** engaged in medical research also gained.
- **The manufacturers of masks and Personal Protective Equipment** also gained during the pandemic

What are the problems in taxation?

- **Implementation of Equalisation Levy:** Through Digitalisation and e-commerce multilateral corporates have found an easy way to make big money. However, the tax administration is struggling with the implementation of the equalisation levy.

- **Implementation of Anti profiteering rules under GST:** As per the Goods and Services Tax (GST) law, any reduction in the rate of tax on the supply of goods or services has to be passed on to the consumer by way of commensurate reduction in prices. Companies are getting benefited from GST rate reduction without passing on the benefits to the end consumers.
- **Tax evasion:** Tax avoidance by global web companies has become acute because of Digitalisation.
- **Tax dispute settlement:** The International Court of Arbitration ruled that the Indian government's move to seek taxes from Vodafone using retrospective legislation was against the fairness principle.

What can be done?

- Digital taxation has to be amended in accordance with the UN Model Convention. There is need for India to act in sync with the OECD.
- The Anti-Profitteering Rules have to be implemented vigorously wherever there is reduction in the tax rate on any commodity or service
- Need to find a suitable mechanism to negotiate settlement through mediation or conciliation or, if necessary, arbitration in connection with tax disputes between the tax-paying companies and the Central Board of Direct Taxes.

Our archaic laws should be modernised and made compatible with international tax laws. The suggestions made by Akhilesh Ranjan Task Force needs to be implemented after wide consultation.

5. Agri model

Source: The Indian Express

Syllabus: GS-3- Agriculture

Context: The next Green Revolution 2.0 will come through in-depth research, better investment opportunities and access to the market.

What led to the green revolution?

- **Scarcity of grain:** After the China war, when India was standing at the cusp of economic destruction, Pakistan attacked India. There was an acute scarcity of food grains in the country.
- **Change in farm sector:** Scientist Norman Borlaug brought a revolutionary change in the farm sector in Mexico with his semi-dwarf varieties of rice and wheat. Borlaug analysed the farm sector in Punjab and concluded that production can be doubled.
- **Beginning of green revolution:** Subramaniam promised the farmers that if they implement the new farming techniques, the central government will compensate them. This scheme was initially implemented in around 150 farm holdings with the assistance of Punjab Agriculture University, Ludhiana.
 - The Green Revolution worked on three fronts: better seeds, irrigation and optimum use of fertilisers.

The new laws have set the tone for second green revolution. Discuss.

- **For the rich farmers of Punjab, Haryana and western Uttar Pradesh:** Things are different; but for crores of small landholders in Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh, West Bengal, Odisha, etc., it is now possible to feed their families.
- **Landholdings in many states have shrunk:** In eastern UP, the cultivators are largely marginal farmers now.
 - Farmers with less than an acre of arable land are identified as marginal farmers.

9 PM Compilation for the Month of December (Third week), 2020

- Small farmers are those with landholdings between 1 acre and 2.5 acres.
- It is difficult for a farming family to sustain themselves with just an acre of arable land. The farmer will have to explore other avenues to improve his financial position.
- **Agrarian transition development:** The latest farm policy reforms of the government are also called agrarian transition development and were implemented in Europe and the US early on. Today, around 45 per cent of the country's workforce is involved in agriculture.
- **Agriculture after independence:** When India attained Independence, the contribution of agriculture to the country's GDP was huge, which today has come down to around 15 per cent. The old model has been a drag on the economy as well as the villages.
- **Develop models of contract farming:** It is an avenue to develop an organised corporate model of agriculture in the country. This will speed up urbanisation in the villages and the development of industries and the service sector there.
 - These sectors will be able to absorb the excess workforce in the farm sector.
- **Structure and potential of contract farming:** For instance, if a village has a thousand farmers who have an acre of arable land, then, through contract farming, someone can sow crops on the entire 1,000 acres of land.
 - The land continues to belong to the farmer, while on the other hand, he/she will earn the profit from the sale of produce generated from his/her part of the landholding. This also frees him/her to pursue other employment opportunities.

Way forward

- **The next revolution:** Green Revolution 2.0 will come through in-depth research, better investment opportunities and access to the market. The three farm laws are a revolutionary step in that direction.

6. Income support to mitigate income losses

Source- [The Indian Express](#)

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

Context- The government's unusual reluctance in providing adequate support to the economy has purportedly been because of the lack of fiscal space.

Is India in a technical recession?

Technical recession- The National Bureau of Economic Research (NBER) in the US defines a technical recession to be in progress when real GDP has declined for at least two consecutive quarters.

- However, the growth rate is measured on a quarter-over-quarter, not year-ago, basis.

According to JP Morgan's estimates – On quarterly basis, India's GDP plunged 25 per cent in 2Q20 and recovered by 21 per cent in 3Q20.

- This implies that India did not suffer two consecutive quarters of negative growth.
- Therefore, India is not in a technical recession.

What is RBI's survey suggests to real GDP growth?

RBI latest survey of professional forecasters (SPF) has forecast that real GDP is expected to recover in FY22 to 12 percent from -9 percent in FY21.

- This implies that six quarters from now it will still be about 7 per cent below the pre-pandemic path, or \$300-billion-a-year of **income losses** across two years.

- **Concern-** This can cause great damage to household and SME balance sheets, to income inequality, to poverty, and to women's employment

What are the issues with government policy?

1. **No income support-** The income loss could have been mitigated by budgetary income support. However, the government chose not to provide this.
 - Government consumption declined 22 per cent on a quarterly basis in 3Q.
2. **Limited support to the domestic economy** - Despite the apparent lack of fiscal space at home, the RBI has been funding other countries' fiscal deficits.
 - RBI invested almost 3 per cent of GDP in foreign assets just in the first half of this fiscal year.
3. **India's huge current account surplus is a bane-** This reflected not economic strength but an economy imploding so much faster than others that India's demand for imports fell faster than foreign demand for Indian exports.
4. **Ongoing recovery led by capital than wages** - Indian companies reported a decline in sales. However, operating profits growth was in the double digits. Net profits grew even faster. Large firms achieved this by slashing costs.
 - A recovery led by profits will not lead to higher investment demand as long as there is significant excess capacity in many parts of the Indian economy.
 - As far as the labour market goes, unemployment has dropped below pre-covid levels, but that is partly because of a decrease in the labour participation rate.

What is the way forward?

Government needs to provide extensive income support to mitigate the income losses due to pandemic.

- Government needs to be ensured that the recovery is not hamstrung by damaged household and SME balance sheets because of the extended loss of wages and incomes.
- Infrastructure spending and reforms are critical to sustain medium-term growth, neither can boost near-term demand.

7. India's retail inflation

Source- [The Hindu](#)

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

Context- Retail inflation showed signs of easing in November, led by easing prices of some food items.

More in news-

Consumer Price Index inflation stood at 6.93% in November 2020 compared to 7.61% in October, according to data released by the Ministry of Statistics and Program Implementation, though it remained above the comfort level of the Reserve Bank.

What are the reasons for decline in CPI inflation?

1. The movement in retail inflation is broadly driven by the movement in food and beverage inflation which has 46 per cent weight in the consumer price index.
 - Within the food items, the inflation declined for vegetables to 15.63%, cereals and products 2.32%, meat and fish 16.67% and milk and products 4.98%.
2. Inflation in the key transport and communication category that includes petrol and diesel eased by a marginal 10 basis points to 11.06%.

3. The inflation for housing eased to 3.19%, while that for miscellaneous items was flat at 6.94% in November 2020.
 - Within the miscellaneous items, personal care and effects 11.97%, recreation and amusement 4.57%.

What are the areas of concern for RBI?

1. Inflation remained above the comfort level of the RBI-

- Out of the food basket of 12 items, inflation still remained in the double digits in the case of six.
- Key protein sources including pulses, eggs and meat and fish continued to register worryingly high levels of inflation.

2. Worrying high transportation cost- With oil marketing companies continuing to raise pump prices of these crucial transportation fuels, it is hard to foresee any further appreciable softening in food prices in December.

- This put the RBI's forecast for average fiscal third-quarter inflation of 6.8% in jeopardy.

Disrupted supply chain logistics, higher operational and labour costs, higher administrative fuel costs partly contribute to the upward inflation trajectory in recent months.

What is the way forward?

- Policymakers must guard against easing vigilance on prices while considering growth-supportive measures.
- Price stability must remain the monetary authority's primary target.
- The decline in the CPI inflation print in Nov 2020 to 6.93 per cent from 7.61 per cent in Oct 2020 has definitely come as a relief to the bond markets.

8. Vaccine policy

Source: The Hindu

Syllabus: GS-3- S and T

Context: Recently unveiled India's COVID-19 vaccine policy, should make adequate allowances for ground realities.

What is India's plan on vaccinating people?

- **Strategy to slow the virus spread:** With a definitive cure not yet available for COVID-19, vaccines present the world with the best strategy to slow the virus down.
- **India's plan:** The U.K. and the U.S. began vaccinating their people, India has announced its plan and proposed line-up for COVID-19 vaccination.
 - **Priority population:** As per the government's strategy, the vaccination is to be given first to health-care workers and then to people over the age of 50, with those over 60 given priority, based on the situation. This will amount to about 30 crore people.
 - **Verifying document:** The voters' list for the Lok Sabha and Assembly election polls has been set as the verifying document for the process.
 - **Co-WIN:** A new digital platform, Co-WIN, will be used for COVID-19 vaccination delivery, and about 1.54 lakh Auxiliary Nurse Midwives working on Universal Immunisation Programmes will be roped in as vaccinators, with more such field staff to be mobilised in collaboration with the States.
 - **Cold chain systems:** Cold chain systems are to be strengthened across the country to deliver multiple doses.

What are the steps to be taken?

- **Perception management:** They need to clear the fog on vaccine safety and efficacy among the people.
- **Detailed plan:** A detailed plan must be prepared for vaccinating children and a breakdown of tasks down to the lowest governance rung, as counties in the U.S. have been doing.
 - Unless the latter is done, a proper estimate of the true challenges of administering vaccines in the field will not be available.
- **Tackling vaccine hesitancy:** Vaccine hesitancy is a reality and the only way to counter that is to be open and honest about adverse effects and make available relevant information in the public realm.
 - In the past, in some States, vaccination programmes have suffered temporarily because of misinformation about adverse events following shots.

Way forward

- In this case, a long-term follow up of all who receive the vaccine is absolutely essential. For, therein lies the assurance that everyone in the global line list is waiting for.

9. Punjab, Haryana need to look beyond MSP crops

Source: [The Hindu](#)

GS3: Issues related to transport and marketing of agricultural produce, Issues related to direct and indirect farm subsidies

Context: States of Punjab, Haryana need to look beyond MSP crops

Background

- The states of Punjab, Haryana and western Uttar Pradesh, were an early adopter of Green Revolution technology.
- Owing to early adoption of green revolution technology, they became a major beneficiary of various policies adopted to spread modern agriculture technology in the country.
- It enabled India to move from a country facing a severe shortage of staple food to becoming a nation close to self-sufficiency in just 15 years.

What attracts farmers to rice-wheat crops?

- **MSP:** Procurement of marketed surplus of paddy (rice) and wheat at Minimum Support Price (MSP) completely insulated farmers against any price or market risks.
- **Steady income:** It also ensured a reasonably stable flow of income from these two crops. For example, per farmer agriculture incomes in Haryana and Punjab are two to three times more than the national average
- **Technological Advantage:** Over time, the technological advantage of rice and wheat over other competing crops further increased as public sector agriculture research and development allocated their best resources and scientific manpower to these two crops.
- **Other reasons:** Other public and private investments in water and land and input subsidies were the other favourable factors.

What are the adverse effects of Green revolution?

- Though initially, the progress and specialisation towards these two crops served the great national goal of securing the food security of the country.

- During the mid-1980s, some experts foresaw the serious consequences of continuation of paddy cultivation in the region and suggested diversification away from the rice-wheat system.
- This system had adverse effect on natural resources, the ecology, the environment, and fiscal resources.
- The policy of free power for pumping out groundwater for irrigation has resulted in depletion of groundwater resources. In the last decade, the water table has shown a decline in 84% observation wells in Punjab and 75% in Haryana.
- The burning of paddy stubble and straw has become another serious environmental and health hazard in the whole region.
- Concerns have also been expressed about plateauing productivity and stagnant income from rice-wheat cultivation.
- However, the area under these two crops has only increased rather than fallen.

Why it needs to be changed?

- The prospects of further growth in agricultural income from the crop sector dominated by rice and wheat are very dim as the productivity of rice and wheat has reached a plateau.
- In India, the per capita intake of rice and wheat is declining and consumers' preference is shifting towards other foods. For example, the average spending by urban consumers is more on beverage and spices than on all cereals.
- Rice and wheat procurement in the country has more than doubled after 2006-07 and buffer stocks have swelled to an all-time high. It has created stress on the fiscal resources of the government.
- The implication of all these changes is that farmers in the region will find it difficult to increase their income from rice-wheat cultivation and they must be provided alternative choices to keep their income growing.
- Procurement of almost the entire market arrivals of rice and wheat at MSP for more than 50 years has affected the entrepreneurial skills of farmers to sell their produce in a competitive market where prices are determined by demand and supply and competition.

What is the way forward?

- The solution to the ecological, environmental and economic challenges facing agriculture in the traditional Green Revolution States is not in legalising MSP but to shift from MSP crops to high value crops and in the promotion of non-farm activities.
- Some options for this are, promotion of food processing in formal and informal sectors, a big push to post-harvest value addition and modern value chains, a network of agro-and agri-input industries; high-tech agriculture; and a direct link of production and producers to consumption and consumers without involving intermediaries.

10. New farm laws will impoverish rural India

Source: [Indian Express](#)

GS3: Issues related to transport and marketing of agricultural produce, Issues related to direct and indirect farm subsidies

Context: The new farm laws have the potential to restructure Indian agriculture in areas of production, procurement, marketing, pricing, stocking and land ownership.

How farm laws can restructure the whole scenario in rural India?

- **Landless labours:** About 60 per cent of population is engaged in agriculture and allied activities.

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- **Affects welfare:** Changes in production, marketing and food distribution directly impact welfare. Many farmers migrate to neighbouring towns and states to work as casual labourers during the non-agricultural seasons.
- **Livelihood:** Nearly 263 million are directly dependent on agriculture and the rest on agriculture allied small industries such as brick-kilns, quarries and small cottage industries in the villages.

What has been proposed by the farm laws?

- **Contract farming:**
 - **Farmers' (Empowerment and Protection) Agreement of Price Assurance and Farm Services, 2020** claims that it will enable agri-business firms, retail supermarket chains to enter into prior agreements with small farmers for production, pricing and purchase of agricultural products.
 - It facilitates **leasing of land** from small farmers and **pooling of plots** to turn them into large farms and cultivate them with modern machinery and technology.
 - **Niti Aayog** has argued that since small farms are non-profitable it is necessary to opt for **corporate farming**.
- **Reducing APMC monopoly:**
 - It will provide a level-playing field to both farmers and traders including agri-business firms, retail supermarket chains parallel to the APMC market yards.

How does it affect the employment and livelihood opportunities of the landless families?

- As per the 2011 Census, there are 494.9 million (49.49 crore) landless individuals in villages, who are directly or indirectly dependent on cultivation for their livelihoods.
- According to Census 2011, around 1.2 crore or nearly 14 per cent of the farming community are tenant farmers or sharecroppers, who work in fields owned by others.
- **With no land reform agenda** on the horizon, this law will lead to large-scale landlessness, unemployment.
- Farmers should find 170 days of employment in two crop cultivated areas. However, the actual employment days are far less.
- With large farms, modern technology and the use of heavy machinery for a majority of field operations, a large chunk of them are certain to lose employment with **no rehabilitation**.
- **Private buyers will dominate the APMC mandis** thus denying small farmers the assurance of selling at MSP.
- **For example**, In Bihar after abolishing the APMC mandi structure in 2006, the small and tenant farmers are now forced to sell their maize produce to private traders and agri-business corporations at prices about 30 per cent lower than the MSP.
- Small tenant farmers do not have the clout to bargain with large corporations.

How the farm laws will impact food security?

- Farmers tend not to keep a portion of the harvest for family consumption and sell the entire produce in markets generally
- Majority of landless and small farmers are dependent on the subsidised grain provided through the PDS.
- With MSPs going out, the agricultural crisis would further deepen and affect the nation's food security.
- With the diminishing of FCI, the PDS will collapse.

11. Waste to Energy

Source: [The Hindu](#)

GS3: Environmental Pollution and Degradation, Science and Technology- Developments and their Applications and Effects in Everyday Life

Context: Recently Karnataka Chief Minister B.S. Yediyurappa laid the foundation stone for a 11.5 MW waste-to-energy plant near Bidadi. This plant is expected to process 600 tonnes per day of inorganic waste.

What is the significance of Waste to Energy Plants?

- The waste-to-energy plants usually accept the RDF material generated in organic composting plants.
- They also segregate the wet and inorganic material near the plant, convert organic waste to compost, and inorganic waste to energy.

Why it is needed?

- Bengaluru generates close to 5,000 tonnes of waste daily, of which about 2,500 tonnes is organic, about 1,000 tonnes inert material (sweeping waste) and 1,500 tonnes inorganic.
- This inorganic material, which consists of bad quality plastics and used cloth pieces, can be processed as **Refuse Derived Fuel (RDF)**.
- This material has a calorific value of more than 2,500 kJ/kg, and can be used to generate steam energy, which can be converted into electric energy instead of burning coal and other materials used in traditional waste-to-energy plants.
- At present, Inorganic waste that is not fit for recycling are landfilled or left unhandled in waste plants and cause fire accidents.
- Attempts to send this material to cement kilns have not fructified.
- The proposed plant can source 600 tonnes per day of this RDF and generate 11.5 MW of power equivalent to 2.4 lakh units of power per day.
- This will reduce the city's dependency on unscientific landfills, reduce fire accidents, and provide a permanent solution to recover value from inorganic waste.

What are the challenges faced by Waste to Energy plants in India?

- **Poor quality of waste:** The Waste to Energy plants require fine inorganic material with less than 5% moisture and less than 5% silt and soil contents, whereas the moisture and inert content in the mixed waste generated in the city is more than 15%-20%.
- **Lack of segregation at source:** Since segregation at source doesn't happen in the city, the collected waste material needs to be sieved using 80mm-100 mm sieving machines, which lets through organic material with more than 80mm-100 mm particle sizes into the inorganic waste. In addition, the sticky silt and soil particles will also reduce the calorific value.
- **Cost of Power is high:** Generally, the tariff at which the power is purchased by to energy plants across the country is around ₹7-8 Kwh which is higher than the ₹3-4 per Kwh generated through coal and other means. This could be a serious challenge, as the selling price of power cannot be increased corresponding to the purchasing price.

12. Guaranteed MSP will claim half the Budget

Source: [The Hindu Business line](#)

GS3: Issues related to Direct and Indirect Farm Subsidies and Minimum Support Prices

Context: Procurement of 23 crops at MSP which will amount to ₹17-lakh cr and to support this annual allocation, rich farmers should pay tax.

What is the farmers' demand?

- The protesters have rejected the offer of amendments to farm laws and are firm on their demand for repeal of the three laws.
- Farmers want MSP guarantee.

Is it feasible to accept demand of MSP guarantee?

- **Not economical:** India has about 14 crore farmers (as per PM-KISAN enumeration). Cost of procuring all 23 crops is 50 per cent of India's annual expenditure
- **Unsustainable burden:** The cost of MSP and subsidised food supplies are being met by heavy borrowings from the National Small Savings Fund (NSSF).
- **Rising subsidies:** In 2019-20, 11 per cent of the country's total budget was spent on farmer welfare schemes. Subsidies on food and fertiliser and expenses on irrigation schemes in 2019-20 noticed a 65 per cent jump from 2017-18.
- **Direct benefit:** introduction of the PM-KISAN scheme resulted in leap in food subsidy.
- **Rise in procurement:** Procurement of food crops including paddy, wheat, pulses and oilseeds under MSP has seen a dramatic increase. For example, compared to 1,395 lakh tonnes of wheat procured between 2009 and 2014, 1,627 lakh tonnes of wheat have been procured in the last five years.

What are the other issues?

- **Disparities:** MSP's poor implementation has created problems of equity with large farmers of just two States Punjab and Haryana.
- **Faulty policy:** As per CACP, more than 95 per cent paddy farmers in Punjab and about 70 per cent farmers in Haryana are covered under MSP operations. States such as Uttar Pradesh (3.6 per cent), West Bengal (7.3 per cent), Odisha (20.6 per cent) and Bihar (1.7 per cent), have only a minuscule number of farmers benefit from procurement.

Why blanket exemption on taxing agriculture income is bad policy?

- Agriculture income including that from sale of farmland is exempt under Section 10 (1) of the Income Tax Act, 1961 without any limit.
- Rich farmers and politically influential people use the provision to convert black money into white.
- Rich farmers include many corporates who run seed companies and whose profits run into crores.
- In 2019, a Comptroller and Auditor General report red-flagged the **irregularities in exemptions** given by the taxman on agriculture income.
- It said that claims of tax exemption on farm income were given based on "inadequate verification or incomplete documentation" in more than a fifth of the 6,778 cases.
- Exemption was granted in hundreds of cases where land records or proof of farm income was not available.
- According to an article published in the Economic and Political Weekly by Govind Bhattacharjee, a retired Director General from CAG, assesses who had reported agricultural of more than ₹5 lakh each between 2014-15 and 2016-17 were 22,195.

The blanket exemption on agriculture income should be stopped and it should continue for roughly 86 per cent of the peasants of the country. The 14 per cent rich farmers should come forward to help the rest get MSP support.

13. Farmer's protest

Source- [The Hindu](#)

Syllabus- GS 3- Issues related to direct and indirect farm subsidies and minimum support prices; Public Distribution System- objectives, functioning, limitations, revamping; issues of buffer stocks and food security; Technology missions; economics of animal-rearing.

Context- The economic calculus needs to shift from 'economies of scale with standardization' to 'economies of scope for sustainability'.

How farm productivity can be increased and what are the consequences of this?

The agriculture sector contributes 17 per cent of India's GDP. As per estimate, about 57 per cent of the working population is engaged in agriculture.

According to economists the farm productivity can be increased by -

- India needs to shift from basic farming to more efficient, sustainable, productive farming.
- More technology and automation will be required to improve productivity.
- **Reduce the number of employed-** The agriculture sector should employ only 17 per cent of the workforce as to become more productive like other sectors.

Concern with such approach-

1. Landholdings are too small for mechanization
2. **Mono-cropping-** Mechanized farming will initiate mono-cropping, as mechanization requires standardization of work, which results in-
 - Fluctuate the ecological balance.
 - Reduced diversity of flora enables pests to spread more easily.
 - Soil quality gets reduced and waters resources depleted.

Therefore, India must figure out a way to provide meaningful employment to hundreds of millions of people outside agriculture.

What is government's contention with new farm laws?

1. **Farmers will get higher prices** - These Acts are intended to empower the farmers and ensure doubling of their incomes.
2. **Provide wider markets for farm produce** - The Acts will only increase options for farmers in the output markets.
 - Connections into global supply chains can increase volumes of sales.

What are the major issues with new farm reforms?

1. **Promote corporate control-** The farmers contend the federal government is making ready to withdraw from the procurement of food grain and hand it over to the company gamers.
2. **Will not have adequate pricing power-** Small and marginal, would be left at the mercy of the corporates, with reduced collective bargaining capacity.
 - Trade will always favour the larger players in the supply chains who have easier access to capital.
3. **Against the Spirit of Cooperative federalism-** Since agriculture and markets are State subjects, the ordinances are being seen as a direct encroachment upon the functions of the States

What is the way forward?

1. Experts from many disciplines must collaborate to find systemic solutions for low income in farm sectors.
2. The intended beneficiaries of the new policies must be included in the designing of the new policies right at the beginning.

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- Policymakers must listen to the institutions that represent small people — associations and unions of farmers, informal workers and small enterprises.
3. Cooperative ownership and collective bargaining must be strengthened to give power to small farmers before opening markets to large corporations.

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