

# CIVIL SERVICES EXAMINATION focus

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## CURRENT AFFAIRS ANALYSIS

logical . simple . targeted  
analysis & explanation  
of relevant news

## ETHICS, INTEGRITY & APTITUDE

Coverage from  
varied  
sources

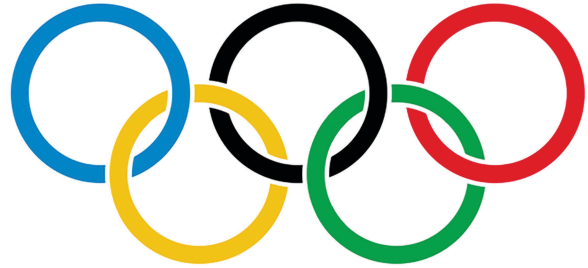
## ESSAYS OF THE MONTH

Selected essays  
from Rau's  
GSI students

**AUGUST  
2021**

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

*editorial  
note*



## **QUEST FOR MEDALS**

As the world continues to recover from the COVID-19 pandemic, Olympic Games in Tokyo seem to have come as the beacon of hope. Olympics are not merely a series of sports competition. The legacy and enduring spirit behind them makes them special.

Roots of Olympics are traced to ancient Greece. The Colosseum in Rome stands as a living testimony of ancient Olympic games. Towards the end of 19th Century, **Pierre de Coubertin's** efforts led to the revival of Olympics. He founded the International Olympic Committee in 1894 and gave it the responsibility of organizing the modern Olympics Games every 4 years.

The first modern Olympic games were held at Athens in 1896. When racism, gender inequality and imperialism were the norm across the world, the Olympic games presented a new ethic that celebrated diversity, praised effort, gave women a chance to compete alongside men and treated all countries equally.

Olympism the value behind the Olympics seeks to blend sport with culture and education. It seeks to create a way of life based on joy of effort, educational value of good example, social responsibility and respect for universal fundamental ethical principles. Core of Olympism is to encourage effort, preserve human dignity and develop harmony.

### **India and Olympics**

Despite being home to the largest youth and second largest population in the world, India's performance at the games

have been subpar. It is disappointing that a country that has world class talent in various disciplines has not been able to produce champions in sports. Squad size of India to Olympics has increased in recent editions, however, medals have been elusive.

### **Reasons for India's subpar performance at Olympics:**

- a) **Lack of sporting culture:** Culturally, sports are not celebrated in India, parents want kids to focus on studies and see sports as distraction. At the community level, there is not much engagement of local community with sports.
- b) **Lack of focus on sports at grassroot level:** Search of sporting talent should start at school. However, there is inadequate focus and emphasis on physical education and sports at school and university level. Schools and colleges lack equipment, infrastructure and guidance for students to excel in sports.
- c) **Difficult to see sports as career:** Sports is not the first choice as a career for most of our sportsmen due to insecurity. Even successful sportsmen are sometimes forced to live a life of penury. Large majority of probables drop out because of high risk, uncertainty and low rewards in sports.
- d) **Lack of investment in sports** as spending from Union & State Governments taken together spend just 2 paisa per capita per day. Investment in sports has been driven primarily by public sector with private participation being very limited and mostly

concentrated in cricket. Sports have become technology led. However, India continues to rely on archaic means of training.

- e) Issues with sports administration:** Allegations of nepotism, fiefdom, lack of professionalism, unaccountability and financial irregularities surround the sports federations. Sports administration is bureaucracy led who have very limited exposure to management of athletes and requirement of sports. Tournaments like National Games are not organised regularly, displaying the attention sports gets.

Olympics Task Force constituted by Government has highlighted that India's success in Olympic sports so far has been delivered despite the system in place and not because of it. They have pointed that there are too many gaps in our sport's administrative structure. There can be no transformational change in Indian sporting results unless there is systemic overhaul to plug these gaps. It has suggested for:

**a) Developing a national culture of sports**

- Schools should be where focus of sports development should start with. Initiatives like mandatory sports hour each day, provision for sports equipment in all schools, sports being part of curriculum and competitions at school level (Khelo India) need to be made.
- District level sports schools should be established in each district of India to nurture grassroot talent.
- Developing world class sports infrastructure in leading universities of the country.
- Special focus should be given towards regional pockets of sporting excellence such as Tribals areas, North-East for football, Punjab for Hockey etc.

**b) Professional Sporting Leagues** such as IPL should be encouraged as they give opportunity to domestic sportspersons to compete with best international players, increasing their exposure and tactics.

**c) Reforms in Sports Administration:**

- Redefining the role of Sports Authority of India as the agency responsible for running academies of excellence for elite athletes.
- SAI should focus on development of Sports Science expertise and research.
- SAI should be professionalised by ending government

deputations and have financial autonomy.

**d) Focus on coach development** by giving them salaries equivalent to university professors, salary cap for Indian caps should be removed to bring them at par with foreign coaches. A National Coach Development Program should be launched.

**e) Focus on physical literacy** by constituting a National Council for Physical Literacy and Sports. This body would be responsible for sports education and training.

**f) Comprehensive National Sport Repository System** to be developed where everything related to an athlete is available including their performance record, training, funds used, injuries etc.

**g) One state, One sport:** Sports being a State subject under the Constitution, States have to show more intent in promoting and developing sports. Therefore, States can start with choosing one Sport they desire to support and focus on its infrastructure development.

**h) Timely hosting of national games** should be made mandatory every two years will give regular competitive exposure to sportspersons.

**i) Technology infusion in sports** with focus on sports science, nutritional science, training routines and monitoring of sportsmen health and performance by intensive data analysis.

**j) Assured Career for Elite sports persons:**

- Attractive stipend to take care of nutritional and other needs of sportsmen for elite potential athletes by State and Central Government.
- Currently, there is a provision of sport quota recruitment up to 5%. The word 'up to' should be removed meaning a 5% minimum reservation under sports quota.

Hopefully, with the reforms suggested above India's quest for glory at Olympics get materialised in the coming Olympics.

At the end, we must realise that the message of Olympics is not limited to sportspersons only. 'Faster, Higher, Stronger' – should motivate each one of us to excel in our own lives, be agile and healthy and be strong in all the ways we can yet at the same time being tolerant, compassionate, peaceful and socially and environmentally conscious.

# focus

## CRITICAL NOTES FOR THE PREPARATION OF GENERAL STUDIES PAPERS

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

The sources relied for selection and analysis of issues are:

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

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

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

### Features

#### PART ONE | CURRENT AFFAIRS ANALYSIS

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

#### PART TWO | ETHICS, INTEGRITY & APTITUDE

- Coverage from varied sources

#### PART THREE | ESSAYS FOR YOU

- Selected essays from Rau's GSI students

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

**Good Luck!**  
**RAU'S IAS STUDY CIRCLE**





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# **PART ONE**

# **CURRENT AFFAIRS ANALYSIS**

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

# ECONOMIC DEVELOPMENT

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

## AGRICULTURE

### E-NAM: SUCCESSES AND CHALLENGES

#AGRICULTURE

PRIMARY SOURCE: THE HINDU BUSINESS LINE; SECONDARY SOURCE: FINANCIAL EXPRESS

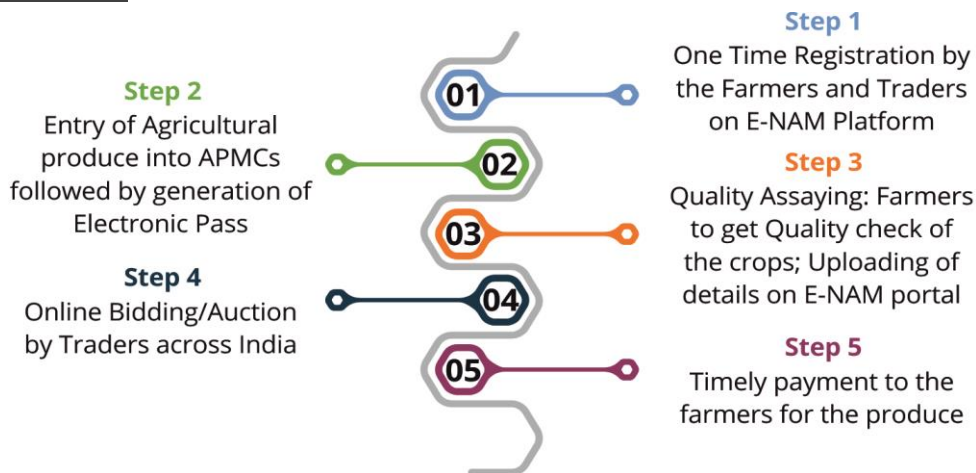
According to a recent data published by Ministry of Agriculture, only around 14% of the Mandis have been integrated with the E-NAM so far. This shows that despite making visible inroads, the E-NAM platform has a long way to go.

#### NEED FOR E-NAM PORTAL

Most of the State governments enacted the Agricultural Produce Market Regulation Act (APMC Act) to regulate agricultural marketing. Presently, we have around 6700 APMC wholesale mandis throughout India. So, effectively, we do not have one, but thousands of agriculture markets.

**Fragmented Agricultural Marketing:** Agricultural commodities pass through multiple middlemen and traders leading to higher prices for the consumers

#### WORKING MECHANISM



**Against Interests of Small and Marginal farmers** who are forced to sell at lower prices due to their low marketable surplus and poor bargaining power.

**Lack of Integrated Domestic market** leading to poor price discovery and lower price realisation for farmers

**Higher Post-harvest Losses** in the range of 20-25% of produce accounting for Rs 92,000 crores loss.

#### WHAT IS E-NAM?

Pan-India Electronic portal to link the existing APMCs to create an Integrated domestic market ("One Nation, One Market"). Managed by **Small Farmers' Agribusiness Consortium (SFAC)**.

States interested to integrate their mandis with E-NAM are required to carry out following three reforms in their APMC Act.

- a) Single trading license (Unified) to be valid across the state
- b) Single point levy of market fee across the state; and
- c) Provision for e-auction/ e-trading as a mode of price discovery

## ECONOMIC DEVELOPMENT

### RECENT DEVELOPMENTS IN 2020

**FPO Module on e-NAM:** Enables FPOs to upload pictures of their produce directly from collection centres without the need to come to Mandis.

**Warehousing based Trading Module:** Farmers can sell their produce directly from the warehouses registered under warehousing Development and Regulating Authority (WDRA).

**Logistics Module:** Link large logistic aggregator platforms with the traders for the seamless transportation of Agri-produce.

**KISAN rath Application:** Mobile application to enable the Farmers and Traders in hiring vehicles for transportation of Agri-produce.

**Integration with other platforms:** e-NAM platform has been made inter operable with ReMS platform of Govt. of Karnataka. Such an integration facilitates farmers of either platform to sell their produce in other platform thereby increasing their market access.

**Agri-Infrastructure Fund:** Financing facility to Primary Agricultural Cooperative Societies, Farmers Producer Organizations, Agriculture entrepreneurs, Start-ups, APMCs etc to set up collection centres, cold chains, warehousing, assaying, grading and packaging units etc.

### BENEFITS, CHALLENGES AND WAY FORWARD

BENEFITS	CHALLENGES	WAY FORWARD
<p><b>Thrust to New Farm Acts:</b> The new farm acts enable the farmers to sell their agricultural produce directly from the trade area- Farm gate, warehouse, factory premises etc. Hence, E-NAM would provide fillip to the implementation of new farm acts.</p> <p><b>Efficient Agri-marketing regime-</b> Single trading license. Single point levy of market fee, e-auction.</p> <p><b>Benefits Farmers:</b> Remunerative prices, reduced transaction costs, more transparency in sale produce and prompt payment of sales proceeds</p> <p><b>Boost FPOs:</b> New E-NAM Trading modules such as FPO Module, Warehousing module would save transportation costs for the FPOs.</p> <p><b>Boost Food Processing Sector and Exports</b> as Processors and Exporters can directly buy the produce from farmers without any hassles</p> <p><b>Ensures Quality in procurement</b> as it provides for assaying and grading of produce.</p> <p><b>Streamlines the agricultural supply</b> chain, reduces logistics cost and reduces post-harvest losses</p> <p><b>Induces transparency and competition</b> and prevents collusion among the traders</p> <p><b>Ensures timely payment</b> directly to the bank accounts of the farmers</p> <p><b>Ensures price stability</b> and prevents inflation</p>	<p><b>Poor Penetration:</b> Only around 1000 APMCs (14%) have been integrated with e-NAM in last 5 years. In particular, larger APMCs have not been integrated.</p> <p><b>Lack of Political will:</b> Some of the states have not fulfilled the criteria to join E-NAM. This is due to the fear of revenue loss due to single point levy of market fee and single trading license.</p> <p><b>Infrastructural gaps:</b> Inadequate infrastructure such as such as electronic gate pass (entry and exit), quality assaying (QA) labs, electronic weighbridge; Underdeveloped IT Infrastructure; Poor Internet connectivity; Lack of financial inclusion among the farmers; Farmers need cash to meet immediate expenses.</p> <p><b>Poor participation of Farmers:</b> Around 32% of the farmers are still unaware of the E-NAM; Farmers continue to sell the produce directly to traders in the villages due to - (a) Easier Credit provided by Traders (b) APMCs located far way from villages (c) Immediate cash payment</p> <p><b>Resistance by Traders and Middlemen</b> as the online system is</p>	<p><b>Conduct awareness programmes</b> among the farmers to highlight the benefits of E-NAM</p> <p><b>Increase Funding:</b> Presently, Government gives Rs 75 lakh to each mandi for integrating with E-NAM. Need to provide higher funds to the APMCs to plug the infrastructural gaps.</p> <p><b>Deploy adequate IT staff</b> for smooth functioning of e-NAM platform</p> <p><b>Improve the coverage of E-NAM</b> in terms of integration with more APMCs and Warehouses</p> <p><b>Reduce the dependence of the farmers</b> on the middlemen by organising them into FPO, set up collection centres at farm level and link such collection centres with E-NAM</p> <p><b>Open Bank branches</b> on the APMC premises to get instant payments.</p> <p><b>Establishment of an Apex Body</b> is advocated to control and regulate the actives of e-</p>



## ECONOMIC DEVELOPMENT

in Agri-Commodities.	more accountable and would bring them under the ambit of tax.	NAM
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# LIVESTOCK SECTOR- OPPORTUNITIES, CHALLENGES AND WAY FORWARD

#AGRICULTURE



The Cabinet Committee on Economic Affairs has recently approved implementation of special livestock sector package amounting to Rs.9800 crores over the 5 years.

The Special Livestock sector package has been formed by merging different schemes of the Department of Animal Husbandry & Dairying into 3 different categories related to Dairy Development, Livestock health and Infrastructure development.

In this regard, let us take this opportunity to holistically cover the Livestock Sector from the perspective of Mains Exam.

Animal husbandry output constitutes about 30 percent of the country's agricultural output. Women constitute 70 per cent of the labour force in livestock sector as against 35 per cent in crop farming. Further, most of the livestock is concentrated in dry land areas and with small and marginal farmers. Hence, development of animal husbandry is considered to be more egalitarian and inclusive.

### IMPORTANCE OF LIVESTOCK IN RURAL ECONOMY

- Source of Subsidiary Income
- Milk, meat and eggs are an important source of animal protein to the members of the livestock owners.
- Social Security: The families especially the landless which own animals are better placed than those who do not.

- Agriculture: The farmers, depend upon bullocks for ploughing, carting and transport of both inputs and outputs.
- Dung: In rural areas dung is used for several purposes which include fuel (Dung cakes), fertilizers (farmyard manure), and plastering materials (poor man's cement)

### CONSTRAINTS AND CHALLENGES

- Shortage of Feed and fodder (only 4% of land categorized as Pastureland)
- Frequent occurrence of deadly diseases such as Foot and Mouth Diseases
- Underdeveloped Livestock markets
- Livestock extension grossly neglected
- Lack of International processing Standards hindering export of meat
- Poor coverage of livestock insurance
- Poor coverage of Artificial Insemination

### STRATEGIES NEEDED

**Expand Coverage of Artificial Insemination (AI):** E PashuHaat portal has to be expanded to connect breeders with farmers and necessary information about availability of quality bovine germplasm should be provided.

**Address Shortage of Male Germplasm/Breeding Bulls** by identifying more high genetic merit bulls

**Address Acute Shortage of feed and fodders** by effectively implementing National Livestock Mission (NLM)

**Skilled Human Resource Development** to enhance extension service

**Development of Dairy Entrepreneurs** by providing cheaper access to credit, handholding support etc.

**Effective implementation** of Rashtriya Gokul Mission and Rashtriya Kamdhenu Aayog for development and conservation of indigenous bovine breeds

**Organizing farmers into FPOs** and focus on diversification towards low-cholesterol ghee, low fat butter, flavoured milks, ice-creams etc.

## ECONOMIC DEVELOPMENT

**Promotion of Contract farming:** Contract farming in Poultry sector and Dairy sector have been successful in some of the states such as Punjab. For example, NESTLE's association with the farmers in the Punjab for

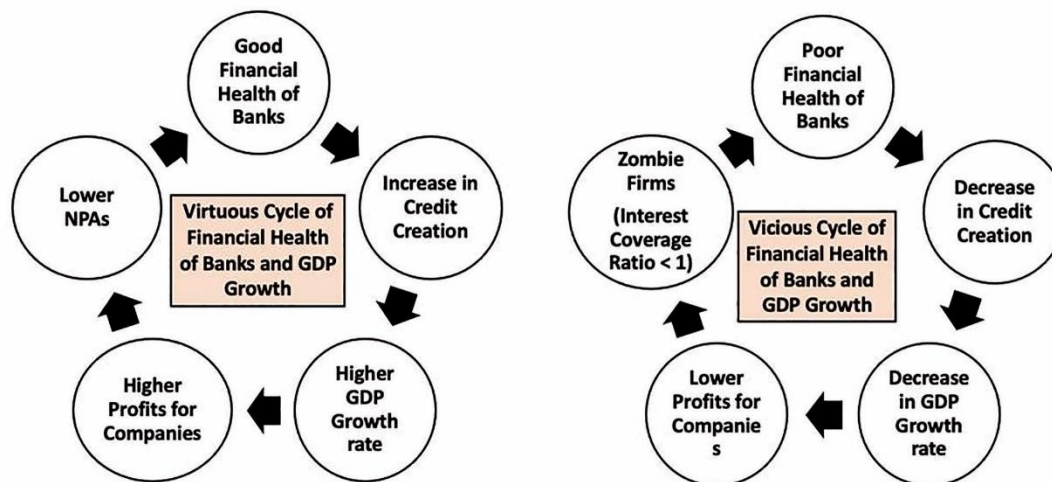
the procurement of milk has been responsible for socio-economic transformation. There is a need to adopt such models across India.

# BANKING AND FINANCE

## 5 YEARS OF IBC: HITS AND MISSES

#BANKING

PRIMARY SOURCE BusinessLine



The year 2021 marks the 5 years of completion of Insolvency and Bankruptcy code (IBC). In this regard, let's discuss about the hits and misses of IBC.

### Relationship between Financial health of Banks and Economic Growth

## EVOLUTION IN THE FRAMEWORK FOR THE RESOLUTION OF NPAs

### 1993- Debt Recovery Tribunals

Over-burdened with Cases; Poor Recovery rates; Delay in Recovery

### 2016- Insolvency and Bankruptcy Code

Consolidate all the laws related to Bankruptcy  
Time bound recovery of NPAs



### File Civil Suits to recover NPAs

Lengthy and Time-consuming exercise

### 2002- SARFAESI Act

Enables the Banks to sell off pledged assets without approaching the DRTs

### Budget 2021- Bad Bank

Setting up of Bad Bank in the form of National Asset Reconstruction Company Limited.

Earlier, in case of default, the Banks were required to file civil suits in ordinary courts to sell the pledged properties

and recover the bad loans. This was a lengthy and time-consuming exercise. Subsequently, the Debt Recovery

## ECONOMIC DEVELOPMENT

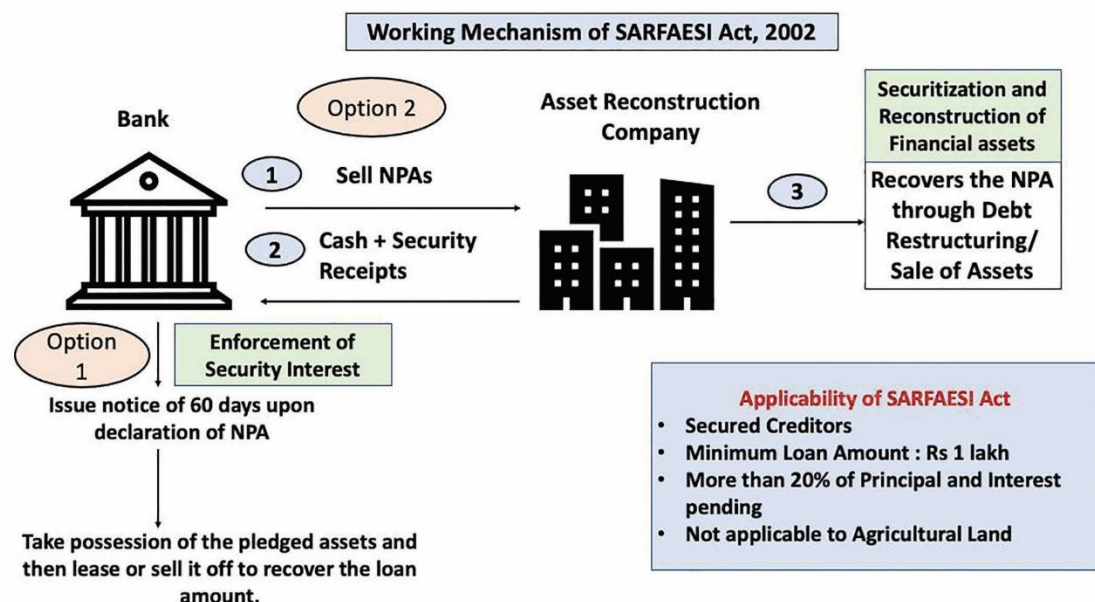
Tribunals (DRTs) were set up in 1993 based upon the recommendations of **Narasimhan Committee (1991)**. However, the DRTs came to be over-burdened with the cases and recovery of bad loans through the DRTs was lengthy process. Hence, the SARFAESI Act was passed in order to enable the Banks to recover their dues quickly.

### ABOUT SARFAESI ACT, 2002

The SARFAESI Act essentially empowers banks to directly auction residential or commercial properties that have been pledged with them to recover loans from borrowers. As per the SARFAESI Act, if a borrower

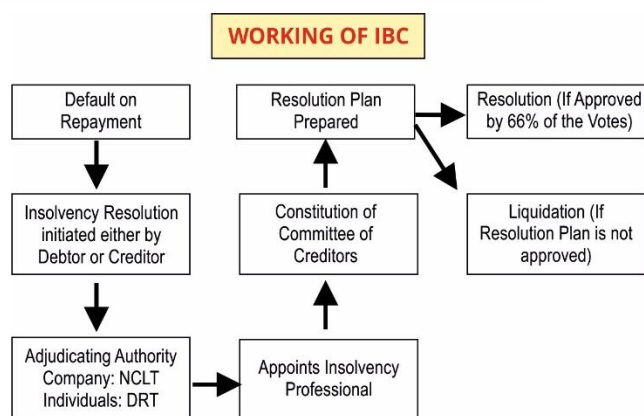
defaults on a loan, the Banks can give a notice period of 60 days to the borrower to repay the loans. If the borrower fails to repay within 60 days, the Banks can take the following actions:

1. Take possession of the pledged assets and then lease or sell it off to recover the loan amount.
2. Take over the management of the business of the borrower.
3. Appoint a person to manage the assets.



### DIFFERENCE BETWEEN SARFAESI ACT AND IBC, 2016

1. SARFAESI- Applicable only for secured financial creditors; IBC- Applicable for both secured and unsecured financial creditors.
2. Unlike IBC, SARFAESI is not applicable to Operational Creditors.
3. The minimum threshold for invoking IBC: Individuals (Rs 1000); Companies (Rs 1 crore); Minimum threshold for SARFAESI: Rs 1 lakh.



### HITS AND MISSES OF IBC, 2016

HITS	MISSES
<ol style="list-style-type: none"> <li>1. <b>Higher Recovery rate</b> of 45% in comparison to recovery rate of 26% in the earlier regime.</li> <li>2. <b>Time taken to close the cases:</b> Around 1 year in comparison to 3-4</li> </ol>	<ol style="list-style-type: none"> <li>1. <b>Case Closure:</b> Only 60% of the cases closed.</li> <li>2. <b>Mode of Case Closure:</b> Majority of cases</li> </ol>

## ECONOMIC DEVELOPMENT

<p>years earlier.</p> <p>3. Improvement in <b>Ease of Doing Business</b></p> <p>4. Addresses the <b>Chakravyuha challenge</b> of Indian Economy:</p> <ul style="list-style-type: none"> <li>• 1991 LPG Reforms has enabled easier entry of private sector but made the exit difficult.</li> <li>• Old Inefficient firms continue to operate with highly efficient firms leading to misallocation of factors of production</li> <li>• IBC has enabled faster exit of old inefficient firms</li> </ul> <p><b>5. Behavioral Change</b></p> <p>1. Fear of losing control of the company forces the promoters to operate at highest level of efficiency.</p> <p>2. Encourages the borrowers to settle dues at the earliest.</p>	<p>closed through liquidation; Few cases closed due to Resolution.</p> <p><b>3. Recovery rates:</b> Exclusion of large recovery cases such as Bhushan Steel, Essar Steel etc. would lead to recovery rate of around 35-36%.</p> <p><b>4. Delay</b> in admission of Applications and Approval of Resolution plans</p> <p><b>5. Infrastructural issues:</b> Less number of NCLTs; Delay in appointments; Higher vacancies etc.</p>
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## RBI'S FINANCIAL STABILITY REPORT

#RBI

PRIMARY SOURCE BusinessLine

The RBI has recently released financial stability Report (FSR). This report discusses some of the recent developments that have an impact on the financial stability of India.

As per the latest FSR, gross non-performing assets (GNPA) ratio of scheduled commercial banks (SCBs) could rise to 11.2 per cent by the end of March 2022.

### BASIC TERMS TO UNDERSTAND

**Non-Performing Asset (NPA):** A loan is categorized as NPA if it is due for a period of more than 90 days. Depending upon the due period, the NPAs are categorized as under:

- **Sub-Standard Assets:** > 90 days and less than 1 year
- **Doubtful Assets:** greater than 1 year
- **Lost Assets:** loss has been identified by the bank or RBI, but the amount has not been written off wholly.

### SPECIAL MENTION ACCOUNTS (SMA)

Special Mention Account (SMA) Category has been introduced by the RBI in order to identify the incipient stress in the assets of the banks and NBFCs. These are the accounts that have not-yet turned NPAs (default on the loan for more than 90 days), but rather these accounts can potentially become NPAs in future if no suitable action is taken. The SMA has the various sub-categories as shown below:

- SMA-0: Principal or interest payment not overdue for more than 30 days but account showing signs of incipient stress
- SMA-1: Principal or interest payment overdue between 31-60 days
- SMA-2: Principal or interest payment overdue between 61-90 days
- Note: If the Principal or interest payment is overdue for more than 90 days, then the loan is categorized as NPA.

### PROVISIONING COVERAGE RATIO (PCR)

Under the RBI's provisioning norms, the banks are required to set aside certain percentage of their profits in order to cover risk arising from NPAs. It is referred to as "Provisioning Coverage Ratio" (PCR). It is defined in terms of percentage of loan amount and depends upon the asset quality. As the asset quality deteriorates, the PCR increases. The PCR for different categories of assets is as shown below:

- Standard Assets (No Default): 0.40%
- Sub-standard Assets (> 90 days and less than 1 year): 15%
- Doubtful Assets (greater than 1 year): 25%-40%
- Loss Assets (Identified by Bank or RBI): 100%

**Gross and Net NPA:** Gross NPA refers to the total NPAs of the banks. The Net NPA is calculated as Gross NPA - Provisioning Amount.

**Capital Adequacy ratio (CAR):** The CAR has been laid down by the BASEL committee on banking supervision under Bank of International Settlement located in Basel, Switzerland.



## ECONOMIC DEVELOPMENT

It has been laid down to ensure financial stability and to prevent failure of banks. So far, 3 BASEL Norms have been laid down: Basel I (1998), Basel II (2004), Basel III (2009).

**CAR** is the **ratio** of a bank's **capital** to its risk. It is also known as the **Capital to Risk (Weighted) Assets Ratio (CRAR)**

$$CAR = \frac{\text{Tier-1 Capital} + \text{Tier-2 Capital}}{\text{RWAs}} \times 100.$$

The Banks in India are required to maintain CAR of 9% (Tier-1 capital: 7% + Tier-2 Capital: 2%) along with Capital Conservation buffer (CCB) of 2.5%.

Hence, unlike the BASEL III norms, which stipulate capital adequacy of 10.5% (8%-CAR + 2.5% CCB), the RBI has mandated to maintain capital adequacy of 11.5% (9%-CAR + 2.5%-CCB)

### LIQUIDITY COVERAGE RATIO (LCR)

A failure to adequately monitor and control liquidity risk led to the Great Financial Crisis in 2008. To improve the banks' short-term resilience to liquidity shocks, the Basel Committee on Banking Supervision (BCBS) introduced the LCR as part of the Basel III post-crisis reforms. The LCR is designed to ensure that banks hold a sufficient reserve of **high-quality liquid assets (HQLA)** to allow them to survive a period of significant liquidity stress lasting 30 calendar days.

HQLA are cash or assets that can be converted into cash quickly through sales (or by being pledged as collateral)

with no significant loss of value. The LCR requires banks to hold a stock of HQLA at least as large as expected total net cash outflows over the stress period of 30 days.

$$\frac{\text{Stock of HQLA}}{\text{Total net cash outflows over the next 30 calendar days}} \geq 100\%$$

Total net cash outflows are defined as the total expected cash outflows minus the total expected cash inflows arising in the stress scenario.

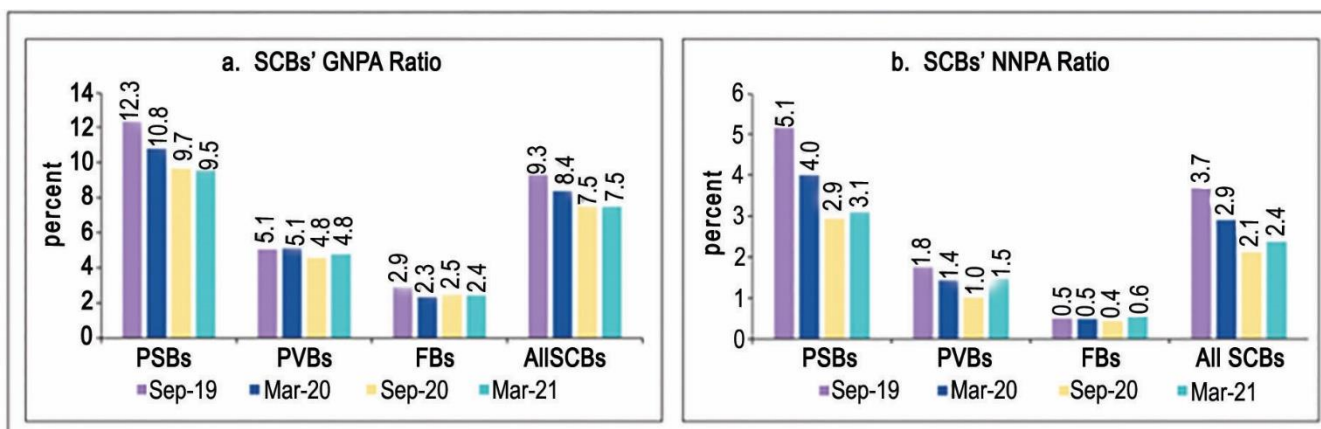
**Leverage Ratio (LR):** The Basel Committee on Banking Supervision (BCBS) introduced Leverage ratio (LR) in the 2010 Basel III package of reforms. The Formula for the Leverage Ratio is (Tier 1 Capital/ Total Consolidated Assets) ×100 where Tier 1 capital represents a bank's equity.

It is to be noted that the Tier 1 capital adequacy ratio (CAR) is the ratio of a bank's core tier 1 capital to its total risk-weighted assets. On the other hand, leverage ratio is a measure of the bank's core capital to its total assets.

Thus, the Leverage ratio uses tier 1 capital to judge how leveraged a bank is in relation to its consolidated assets whereas the tier 1 capital adequacy ratio measures the bank's core capital against its risk-weighted assets.

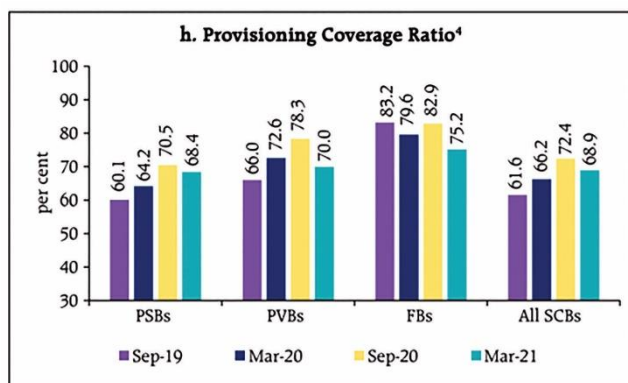
### HIGHLIGHTS OF THE REPORT

**Decrease in GNPA and NNPA:** The gross non-performing assets (GNPA) has remained at 7.5% in March 2021. While, net NPA (NNPA) ratios has increased to 2.4% in March 2021.

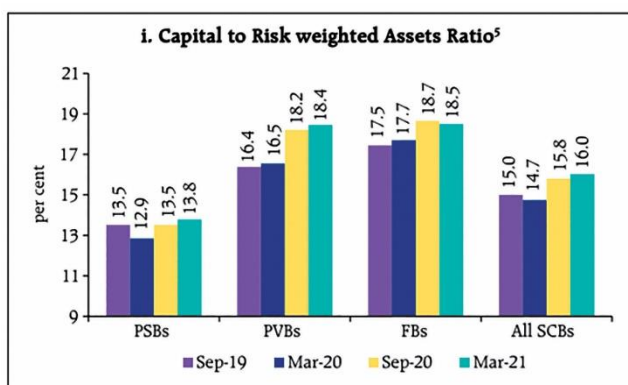


**Deterioration in Provision Coverage Ratio (PCR):** The provision coverage ratio (PCR) of all Banks taken together deteriorated across all bank groups from 72% in Sep 2020 to 69% in March 2021.

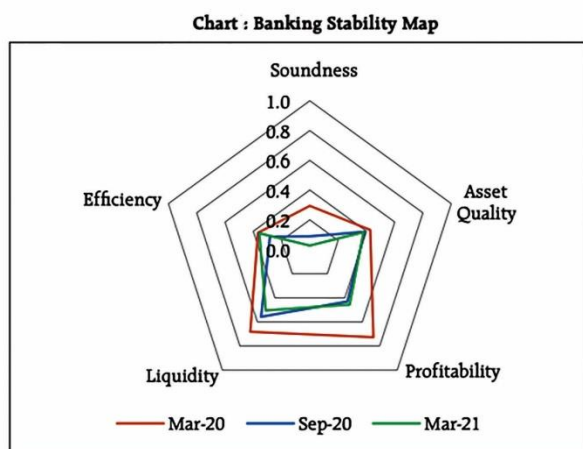
## ECONOMIC DEVELOPMENT



### IMPROVEMENT IN CAPITAL TO RISK-WEIGHTED ASSETS RATIO (CRAR)



### BANKING STABILITY INDICATOR



Note: Away from the centre signifies increase in risk.  
Source: RBI supervisory returns and staff calculations.

### RATIONALE BEHIND BANKING STABILITY INDEX

The concentration of bad assets in a handful of sectors increases the risk for the banking system as default in one sector can put significant pressure on the balance sheet of several banks. Further, since the banking and

the financial system is highly interconnected, the failure of one bank, or some banks, is likely to affect the stability of other banks. This interdependence is measured by the Banking Stability Index.

### DEFINITION

The Reserve Bank of India (RBI) defines Banking Stability Index (BSI) as “the expected number of banks that could become distressed given that at least one bank has become distressed”. Hence, as the BSI increases, it means that more banks are expected to become distressed if one bank in the system is distressed.

The BSI takes into account the following parameters:

- Efficiency of the Banks
- Profitability
- Soundness
- Liquidity
- Asset Quality.

**Updates on BSI:** By March 2021, the banking stability indicator (BSI) has showed improvement in all its five dimensions (i.e., asset quality; profitability; liquidity; efficiency; and soundness) that are considered for assessing the changes in underlying financial conditions.

## IMPACT OF PANDEMIC ON HOUSEHOLD SAVINGS

#RBI

PRIMARY SOURCE THE HINDU BUSINESS LINE

Recently, the RBI has published the Preliminary Estimates of the Household Financial Savings for the third quarter of 2020-21. In this regard, this article basically analyses the impact of covid-19 pandemic on financial savings of the Households.

### TRENDS IN GROSS SAVINGS RATE

The Gross savings is contributed by mainly 3 sectors- Public, Private Corporate and Household sector. As shown below, the Household sector accounts for the highest share of Gross Savings followed by private corporate sector.

## ECONOMIC DEVELOPMENT

### Gross Savings as percentage of GDP

	2011-12	2014-15	2015-16	2016-17	2017-18
Gross Savings	34.6	32.2	31.1	30.3	30.5
Public	1.5	1.0	1.2	1.7	1.7
Private corporate*	9.5	11.7	11.9	11.5	11.6
Household sector	23.6	19.6	18.0	17.1	17.2
Net financial savings	7.4	7.1	8.1	6.3	6.6
Physical savings	16.3	12.5	9.9	10.8	10.6

Source: Central Statistics Office

There has been decline in Gross Savings from 34.6% in 2011-12 to 30.9% in 2019-20. The decline in the Gross Savings is basically on account of decline in Gross savings of household sector.

**Note:** In India, the average household holds major chunk of its savings in physical assets (Real estate, durable goods such as transportation vehicles, livestock, agricultural machinery and non-farm business equipment). This is in contrast to developed economies where households hold substantial portion of their wealth in financial assets.

The Household savings is in turn categorised into two types:

**Net Financial Savings:** It is calculated as (Financial Assets- Financial Liabilities) of the households. The Financial assets include currency, bank deposits, debt securities, mutual funds, insurance, pension funds and small savings. Financial liabilities are primarily held in the form of loans and borrowings from banks, nonbanking financial companies (NBFCs) and housing finance companies (HFCs).

**Physical Savings:** The Physical savings include savings in the form of land, buildings, home etc.

### DETAILS OF SAVINGS OF THE HOUSEHOLDS

#### Financial Saving of the Household Sector

(Percent of GNDI)

Item	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20
1	2	3	4	5	6	7	8	9	10
<b>A. Gross Financial Saving</b>	10.4	10.5	10.4	9.9	10.7	10.4	11.9	11.1	11.0
<i>of which:</i>									
1. Currency	1.2	1.1	0.9	1.0	1.4	-2.1	2.8	1.4	1.4
2. Deposits	6.0	6.0	5.8	4.8	4.6	6.3	3.0	4.2	4.2
3. Shares and Debentures	0.2	0.2	0.2	0.2	0.2	1.1	1.0	0.4	0.4
4. Claims on Government	-0.2	-0.1	0.2	0.0	0.5	0.7	0.9	1.1	1.3
5. Insurance Funds	2.2	1.8	1.8	2.4	1.9	2.3	2.0	1.9	1.5
6. Provident and Pension Funds	1.1	1.5	1.5	1.5	2.1	2.1	2.1	2.1	2.2
<b>B. Financial Liabilities</b>	3.2	3.2	3.1	3.0	2.7	3.0	4.3	4.1	3.2
<b>C. Net Financial Saving (A-B)</b>	7.2	7.2	7.2	6.9	7.9	7.3	7.5	7.1	7.8

**GNDI:** Gross National Disposable Income **Note:** Figures may not add up to the total due to rounding off. **Source:** NSO.

### RECENT TRENDS IN FINANCIAL SAVINGS OF HOUSEHOLDS

Studies show that households tend to save more during a slowdown and income uncertainty. The present economic slowdown has led to higher uncertainty for the households. Hence, the households have refrained from borrowings loans from the Banks leading to contraction in the household financial liabilities. This decrease in the

household financial liabilities has led to increase in the net financial savings of the households. (Remember Net Financial Savings is calculated as (Financial Assets- Financial Liabilities) of the households).

In the first quarter of 2020-21, the net financial savings of the households increased to 21% of the GDP. According to the RBI's preliminary estimate, household financial

## ECONOMIC DEVELOPMENT

savings were at 8.2% of GDP in the third quarter of 2020-21.

So, when the pandemic first struck, household financial savings initially jumped In the first quarter of 2020-21, but went on to witness sequential moderation in the next two quarters.

### RECENT TRENDS IN HOUSEHOLD DEPOSITS

The ratio of household deposits to GDP declined to 3.0% in the December quarter of 2020-21 from 7.7% in the

previous quarter. According to a recent data released by the RBI, the currency with the Public has risen to all time high of Rs 28 lakh crores in the month of May 2021. There are number of reasons for higher withdrawal of cash by the Public from the Banks leading to higher currency with the Public. These include (a) uncertainty caused due to Covid-19 pandemic (b) higher healthcare expenditure (c ) Loss of Jobs forcing people to withdraw their savings and so on.

## INCLUSIVE GROWTH AND DEVELOPMENT

### FINANCE MINISTER'S RELIEF PACKAGE

#DEVELOPMENT



*The outbreak of CoVID-19 has impacted both demand and supply side simultaneously leading to twin shocks, which is unprecedented. Recently, the National Statistical Office (NSO) has released the provisional estimates of the National income for the year 2020-21 revealing that the Indian Economy has suffered worst form of "Economic Recession" for the first time in the last 41 years since 1979-80.*

*Against this background, the Union Finance Minister has recently announced number of measures to provide relief to diverse sectors affected by the second wave of COVID-19 pandemic. The total size of the economic package is estimated to be around Rs 6.2 lakh crores. This is in addition to the Rs 20 lakh crores support extended by Aatma Nirbhar Bharat package, which was announced last year.*

### RATIONALE FOR THE PACKAGE

**Prevent Vicious Economic Cycle:** There are 4 drivers of an Economy- Consumption Expenditure, Investment, Govt. Expenditure and Net Exports (Exports- Imports). In the case of India, consumption expenditure is the major driver accounting for 60% of India's GDP. However, the loss of jobs accompanied by uncertainty due to economic slowdown has led to decline in Consumption

expenditure. This in a way has the potential to further accentuate the economic slowdown.

**Boost Consumer Sentiment:** According to RBI's Monthly Consumption Expenditure Survey, the consumer sentiment within India has been on constant decline. If the consumers are optimistic about the current and future economic state of the country, then they would spend more money leading to an increase in the GDP. On the other hand, if the Consumer confidence is low, this can lead to decrease in the consumption expenditure and hence impacts the GDP growth rate.

**Follow-up to Previous Packages:** These measures can be considered to be a follow-up to the Rs 20 lakh crore Aatma Nirbhar Bharat Package announced earlier.

**Boost health care Infrastructure:** The Covid-19 pandemic is "Once-in-a-Century" crisis which has exposed the loopholes in our healthcare infrastructure. As rightly pointed out by the Economic Survey 2020-21, we need to substantially ramp up our investment in the healthcare.

**Improve Credit creation:** The RBI has taken number of measures to improve the liquidity situation in the economy. In spite of surplus liquidity, Banks are reluctant to lend loans due to the fear of rising NPAs due to the economic slowdown. Similarly, various business establishments are also reluctant to take loans due to poor investor sentiment. Thus, there is a need to nudge the Banks to lend loans to private sector. Similarly, even the private sector must be encouraged to take loans. The improvement in credit creation would have multifaceted



## ECONOMIC DEVELOPMENT

benefits in the form of increased investment, job creation, revival of demand and thus boost to the GDP growth rate. In this regard, the Government has sought to improve the credit creation by giving guarantee on loans taken by the private sector entities which have been affected by the covid-19 pandemic.

**The finance minister has announced around 17 measures. These measures can be clubbed into 3 broad categories: -**

1. **Economic Relief from Pandemic**
2. **Strengthening Public Health**
3. **Impetus for Growth & Employment**

### ECONOMIC RELIEF FROM PANDEMIC

#### Loan Guarantee Scheme for COVID Affected Sectors

Under this scheme, the Government has promised the guarantee on loan repayment taken by various sectors which have been affected by the Covid-19 pandemic. The guarantee on loan repayment would be provided by **National Credit Guarantee Trustee Company Limited**. No guarantee fee to be charged by NCGTC under the scheme.

The sectors which would be able to avail loans under this scheme include:

- (a) Healthcare sector for both creation as well as expansion of healthcare infrastructure
- (b) Guarantee on loans extended by the Banks to the Micro-finance Institutions for on-lending to small borrowers (Loan size of up to Rs 1.25 lakh)
- (c) Guarantee on loans extended to people working in the tourism sector

### EMERGENCY CREDIT LINE GUARANTEE SCHEME (ECLGS)

**Background:** In May 2020, as part of Aatmanirbhar Bharat 1.0, the Government had announced Emergency Credit Line Guarantee Scheme with the following features.

**Objectives:** Mitigate the economic distress faced by MSMEs due to Covid-19 by providing them additional funding in the form of a fully guaranteed emergency credit line.

**Benefits:** Banks and NBFCs to extend collateral free loans worth Rs 3 lakh crores to the MSMEs, business enterprises, individual loans for business purposes and MUDRA borrowers

**Eligibility:** Applicable to only standard loans (The MSMEs who have not defaulted on their repayment of loans and their accounts are categorized as Standard Assets by Banks).

**Features of Loans:** Moratorium of 12 months on the principal repayment. Interest rate to be capped.

**Government's role:** 100% Credit guarantee cover to banks and NBFCs on principal and Interest. This guarantee is provided by National Credit Guarantee Trustee Company Limited (NCGTC).

**Latest Announcement:** Overall cap of admissible guarantee to be raised from Rs. **3 lakh crores to Rs. 4.5 lakh crores**

### EXTENSION OF AATMANIRBHAR BHARAT ROZGAR YOJANA

The finance minister has announced the extension of the Aatmanirbhar Bharat Rozgar Yojana (ABRY) from 30th June 2021 to 31st March 2022.

**Background:** In Oct 2020, the Union Cabinet had given its approval for ABRY to boost employment creation in formal sector. Under this scheme, the Government would bear the burden of the Employee Provident Fund (EPF) contributions of Employees and Employers.

#### Details about Employee Provident Fund (EPF)

**What is it?:** EPF is a social security scheme aimed at salaried individuals and is run by EPFO, which comes under the labour ministry.

**Coverage:** Organizations that employ 20 people or more need to offer EPF benefits to their employees.

**Is it Compulsory?:** The EPF is not compulsory for all employees. Only those who earn up to Rs 15,000 a month have to contribute 12% of their basic salary plus dearness allowance to EPF. The employer contributes an equal percentage (12%) to the corpus out of which 3.67% goes to the EPF and the rest 8.33% goes towards employees' pension scheme (EPS). For those who earn above the threshold of Rs 15,000, contribution to EPF is optional.

### AATMANIRBHAR BHARAT ROZGAR YOJANA (ABRY)

A new scheme to incentivize job creation during COVID-19 recovery has been launched. The scheme will be effective from October 1, 2020. Under this scheme, the central government would pay

## ECONOMIC DEVELOPMENT

- Both Employer's and Employee's share of contribution (total 24% of wages) for establishment strength up to 1000 employees.
- Only Employee's share (12% of wages) in case of establishment strength of more than 1000.

### STRENGTHENING PUBLIC HEALTH

Besides supporting the health sector through credit guarantee scheme, a new scheme for strengthening public health infrastructure and human resources has also been announced.

This scheme will focus on short term emergency preparedness with special emphasis on children and paediatric care/paediatric beds. These include increasing availability of ICU beds, oxygen supply at central, district and sub-district level; availability of equipment, medicines; access to tele-consultation; strengthening ambulance services etc.

### IMPETUS FOR GROWTH & EMPLOYMENT

#### FIGHTING MALNUTRITION AND IMPROVING FARMERS' INCOME:

**Background:** Earlier focus of research was on developing higher yield crop varieties. Attention towards nutrition, climate resilience and improving the income levels of the farmers was missing.

**Announcement:** ICAR has developed bio-fortified crop varieties having high nutrients like protein, iron, zinc, vitamin-A. Varieties tolerant to diseases, insects' pests, drought, salinity, and flooding etc. have also been developed. 21 such varieties will be released.

#### EXPORT INSURANCE COVER

**Background:** India's vision of becoming a \$ 5 trillion economy by 2024 is intricately linked with an export-oriented approach. Greater integration with global value chains (GVCs) will enable India to attract investment, create Jobs, Boost Exports and hence sustain virtuous economic cycle.

**Announcement: Export Credit Guarantee Corporation (ECGC)** promotes exports by providing credit insurance services. It supports around 30% of India's merchandise exports. It has been decided to infuse equity in ECGC over 5 years to boost export insurance cover by Rs. 88,000 crores.

### NEW STREAMLINED PROCESS FOR PPP PROJECTS AND ASSET MONETISATION

**Background:** The Union Budget 2021-22 has announced the **National Monetisation pipeline** to monetise the assets owned by PSUs such as National Highways, Airports, Gas pipelines etc. The money earned through monetisation of the assets can be in turn used for creation of new infrastructure assets. However, Current process for approval of Public Private Partnership (PPP) projects is long and involves multiple levels of approval.

**Announcement:** A new policy will be formulated for appraisal and approval of PPP proposals and monetization of core infrastructure assets. The new policy would focus on the speedy clearance of projects and to improve the Ease of Doing Business.

### DIGITAL INDIA: BHARATNET TO BE IMPLEMENTED IN PPP MODEL

The Bharat Net project has the objective of providing high-speed broadband to all the panchayats in the country. It is the revamped version of National Optical Fibre Network (NOFN) which was launched in October 2011.

**Progress So far:** On August 15, 2020, PM announced broadband connectivity to all inhabited villages in 1000 days. Out of 2.5 lakh Gram Panchayats, 1.56 lakh Gram Panchayats have been made service ready by 31st May 2021

**New Announcement:** The Government has proposed to implement BharatNet in PPP model in 16 States

## TAXATION

### EXCISE DUTY ON PETROL AND DIESEL

#GOVTPOLICIES

PRIMARY SOURCE | THE HINDU

*The rate of Inflation, as measured by CPI has increased to 6.3% in May 2021. The CPI has remained above the targeted rate of inflation of 4%. The increase in rate of Inflation is*

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## ECONOMIC DEVELOPMENT

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not only putting additional burden on the people, but it would also put economic revival in jeopardy.

One of the reasons for the higher rate of inflation is higher taxes on Petrol and Diesel. In this regard, the credit ratings agency ICRA has called upon the Government to reduce the tax rates so as to reduce the inflation and push economic growth.

### PRESENT TAX REGIME ON PETROLEUM PRODUCTS

Presently, both the Central and State Government impose taxes on Petrol and Diesel. The Central taxes on Petrol and Diesel include **Basic Excise Duty, Special Additional Excise Duty, Road and Infrastructure Cess and Agriculture Infrastructure and Development Cess**. This comes to be around Rs 32.9 per litre of petrol and Rs 31.8 per litre of diesel.

Apart from these central taxes, even the state governments impose their own tax in the form of VAT. Hence, there is a high incidence of Central and State taxes on Petrol and Diesel. These taxes alone account for almost around 60% of the cost of the petrol and diesel.

### GOVERNMENT'S TAX POLICY TOWARDS PETROLEUM PRODUCTS

Whenever there is decline in the international crude oil prices, the Central Government usually increases the tax rates. That is why, in spite of decline in the international crude oil prices, we end up paying almost the same price for petrol and diesel in India. We do not get the benefit of decline in the prices of crude oil. Rather, it is the government which gets the benefit in terms of higher tax revenue. Such a government's policy has a number of advantages:

1. The Higher Excise duty on Petrol and Diesel acts as an implicit carbon tax and nudges the economy to move towards greener fuels.
2. Enables the Government to earn more revenue, which can be used later as buffer, in event of increase in crude oil prices.
3. Enables the Government to raise revenue to undertake higher expenditure towards green energy projects.
4. Predictable and easy to administer tax

### PRESENT REASONS FOR INCREASE IN THE PETROL AND DIESEL

Last year, in 2020, the international crude oil prices were at all time low due to decline in the global demand due to the Covid-19 pandemic. Hence, the Government had increased the taxes on the Petrol and diesel. Because of this, in spite of fall in consumption of Petrol and Diesel, the overall revenue collected by the Centre had increased.

Now, in 2021, the prices of international crude oil prices have started increasing. But the Government has failed to cut the tax rates. Hence, the prices of Petrol and Diesel have reached all-time high.

### IMPACT OF INCREASE IN PETROL AND DIESEL

Petrol and Diesel are considered to be important inputs in our economy. They are not only used for the purpose of transportation, but they are also used as raw materials in number of Industries. Hence, increase in their prices would inevitably lead to increase in the rate of Inflation.

### ICRA'S RECOMMENDATIONS

If the Government keeps the tax rates unchanged, then it would be able to earn around Rs 3.6 lakh crores in 2021-22. This is 40,000 crores higher than Rs 3.2 lakh crores which it earned in 2020-21. However, the higher tax rates would further accentuate the Inflation and slowdown the economic revival. Thus, there is a need to cut the tax rates without significant impact on Government's revenues.

### HOW SHOULD THIS BE DONE??

Presently, due to the unlocking of the economy, demand for the mobility has increased. Economic revival is slowly taking place. Therefore, the demand for Petrol and diesel is set to increase. Hence, even if the Government reduces the tax rates by a certain margin, the overall revenue would not be impacted much.

### (Higher consumption of Petrol and Diesel--> Higher Tax revenue in spite of lower tax rate)

Thus, ICRA believes that if Government reduces the tax rates by around Rs 4.5 per litre, then it would still be able to earn revenue of around 3.2 lakh crores, which was same as what it earned in the previous financial year.

ECONOMIC DEVELOPMENT

GOVERNMENT POLICIES

DATA LOCALISATION- PROS AND CONS

#RBI



Earlier, in 2018, the RBI had issued a circular which mandated all the payment system operators such as Mastercard, Visa etc. to store payment related information of the Indian Citizens in the servers which are physically based in India. In spite of giving sufficient time to the companies to comply with Data localisation norms, Mastercard has failed to store data in servers based in India. In this regard, recently, RBI has decided to ban Mastercard from issuing new debit and credit cards to customers in India.

DATA LOCALIZATION- PROS AND CONS

- Data localization refers to storage of data on any device that is physically present within the borders of a specific country where the data gets generated. In case of India, the Draft E-Commerce policy has mandated for the data localization norms for the e-commerce companies such as Flipkart, Amazon etc.
On similar lines, the RBI has mandated that all the payment system operators such as Mastercard, Visa etc. should compulsorily store the payments related data in the servers which are physically based in India.
Further, the Srikrishna Panel has also recommended for the Data localization norms in order to ensure the privacy of the sensitive users' data.

BENEFITS OF DATA LOCALIZATION

Data as Public Good: The Economic Survey 2018-19 has highlighted that the data generated by the Indian users has to be accessible by the people and ultimately used for the benefit of people in the spirit of "Data of the People, by the People, for the People"; Promotes evidence-based policy making in order to improve the education, health and various dimensions of human development.

Enforcement: Enable law enforcement officers to access information required for the detection of crime as well as in gathering evidence for prosecution.

Reducing Vulnerabilities: A large amount of data is transmitted from one country to the other via undersea cables which increases the risk of vulnerability of the internet and cross-border transfer of data.

Thrust to Industrial Revolution 4.0: Data localization norms would force the companies to store their data in India giving a much-needed push to Industrial Revolution 4.0.

Preventing Foreign Surveillance: A significant portion of the data collected and stored by global MNCs in other countries increases the scope of foreign surveillance.

CONCERNS RELATED TO DATA LOCALIZATION

Increase in Compliance Cost: Presently, some of the Indian companies store their data in servers located in the other countries at much cheaper prices. The data localization norms may make it costlier for the Indian companies to create necessary digital infrastructure to store the data within India.

Monopolization of Data: Data Localization would require huge investment in creation of digital infrastructure which can be done only for large MNCs. However, the small and medium sized businesses would have to be dependent upon the infrastructure set up these global MNCs in India.

Cyber Threat: Forcing the companies to store data locally deprives them of the option of distributing information across servers in multiple locations, making it more vulnerable to cyber threats.

Issues related to Privacy: It is to be noted that data localization may not be able to completely eliminate cyber-attacks. Even when, data is stored locally, it is prone to cyber-attacks leading to data breach and loss of privacy.

30 YEARS OF LPG REFORMS- ANALYSIS

#LPG



July 2021 marks the 30th anniversary of the LPG Reforms. On one hand, the GDP size of India has increased from \$275

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## ECONOMIC DEVELOPMENT

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bn to \$ 2.9 trillion. However, on the other hand, the increase in GDP size has not been accompanied by transformative changes in the Indian Economy.

Taking this forward, let us understand about the challenges with the LPG reforms in India.

**Agricultural Development:** The average growth rate of Indian agriculture is below the targeted growth rate of 4% and is way below the double-digit growth rate of the service sector. In spite of being the one of the largest producers of food grains, India's share in global export of agricultural commodities has remained stagnant at 2% (9th Rank). Similarly, the import of cheaper agricultural commodities has adversely affected the income levels of the farmers. This clearly shows that the farmers in India have not able to get benefitted from LPG reforms.

**Stagnation in Manufacturing sector:** The share of manufacturing sector to India's GDP has remained stagnant at 16-17% since 1991 reforms. Instead of focussing on labour intensive industries, the manufacturing sector has come to be dominated by capital intensive Industries. The failure of the LPG reforms to promote manufacturing sector is considered to be the biggest loss for the Indian Economy.

**Jobless Growth:** The employment elasticity is hardly around 0.1 which means every 1% increase in GDP growth rate leads to 0.1% increase in employment creation. Apart from low quantity of jobs, concerns have also been raised with respect to poor quality of jobs. 90% of India's workforce is employed in informal sector which is characterised by low wages, poor productivity and lack of access to social security benefits. Hence, there is a need to create high-paying, high-productivity formal sector jobs.

**Lack of Inclusive Growth:** India has failed to prevent concentration of wealth and provide for equitable distribution of income. For instance, as per Credit Suisse, 1% of the wealthiest in India have increased their share in wealth from 40% in 2010 to 60% in the last five years. The richest 10% in India own more than 4 times the wealth than the remaining 90%. Going forward, richest 10% in India would take away the majority share of \$ 5 trillion economy.

**Provision of basic services:** The Government has failed to allocate sufficient financial resources for provision of

basic goods and services. For instance, India's expenditure of 3% on education is much below the target of 6%. Similarly, expenditure on health has remained quite lower at 1.5% as against the mandated 3%.

**Balanced Regional Development:** The private sector investment tends to get concentrated in the already well-developed states and regions. This in turn leads to disparity in the development across the states and within states in India. Some of the states such as Maharashtra, TN, Punjab etc. have made rapid progress. However, the states in the Northeast and Eastern India continue to have lower growth rates. Similarly, even within the states, there are certain pockets of underdeveloped regions such as Vidarbha (Maharashtra), Saurashtra (Gujarat), Hyderabad-Kar region (Karnataka) etc.

### CONCERNS WITH INDIA'S EXTERNAL SECTOR

- India's share in the world's exports has remained stagnant at 1.6% in the last decade.
- India is still critically dependent on import of critical goods such as Pulses, Oilseeds, Electronic Goods, Active Pharmaceutical Ingredients (APIs) etc. which shows lack of self-sufficiency of Indian Economy.
- Imports into India is much higher than exports. This usually leads to Current Account deficit.
- India's export basket is dominated by Capital intensive goods such as Petroleum products, Gems, Jewelry etc. (rather than Labor intensive goods such as Textiles, Leather etc.)
- Undoubtedly, the forex reserves have increased to all time high. However, it is mainly on account of increase in volatile FPI inflows rather than on account of export surplus.
- Unlike China, India has failed to get integrated into Global value chains (GVCs).

**Poor Innovation Ecosystem:** The R&D Expenditure as % of GDP at 0.7% has remained stagnant in the last 2 decades. Unlike developed economies, the R&D expenditure in India is mainly driven by public sector. The private sector investment in R&D needs to be substantially enhanced.



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## ECONOMIC DEVELOPMENT

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# SOLAR POWER IN RURAL AREAS

#ENERGY

**PRIMARY SOURCE** THE HINDU

Rajasthan's power regulator has ordered to solarise unelectrified public schools mostly in rural area and also directs to seek corporate social responsibility (CSR) funds for the solarising drive. This brings us to the important discussion on rural solar energy in India.

National institute of solar energy has assessed the country's solar potential of about 748 GW assuming 3% of the waste land area to be covered by Solar PV module.

As of January 31, 2021, the total installed capacity of solar power stood at 38,794 MW (including 34,561 MW of ground-mounted capacity and 4,233 MW of rooftop capacity).

### WHY SOLAR POWER IN RURAL AREAS

- It is abundantly available due to limited construction in rural areas.
- India's land area is receiving 4-7 kWh of solar energy per sq. m per day.
- Benefited millions of people in Indian villages by meeting their cooking, lighting and other energy needs in an environment friendly manner.
- Socio-economic benefits: reduction in drudgery among rural women and girls engaged in the collection of fuel wood from long distances and cooking in smoky kitchens, minimization of risks of contracting lung and eye ailments, employment generation, and improvement in standard of living and creation of opportunity for economic activities at village level.
- It would generate employment, manufacturing in rural India. This would further reduce the rural-urban migration.
- Solar power would boost the economic, social and political activities in rural areas like schools, hospitals, factories etc.
- Solar power would also help in decentralised power distribution to agricultural fields.

### WHAT ARE THE ISSUES FACED TO EXPAND SOLAR TO RURAL AREAS?

- Issue of **domestic content requirement** under **World Trade Organisation** has become a hurdle in expanding the cheap equipments in rural areas.

- Domestic manufacturing is very limited, that too with higher prices.
- Land availability is limited due to agricultural expansion.
- Per unit cost is high in short run which is against the economic capacity of rural population.
- Solar power in India is regionally concentrated in few states that too in urban areas.
- People in village areas are not well aware about the solar power, its installation and functioning.
- Village economy is still surviving on biomass and fuel wood for energy needs.

### GOVERNMENT INITIATIVE IN THIS REGARD

- National Solar Mission** to promote ecological sustainable growth while addressing India's energy security challenges.
- Long term loan from **Indian Renewable Energy Development Agency**.
- National institute of Solar Energy**: for R&D.
- Solar parks and ultra-mega solar power project .
- Canal bank and canal tank solar infrastructure.
- Sustainable rooftop implementation of Solar transfiguration of India (SRISTI) scheme to promote rooftop solar power projects in India.
- Suryamitra: to prepare qualified workforce.
- Renewable purchase obligation for large energy consumer customers.
- National green energy programme and green energy corridor.
- KUSUM scheme: decentralised power generation at micro levels.

# ONE NATION ONE RATION CARD SCHEME

#PDS

**PRIMARY SOURCE** pib

The ONORC scheme is being implemented for the nationwide portability of ration cards under National Food Security Act (NFSA). Through this all eligible ration card holders/beneficiaries covered under NFSA can access their entitlements from anywhere in the country.



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## ECONOMIC DEVELOPMENT

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### BENEFITS

1. Access to migrant workers, no poor is deprived of PDS entitlement if that person shifts from one place to another.
2. Check on fake ration card holders.
3. Reduce dependence of migrant worker on shop owners and curtail instances of corruption.
4. Control on rising food subsidy bill by preventing leakages.

### CHALLENGES

- Pan-India portability poses the risk of significantly increasing the cost to the government thus increasing the possibility of shops running out of stock.
- There are technical glitches in the current PDS framework.
- Issues of bogus cards and duplication of cards.
- Linking with Aadhaar poses challenges as some of the migrants may not have Aadhaar card.
- States may become biased towards residents and outsiders.
- Social differences among inhabitants and migrants.
- Choice of food grains are very limited.
- There is skewed food distribution among state under NFSA.

### POSSIBLE SOLUTIONS

- Early roll out of the scheme in all states.
- Software and technical infrastructure should be put in place.
- Centralized grievance redressal system for those who are left behind or exploited.
- Number of food grain choices should be increased considering the changing food habits of Indians.
- Food allowance on non-delivery of ration.
- Biometric authentication should be made glitch free, faster and more accurate.
- States could be encouraged to participate in the scheme.

## OPEN NETWORK FOR DIGITAL COMMERCE

#GOVTPOLICIES

PRIMARY SOURCE | The Indian EXPRESS

*The Department for Promotion of Industry and Internal Trade (DPIIT) has recently appointed an advisory committee for Open Network for Digital Commerce (ONDC) project. This project is aimed at creating open-source platforms for the e-commerce sector and thus curb digital monopolies.*

### UNDERSTANDING OPEN-SOURCE SOFTWARE

- Making a software or a process open source means that the code or the step of that process is made available freely for others to use, redistribute and modify it. For example, Google's Android OS is open source while Apple's IOS is closed source.
- In the field of Banking sector, we have open-source API in the form of UPI. The UPI has been integrated into number of mobile apps such as Paytm, Gpay, Phonepe etc. and thus has boosted digital payments.

### OPEN NETWORK FOR DIGITAL COMMERCE

- Presently, e-commerce sector is dominated by giants such as Amazon, Flipkart etc. These companies use their own proprietary software for handling various aspects of their operations such as listing of vendors, price discovery, cataloguing of products etc.
- The ONDC project seeks to creating open-source software for the e-commerce sector just like how we have UPI in banking sector. Such an open-source software can be used by multiple companies to create e-commerce platforms.

**Note:** The task of implementing DPIIT's ONDC project has been assigned to the Quality Council of India (QCI).

### BENEFITS OF ONDC PROJECT

- Enable the growth of E-commerce companies and check digital companies
- Presently, traders must showcase their products separately on different platforms. But, since the

## ECONOMIC DEVELOPMENT

ONDC project is based upon open software, common technological standards will be used across different platforms. Hence, it will enable traders to showcase their products simultaneously on different platforms.

- Digitise the entire value chain, standardise operations, promote inclusion of suppliers, derive efficiencies in logistics and enhance value for stakeholders and consumers

## WHOLESALE AND RETAIL TRADE UNDER MSMEs

#GOVTPOLICIES



Recently, the Ministry of MSMEs has announced the revised guidelines for MSMEs. As per the revised guidelines, Retail and Wholesale trade would be considered as part of MSME sector to avail priority sector loans from the Banks.

### BACKGROUND

MSME Development Act, 2006 provides for classification of enterprises into Micro, Small and medium enterprises. It also provides for filing of memorandum by the MSMEs with the Ministry of MSME. The MSME Ministry has come up with the Udyog registration portal for the registration of MSMEs.

The MSME ministry comes up with the list of activities for which the MSMEs can get registered under the Udyog Registration. Once registered, these MSMEs can avail various benefits such as Priority sector lending.

### RECENT DECISION

- So far, enterprises involved in the Retail and Wholesale trade were not considered as MSMEs and hence were not allowed to be registered with the Udyog Registration portal.
- Now, the Ministry has decided to consider Retail and wholesale trade as MSMEs. At the same time, the Ministry has clarified that the benefits to such MSMEs will be limited to Priority sector lending only.
- The recent move by the Government is set to benefit around 25 million wholesale and retail traders.

### CHANGE IN DEFINITION OF MSMEs AS PART OF AATMA NIRBHAR BHARAT PACKAGE (2020)

Existing MSME Classification			
Criteria: Investment in Plant & Manufacturing or Equipment			
Classification	Micro	Small	Medium
Manufacturing Enterprises	Investment < Rs 25 lakh	Investment < Rs 5 crore	Investment < Rs 10 crore
Service Enterprises	Investment < Rs 10 lakh	Investment < Rs 2 crore	Investment < Rs 5 crore
Revised MSME Classification			
Composite Criteria: Investment and Annual Turnover			
Classification	Micro	Small	Medium
Manufacturing Enterprises	Investment < Rs 1 crore And Turnover < Rs 5 crores	Investment < Rs 10 crore And Turnover < Rs 50 crores	Investment < Rs 50 crore And Turnover < Rs 250 crores
Service Enterprises			

**New Definition:** As shown in the above table, 3 important changes have been introduced in the new definition of MSMEs:

1. The Investment limit has been increased.

2. An additional criterion of annual turnover has been introduced.

3. The distinction in the definition of Manufacturing and service sector enterprises has been done away with.

ECONOMIC DEVELOPMENT

EXTERNAL SECTOR

RBI'S REPORT ON NIIP

#EXTERNAL SECTOR

PRIMARY SOURCE THE HINDU

Recently, the RBI has released the Net International Investment Position (NIIP) of the Indian Economy as of March 2020.

WHAT IS NET INTERNATIONAL INVESTMENT POSITION (NIIP)?

Balance of payments (BoP) shows transactions between residents and non-residents of an economy for a period of one year. These economic transactions may lead to two results:

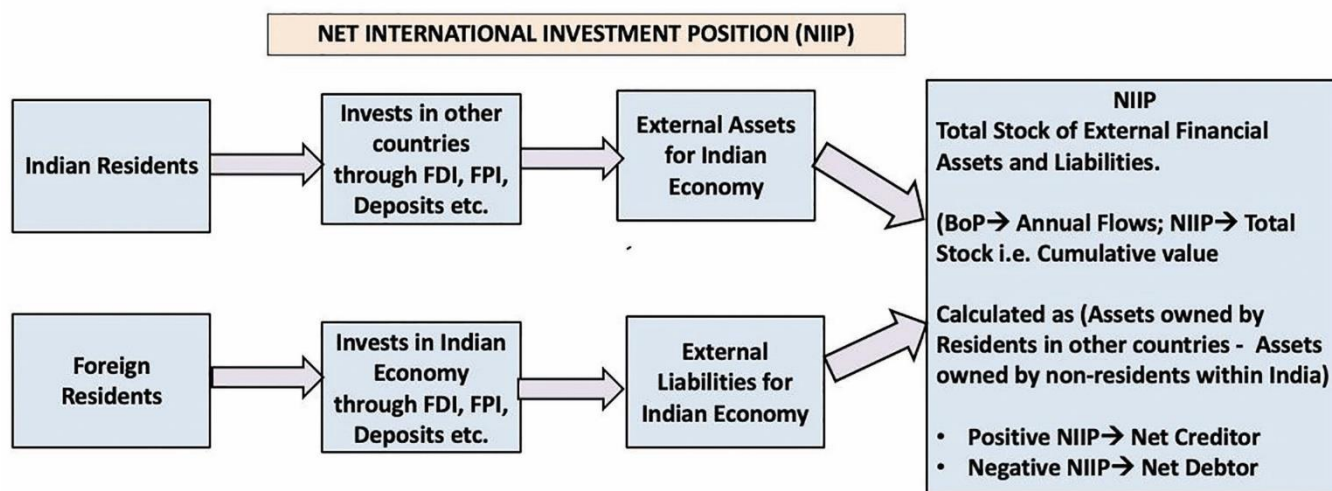
1. Residents from India owning assets in other countries (such as Foreign Investment, Equities, Debt, Deposits etc in other countries) -> Assets for Indian Economy

2. Residents from other countries owning assets in India such as FDI, FPI, NRI Deposits etc. -> Liabilities for Indian Economy

Due to these transactions recorded on BoP, a particular economy builds up stock of external financial assets and liabilities. Thus, NIIP has been introduced in order to measure the total stock of external financial assets and liabilities. It is calculated as (Assets owned by residents in other countries - Assets owned by non-residents within India).

Positive NIIP indicates that Indian residents own more assets abroad as compared to assets owned by non-residents in India. While Negative NIIP indicates that a country's residents own less assets abroad than the assets of non-residents.

The NIIP is expressed both in absolute value as well as % of GDP. The higher the ratio of NIIP to GDP, the more vulnerable an economy becomes to the developments in international markets.



RBI'S REPORT ON NIIP

The NIIP of India stands at - 352 \$ bn as of March 2021. The negative value of NIIP indicates that our external liabilities (\$1210 bn) are higher than our External Assets (\$858 bn). In terms of percentage of GDP, NIIP stands at - 13% as of March 2020.

RBI'S REPORT ON EXTERNAL DEBT

#EXTERNAL SECTOR

PRIMARY SOURCE THE HINDU

Recently, the RBI has published a report on the status of External Debt of India as of March 2021.

## ECONOMIC DEVELOPMENT

### EXTERNAL DEBT OF INDIA

The External debt includes the total money owed by the Government, Corporations or Indian Citizens to foreign creditors. The Foreign Creditors could be Foreign Government, Multilateral Institutions (World Bank, IMF etc), private commercial banks etc.

<b>Categorisation of External Debt</b>	<ul style="list-style-type: none"> <li>• Duration of loan- Short-term (less than 1 year) and long-term (more than 1 year)</li> <li>• Sovereign Debt (Government) and Non-Sovereign Debt ( Other than Government, including private sector)</li> </ul>
<b>Major Heads under External Debt</b>	<ul style="list-style-type: none"> <li>• <b>Multilateral Debt:</b> Debt from the multilateral institutions such as World Bank, IMF, ADB etc.</li> <li>• <b>Bilateral Debt:</b> Debt from sovereign countries such as Japan, Germany etc.</li> <li>• <b>Trade Credits/Export Credits:</b> Loans and credits extended for imports directly by overseas supplier, bank and financial institutions</li> <li>• <b>External Commercial Borrowings:</b> loans from commercial banks, other commercial financial institutions</li> <li>• <b>Non-Resident Deposits</b> in Banks and Financial Institutions</li> </ul>

<b>Present status of External Debt</b>	<p><b>Cumulative External Debt:</b> At end of March 2021, India's external debt was placed at US\$ 570 billion (21.1% of the GDP). This is \$ 11.5bn higher as compared to India's external debt of \$ 558.5 bn at the end of March 2019.</p> <p><b>Composition of Debt:</b> Non-Sovereign Debt (Non-Government Debt) : 17.1% of the GDP; Sovereign Debt (Government Debt): 4% of the GDP.</p> <p><b>Components of Debt:</b> External Commercial Borrowings (ECBs) accounting for 40% of external debt remains the largest source of External Debt followed by Non-resident deposits.</p> <p><b>Duration of Debt:</b> Long term debt (maturity of more than 1 year) accounts for 82% of external debt; Short-term debt ( maturity of less than 1 year) accounts for 18% of external debt</p> <p><b>Denomination of Debt:</b> US dollar (52%); remaining in Rupee, Yen, SDR and Euro and Euro.</p>
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## PRELIMS SNIPPETS

### BOLD PROJECT

The Khadi and Village Industries Commission (KVIC) has recently unveiled a unique project named "Bamboo Oasis on Lands in Drought" (BOLD).

#### DETAILS

**Objective:** Seeks to create bamboo-based green patches in arid and semi-arid land zones.

**Advantages:** Dual benefit of reducing desertification and supporting rural Industries.

**Why Bamboo?** Grow fast and prevent land degradation; Also help in conserving water and reduce evapotranspiration from land surface and hence suitable for arid and drought-prone areas.

### WORLD INVESTMENT REPORT 2021

According to UNCTAD's World Investment Report 2021, the global FDI flows fell by almost 35% to \$ 1 trillion in 2020 due to Covid-19 pandemic.

## ECONOMIC DEVELOPMENT

### MAJOR HIGHLIGHTS

**Top Ranking Countries:** US, China, Hong Kong, Singapore and India are the top ranked countries in terms of FDI inflows.

**India's Performance:** India has improved its ranking from 8th (2019) to 5th (2020).

### REPORTS PUBLISHED BY UNCTAD

- Trade and Development Report
- World Investment Report
- Technology and Innovation Report
- Digital Economy Report

## PURCHASING MANAGERS' INDEX (PMI)

According to the latest estimates, the Services PMI has contracted to a 11-month low in June 2021. The value of Services PMI stood at 41.2. Reading of above 50 indicates Expansion and reading of below 50 indicates contraction.

### DIFFERENCES BETWEEN IIP AND PMI

Purchasing Managers Index (PMI)	Index of Industrial Production (IIP)
Published by Nikkei	Published by National Statistical Office
Does not track the actual Production	Tracks the actual Production
Covers only 500 private sector companies	Covers both Private Sector as well as PSUs
Covers both Manufacturing and Services	Covers only the Manufacturing Sector
Less Comprehensive since it covers only private sector companies	More Comprehensive
Not used for GDP calculation	Used for GDP Calculation to account for the unorganised sector

## PRACTICE QUESTIONS

### MCQS

**Q1. With respect to India's External Debt, consider the following statements:**

1. The Sovereign Debt is much higher than the Non-Sovereign Debt.
2. A major share of External debt is denominated in dollars.

Which of the statements given above is/are correct?

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

**Q2. Which among the following agencies publishes the World Investment Report?**

- (a) World Bank  
(b) IMF

- (c) UNCTAD  
(d) World Economic Forum (WEF)

**Q3. With reference to Purchasing Managers Index (PMI), consider the following statements:**

1. The PMI tracks the actual production of Goods and Services in a country.
2. The PMI covers both public sector as well as private sector companies.

Which of the statements given above is/are correct?

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

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## ECONOMIC DEVELOPMENT

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**Q4. If the Net International Investment Position (NIIP) of a country is Positive, what would it denote?**

- (a) Net inflow of all foreign investments in a particular year is positive.
- (b) Net inflow of FDI into a country for particular year is positive.
- (c) It denotes that a country is a net International Debtor
- (d) It denotes that a country is a net International Creditor

**Q5. With respect to Gross Savings in India, consider the following statements:**

- 1. The Household sector contributes for the highest share of Savings in India.
- 2. A major share of household savings is in form of physical savings rather than financial savings.

Which of the statements given above is/are correct?

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

## DESCRIPTIVE QUESTIONS

**Q1.** The implementation of Insolvency and Bankruptcy Code (IBC), 2016 has emerged as a game changer in improving the financial health of the Banks and thus enabled virtuous economic cycle. Critically Analyze (250 Words)

**Q2.** The Animal Husbandry and Dairy sector has the potential to bring about Inclusive and Egalitarian growth. In the light of this statement, examine various strategies to be adopted to optimally reap the benefits associated with the Animal Husbandry sector. (250 Words)

**Answers:** 1-b, 2-c, 3-d, 4-d, 5-c



# CONSTITUTION, POLITY AND GOVERNANCE

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

## RULE OF LAW VERSUS RULE BY LAW

#RULE OF LAW #RIGHTS ISSUES

<b>PRIMARY SOURCE</b>	<i>The Indian EXPRESS</i>	<b>SECONDARY SOURCE</b>	THE HINDU
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Chief Justice of India has said that there is a difference between Rule of Law and Rule by Law.

### UNDERSTANDING "LAW" WITHIN "RULE OF LAW"

- The true meaning of law which combines the backing of a competent legal authority (sovereign) along with the ideals of justice and equity. Law needs to be fair, just & reasonable.
- An "unjust law" might not have the same moral legitimacy as a "just law", but it might still command obedience of some sections of the society to the detriment of others.
- According to CJI, only such states where laws backed by sovereign are tempered by ideal of justice can be said to truly practicing 'Rule of Law'.

### BRITISH USED 'RULE BY LAW' TO CONTROL INDIAN COLONY

- British colonial powers enforced classification of laws based on identity and origin and segregated between Indians and British. Laws such as Rowlatt Acts were passed which curtailed freedom and went against human dignity and freedom. Thus, merely being a law in place does not ensure 'Rule of Law'.
- Indian freedom struggle can thus be summarised as a political struggle to convert "Rule by Law" to "Rule of Law".

### CJI HIGHLIGHTS PRINCIPLES OF RULE OF LAW

- 1. Laws must be clear and accessible** - A regime rooted in 'rule of law' cannot have segregation of laws or secretive laws and wordings of the law must be in simple and clear language.
- 2. Equality Before Law** - 'Rule of law' ensures equal access to justice for all sections of the society including marginalised or vulnerable sections. Any kind of weakness (poverty, illiteracy, disabled) must not bar access to rights enjoyed by other section of the society. Aspects of gender equality must be ensured and legal empowerment of women must be appreciated as it helps them in advocating their rights and increase their visibility in the legal reform process.
- 3. Right to participate in the creation and refinement of laws** - This is done by electing representatives in Parliament and State Assemblies by periodically conducted elections. However, the mere right to change the rulers every few years by itself need not be a guarantee against tyranny. It should be realized that people are ultimate sovereign. Centrality of human dignity and autonomy forms the basis of ultimate sovereignty of people. A public discourse that is both reasoned and reasonable is an inherent aspect of human dignity and hence essential to a properly functioning democracy. **Julius Stone** has observed in his book, **The Province of Law**, that regular and free and fair elections, day-to-day political discourses, criticisms and voicing of protests is integral to the democratic process and a safety mechanism against tyranny and loss of freedom.
- 4. Presence of a "strong independent judiciary" as Guardian of the Constitution**
  - **Judicial Review is guaranteed as basic structure**, this ensures interpretation of laws in constitutional context and also limits infinite amending powers of Parliament. However, ensuring constitutional rule is



## CONSTITUTION, POLITY AND GOVERNANCE

not only the duty of Courts but also the constitutional mandate of the legislature and executive.

- **Freedom in the functioning of Judiciary** is a must and it should not be controlled either directly or indirectly by legislature or executive, else the 'Rule of Law' would become illusory.
- **Media Trials** - Amplification of public opinion through social media or other platforms need not confuse a Judge between what is right and what the majority believes in as these two might not be synonymous. Therefore, media trials cannot be a guiding factor in deciding cases.

2. Inability to adopt an integrated approach to national priorities and problems.
3. Constitution currently places a limitation on the size of the council of ministers to be 15% of strength of Lok Sabha.

Thinning of resources across various issues. Also, increase in manpower increases establishment cost of government. For ex. The Ministries related to transport currently are: **1) Ministry of Railways, 2) Ministry of Road Transport and Highways, 3) Ministry of Ports, Shipping and Waterways, 4) Ministry of Civil Aviation.** However, there is a need for the India to develop a comprehensive national multi-modal transport in an integrated way. Thus, an umbrella **Ministry of Transportation** with 4 separate departments dealing with Railways, Roadways, Waterways and Airways would have helped achieve the goal better.

Thus, there is a need to strike a balance between the requirements of functional specialization and the need for a holistic approach to key issues.

## PROLIFERATION OF MINISTRIES

#UNION GOVERNMENT

PRIMARY SOURCE

THE HINDU

SECONDARY SOURCE

Second ARC

*A new **Ministry of Cooperation** has been formed. Over the years, there has been a proliferation of new ministries in India. Currently, there are more than 50 Ministries and many more departments.*

*As compared to India, other democracies such as the US and the UK have around 20-25 ministries and various functions of government are distributed in these.*

### REASONS FOR PROLIFERATION OF MINISTRIES

1. Creating new department to deal with individual subjects leads to greater attention and resources on that field.
2. Functions of government have increased.
3. Centralizing tendency of Union Government which takes upon itself functions which can be better managed at the State Level or by the Private Sector.
4. Coalition politics meant that varying factions had to be placated by giving ministership.
5. Large number of ministers is essential for a diverse country as it empowers representational democracy.

### ISSUES WITH PROLIFERATION OF MINISTRIES

1. Lack of coordination among different ministries.

### RECOMMENDATIONS OF 2<sup>ND</sup> ARC

1. The concept of a Ministry needs to be redefined. A Ministry would mean a group of departments whose functions and subjects are closely related and is assigned to a First or Coordinating Minister for the purpose of providing overall leadership and coordination. This concept of a Ministry and the Coordinating (or First) Minister may be explicitly laid down in the Allocation of Business Rules. Adequate delegation among the Ministers would have to be laid down in the Transaction of Business Rules. As a consequence of this, rationalization of Secretary level posts wherever required may also needed.
2. Individual departments or any combination of these could be headed by the Coordinating (or First) Minister, other Cabinet Minister(s)/Minister(s) of State.
3. The structure of the Government of India should be rationalised by grouping together closely related subjects in order to reduce the number of Ministries to 20-25.

## CONSTITUTION, POLITY AND GOVERNANCE

# RECONSTITUTION OF CABINET COMMITTEES

#UNION GOVERNMENT

**PRIMARY SOURCE** THE HINDU **SECONDARY SOURCE** Second ARC

With the reshuffle in the Union Cabinet, the Cabinet Secretary has notified changes in the composition of Cabinet Committees.

### ABOUT CABINET COMMITTEES

- Under the **Article 77 of the Constitution**, President has power to make rules for convenient transaction of business of Union Government and for allocation of work among ministers. Under these the President has notified, two sets of rules:
- 1. **Allocation of Business Rules** deals with distribution of subject among different ministries and departments
- 2. **Transaction of Business Rules** deals with disposal of business by ministries, inter-departmental consultations, committees of cabinet, consultation with Prime Minister and President etc.
- According to the Transaction of Business Rules, Prime Minister has power to constitute or discontinue Standing Committees of the Cabinet and the functions assigned to them.
- Membership to these Standing Committees as Prime Minister may specify.
- Secretarial assistance to cabinet committees is provided by Cabinet Secretariat, headed by Cabinet Secretary.
- Ad hoc committee of ministers may be appointed by the Cabinet, Standing Committee or Prime Minister on such matters as may be
- Rationale for Cabinet Committees:
  - Help in taking decisions where multiple ministries are involved
  - Help in horizontal consultation and coordination and dialogue between different ministries

### CABINET COMMITTEES

Name of the Cabinet Committee	Head of the Cabinet Committee
1. Appointments Committee of the	Prime Minister

Cabinet	
2. Cabinet Committee on Accommodation	Union Home Minister
3. Cabinet Committee on Economic Affairs	Prime Minister
4. Cabinet Committee on Parliamentary Affairs	Union Defence Minister
5. Cabinet Committee on Political Affairs	Prime Minister
6. Cabinet Committee on Security	Prime Minister
7. Cabinet Committee on Investment and Growth	Prime Minister
8. Cabinet Committee on Employment and Skill Development	Prime Minister

### ISSUES WITH CABINET COMMITTEES

1. Some of the Cabinet Committees are not able to meet regularly.
2. Some of the Committees are merely recommendatory in nature while others are empowered to take decisions.
3. Lack of clear time lines for cabinet committees to arrive at a decision.
4. Several important subject though inter-ministerial in nature are not dealt by any of these committees.
5. Cabinet Committees can take up a matter only if it is referred to it by order of the Minister concerned of Cabinet.

### WAY FORWARD

1. Each of the Cabinet Committees should be supported by a Secretaries Committee so that issues which can be solved at Secretary level do not consume time of ministers.
2. Between the Cabinet Committees all important matters should be covered.
3. Each Cabinet Committee should meet regularly so that sustained attention is given to complex problems and the process of implementation of important policies and programmes is kept under constant review.
4. The office of Cabinet Secretary should be given more manpower and support for aiding these committees.
5. Apart from Standing Committees, the provision to form Ad hoc committees should be explored for subject specific issues.

## CONSTITUTION, POLITY AND GOVERNANCE

### RESIGNATION OF UTTARAKHAND CM

#RESIGNATION OF MINISTERS #CONSTITUTION NINETY FIRST AMENDMENT

PRIMARY SOURCE THE HINDU

SECONDARY SOURCE THE CONSTITUTION OF INDIA

Chief Minister of Uttarakhand had to resign as the by-election to be conducted was postponed due to COVID pandemic and this could have exceeded the six months window allowed to become a minister as per Article 164(4) of the Indian Constitution.

#### CONSTITUTIONAL PROVISIONS RELATED TO MINISTERS

1. Constitutional Provisions related to Union Council of Ministers are laid down in Article 74 and 75 while that for State Council of Ministers is laid down in Article 163 and 164 of the constitution.
2. According to the Constitution, Prime Minister is appointed by the **President (Article 75)** while the Chief Minister is appointed by the **Governor (Article 164)**. In case of Union, other Ministers are appointed by the President on the recommendation of Prime Minister while in case of States, other Ministers are appointed by the Governor on the advice of the Chief Minister.
3. In case of Union, Council of Ministers is collectively responsible to the House of the People (Lok Sabha) (Article 75 (3)). In case of States, Council of Ministers is collectively responsible to the Legislative Assembly of the State (Article 164 (2)).
4. Since India follows a parliamentary democracy, the ministers must be members of Parliament or State Legislative Assembly. However, a person can be made a minister (in Parliament or State Assembly) even if they are not member of either Parliament or State Assembly. **Article 75(5) and 164(4)** gives a grace period of 6 months for such ministers who are not members of either Parliament or State Assembly. So, it means that such ministers must become members of Parliament or State Assembly within a period of 6 months, else they fail the constitutional requirement to remain as Minister, in centre or state.

#### 5. Other constitutional provisions related to Council of Ministers:

- (a) Ministers hold office during the pleasure of President in case of Union Government and of the Governor in case of State Government.
- (b) **Limitation on size of Council of Ministers:** In case of Union Government, total number of Ministers, including Prime Minister, in the Council of Ministers shall not exceed 15% of the total number of members of the House of People (Lok Sabha). In case of State Government, total number of Ministers, including Chief Minister in Council of Ministers shall not exceed 15% of the total number of members of Legislative Assembly of the State. **(This provision was included by 91st Amendment Act).**
- (c) **Anti-Defection Law:** A member of Parliament who is disqualified under the Tenth Schedule shall also be disqualified to be appointed as a Minister from the date of his disqualification till the date on which the term of his office would expire or where he gets re-elected to the house.

### CODIFICATION OF PARLIAMENTARY PRIVILEGES

#PARLIAMENTARY PRIVILEGES

PRIMARY SOURCE THE HINDU

SECONDARY SOURCE THE CONSTITUTION OF INDIA

SECONDARY SOURCE SUPREME COURT JUDGEMENTS

The Supreme Court has ruled that legislative privilege cannot be extended to provide legal immunity to criminal acts committed by lawmakers. Legislators charged with unruly behaviour that results in offences under penal laws cannot be protected either by their privilege or their free speech rights.

#### UNDERSTANDING PARLIAMENTARY PRIVILEGES

- Parliamentary privilege is the sum of certain rights enjoyed by each House collectively... and by members of each House individually, without which they could not discharge their functions, and which exceed those possessed by other bodies or individuals. Some

## CONSTITUTION, POLITY AND GOVERNANCE

privileges rest solely on the law and custom of Parliament, while others have been defined by statute.

- Certain rights and immunities such as freedom from arrest or freedom of speech belong primarily to individual members of each House and exist because the House cannot perform its functions without unimpeded use of the services of its members.
- Other rights and immunities, such as the power to punish for contempt and the power to regulate its own constitution belong primarily to each House as a collective body, for the protection of its members and the vindication of its own authority and dignity.

Fundamentally, however, it is only as a means to the effective discharge of the collective functions of the House that the individual privileges are enjoyed by members.

- **A breach of privilege** is a violation of any of the privileges of MPs/Parliament. Among other things, any action 'casting reflections' on MPs, parliament or its committees could be considered breach of privilege. This may include publishing of news items, editorials or statements made in newspaper/magazine/TV interviews or in public speeches.

### CONSTITUTIONAL PROVISIONS

- **Parliamentary privileges (Art 105 & 194)** are special rights, immunities, exceptions enjoyed by the members of the two houses of Parliament and their committees.
- These rights are also given to those individuals who speak and participate in any committee of the Parliament, which includes the **Attorney General of India and the Union Ministers**.
- **President, who is integral part of the parliament, does not enjoy these privileges.**
- **Article 105 (3)** was amended by the Constitution 44<sup>th</sup> Amendment and now has two aspects.
  1. Powers, privileges and immunities of each Houses of Parliament, its Members and Committees shall be such as may be defined by Parliament by law in time.
  2. Till such powers, privileges and immunities are defined by Parliament, shall be the same as that was enjoyed by House of Commons as on 26<sup>th</sup> January 1950.

- **Article 105 (3)** has avoided direct reference to House of Commons but effectively such privileges continue till Parliament frames a law.

- **Parliament has not yet codified its privileges.**

### FREEDOM OF PUBLICATION - ARTICLE 361-A

- **Article 361-A** was added by the Constitution 44<sup>th</sup> Amendment which says that no person shall be liable to any proceedings, civil or criminal in any Court of law in respect of any publication in a newspaper of a substantially true report of any proceedings of either House of Parliament or Legislative Assembly, unless the publication is proved to have been made with malice. A similar immunity is extended to broadcast on air. Newspapers were not immune to publications of parliamentary proceedings prior to 44<sup>th</sup> Amendment.
- In the famous **Searchlight** case, Supreme Court ruled that publication of inaccurate or mashed version of speeches delivered in the House or misreporting the proceedings amounts to breach of privilege. The Court held that publication of those parts of proceedings by a newspaper which were expunged by the House amounts to breach of privilege of the House and the offending party can take action inspite of protection from Article 361A.
- Supreme Court also held that House can impose prohibition on publication of any debates, proceedings even if such prohibitions amounted to violation of freedom of speech and expression under Article 19(1)(a).

### INTERNAL AUTONOMY

- **Article 122 (1)** grants immunity on the same lines to internal functioning of the House. The validity of any proceedings in Parliament cannot be called into question on the ground of alleged irregularity or procedure.
- **Article 122 (2)** further says that officers of Parliament who regulates its procedure and maintains order is not subject to jurisdiction of any court while exercising those powers. Thus, House of Parliament is free from judicial control in its functioning.
- **Speaker** cannot be sued for damages for any action taken against a member including that of arrest. A High Court or Supreme Court cannot issue a **writ** under Article 226 or Article 32 to restrain the functioning of the House or legislation even though



## CONSTITUTION, POLITY AND GOVERNANCE

the subject of legislation is *ultra vires*. Only when a Bill becomes a law after President's assent, the Courts can decide upon its constitutionality.

- Thus, the **House enjoys immunity from judicial process** and such courtesy is also extended to Committee of the House as a committee is one of its part through which a House functions. However, illegality or unconstitutionality of a procedure can be enquired into by a Court of Law.

### INQUIRIES

- A House has power to make inquiries and order attendance of witnesses. A person charged with contempt or breach of privilege of the House can be summoned to be present and answer the questions relating to disobedience. The House can even order the person's custody in extreme cases.
- **The Committee of Privilege** can order for persons, records and to administer an oath or affirmation to a witness before it. If such orders are not obeyed will also be considered as breach of privilege of the House.

### DISCIPLINARY POWERS OVER MEMBERS

- A House of Parliament has power to enforce discipline, to punish its members for their offending or obstructive behaviour, to suspend or even to expel a member for unfit behaviour or misconduct in the House.
- The Courts do not interfere with the power of the House to impose disciplinary proceedings. The House also has the power to terminate the suspension at their discretion.
- Lok Sabha Speaker has suspended five members of opposition for their unruly behaviour in the past as it brought disrepute to the House of Parliament.

### NEED FOR CODIFICATION OF PARLIAMENTARY PRIVILEGES

- **Parliament has yet not codified privileges** available to members inspite of its mentioning in the constitution under Article 105(3) and 194(3).
- **Misuse of Privileges** - This has led to misuse of certain privileges accorded to the members of Parliament and State Legislatures. Privilege motions are misused in India to fulfill political ambitions. Such actions need to be avoided by the office bearers.

- **India mostly follows British conventions** with respect to privileges enjoyed by the House and its members. Since independence, the jurisprudence on privilege has evolved and various important case laws have shown the pathway.
- **Need to Streamline Parliamentary Privileges** - Parliamentary democracy functions on the pillars of freedom of speech and criticism. Every government should profit by the criticism faced by it during its tenure as such criticisms helps in streamlining and improving quality and effectiveness of governance.

### WAY FORWARD

- **Need to Codify Parliamentary Privileges** - Thus, there is a stringent need to codify privileges, powers and immunities of the House. It will provide proper guidelines to be followed and remove uncertainties which currently prevail. In a democracy free speech and rule of law should be the norm, not the exception.
- **Justice Subba Rao in Searchlight case** strongly pleaded for codification of privileges instead of following conventions.

The framers of the constitution felt that privileges of the House must not be framed in hurry but should be allowed to grow and nurture with time and then legislated. Thus, time has come to codify the privileges, powers and immunities as it will not only provide a proper road map to be followed but shall also be a safeguard against any misuse of powers, privileges and immunities.

## DELAYS IN CASES OF ANTI-DEFECTION

#ANT-DEFECTION #TENTH SCHEDULE

PRIMARY SOURCE	THE HINDU	SECONDARY SOURCE	SUPREME COURT JUDGEMENTS
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*A petition was filed in Supreme Court to look into the practice of mala-fide delays on the part of the Speakers/Chairmen of both houses of the Parliament & State Legislative Assembly in deciding cases of defection under Tenth Schedule of the Indian Constitution. In this backdrop, let us go through the important highlights of SC Judgment in the case of **Keisham Meghachandra Singh**.*

### IMPORTANT HIGHLIGHTS OF THE JUDGEMENT

## CONSTITUTION, POLITY AND GOVERNANCE

- **Decision on anti-defection operates independently** (in Speaker's capacity as an independent Tribunal): The decision of Speaker under Tenth Schedule is not the decision of the House, nor is it subject to the approval by the House and the decision operates independently from the functioning of the House.
- **Immunity only from parliamentary procedure:** Decision of Speaker on anti-defection can be judicially reviewed and only the procedure followed cannot be judicially reviewed.
- **Speaker/Chairman quasi-judicial authority** - Speaker or the Chairman acting under the Tenth Schedule is a Tribunal. Speaker is a quasi-judicial authority **who is required to take a decision within a reasonable time.**
- **Judicial power of Speaker/Chairman** - The power to resolve such disputes vested in the Speaker or Chairman is a judicial power.
- **No blanket ban of judicial review of Speaker's decision for disqualification under Tenth Schedule** - Judicial Review by High Court and Supreme Court is allowed on Speaker's decision of disqualification under Tenth Schedule on grounds of infirmities based on violations of constitutional mandates, mala fides, non-compliance with rules of natural justice and perversity. However, judicial review cannot be available at a stage prior to the making of a decision by the Speaker/Chairman.
- **Speaker to decide the case in reasonable time** - Supreme Court quoted Kihoto Hollohan case where it held that Speaker while deciding case of anti-defection must decide within reasonable time and should not take more than three months. The Court said that period of three months has been kept in mind considering life of Lok Sabha and State Legislative Assemblies which is 5 years.

### Suggestions & Recommendations of Supreme Court

#### 1) Need for Parliament to re-think on role of Speaker to decide cases of defection

- As per **Article 93**, Lok Sabha shall choose two members of the House to be respectively Speaker and Deputy Speaker. The Speaker is a constitutional authority and his tenure is dependent on the will of the majority. So, likelihood of suspicion of bias could not be ruled out as mostly Speaker belongs to the ruling majority.

- Thus, it is time for Parliament to rethink on whether disqualification petitions ought to be entrusted to Speaker as a quasi-judicial authority when such Speaker continues to belong to a particular political party either de jure or de facto.

#### 2) Permanent Tribunal - Amending the Constitution

- Parliament may consider amending the Constitution to substitute the Speaker with a PERMANENT TRIBUNAL headed by a SC judge for adjudication of anti-defection matters. This would ensure that such disputes are decided both swiftly and impartially, thus giving real teeth to the provisions contained in the Tenth Schedule.

#### 3) Inherent bias cannot be ruled out

- Supreme Court observed that Speaker continues to belong to a particular party and there is inherent bias in their ruling. The convention that speaker does not belong to a particular political party needs to be adopted in India. Speakers should be asked to quit their political parties while they remain in the estimated office.

## VACANCY OF SPEAKER'S OFFICE

#LEGISLATURE #SPEAKER

**PRIMARY SOURCE** *The Indian EXPRESS*

*Maharashtra Assembly has been functioning without a Speaker. Lok Sabha has been functioning without a Deputy Speaker. In this respect, let us analyze the election of speaker and deputy speaker.*

### CONSTITUTIONAL SCHEME

- **Article 93 (for Lok Sabha) and Article 178 (for State Legislative Assemblies)** of the Constitution says that the office of speaker and deputy speaker should be occupied 'as soon as may be'.
- Therefore, the constitution does not clearly specify the duration in which the office of speaker or deputy speaker should be occupied.
- In the Lok Sabha and State Assemblies, the President/Governor sets a date for the election of the Speaker.
- Date for the election of Deputy Speaker is decided by the Speaker.



## CONSTITUTION, POLITY AND GOVERNANCE

- Assemblies of Haryana and Uttar Pradesh have fixed a time line for the election of speaker and deputy speaker.
- The Constitution envisages that the office of Speaker should never be vacant, therefore he continues in office until the beginning of the next House.

### IMPORTANCE OF OFFICE OF SPEAKER

Speaker is principal spokesperson of the Lok Sabha. He represents its collective voice and is its sole representative to the outside world.

1. He presides over the house proceedings and joint sittings of two Houses of Parliament.
2. He decides whether a Bill is money Bill or not.
3. He has the power to appoint the chairpersons of Parliamentary Standing Committees.
4. He also decides cases of anti-defection.
5. Even though speaker speaks rarely in the house he speaks for the House as a whole.
6. Speakers actions are bound by the Constitution and Rules of Procedure and Conduct of Business in Lok Sabha.

### IMPORTANCE OF OFFICE OF DEPUTY SPEAKER

1. Deputy Speaker is independent of the Speaker, not subordinate to him as both are elected from among the members of the House.
2. Deputy Speaker presides over the house in the absence of Speaker. He ensures continuity of the Speakers office by acting as the Speaker when the office becomes vacant.
3. Deputy Speaker chairs various committees of Lok Sabha. Earlier Deputy Speakers have chaired the Committee on MPLAD Scheme and Lok Sabha Committee on Private Members' Bills.
4. Deputy Speakers also chairs various committees formed under the aegis of conference of presiding officers of legislative bodies in India.
5. When a resolution for removal of Speaker is being discussed, Constitution specifies that the Deputy Speaker presides over the proceedings of the House.
6. Earlier, Deputy Speaker and Speaker both came from ruling party, however, gradually a tradition developed of appointing the deputy speaker from opposition parties.

## FEDERAL ISSUES

### KRISHNA RIVER WATER SHARING – THE UNENDING PROBLEM

#RIVER-WATER DISPUTES

PRIMARY SOURCE *The Indian EXPRESS* SECONDARY SOURCE PRS  
SECONDARY SOURCE LEGISLATIONS

*In a fresh dispute, Andhra Pradesh government has alleged that Telangana has been drawing Krishna water from four projects — Jurala, Srisailam, Nagarjuna Sagar, and Pulichintala — for hydropower generation without approvals from the Krishna River Management Board (KRMB). KRMB along with Godavari River Management Board (GRMB) was constituted under Section 85 of the Andhra Pradesh Reorganisation Act, 2014 to regulate supply of water from the projects to the successor States.*

### KRISHNA RIVER MANAGEMENT BOARD & GODAVARI RIVER MANAGEMENT BOARD

- Section 84 of the Reorganisation Act constituted an Apex Council for the supervision of the functioning of the Godavari River Management Board and Krishna River Management Board.
- The Apex Council consist of:
  - (a) Minister of Water Resources, Government of India—Chairperson
  - (b) Chief Minister of State of Andhra Pradesh—Member
  - (c) Chief Minister of State of Telangana—Member

### FUNCTIONS OF THE APEX COUNCIL INCLUDES:

- (i) Supervision of the functioning of the Godavari River Management Board and Krishna River Management Board
- (ii) Planning and approval of proposals for construction of new projects on Godavari or Krishna river water

## CONSTITUTION, POLITY AND GOVERNANCE

- (iii) Resolution of any dispute amicably arising out of the sharing of river waters
- (iv) Reference of any disputes not covered under Krishna Water Disputes Tribunal, to a Tribunal to be constituted under the Inter-State River Water Disputes Act, 1956.

***Despite these measures taken by the central government, disputes have again arisen.***

### **CONSTITUTIONAL PROVISIONS ON ADJUDICATING RIVER-WATER DISPUTES**

**Article 262** of the Constitution provides for the adjudication of inter-state water disputes. It has two provisions:

- i. Parliament may by law provide for the adjudication of any dispute with respect to the use, distribution and control of waters of any inter-state river
- ii. Parliament may also provide that neither the Supreme Court nor any other court is to exercise jurisdiction in respect of any such disputes.

So, this means that till the dispute is being heard by the Tribunal, party to the disputes (states) cannot approach the Supreme Court for any intervention or final hearing.

#### **Water under VII Schedule**

- Water is included in **Entry 17** of **State List** under **Seventh Schedule** of the Constitution. It can be subject to the Centre's arbitration if, and only if, it involves a clear case of conflict or dispute as mentioned under **Entry 56** of **Union List**.
- As per **Entry 17** of the **State List**, States have competence over water supplies, irrigation and canals, drainage and embankments, water storage and water power subject to the provisions of entry 56 of Union List of the Constitution.
- Whereas **Entry 56** of **Union List** relates to *regulation and development of Inter-state rivers and river valleys* to the extent to which such regulation and development under the control of the Union is declared by Parliament by law to be expedient in the public interest.

#### **Based on Article 262, Parliament has enacted:**

- The Inter-State River Water Disputes Act (1956)
- The River Boards Act (1956)

### **IMPORTANT HIGHLIGHTS - INTER-STATE RIVER WATER DISPUTES ACT, 1956**

- States requests Central government to refer their river water sharing dispute to the Tribunal.
- Within 1 year of the request received, Central Government notifies in the official gazette a Water Dispute Tribunal specific to the river water in question (For ex. Cauvery River Water Dispute).
- Tribunal then investigates and submits their report to the Centre and disputing States.
- Central Government then publishes the decision of the Tribunal in the Official Gazette. The decision of the Tribunal is final and binding on the parties to the dispute.
- After the decision of Tribunal, Central Government may notify schemes in the official gazette to implement the Tribunal's award.
- Supreme Court or any other Court shall not have jurisdiction in respect of any water dispute which may be referred to a Tribunal under this Act.
- Central Government dissolves the Tribunal after it has forwarded its report and as soon as the Central Government is satisfied that no further reference to the Tribunal in the matter would be necessary.

#### **Concerns with Inter-State River Water Disputes Act, 1956**

- No timeline has been provided in the Act for completion of the Award.
- Does not provide for mechanism of negotiation prior to constitution of Tribunal.
- Delay in notifying of awards by the Centre – this continues the dispute for perpetuity
- Water sharing disputes due to its long-lasting nature becomes an emotive issue and fuels regionalism between disputing states.
- Formation of new states (in this case Telangana) further aggravates river-water sharing as all well settled sharing agreements are demanded to be renegotiated
- Centre at times hesitates in forming Tribunal and judicial intervention becomes necessary to set up the tribunal under Inter-State River Water Disputes Act.

## CONSTITUTION, POLITY AND GOVERNANCE

Example – Tribunal constituted to settle Mahadayi River water dispute.

- Non-adherence of Award by the Tribunal is another concern as hardly states agree on the award and approach Supreme Court for final hearing.
- Awards of Tribunals do not emphasise on water conservation practices such as drip irrigation, water harvesting that will increase water use efficiency.

### Sarkaria Commission – Inter-State Water Disputes

The Sarkaria Commission recommended amending the 1956 Act for the following:

- To empower the Union Government to appoint a Tribunal (without a reference from the State government) when the Central Government is satisfied that such a dispute actually exists.
- Constitute Data Bank and information system at the national level and states to give necessary data to the Tribunal for adjudication of disputes.
- The award of the Tribunal to be effective within five years from the date of constitution of the Tribunal.
- Tribunal's Award to have the same force and sanction behind it as an order of the Supreme Court.

Based on these recommendations, central government earlier introduced the Inter-State River Water Disputes (Amendment) Bill 2017. However, the Bill was not passed and now the government has introduced the Inter-State River Water Disputes (Amendment) Bill, 2019 to amend the Inter State River Water Disputes Act, 1956 with a view to streamline the adjudication of inter-state river water disputes and make the present institutional architecture robust.

### THE INTER-STATE RIVER WATER DISPUTES (AMENDMENT) BILL 2019:

- **Dispute resolution:**
  - ✓ when a state puts in a request regarding any water dispute, the central government will set up a **Disputes Resolution Committee (DRC)**, to resolve the dispute amicably.
  - ✓ If a dispute cannot be settled by the DRC, the central government will refer it to the **Inter-State River Water Disputes Tribunal**.

- **Permanent Tribunal:** The central government will set up a **Permanent Inter-State River Water Disputes Tribunal**, for the adjudication of water disputes. This Tribunal can have multiple benches to look into multiple disputes. (*Earlier adhoc tribunals were constituted as and when the dispute arises. This often led to delay in constitution of tribunals*)
- **Appointment of Experts:** The proposed Bill also provides for appointing experts known as Assessors as they will provide technical support by furnishing relevant data and information which shall be helpful in the adjudication of water disputes.
- **Fixed Time frame:** Tribunal must give its decision on the dispute within 2 years, which may be extended by another year.
- **Centre to Maintain Data Bank for each River Basin:** States shall furnish relevant data, information or any details to the Central Government or agency authorised to collect such data by the Central Government.
- **Decision of the Tribunal:** The decision of the Bench of the Tribunal will be final and binding on the parties involved in the dispute.

However, the sustainable solution to these disputes depends upon how effective the tribunal award is implemented. For this purpose parliament had enacted the River Boards Act (1956).

### RIVER BOARDS ACT (1956)

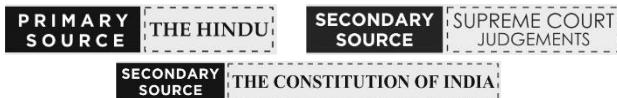
- It provides for the establishment of river boards by the Central government for the regulation and development of inter-state river. A River Board is established on the request of state governments concerned to advise them.
- These river boards were supposed to prevent conflicts by advising on the integrated development of inter-state river basins and implementing the tribunal awards
- However, no such water board has ever been created under this act. This act has remained a dead letter till now.

## CONSTITUTION, POLITY AND GOVERNANCE

### JUDICIARY

## 97<sup>TH</sup> CONSTITUTION AMENDMENT

#CO-OPERATIVES #AMENDMENT



The Supreme Court using the 'Doctrine of Severability' has struck down parts of Constitution 97<sup>th</sup> Amendment which deals with co-operative societies as it did not follow the process laid down in Article 368(2) of the Indian Constitution.

### CONSTITUTION NINETY SEVENTH AMENDMENT

Following provisions were introduced in the Constitution with respect to Co-operatives:

- **Article 19(1)(c):** Freedom to form cooperatives
- **Article 43B in DPSC (PART IV)** cast duty on state promotion of **voluntary formation, autonomous functioning, democratic control** and **professional management** of co-operative societies.
- **PART IXB** – was added in the constitution which provided for Article 243ZH to Article 243ZT for professional management of co-operative societies by state legislature, determining the functioning and tenure of members of Board along with their regular election, audit and accounts, maximum number of directors in each society, reservation for seats for SCs, or STs, and women, multi-state co-operatives and application of Part IX-B to Union Territories.
- Did not define cooperatives.

### REASON TO ENACT CONSTITUTION 97TH AMENDMENT

In the Constitution, cooperatives are expressly provided in State List and kept expressly outside the realm of Union List. It was expected that cooperatives will function under the State Laws.

Cooperatives were seen as **an alternative model of economic growth** as a middle path between the private sector and public sector. Its growth was envisaged for

securing social and economic justice and equitable distribution of the fruits of development. Some of the challenges facing the cooperative sector are:

- **Regional disparity in cooperative development:** Cooperative structure has managed to flourish only in a handful of States like Maharashtra, Gujarat, Karnataka etc. Currently, central government provides equity and credit support to cooperative societies. This benefits thus gets concentrated in few states where cooperatives have developed. Regions where cooperatives are developed are already relatively well-off states, there is a need to focus on development of cooperatives in poorer parts of the country.
- **Issues of membership:** Inability to ensure active membership, speedy exit of non-user members, lack of member communication and awareness building measures
- **Governance challenges:** Serious inadequacies in governance including that related to Boards' roles and responsibilities
- **Cooperatives not seen as economic institutions:** A general lack of recognition of cooperatives as economic institutions both amongst the policy makers and public at large
- **Inability to attract and retain competent professionals** leading to poor services and low productivity.
- **Lack of efforts for capital formation** particularly that concerning with enhancing member equity and thus member stake
- **Lack of cost competitiveness** arising out of issues such as overstaffing, a general top-down approach in forming cooperatives including the tiered structures
- **Politicization and excessive role of the government** chiefly arising out of the loop holes and restrictive provisions in the Cooperative Acts
- **Irregular elections** make office bearers remaining in office indefinitely, reducing their accountability and increase corruption.

## CONSTITUTION, POLITY AND GOVERNANCE

Thus, need was felt for fundamental reforms in the functioning of co-operatives to:

- ✓ Revitalize the institutions to ensure their contribution in the economic development of the country.
- ✓ Serve the interests of members and public at large.
- ✓ Ensure their autonomy, democratic functioning and professional management.

### SC JUDGEMENT IN RAJENDRA N SHAH CASE

- Earlier Gujarat High Court had ruled that, “co-operative societies” are placed under Entry 32 of the State List and hence was within state’s jurisdiction to legislate. So, any change in that status by the centre would require the ratification by at least one-half of the state legislatures as per Article 368(2) of the Constitution. It also affected federal principles and was against the basic structure of the Constitution. Thus, 97<sup>th</sup> Constitutional Amendment was invalidated.
- **Supreme Court** upheld the Gujarat High Court judgment but did not strike down Part IXB in its entirety. The Court by applying **Doctrine of Severability** held Article 243Z1 to 243ZQ as unconstitutional leaving aside Article **243ZR and 243ZS**.
- Supreme Court struck down part IX B of the Constitution related to cooperative societies but declared the part related to multi-State cooperative societies both within the various States and in the Union territories of India as valid.
- The Court also referred **Kihoto Hollohan judgment** where Doctrine of Severability was applied on Tenth Schedule to render Paragraph 7 of Tenth Schedule of the Indian Constitution as invalid.
- However, the minority judgment questioned the independent workability of Article 243ZR & 243ZS without other provisions of PART IXB and declared the entire PART IXB as constitutionally invalid.

### DOCTRINE OF SEVERABILITY

- The doctrine of Severability is also known as the **Doctrine of Separability**. This Doctrine is applied to remove certain part of a statute, or provisions of law when declared invalid.

- This saves the entire law as the entire law or provision is not declared invalid but only the part considered invalid or unconstitutional.
- Thus, only the offending provision is declared void by the Court and not the entire statute or entire part.

### SUGGESTIONS FOR STRENGTHENING OF COOPERATIVES

1. States should amend their cooperative legislations in the spirit of Model Cooperatives Act proposed by Brahm Prakash committee. Such a law should be member centric and based on cooperative principles.
2. **For enhancing member participation:** Definition of ‘Active members’ should be introduced in cooperative legislations, right to vote and contest should be given only to active members and enabling provision for speedy exit of non-user members.
3. **Effectiveness of Boards:** Cooperative legislations should clearly define role and responsibilities of cooperative’s board vis-à-vis that of paid executives/managers.
4. **Enhancing Professionalism:** Cooperatives should be enabled for cooption of experts, subject matter experts. Also, any person elected as a Director on the Board should undergo a set of prescribed training programs.
5. **Checking Politicisation:** Cooperatives law should provide for rotational retirement of Board members and restriction on contribution to political and religious organisations.
6. **Enhancing competitiveness:** Cooperatives should have freedom to decide their organizational structure and staffing policies, they should be enabled to form joint ventures, partnerships etc. with cooperatives and other corporates and have flexibility in business decisions, mobilizing funds etc.
7. State Governments should put in place a policy framework for facilitating the functioning of cooperatives with free and fair means. States should refrain from deputing officers to occupy key positions in cooperatives.
8. Full income tax exemption is therefore recommended for all cooperative societies. This will be a major incentive for the cooperatives to strengthen their capital base.



## CONSTITUTION, POLITY AND GOVERNANCE

- 9. The office of registrar of cooperatives should be restructured as a developmental office which handholds and guides cooperatives.

A well-functioning cooperative sector can work wonders especially in agricultural and rural development sector. The example of Amul needs to be kept in mind. Steps need to be taken to empower cooperatives further.

### ALL INDIA JUDICIAL SERVICE

#AIJS #ARTICLE 312

PRIMARY SOURCE THE HINDU

SECONDARY SOURCE THE CONSTITUTION OF INDIA

SECONDARY SOURCE Law Commission of India

Creation of All India Judicial Service (AIJS) common to Union and States was added in Article 312 through Constitution 42<sup>nd</sup> Amendment way back in 1976. Even NITI Aayog in its Report - "StrategyforIndia@75", has supported constituting AIJS to bring judicial reforms and improve the judicial administration. However, the service has not been created due to number of oppositions and hurdles.

#### IMPORTANT CONSTITUTIONAL PROVISIONS - AIJS

- **Article 312(3)** - The all-India judicial service referred shall not include any post inferior to that of a district judge as defined in article 236.
- **Article 312(4)** - any amendment made in CHAPTER VI of PART VI due to enactment of legislation setting up an AIJS would not be deemed to be amendment of the Constitution for the purpose of Article 368.
- **Why would amendment of Chapter VI of Part VI be needed** - Chapter VI pertains to States and Chapter VI pertains to Subordinate Judiciary where conditions of appointment of District Judge is defined.
- **Article 233** - A person shall only be eligible to be appointed a district judge if he has been for not less than seven years an advocate or a pleader and is recommended by the High Court for appointment.
- **To facilitate creation of AIJS**, "administration of justice" was transferred **from State List to the**

**Concurrent List** by the Constitution 42<sup>nd</sup> Amendment.

#### BENEFITS OF CREATING AIJS

- **Timely Recruitment:** In some of the states, the exams for the appointment for the appointment for the lower judiciary have not been held every year leading to huge vacancies. Once the AIJS is established, exams will be conducted annually to fill up regular vacancies.
- **Uniformity in Judicial Administration:** Conduct of judicial services examination is not uniform and this results in increasing vacancies and also increment in pending cases. A uniform All India Examination conducted periodically will help in solving both the issues as the candidates would be allocated to the different states based on vacancies. This will ensure uniformity in judicial administration.
- **Improvement in Efficiency of Judicial Administration:** AIJS would attract the best talent in the country and hence it would be able to maintain high standards of Judicial administration.
- **Promote National Integration:** AIJS would be able to promote all-India outlook and promote the national integration. This will allow the talented Judges of AIJS officers to function beyond their regional and linguistic interest.
- **Beneficial to the states:** Some of the states that are poor in human resources may not be able to find the best talent within their state for the recruitment of the judges at the lower judiciary. The AIJS would be able to solve this problem by conducting all India Exams and appointing the best talent from other states in such resource poor states.

#### CONCERNS HIGHLIGHTED IN 116<sup>TH</sup> LAW COMMISSION REPORT

- **Inadequate knowledge of regional language** would corrode judicial efficiency both with regard to understanding and appreciating evidence & pronouncing judgments as most of work of district and sessions courts is done in vernacular language.
- **Promotional avenues of the members of State Judicial Service** would be severely curtailed.
- **Erosion of the control of the High Court over Subordinate judiciary** would impair independence of judiciary.

## CONSTITUTION, POLITY AND GOVERNANCE

- **Stiff opposition from various state governments** and their respective High Courts.
- **Judiciary cannot be compared with the executive as far as service is concerned – on holding examination by UPSC**
- AIJS will bring the thin wedge of executive as the service will be brought under political control.

### OTHER CONCERNS ON CREATING AIJS

- **Goes against the Federalism:** Presently, it is the responsibility of the state Governments to appoint the Judges at the lower Judiciary. Hence, any changes in the Judicial structure have to be approved by the State Legislatures. However, the AIJS can be established without any constitutional amendment wherein the prior approval of the State legislature is not needed.
- **Problem of Promotional Avenues** – When AIJS will be implemented, three category of judges will be appointed – 1. AIJS 2. State Judicial Service/High Courts (Lower & Higher Judiciary) and 3. Practicing Advocates appointed from the bar. There is a concern among these members that promotional avenues will reduce as much of the seats in higher judiciary will be manned by members of AIJS.
- **Unequal Representation from States** – As candidates will compete at an all-India level.
- **Problem of Cadre Allocation** – This problem arises from the language issue.
- **Creation of National Judicial Appointment Commission to conduct AIJS Exam** - Supreme Court has declared NJAC Act as unconstitutional. So, government again has to bring fresh legislation in the Parliament whereby executive or legislative interference must be avoided in the functioning of judiciary.

### CONCLUSION

Creation of All India Judicial Services is the need of the hour and the government must try to solve the hurdles of language, promotional avenues, creating National Judicial Appointment Commission and others in creating AIJS for administration of Justice.

## BIOCENTRICISM AS PART OF ARTICLE 21

# BIOCENTRISM #ANTHROPOCENTRISM  
#ENVIRONMENTAL RIGHTS

PRIMARY SOURCE

THE HINDU

SECONDARY SOURCE

SUPREME COURT JUDGEMENTS

Supreme Court's upholding of biocentric principles of coexistence in **M.K. Ranjithsinh Case** has given new life to the idea of biocentrism over anthropocentrism. In this context, there is a need to recognize constitutional right of "Nature" within the contours of Article 21.

### CONTEXT OF THE JUDGEMENT

- This case was filed for the protection of Great Indian Bustard in the state of Gujarat and Rajasthan which is "Critically Endangered" as per IUCN Red List and Lesser Florican.
- Overhead power lines have become a threat to the life of these birds as they frequently tend to collide with these power lines and get killed.
- The Wildlife Institute of India (WII) has stated that every year 1 lakh birds die due to collision with power line and unless power line mortality is mitigated urgently, extinction of GIBs is certain.

### SC'S OBSERVATION AND DECISION

- SC held that wherever the overhead powerlines exist in habitat zones of Bustard, the governments of Rajasthan and Gujarat shall take steps to install bird diverters pending consideration of the conversion of overhead cables into underground power lines.
- In protecting the birds, SC has emphasised on the biocentric values of eco-preservation.
- The Court has asked states to use funds from the Compensatory Afforestation Fund Act, 2016 for protection of the two species and also to improve the wildlife habitat of the region.
- The Court has asked a committee chaired by Dr. Rahul Rawat (Scientist) to explore the feasibility of underground power line to save the Great Indian Bustard and Lesser Florican from becoming extinct.

### UNDERSTANDING BIOCENTRISM

- The philosophy of biocentrism holds that all life deserves equal moral consideration and has equal moral standing and extends inherent value to all living things. It is an understanding of how the earth works, particularly as it relates to its biosphere or biodiversity.

## CONSTITUTION, POLITY AND GOVERNANCE

- Thus, biocentric ethics calls for a rethinking of the relationship between humans and nature. This perspective is contrary to Anthropocentrism which is a human-centred system.
- **Biocentrism consists of at least two qualitatively distinct attitudes:**
  - **First**, biocentrism can stem from a desire to *avoid hurting sentient beings* (e.g., harboring concerns about killing animals).
  - **Second**, biocentrism can stem from a desire to *uphold purity* in nature (e.g., harboring concerns about violating the sanctity of nature).
- Avoiding harm and preserving purity have been identified as two separate forms of moral concern that rely on functionally distinct systems of cognitive and emotional processing.
- Therefore, the concept of biocentrism potentially obscures a psychologically important distinction in environmentalist attitudes.

### ANTHROPOCENTRISM VERSUS BIOCENTRISM

- Anthropocentric concerns for the environment are narrowly aimed at preserving the welfare of humans, while biocentric concerns are oriented toward protecting non-human organisms and nature as a whole.
- While anthropocentrism can sometimes lead to pro-environmental attitudes and actions, biocentrism is more reliably and robustly related to environmentalism, both for abstract values and for concrete behaviors.
- So, we can say that anthropocentrism promotes the preservation of the environment as a means to an end rather than an end in itself. However, biocentrism treats environmentalism as a moral imperative independently of its impact on human flourishing.

### OTHER IMPORTANT CASES HIGHLIGHTING BIOCENTRISM

- **T.N. Godavarman Thirumulpad case:**
  - SC highlighted the need to move away from principles of anthropocentric to ecocentric.
  - The Court held that many of our principles like Sustainable Development, Polluter Pay Principle, Inter-generational equity have their roots in anthropocentric principles whereby humans take precedence over non-humans.

- The court pointed to two salutary principles government environment. They are:
  - **Principle of sustainable development** i.e. to pursue balanced development taking the needs of present and future generation in stride.
  - **Precautionary principle** i.e. err on the side of caution when making changes to environment.
- **Centre for Environmental Law, World Wide Fund - India case:** SC observed that Article 21 of the Constitution of India protects not only the human rights but also casts an obligation on human beings to protect and preserve species becoming extinct. Therefore, conservation and protection of environment is an inseparable part of right to life under Article 21.
- SC while dealing with environment has relied Article 47 and Article 48A present in DPSP along with Fundamental Duties under Article 51A(g).

**Article 47 - Duty of the State to raise the level of nutrition and the standard of living and to improve public health** - The State shall regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties and, in particular, the State shall endeavour to bring about prohibition of the consumption except for medicinal purposes of intoxicating drinks and of drugs which are injurious to health.

**Article 48A - Protection and improvement of environment and safeguarding of forests and wild life** — The State shall endeavour to protect and improve the environment and to safeguard the forests and wild life of the country.

**Article 51A(g)** - It shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures.

### TIME TO MOVE TO BIOCENTRIC APPROACH BY GIVING CONSTITUTIONAL RIGHT TO NATURE

- It is to the credit of the judiciary that it has fished out enduring principles of sustainable development and read them into the precepts of Article 21 of the Constitution which ensures right to life and personal liberty.

## CONSTITUTION, POLITY AND GOVERNANCE

- However, Indian Constitution is silent on binding legal obligation of humans against Nature.
- We can learn from countries like Ecuador and Bolivia as they seek to travel away from an anthropocentric basis of law to a biocentric one.
  - In 2008, Ecuador became the first country in the world to recognise "Rights of Nature" in its Constitution.
  - Bolivia has also joined the movement by establishing Rights of Nature laws too.
  - In 2010, the city of Pittsburgh, Pennsylvania became the first major municipality in the United States to recognise the Rights of Nature.
- As a first step, these laws empower people in a community to "step into the shoes" of a mountain, stream or forest ecosystem and advocate for the right of those local communities".

### WAY FORWARD

Supreme Court's judgment in M.K. Ranjithsinh upholding the biocentric principles of coexistence is a shot in the arm for nature conservation. There is a need to extend the idea of right to life to our ecosystem without which life on earth will not be possible.

## COMPENSATION FOR COVID DEATHS

#COMPENSATION #DISASTER MANAGEMENT  
#COVID DEATHS



A petition in the Supreme Court is seeking compensation for deaths caused due to COVID-19 as the novel disease was declared as a "notified disaster" under the Disaster Management Act.

### DECLARATION FOR COMPENSATION UNDER DISASTER MANAGEMENT ACT

- In 2015, Disaster Management Division of the Ministry of Home Affairs (MHA) notified a revised list of "norms of assistance" to all state governments. Under "**ex gratia payment to families of deceased persons**", it specified to pay Rs. 4 lakh per deceased person including those involved in relief operations or

associated in preparedness activities, subject to certification regarding cause of death from appropriate authority."

- COVID-19 was declared as 'Notified Disaster' by Union Ministry of Home Affairs in March 2020. MHA directed States to use State Disaster Response Fund (SDRF) for COVID-19 relief. However, MHA did not specify payment of ex-gratia to families of deceased.

### OBSERVATION OF SUPREME COURT

- Supreme Court has mentioned that it is the statutory duty of NDMA to recommend guidelines for the minimum standards of relief to be provided to persons affected by disaster, which shall include the reliefs as per Section 12 of DMA.
- Accordingly, the Court has directed NDMA to recommend guidelines within six weeks for ex gratia to family members of those who lost their lives during the COVID pandemic.

### SECTION 12 OF DISASTER MANAGEMENT ACT

It allows NDMA to recommend guidelines for the minimum standards of relief to be provided to persons affected by disaster. Guidelines for minimum standards of relief to be provided by NDMA must include:

- (i) Minimum requirements to be provided in the relief camps in relation to shelter, food, drinking water, medical cover and sanitation;
- (ii) Special provisions to be made for widows and orphans;
- (iii) Ex-gratia assistance on account of loss of life as also assistance on account of damage to houses and for restoration of means of livelihood;
- (iv) Such other relief as may be necessary.

### IMPORTANT HIGHLIGHTS ABOUT NDMA

- It is statutory body under the Disaster Management Act, 2005 with Prime Minister as its head.
- NDMA shall lay down policies, plans and guidelines for disaster management for ensuring timely and effective response to disaster.
- NDMA shall approve National Plan or plan prepared other departments or ministries
- Lay down guidelines to be followed by the State Authorities in drawing up the State Plan
- Coordinate the enforcement and implementation of the policy and plan for disaster management.



## CONSTITUTION, POLITY AND GOVERNANCE

- Recommend provision of funds for the purpose of mitigation
- Provide such support to other countries affected by major disasters as may be determined by the Central Government.
- Lay down broad policies and guidelines for the functioning of the National Institute of Disaster Management.

### PRELIMS POINTERS - THE DISASTER MANAGEMENT ACT, 2005

- **NDMA Chairperson** of National Disaster Management Authority - Prime Minister
- **National Executive Committee** to assist NDMA - chairperson - Secretary, Disaster Management; National Executive Committee can constitute sub-committee for the efficient discharge of its functions.
- **National Plan** - plan for disaster management for the whole of the country to be called the National Plan
- The National Plan shall be prepared by the **National Executive Committee** having regard to the National Policy and in consultation with the State Governments and expert bodies or organisations in the field of disaster management to be approved by the National Authority.
- **SDMA Chairperson** - Chairperson of State Disaster Management Authority (SDMA) - Chief Minister

- **State Executive Committee** - Chief Secretary to the State Government - Chairperson
- **State Plan** - There shall be a plan for disaster management for every State to be called the State Disaster Management Plan. The State Plan prepared by the State Executive Committee and shall be approved by the State Authority.
- **District Disaster Management Authority** - Collector or District Magistrate or Deputy Commissioner shall be the Chairperson, the elected representative of the local authority who shall be the co-Chairperson; In the Tribal Areas, as referred to in the Sixth Schedule to the Constitution, the Chief Executive Member of the District Council of autonomous district, shall be the co-Chairperson.
- **District Plan** - There shall be a plan for disaster management for every district of the State.
- **National Institute for Disaster Management**
- **National Disaster Response Force** - specialist response to a threatening disaster situation or disaster.
- **National Disaster Response Fund** - to meet any threatening disaster situation or disaster; an amount deposited after due appropriation made by Parliament by law.

## LEGISLATIONS

### AMENDMENT TO CINEMATOGRAPHY ACT, 1952

#RIGHTS #FILM CERTIFICATION

PRIMARY SOURCE

THE HINDU

SECONDARY SOURCE

LEGISLATIONS

The Ministry of Information and Broadcasting (MIB) has introduced Cinematography (Amendment) Bill, 2021 which aims to make the process of sanctioning of films for exhibition more effective and curb the menace of piracy.

#### Amendments Proposed:

1. Category U/A will be subdivided based on age into U/A 7+, U/A 13+ and U/A 16+.
2. Validity of the certification issued by Central Board of Film Certification (CBFC) to be valid till perpetuity.
3. Power to Union Government to direct CBFC to re-examine the certificate it has issued to a film.
4. Film piracy causes huge losses to film industry and government exchequer. In most cases, illegal duplication in cinema halls is the originating point of piracy. Presently, there are no provisions in Cinematography Act, 1952 to check film piracy. The Amendment proposes to prohibit unauthorized recording of films in theatres and proposed penalties



## CONSTITUTION, POLITY AND GOVERNANCE

for the same. Monetary fine which can amount up to 5% of gross production can be imposed.

### ANALYSIS OF THE PROPOSED AMENDMENTS TO CINEMATOGRAPHY ACT

1. **Government can overturn decision of CBFC** - In a constitutional democracy, it is generally accepted that executive shall respect a judicial decision. The decision of CBFC to award a film certification to a film is akin to a judicial decision. SC in the Shankarappa case, held that once a certificate has been issued by CBFC it cannot be revoked. Thus, proposed power to central government to re-examine a film certificate goes against separation of powers, adds one additional layers of censorship and violation of freedom speech under Article 19.
2. **Amendments against Film Piracy Insufficient:**
  - (a) Proposed amendments to address film piracy are insufficient as they merely create one additional law against piracy. Piracy is already criminalised under the Copyright Act, 1957 and Information Technology Act, 2000. The need is effective implementation and enforcement of these provisions.
  - (b) These provisions are open to misuse as they can be used against
    - (i) general public who can share some portions of film for non-commercial purposes especially on social media
    - (ii) filmmakers use small portions of films/songs
    - (iii) The bill should not make criminals out of ordinary citizens.
  - (c) Punishment proposed is vague and overbroad, especially with respect to fine.

### WAY FORWARD

1. CBFC should only be a body which certifies film content for public exhibition and not as a censoring body to dictate excision, modification or amendments to films under review.
2. Amendment proposing revisionary powers to Union Government should be dropped.
3. Exceptions on fair use, de minimis use (*pertaining to minimal things*) and derivative work specific to films must be created in the proposed amendment.
4. Systemic solutions with better law enforcement needs to be introduced.

5. **Film Certification Appellate Tribunal (FCAT) should be reinstated**, as it enables affordable legal remedies to film makers. This was removed by the Tribunals Reforms Ordinance, 2021. FCAT gave film makers access to justice at nominal cost.
6. **Clear definition of 'public' exhibition** should be introduced and only those venues should be considered that cater to mass publics such as cinema halls and theaters. This should not include sites where non-commercial videos are screened for educational and informational purposes such as film clubs, research seminars etc.
7. Other suggestions of **Shyam Benegal Committee on CBFC** such as:
  - (a) Reforms of appointment of members to CBFC
  - (b) Reforms of 1991 guidelines for film certification aiming at artistic freedom for film makers, empowerment of audience and a certification process responsive to social change should be pursued.

## EMIGRATION BILL, 2021

#EMIGRATION #RIGHTS

PRIMARY SOURCE	THE HINDU	SECONDARY SOURCE	LEGISLATIONS
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*The proposed Emigration Bill of 2021 seems better than the Emigration Act 1983, but more reforms are needed to protect Indian workers abroad. The Bill presents a renewed opportunity to reform the recruitment process for nationals seeking employment abroad.*

### EXTENT OF EMIGRATION FROM INDIA

- According to UN, India has the highest number of international migrants in the world. It found that 18 million Indians were living abroad, followed by Mexico (11 million), Russia (11 million), China (10 million), and Syria (8 million), as of 2020.
- **There are two types of international migration from India:** first, workers who are categorised as 'unskilled' or 'semi-skilled' and who migrate mostly to the Gulf countries. Second, the semi-skilled workers, professionals, students who migrate to the advanced capitalist countries.
- **Importance of Emigration:** Emigration for a labour surplus company is very important. India currently does not produce enough job opportunities for

## CONSTITUTION, POLITY AND GOVERNANCE

employ all skilled and semi-skilled citizens. Emigrants once they go out send back remittances which is an important resource for us. India is the largest recipient of remittances in the world today. Also, these emigrants learn the global best practices on their foreign job postings and once they come back Indian economy benefits from their skill and expertise. India has been demanding liberalised regime for movement of professionals across borders (Mode-4 under TRIPS agreement of WTO) leading to removal of bottlenecks that limit movement of people across countries. Also, many countries across the world are currently experiencing old age problem and dearth of working age population, they can benefit from the expertise of Indian labour. For ex. Japan, China, Europe etc. Thus, sustainable and legal emigration is a win-win proposition for the world.

### CHALLENGES FOR MIGRANT INDIANS TO SETTLE ABROAD

- **High cost of international migration** is a challenge for unskilled and semi-skilled people.
- **Loans from institutional & non-institutional sources** to cover cost of migration often leads to families falling in debt trap.
- **Gap between the migration expenditure incurred and remittances** made by international migrants makes life difficult. This also results in flow of capital outside India.
- **Exploitation by employer:** This includes large recruitment charges, contract substitution, deception, retention of passports, non-payment or underpayment of wages, discrimination and other forms of ill-treatment.
- **Recruitment agencies** make false promises to people and extract money from them. Need to be regulated.
- **Poor working conditions** especially for unskilled & semi-skilled people without proper guarantee or medical benefits.
- **Death of migrant workers** -majority of migrant worker deaths in the Arab Gulf States/West Asia are attributed to heart attacks and respiratory failures, whose causes are unexplained. Need to take feedback about their wellbeing after regular interval.

### THE EMIGRATION ACT, 1983 – IMPORTANT HIGHLIGHTS

#### Emigration Authorities – Protectors of Emigrants

- protect the emigrants,
- inspect emigrant conveyance which includes a vessel, vehicle, country-craft and an aircraft,
- enquire about emigrant's residence in foreign countries and their voyage,
- put up check post for illegal emigration

#### Registration of Recruiting Agents

- Recruiting agents shall register themselves with Protector General of Emigrants
- Registered Recruiting Agents to have a Valid Certificate of Registration

#### Recruitment by employers to be through recruiting agent or under permit

- Recruiting Agents shall conduct due diligence of prospective employers, sets up a cap on service fees, and establishes a government review of worker travel and employment documents.

### THE EMIGRATION BILL, 2021 – IMPORTANT HIGHLIGHTS

- Proposes to establish **Bureau of Emigration Policy and Planning & Bureau of Emigration Administration.**
- **Bureau of Emigration Policy and Planning** -to formulate effective policies through periodic assessment, undertake consultation with relevant stakeholders and carry out analysis with regard to emigration and allied matters.
- **Bureau of Emigration Administration:** It has been given the following functions:
  - Maintain digitised records of Indian emigrants
  - Ensure welfare & protection of emigrants by provision for insurance, skill upgradation, pre-departure orientation, counselling etc.
    - Indian Embassy/ Consulate may establish a Labour and Welfare wing to coordinate all issues related to Indian emigrants.
    - The Indian Embassy/ Consulate may establish Emigrants Welfare Committee to oversee, review, direct, aid and address the grievances of Indian emigrants.
- **Regulating Human Resource Agencies & Recruiters**
  - Give ratings for employers, Human Resources Agencies
  - Maintain list of blacklisted foreign employers, fraudulent Human Resources Agencies

## CONSTITUTION, POLITY AND GOVERNANCE

- Establish a shared database among concerned stakeholders in the government to maintain a comprehensive approach towards emigration.
- Periodically inspect any register or records maintained by the Human Resources Agencies
- Advise the Nodal Authorities in respect of matters relating to prosecution of illegal Human Resources Agencies.
- Register, suspend or cancel the certificate of Human Resources Agencies
- Provide Accreditation of employers
- **Helping Indian Emigrants Going Abroad**
  - Prevent illegal emigration, irregularity in recruitment procedures and misuse of visa
  - Establish help desks in India and abroad
  - Undertake awareness programmes to ensure safe, orderly and regular migration
  - Monitor situation, circumstances and activities affecting overseas Indians
- **Punishments & Penalties**
  - For furnishing false information by Human Resource Agencies
  - For taking Accreditation by Employers by furnishing false details
  - For Emigrants – if it is proved that they are not emigrants or lack certain criteria to work abroad – penalty from Rs 10,000 to 50,000 – competent authority can suspend or cancel passport.

### CONCERNS AGAINST THE BILL

- **Charging fees from workers by agencies against international standards:** The Bill permits manpower agencies to charge workers' service fees. This goes against ILO Private Employment Agencies Convention No. 181 and the ILO guidelines for fair recruitment. As per international regulations, it is the employer (and not worker) who bears recruitment cost including the costs of their visas, air travel etc.
- **Makes families vulnerable through loans** - Employment charge (reflected as service fee) makes the families of workers vulnerable to indebtedness and exploitation. Non-formal credit taken by most of the workers for going abroad for work comes at high interest rates.
- **Authorities can cancel passport** - The Bill permits government authorities to punish workers by

cancelling or suspending their passports and imposing heavy fines. This can be used against workers migrating through unregistered brokers or via irregular arrangements such as on tourist visas. This runs contrary to the principles of protection and welfare of migrants.

- **Recruiters and agencies could misuse the law** in favour of select recruiters.
- **Gender insensitive** - The Bill does not also adequately reflect the gender dimensions of labour migration where women have limited agency in recruitment compared to their counterparts and are likely to be employed in marginalised, informal sectors in isolated occupations in which labour, physical, psychological, and sexual abuse are common.
- **Limited Scope for civil society engagement for workers' representation.**

## ANTI-TRAFFICKING BILL



*The Ministry of Women and Child Development has released the draft 'Trafficking in Persons (Prevention, Care and Rehabilitation) Bill, 2021'.*

### AIM OF ANTI-TRAFFICKING BILL, 2021

- Prevent and counter trafficking in persons, especially women and children,
- Provide for care, protection, and rehabilitation to the victims, while respecting their rights,
- Creating a supportive legal, economic and social environment for them, and
- To ensure prosecution of offenders
- It will apply to every offence of trafficking in persons with cross-border implications

### ANTI-TRAFFICKING BILL 2021 SHALL APPLY TO:

- All citizens of India within and outside India;
- Persons who commit offence under this Act beyond India against Indian citizens or affecting the interests of Indian citizens or of India;
- Persons on any ship or aircraft registered in India wherever it may be or carrying Indian citizens;

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- Foreign national or a stateless person who has his or her residence in India at the time of commission of offence under this Act.
- Every offence of trafficking in persons with cross-border implications.

### ANTI-HUMAN TRAFFICKING COMMITTEES

- The Bill constitutes a **National Anti-Human Trafficking Committee, State Anti-Human Trafficking Committees and District Anti-Human Trafficking Committees.**
- **Functions of the Committees -**
  - prevention and combating of offences,
  - rehabilitation and relief services including compensation, repatriation, reintegration to the victims
  - providing protection and rehabilitation homes to enable immediate and long-term sustainable rehabilitation of victims.
  - protection and dignity of victims including prevention of re-trafficking or re-traumatisation of victims
  - effective co-ordination between concerned authorities – within & outside India
- **State Anti-Human Trafficking Committee** shall advise the State Government and District Anti-Human Trafficking Committees.
- **District Anti Human Trafficking Committees** or the **Child Welfare Committees** shall be responsible for repatriation and reintegration of victims into society and family.
- **Role of District Legal Services Authority** - shall award immediate relief to the victim and dependent including aid and assistance for medical and rehabilitation needs after due assessment.
- **Offences and Penalties** - The Bill provides for conviction and fine for any person who is accused under the law.

Committees	Chairperson
National Anti-Human Trafficking Committee	Secretary, Union Ministry of Home Affairs
State Anti-Human Trafficking Committees	Chief Secretary of State

District Anti-Human Trafficking Committee	District Magistrate
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### AGGRAVATED FORM OF TRAFFICKING

- **Aggravated offences** include cases that may result in the death of the victim or where the victim suffers grievous injury (in cases such as acid attack), organ mutilation or removal of organs, or where the victim is a child.
- Provision for punishment (Imprisonment + Fine) for trafficking and severe punishment of life imprisonment along with monetary fine for aggravated forms of trafficking.

### ROLE OF NATIONAL INVESTIGATION AGENCY (NIA)

- **Operation of NIA Act** - NIA shall prevent and combat trafficking in persons.
- **Jurisdiction of NIA** - NIA shall also be responsible for investigation, prosecution and coordination in cases of trafficking in persons including cases of inter-state or international nature.

### CONCERNS AGAINST ANTI-TRAFFICKING BILL

- **Role of NIA questioned** - for investigating cases of anti-trafficking as the Bill allows for overreach and misuse of law by law enforcement agencies.
- **Stringent Penal Provisions** - Stringent provisions for imprisonment, fine and denying the accused the right to anticipatory bail are considered to be violative of fundamental rights.
- **Presumption of Innocence Removed** - Removal of the presumption of innocence directly impacts the crucial fundamental right to life and liberty guaranteed in Article 21.
- **Abetment liable for same punishment as that of the offender.**
- **Ill defined terms** - such as 'promotion', 'procurement' and 'facilitation' and increases scope for misuse of power.
- **Adverse impact on Adult sex workers** - Adult sex workers already a vulnerable section, will be adversely impacted, as the Bill treats victims of human trafficking on par with adult persons in sex work. Trafficking of persons into forced or coerced labour (including sexual exploitation) should not be equated with sex work undertaken by consenting adults. This conflation could lead to misuse of law.

## CONSTITUTION, POLITY AND GOVERNANCE

### GOVERNMENT INITIATIVES

# MIDDAY MEAL SCHEME REDUCES STUNTING

#STUNTING #RIGHTS #MIDDAY MEAL SCHEME

PRIMARY SOURCE

THE HINDU

SECONDARY SOURCE

Report - Intergenerational nutrition benefits of India's National School Feeding Program

A study published in the journal Nature Communications titled '**Intergenerational nutrition benefits of India's National School Feeding Program**' has studied the impact of mid-day meals support on intergenerational improvements in a child's linear growth. The study highlights those girls who received free food in primary schools as part of the Mid-Day Meal (MDM) program, were found to give birth to children who have better growth.

### Stunting

- Stunting is the impaired growth and development that children experience from poor nutrition, repeated infection, and inadequate psycho-social stimulation.
- A stunted child is too short for their age, does not fully develop and stunting reflects chronic under-nutrition during the most critical periods of growth and development in early life.
- Stunting is defined as the percentage of children, aged 0 to 59 months, whose height for age is below minus two standard deviations (moderate and severe stunting) and minus three standard deviations (severe stunting) from the median of the WHO Child Growth Standards.



Stunting means you're too short for your age

well-nourished kids are more likely to:  
stay in school longer  
earn higher wages  
escape poverty

#ffd3

### ABOUT MIDDAY MEAL SCHEME

- From 1st April, 2008, the programme covered all children studying in Government, Local Body and Government-aided primary and upper primary schools and the Education Guarantee Scheme (EGS) and Alternative and Innovative Education (AIE) centres including Madarsa and Maqtabas supported under Sarva Shiksha Abhiyan (SSA) of all areas across the country.

### Nutritional Norms -

Level	Calories	Grams of Proteins
Primary	450 Calories	12 grams
Upper Primary	700 Calories	20 grams

This energy and protein requirement for a primary child comes from cooking 100 g of rice/flour, 20 g pulses and 50 g vegetables and 5 g oil, and for an upper primary child it comes from 150 g of rice/flour, 30 g of pulses and 75 g of vegetables and 7.5 g of oil.

### MDM has helped over the years to

- Avoid hunger & malnutrition
- Increase enrollment in schools
- Improve school attendance and reduce drouout rates
- Improve mixing of students from different castes/religions
- Improve girl education & health

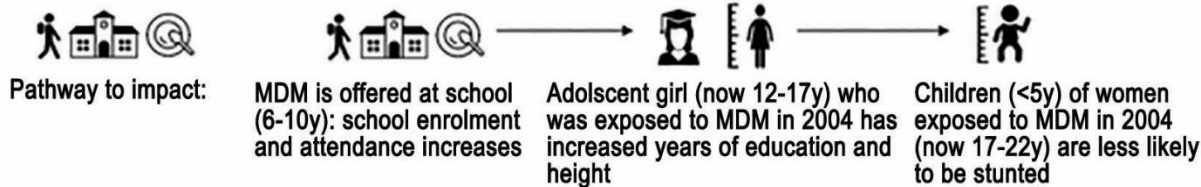
### HIGHLIGHTS OF THE REPORT

- **Correlation of Stunting & MDM Exposure** - The report highlights - Height-for-Age Z-score (HAZ) - among children born to mothers with full MDM exposure was greater than that in children born to non-exposed mothers.



## CONSTITUTION, POLITY AND GOVERNANCE

- **State Variability in MDM Rollout** - Data shows that even ten years after the central mandate, substantial state variability in MDM rollout existed



Coverage refers to the proportion of girls aged 6-10 years who received a MDM in school. Source for MDM program coverage data (green maps): NSS-CES 55(2000), 61(2005) and 68 (2012). Source for child stunting data (red map): NFHS4 (2016). MDM, mid-day meal. Source data are provided as a Source Data file.

- **Stunting was lower in states having high MDM Coverage** - Empirical exploration of the intergenerational benefits of the MDM scheme was motivated by the observation that stunting prevalence was lower among children aged 0-5 years in 2016 in states where MDM coverage was higher in 2005. The ability of historical MDM coverage to predict the prevalence of stunting in 2016 suggests that a mother's exposure to the program during primary school may have future returns for her children.
- HAZ correlations with Socio-economic status & MDM Coverage** - HAZ in children also increased with later mother's birth year and was higher in non-poor households compared to poor households.

## PRACTICE QUESTIONS

### MCQS

**Q1. Which of the following statements about "Midday Meal Scheme" is/are correct?**

1. It is a centrally sponsored scheme.
2. It aims to enhance enrollment and improve nutrition of children.
3. Students studying only in primary level in government schools get food under the scheme.

Select the correct answer using the code given below:

- (a) 2 and 3 only                      (b) 1 and 2 only  
(c) 1 and 3 only                      (d) None of the above

**Q2. A petition has been filed in the Supreme Court for providing compensation to victims who died due to COVID-19. This compensation is claimed under which of the following legislations?**

- (a) Consumer Protection Act  
(b) Epidemic Diseases Act  
(c) Disaster Management Act  
(d) National Food Security Act

**Q3. Consider the following statements:**

1. National Disaster Management Authority is chaired by Union Home Minister.
2. National Board for Wild Life is chaired by Prime Minister.

Which of the statements given above is/are correct?

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

**Q4. Consider the following statements:**

1. Krishna River Management Board & Godavari River Management Board has been constituted under the River Boards Act, 1956.
2. "Regulation and development of Inter-state rivers and river valleys" is part of State List under Seventh Schedule of the Indian Constitution.
3. Inter-state River Water Disputes Act, 1956 provides for a Permanent Tribunal to adjudicate river-water disputes within fixed time frame of two years.



# INTERNATIONAL RELATIONS & SECURITY

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

## AFGHAN ISSUE

#GEOPOLITICS

PRIMARY SOURCE

THE HINDU

*US forces are withdrawing from Afghanistan and it is followed by increased violence between Afghan army and Taliban. Taliban is making rapid territorial gains in Afghanistan. In this context, it is imperative for India to not only secure its interests in the Afghanistan in case of Taliban takeover but also to find a long-lasting solution to the Afghan problem.*

### CONCERNS OF INDIA

- **Growing Pakistan Shadow:** Pakistan Army will now play a major role in the power dynamics within Afghanistan. Most of the senior Afghan leadership is believed to be in Pakistan, in close contact with the Pakistani Army.
- **Strengthening of terrorist groups at the border:** Terror groups inimical to India like Lashkar-e-Taiba and Jaish-e-Mohammed are likely to be bolstered with victory of Islamic fighters over a superpower and may take this opportunity to push for heightened levels of insurgency in J&K.
- **Risk to India's economic interests:** India has already invested deeply in infrastructure, education, power generation and irrigation development projects. New projects like the building of the Shahtoot dam near Kabul, may get delayed or scrapped.
- **Receding Diplomatic Influence in the region:** Since India does not have any substantial linkages with the Taliban, any take-over in Kabul by Taliban will leave India out of its diplomatic influence in the region.

### CONCERN OF REGIONAL POWERS W.R.T RISE OF TALIBAN IN AFGHANISTAN

#### Concerns of Central Asian Republics:

- **Connectivity:** Land locked Central Asian countries can access Indian ocean through Afghanistan. Afghanistan is also the connecting bridge for Central and South Asia.
- **Safety:** Instability in Afghanistan can spill over to Neighbouring central Asian countries like Tajikistan, Turkmenistan etc. They also fear against increased radicalisation of their societies.
- **Refugee crisis:** Civil war in Afghanistan may lead to refugee crisis in Central Asia.

#### Concerns of other important countries:

- **China** fears about the spillover of Taliban movement in its Xinjiang province where **ETIM (East Turkestan Islamic Movement)** had earlier deep ties with Al-Qaeda and Taliban.
- **Russia** fears that instability would spill over in Central Asia which Russia is very sensitive about. Russia also fears about re-emergence of Taliban will increase the threat of terror groups such as Chechen rebels.
- **For Iran**, which is a Shia theocratic country, a Sunni dominated Taliban will continue to remain an ideological, sectarian and strategic challenge.

Hence, there is a convergence of interests among India, Central Asian countries and key regional players (China, Russia and Iran) in seeing a political settlement in Afghanistan.

### DEBATE ON ENGAGING TALIBAN

There has been a debate on whether India should

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## INTERNATIONAL RELATIONS & SECURITY

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engage Taliban or not and if engage whether this engagement should be direct or backdoor.

### What is the present status?

India has started engaging with Taliban through backchannel.

- India had sent non - official delegation of retired diplomats to Moscow where Taliban were present.
- India's External Affairs Minister joined the inaugural session of the intra-Afghan negotiations in Doha.

### Reasons's for India's non-engagement with Taliban:

- Engaging with Taliban gives recognition to them and similar groups which resort to violence. India's stand has always been that Taliban abstains from violence and then peaceful engagement can start.
- Taliban currently is very closely aligned with Pakistan and is often seen as its puppet. Even if we engage Taliban, India will always be second fiddle to Pakistan.
- Taliban's record on human rights has not been encouraging especially its treatment of females.
- Taliban has over the years been central player in international terrorism network. To believe that the new Taliban is different is not right. Taliban's rise can embolden terror groups which target India such as JeM and LeT.
- Giving legitimacy to Taliban will weaken the morale of the democratically elected Abdullah Ghani administration which continues to have good relations with India. President Ghani will thus be forced to look towards other powers and India will lose the support of its only backers in Afghanistan.
- Taliban has been resorting to illegal cultivation of poppy cultivation which is illegally exported worldwide. This finances their war against Afghan National Defence Forces.
- The Agreement between US and Taliban does not take into account India's security interests. While they bar Taliban from developing ties with Al-Qaeda, it does not take care of Taliban's linkages with insurgent groups such as Hizbul Muzahideen, Jaish-e-

Mohammad etc.

- Taliban is an insurgent force, it does not have air-power. While the Afghan forces are a modern military with modern equipment, training and airpower they received from America. Thus, the claim that Taliban will takeover Afghanistan easily, seems to be a propaganga.
- Having tasted the fruits of freedom and development, the people of Afghanistan are not in support of Taliban. Talking to Taliban will reduce the trust, friendship and connect that India has developed with them.

### Reasons for India to engage with Taliban

- Taliban will have a significant presence in Afghanistan in near future. Even in case of a political settlement they will be part of any future afghan dispensation.
- Taliban is looking for regional and global partners for recognition and legitimacy.
- To secure the investments and assets worth \$3 billion, India should engage with all parties in Afghanistan.
- If India does not engage now Russia, Iran, Pakistan and China will emerge as the shapers of Afghanistan's geopolitical destiny, which will be detrimental to Indian interests.
- India's engagement with the Taliban may or may not achieve much, but non-engagement will definitely hurt Indian interests.

### WAY FORWARD ON ENGAGING TALIBAN

- **Engagement with Taliban:** It is said that there are no permanent friends and no permanent enemies in international relations and the only aim is to secure one's national interest. As Taliban's rise to power is eminent, it will be better to have some diplomatic engagement with them.
- Thus, India should be accommodative in opening its door to the Taliban leadership. Continued talks with them would allow New Delhi to seek security guarantees from the insurgents in return for continued development assistance.

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## INTERNATIONAL RELATIONS & SECURITY

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- **Keep investing in Afghanistan:** India must continue its investments in Afghanistan. Development leads to stability. Even, Taliban has been in favour of India's supportive role.
- **Intelligence sharing and training exercises:** Militarily strong Afghanistan civilian government will have better bargaining power at the table in Intra Afghan- peace talks with Taliban.
- **Enhancing bilateral trade:** It will help India retaining its diplomatic leverage irrespective of who is in power.
- Forging cooperation with other regional powers like Russia, Iran and China.
- India should continue to support Afghan owned Afghan led political solution in Afghanistan.
- India should facilitate Inter-Afghan dialogue and reconciliation.

## PEGASUS AND THE SURVEILLANCE LAWS

#SECURITY

**PRIMARY SOURCE** THE HINDU

*According to an international investigation, mobile phones of various Indian politicians, journalists and activists were infiltrated by the use of a malicious software called the Pegasus.*

### ABOUT PEGASUS

- Pegasus is a surveillance spyware that enables the remote surveillance of mobile phones. It has been created by the Israeli tech company NSO.
  - NSO provides this product to governments and their agencies to boost their national security by tracking the communication of terrorists and criminals. This suggests if the list is real these people were under surveillance by governments.
  - Pegasus is so powerful as a cybersurveillance tool that it is classified as a weapon goes through export clearances as a lethal weapon would from Israel.
  - Once it infects a phone it can read every message and call, it can turn on the phone remotely to record every conversation made near the device, without the target's knowledge.
- However, controversy has started because of its illegal use by the governments to track and put on surveillance of their political opponents.
  - This has brought to light the surveillance laws that exist in India and how they stand the scrutiny of **Right to Privacy** recognised by the **Puttaswamy Judgement**.

### IMPACT OF THIS REVELATION

1. India has denied any wrong doing and misuse of state-surveillance.
2. Israel has launched an investigation of this matter and has said that technology is sold to countries for legal use to tracks terrorists, if governments are found to misusing this technology, the license of those countries will be cancelled. Thus, if India is client of NSO, then relations between Israel and India can be strained.
3. Many names on the list include that of Delhi based diplomats of other countries. If the message goes that India has snooping on international diplomats it will tarnish India's image.
4. If it is found that India has been snooping on opposition leaders, journalists it will harm India's image as a democracy.
5. It shows that India for its intelligence needs is dependent on foreign technology suppliers despite having one of the most advanced software industry. It is time that India develops its own indigenous and inhouse capabilities in security and defense sphere.
6. It also shows that India's intelligence agencies are misused for domestic political needs and have to be made accountable to Parliament. A law for regulation and parliamentary oversight is required.
7. Currently, domestic surveillance can be done only for limited number of purposes which is done after lots of control mechanisms. If the surveillance on such wide range of people was being done, it requires investigation for breach of law and dilution of right to privacy of citizens.



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### Decoding Pegasus

Pegasus is a spyware, developed and licensed by an Israeli company, NSO Group. It can be used to infiltrate smartphones that run on both iOS and Android operating systems, and turn them into surveillance devices. A low down:

■ Pegasus's method of attack is called zero-click attacks, which do not require any action by the user. The spyware can hack a device simply by giving a **missed WhatsApp call**

■ It will **alter call logs** so that the user has no knowledge of what happened

■ Once the spyware enters the device, it installs a module to track call logs, read messages, emails, calendars, Internet history, and gather location data to send the information to the attacker

■ It can also be **installed manually** on a device or over a wireless transceiver

■ If it fails to connect with its command-and-control server for more than 60 days, it **self-destructs and removes all traces**

■ If it detects that it was installed on the wrong device or SIM card, it will **self-destruct**

■ Amnesty International noted that despite issuing security updates, Android and iOS devices were **breached**

■ To stay safe, users need to ensure that software in devices is updated and all apps are installed directly through the official stores. **No suspicious email or text should be clicked**



### INDIAN LAWS RELATING TO THE SURVEILLANCE

Despite the revelations by international agencies about the infiltration of cell phones in India, the government has neither confirmed nor denied that it has purchased the NSO software at any point of time. In order to legagly use the software Pegasus the government has to invoke the surveillance laws that exist. They are:

#### THE INDIAN TELEGRAPH ACT, 1885

- It states that the government can intercept a "message or class of messages" when it is "in the interests of the sovereignty and integrity of India, the security of the state, friendly relations with foreign states or public order or for preventing incitement to the commission of an offence".
- These are the same restriction that are allowed under Article 19(2) of Constitution 'reasonable restrictions'.
- Reasons for ordering interception has to be recorded in writing by the officials concerned.

#### INDIAN TELEGRAPH RULES, 1951

- Rule 419A was added in 2007, when Supreme Court stated that **telephonic conversations are covered by the right to privacy, which can be breached only if there are established procedures.**

- It states that surveillance needs the sanction of the Home Secretary at the Central or State level, but in "unavoidable circumstance" can be cleared by a Joint Secretary or officers above, if they have the Home Secretary's authorisation.
- Time Bound: Direction of interception can remain in force for not more than 60 days.
- There is an established oversight mechanism in the form of a review committee headed by the Union Cabinet Secretary. In case of state governments, such cases are reviewed by a committee headed by the Chief Secretary concerned. The law also provides an adjudication process for those adversely affected by any incident.

#### RIGHT TO PRIVACY JUDGEMENT - PUTTASWAMY 2017

- **Surveillance should be legally valid and serve a legitimate aim of the government.**
- The means adopted should be proportional to the need for surveillance, and **there should be procedures to check any abuse of surveillance.**

#### INFORMATION TECHNOLOGY ACT 2000

- **Section 69** allows government "interception or monitoring or decryption of any information through any computer resource" if it is in the interest of the "sovereignty or integrity of India, defence of India, security of the State, friendly relations with foreign

## INTERNATIONAL RELATIONS & SECURITY

States or public order” or for preventing or investigating any cognizable offence.

- By allowing the surveillance for investigating cognizable offence, this law widens the ambit of surveillance beyond the one provided for in the Telegraph act 1885 and the Article 19(2).
- Spyware is illegal because it does activities which are cyber-crimes according to the **section 66** of the IT Act 2000.

### ARGUMENTS FOR SURVEILLANCE

- **National Security:** National security is one of the responsibilities of state. Thus, surveillance is justified because of threats to National security by the terrorist organizations, drug cartels and foreign States.
- **Past success** - Many terror attacks have been thwarted because of intelligence gathered by the means of surveillance.
- **Law abiding citizens need not worry** - also there are checks and balances in the form of laws that exist to regulate the instances of surveillances.

### ARGUMENTS AGAINST SURVEILLANCE

- **Creates an Orwellian state** - State by the means of surveillance tries to curb dissent. If proper checks do not exist, the government acquires totalitarian tendencies.
- **Surveillance laws provide minimal protection** - The restrictions provided under such laws are sometimes vague and are often interpreted by the governments to bypass the limitation imposed.
- **Impacts civil liberties** - Adversely impacts the Right to Privacy of the citizens and at the same time intrudes into the political and social ideology of the citizens.
- **Disparity between state and the citizen:** state is often powerful, and it creates the risk of harms, such as discrimination, coercion.

### INTERNATIONAL NORMS RELATED TO SURVEILLANCE

- Surveillance should be necessary for legitimate aim
- Surveillance should be proportionate to aim it wants to achieve
- There should be legal authorisation for surveillance, the law should be fair.
- The motives behind surveillance should be legitimate

### WAY FORWARD

1. India should carry out the long-awaited intelligence reforms by enacting a legislation which makes Intelligence Agencies answerable to parliamentary scrutiny. This will stop the misuse of intelligence for political ends and direct them to secure India against internal and external risks.
2. India should develop indigenously developed capabilities for surveillance and not outsource its security to be dependent on third party softwares.
3. Comprehensive legislation for data security as advised by **B N Sri Krishna Committee** should be enacted.

## DRONE ATTACK

#SECURITY

PRIMARY SOURCE THE HINDU

*Recently, two explosives-laden drones crashed into the Indian Air Force (IAF) station at Jammu airport. The attack is believed to be the first-ever offensive use of drones to target an Indian military facility — has raised serious security concerns.*

### DRONE USE IN THE PAST

- Drones are being used for military purposes since 1990s. **Instances of Drone Usage:** Used in Gulf War by USA, used against Al-Qaeda by US, Islamic State used drones in Iraq and Syria, Houthi rebels used drones to attack oil facilities in Saudi Arabia etc.
- However, the new threat is the use of drone by non-state actors for terrorism.

### INDIA AND DRONES

- In the past, weapons have been dropped into J&K using drones. They have also been used for surveillance and providing cover to terrorists.
- In the recent years there have been an estimated 100-150 sightings of suspected drones near India's western border annually, most for surveillance.

### CHALLENGES POSED BY DRONE ATTACKS

- It is a low-cost easily accessible tool in the hands of terrorists and have become a key component of modern-day warfare.
- **Types of rogue drones:**

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## INTERNATIONAL RELATIONS & SECURITY

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- **Autonomous drones:** Drone controlled by onboard computers programmed to navigate to a fixed target and don't require real time human control.
- **Drone swarms** - where hundreds of drones try to confuse the system is another challenge that needs to be tackled.
- **Stealth drones:** Drones designed to reduce their radar signature and can be operated in patterns making them difficult to detect. To evade acoustic detection, rotors can be modified to dampen drone's engine noise.
- Drones can be used to smuggle arms and drugs, targeting VVIPs, reconnaissance & surveillance, electronic attacks, delivery of weapons of mass destruction, messaging etc.
- Conventional Radars cannot detect the drones. If calibrated for small objects, **radars confuse them for birds.**
- Indian forces use eyesight to trace and shoot such drones. However, **drones flying at heights are difficult to target.**
- **Technologies to disable and shoot drones like** - interfering with their radio frequency, shooting them with energy beams **have not been fully successful.**
- Besides cross border drones, **challenge also lies in tackling the drones that attack from within the national boundary.**
- **Anti-drone systems are expensive** for the defenders, while **drones are cheaper for the attackers** who use the drone to attack.
- It provides Pakistan opportunity to use them clandestinely, which saves it from being blamed for terror attacks in India.
- Drones could also **pose a threat to essential civilian infrastructure** such as dams, power plants and bridges.
- Threat of air collision between drones and manned aircraft.

### COUNTER-DRONE TECHNOLOGIES

These are systems that are used to detect and intercept unmanned aircraft. These technologies have already been extensively used in civil arena and combat zones including base protection, airspace protection at airports, security during large events and major sports gatherings,

VIP protection etc. For ex. Counter drone systems have been routinely employed during Independence Day and Republic Day celebrations in Delhi.

There are two components of Counter-Drone systems: 1) Detection & 2) Interception

**1) Detection:** Early detection and identification is the key to effective neutralization of the UAV threat which can be undertaken by a combination of sensors. Some of the detection and identification systems being employed for counter drone measures are:

- a) Radar:** These systems can pick-up drones of the size of small birds using very low transmitted power.
- b) Electro-optical/InfraRed:** They monitor for drones in visible light and infrared spectrum.
- c) Radio Frequency:** Most drones are linked with the operator on the ground using a radio link. External properties of the data link's signal can be used for approximate position of the drone and operator.
- d) Acoustic sensor:** These sensors detect noise signatures created by UAV motors and propellers. However, these have limited range and suffer from high nuisance (false) alarm rates (especially in urban environments).
- e) Passive coherent locator system:** It is a passive radar system, which utilizes third-party transmitters like Television broadcasts, FM Radio or Mobile Telephone to detect a target and provide location, heading and speed information. A PCL system is capable to detecting extremely small signal changes scattered by micro drones.

**2) Interception:** This deals with response and neutralization of drones by focusing on denial of mission of rogue drones and their destruction. The options for response range from diverting the UAV in a different direction, capturing it, or to destroying it broadly. Neutralization measures being utilized by counter UAV system are:

- a) Kinetic kill:** Currently, the most relied and preferable option for neutralizing rogue drones. Ex. Shooting down with sniper rifles, using anti-aircraft guns and missiles, deploying fighter aircrafts, depending on the situation. However, high level of skill and expertise is required from the shooter.
- b) High Power Electromagnetic Weapons (HPEM)/Lasers:** This can be used in scanning and

## INTERNATIONAL RELATIONS & SECURITY

neutralization. It utilizes high energy beams focused on the drones to physically burn the drone or a part of it. However, lasers are affected in adverse weather conditions, can cause hazard to humans. Also, it is difficult to keep them focused on the UAV.

- c) **Radio Jamming:** Rogue UAV is identified and targeted with an electromagnetic signal strong enough to overwhelm the system's controls. However, UAVs are specifically encrypted to withstand these attempts.
- d) **GPS Spoofing:** In this, drone is confused to forget its waypoints and go into auto-pilot mode and in this stage using power transmission, it is directed to obey new commands. Thus, this system removes the threat and also gives access to adversary's technology for analysis.
- e) **Drone Capture Nets:** Capture nets can be used from ground as well as a hunter-killer drone. The net encompasses the drone and causes it to cease flying by disrupting the propulsion system. However, range of these capture nets are limited. Variants of this system like Drone-on-Drone and Bird-on-Drone are also used to bring the rogue drone down.

### GLOBAL COUNTER DRONE SYSTEMS

- **Rafael** which has developed the **Iron drome for Israel** has also built a **Drone Dome technology**. It offers a 360-degree coverage. It can jam the signals and the visuals being sent out by the drone. It has high precision in shooting the drone with high powered laser beams.
- **US based Fortem technologies uses interceptor drone technology - "Drone Hunter"**. It fires a net to catch the drone mid-air.
- An **Australian company** also claims to have developed a **"Drone gun"** which can pin point and shoot the drone.

### INDIA'S PREPAREDNESS FOR SUCH ATTACKS

- DRDO has developed a **detect-and-destroy technology for drones**. It was deployed for VVIP protection on Republic Day parade, Independence Day and the Namaste Trump event. It has capabilities of both:
  - Hard kill - destroying a drone with lasers.
  - Soft kill - jamming a drone's signals.

- However, it's range is very limited between 1 to 3 Kms.

### INDIA'S OFFENSIVE DRONE CAPABILITY

- India has **Heron surveillance drones** developed by Israel. India also has **Harop Loitering Munition systems** which is an attack weapon system designed to locate and precisely attack targets.
- India is looking to acquire **MQ9 Reaper drones from the USA**. The MQ9 Reaper, also called a **'Predator' drone**, can detect targets using its inbuilt sensors and radars. US forces have used in Afghanistan.
- **Hindustan Aeronautics Limited's** is developing **CATS Warrior drones**. It will have a mother vehicle - a fighter jet operating 700 km away that will be able to strike enemy targets through unmanned drones. The fighter jets guiding the unmanned drones can remain 150 km behind and control and give directions to four unmanned vehicles called the CATS Warriors.
- HAL is also developing **rotary unmanned aerial vehicle or 'drone helicopter'**, which can operate at 15000 feet. It will be crucial for speedy transportation of supplies in harsh high-altitude areas
- Indian Army placed an order for **indigenous Switch UAVs** meant for day and night surveillance of high-altitude areas.
- India has developed a **National Counter Rogue Drone Guidelines by Ministry of Civil Aviation**.

### SALIENT FEATURES OF NATIONAL COUNTER ROGUE DRONE GUIDELINES:

1. Need to devise an automated UAS Traffic Management (UTM) system for low-altitude airspace to provide hyper-local and real-time information for managing UAS induced traffic. This would ensure that only authenticated UAS could operate in airspace.
2. The UTM architecture needs to have **surveillance, navigation, communication, traffic de-confliction and emergency assistance** aids to regulate drone traffic on real time basis.
3. To prevent drones from straying towards notified vital installations, **dynamic Geo-fencing may be implemented** by permitting UAS to operate only along permitted trajectory in the airspace and prohibiting of use of drones in certain areas.
4. All UAS manufactured, imported or operating in India to be mandated to be equipped with appropriate navigation and communication software and hardware for live telemetry and data exchange. UAS



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## INTERNATIONAL RELATIONS & SECURITY

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must allow for operational command to be transferred to UTM service provider, at any time and capable to executing manoeuvres.

5. Deploying counter UAS infrastructure at vital target systems. Towards this end, airspace regulators and security agencies shall be required to enhance capabilities to track, detect, identify and engage hostile drones in real time.
6. Multi-agency drone regulatory body to be developed with involvement of Air Force and Ministry of Civil Aviation for deployment of counter drone measures.
7. Implementation of **stringent airworthiness criteria** and drone pilot training along with certification.
8. Registration of drones as well as the vendors that are selling drones in India.
9. Vulnerability analysis of drone needs to be identified by security agencies based on Drone impact assessment
10. A legal framework for authorised use of Counter drone systems by security agencies should be put in place.
11. Interaction of R&D organisations and academia to develop systems for development of futuristic technologies.

### **SALIENT FEATURES OF UNMANNED AIRCRAFT SYSTEMS RULES 2021**

- **UAS categorised** as airplane, rotorcraft and hybrid with further categorisation as remotely piloted aircraft, model remotely piloted aircraft and autonomous unmanned aircraft system.
- **UAS classified** as nano, micro, small, medium and large unmanned aircraft
- **Mandatory** for individuals and companies to obtain **approval from the DGCA to import, manufacture, trade, own or operate drones**
- **No Permission- No Take-off (NPNT) policy** adopted for all UAS except for those in the nano category
- Micro and small UAS are not permitted from flying above 60m and 120 m, respectively.
- **UAS prohibited from flying in strategic and sensitive location**, including near airports, defence airports, border areas, military installations/facilities and areas earmarked as strategic locations/vital installations by the Ministry of Home Affairs.
- Penalties have also been provided.

## INTEGRATED THEATRE COMMANDS IN INDIA

#SECURITY

**PRIMARY SOURCE** | THE HINDU

*Chief of defense staff is discussing the idea of having Unified or integrated theatre command in the military to have unified approach to fighting any future war.*

### **WHAT IS THEATRE COMMAND?**

- The word 'theatre warfare' means "the entire land, sea and air areas are involved directly in war operations".
- "Theatre command" refers to unified command under which all the resources of the Army, the Navy and the Air Force are pooled, depending on the threat perception.
- Currently, commands are set up service wise, so for instance in case of war against Pakistan on Western Border, the army will lead the fight on the ground under leadership of Army Commander and Air Force will take care of air-warfare under leadership of Air Force Commander. For a joint strategy, the Army Commander and Air Force Commander will need to coordinate efforts. Thus, there is limited jointness.
- In case of integrated theatre commands, there will be one commander who will control all the assets and forces of Air Force and Army. This will lead to greater jointness and coordination in response.
- The commands could be geographical — like looking at a border with a particular country — or thematic, like a command for all maritime threats.

### **HOW IT WORKS?**

- India currently has 19 military commands vertically split into
  - Army (7 commands)
  - Air Force (7 commands)
  - Navy (3 commands)
  - A Tri-Service Command at Andaman and Nicobar
  - A Strategic Forces Command (SFC) to look after the country's nuclear stockpile
- The plan is to bring all the 17 service commands (Army, Airforce and Navy) into 5 unified or theatre commands



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- Northern Land Theatre (Jammu and Kashmir, Ladakh and Central sector)
- Western Land Theatre (Pakistan centric)
- Eastern Land Theatre,
- Maritime Theatre Command, and
- Air Defence Command

### IDEA OF THEATERISATION

- It was first proposed after the Kargil war. The appointment of **Chief of Defence Staff (CDS)** and creation of the **Department of Military Affairs (DMA)** within the Ministry of Defence can be seen as steps towards achieving greater synergy and fusion between the three branches of the armed forces.

### NEED FOR THEATRE COMMANDS

- **Enhanced coordination** between the armed forces for prompt and effective military response.
- **Bringing down costs**
  - Having a unified approach during defence acquisition will reduce the cost of procurement. For example, Army and IAF acted in silos during procurement of Apache helicopters which increased their cost.
  - A big chunk of the annual defence budget goes into paying salaries and pensions while outlays do not always grow in line with the actual needs of the armed forces. The theatre command system will help remove redundancies, reducing duplication of resources and bring greater focus in the allocation of resources.
- **Unified approach to fighting any future war:** A potential conflict with a major military power like China may extend well beyond the typical theatres into the domains of cyber, space and nuclear, which requires a more integrated response from the Indian armed forces
- Integrated training of armed forces
- Currently, Andaman & Nicobar Command is an integrated command. So, India has some experience in operating an integrated theatre command.
- All major countries of the world have already restructured their armed forces on the lines of Integrated Theatre commands. For ex. China, US, UK, Russia etc.

- The need for jointness and integrated theatre commands has been highlighted by various committees. For ex. **1) Kargil review committee** recommended creation of post of Chief of Defence Staff (CDS) with a particular focus on adopting an integrated approach in defence management. **2) Shekatkar committee** also recommended Theatre command to integrate land-sea-air defence capabilities.


### CONCERNS AGAINST THEATRE COMMANDS

- Lack of consensus over basic structure of Theatre command itself, that is, who reports to whom and how does the chain of command flow. These involve issues of operational command and control over assets
- Existing mismatch between the assets of the army, navy and air force. With fewer perceived resources, the Indian Air Force has concerns about its limited assets getting spread out thinly over the different theatre commands.
- Theatre commands will lead dilution of office of three service chiefs.
- Indian Air force has expressed its reservations about the idea of integrated theatre command. There is a feeling that Air Force will be reduced to a support force in case theatre commands come into being.
- There is a feeling that theatre commands will lead to superiority of Army over other forces.
- There is also a concern how will other security forces such as BSF, ITBP, Assam Rifles and CRPF will be integrated into theatre commands.
- Concerns have been raised about the operational efficacy of such integrating the existing three Indian Navy commands into one.
- Theatre commands are based on the idea of tackling conventional armed conflicts. However, in an age of nuclear overhang, the possibility of full-fledged warfare is very less. Today, sub-conventional warfare, terrorism and cyberwarfare poses most threat to India. Theatre commands will not be suitable to meet these.




Integrated theatre commands is a long pending reform. However, we need to tread cautiously taking all armed forces and relevant stakeholders on board before proceeding with it.

INTERNATIONAL RELATIONS & SECURITY




SNIPPETS

Term / Organization/ Location	In news	Pointers
<b>Term – “Fit for 55”</b>	It is a term that is being used by European Union under its ambitious green deal.	It refers to the at least 55% emission reduction target which the EU has set for 2030. The European Commission’s plan, “Fit for 55,” calls for its 27 member states to cut their output of greenhouse gases by 55% by 2030, compared with 1990 levels.
<b>Climate and Clean Energy Agenda 2030</b>	It is an India – US partnership.	In its new nationally determined contribution, the United States has set an economy-wide target of reducing its net greenhouse gas emissions by 50–52 percent below 2005 levels in 2030. As part of its climate mitigation efforts, India has set a target of installing 450 GW of renewable energy by 2030.
<b>Indentured Labour Route Project (ILRP)</b>	It is a unique project that connects countries with shared histories and experiences of the indentured labour system. This project is an initiative of <b>Government of Mauritius</b> . The initiative is supported by UNESCO. <b>Participants:</b> Mauritius, France, Reunion, India, Australia, Malaysia, Suriname, South Africa, Trinidad & Tobago, UNESCO	<b>Aim of the project:</b> 1. Bring together all countries having experienced migration of indenture and other forms of contract labour in 19th and 20th century. 2. Contribute to nation building efforts and a greater understanding among societies across indentured diaspora as well as within the countries themselves. 3. Give voice to indentured labourers and their descendants and share their experiences. 4. Setting up of an International Database on indenture 5. Synergies with UNESCO Slave Routes Project
<b>Mekong Ganga Cooperation</b>	<i>11<sup>th</sup> Mekong Ganga cooperation was held in July 2021. (20 years of MCG)</i>	The MGC initiative was launched in the year 2000 with the aim of boosting cooperation in tourism, connectivity and culture and other range of areas. <b>Members - India, Myanmar, Laos, Thailand, Cambodia and Vietnam.</b> MGC takes its name from the Ganga and the Mekong, the two civilisational rivers in Southeast Asia. 

### INTERNATIONAL RELATIONS & SECURITY


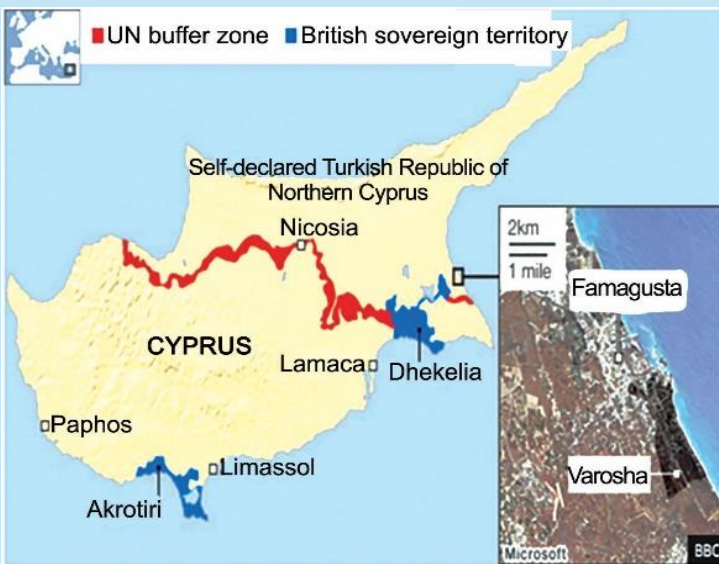

<p><b>INDIAN OCEAN NAVAL SYMPOSIUM (IONS)</b></p>	<p>The 7th edition of Indian Ocean Naval Symposium (IONS), a biennial event, was hosted by the French Navy at La Réunion in July 2021.</p>	<p>Initiative conceived by the Indian Navy in 2008.</p> <p>It seeks to enhance maritime cooperation among Navies of the littoral states of the IOR.</p> <p>It aims to provide an open and inclusive forum for discussion of regionally relevant maritime issues.</p>
<p><b>Qala-I-Naw</b></p>	<p>This location in Afghanistan is in news because of the fighting that is going on between the government troops and the Taliban.</p> <p>It is the capital city of Badghis province of Afghanistan which is located on the western border.</p>	
<ul style="list-style-type: none"> <li>• Islam Qala</li> <li>• Torghundi crossing</li> </ul>	<p>Taliban has claimed that it has captured two important bordering towns of Afghanistan.</p> <p><b>Islam Qala</b> - located in Afghanistan bordering Iran, and</p> <p><b>Torghundi</b> - located in Afghanistan bordering Turkmenistan.</p>	
<p><b>Bagram Airbase</b></p>	<p>The USA used this base for 20 years in the Afghanistan war.</p> <p>It has come into the news because of the withdrawal of the US forces from this base.</p>	

INTERNATIONAL RELATIONS & SECURITY

<ul style="list-style-type: none"> <li>• Shir Khan Bandar</li> <li>• Spin Boldak</li> </ul>	<p><b>Shir Khan Bandar of Afghanistan</b> is a key route to Central Asia. It connects Afghanistan with Tajikistan.</p> <p>The Taliban is in control of Afghanistan's main crossing with Tajikistan.</p> <p><b>Spin Boldak</b></p> <p>The Taliban captured the strategic border crossing of Spin Boldak on the frontier with Pakistan.</p>	 <p>A map of Afghanistan and its neighbors: Kazakhstan, Uzbekistan, Turkmenistan, Tajikistan, Iran, Pakistan, and India. Key locations in Afghanistan are marked: Torghundi crossing, Islam Qala crossing, Kabul, Shir Khan Bandar, and Spin Boldak. The Arabian Sea is shown to the south.</p>
<p>Imam Sahib - Kunduz</p>	<p>Taliban fighters took control of this key district in <b>Afghanistan's northern Kunduz province</b> and encircled the provincial capital.</p>	 <p>A map of northern Afghanistan showing provinces: Mazar-e Sharif, Kunduz, Baghlan, Kabul, and Uruzgan. Neighboring countries are labeled: Turkmenistan, Uzbekistan, Tajikistan, Iran, and Pakistan. A globe inset shows the location of Afghanistan in Central Asia. A scale bar indicates 0 to 250 km.</p>
<p>Zaranj Delaram Highway</p>	<p>The highway runs along <b>Khash Rud river to Delaram to the northeast of Zaranj</b>, where it connects to a ring road that links Kandahar in the south, <b>Ghazni, and Kabul in the east, Mazar-i-Sharif in the north, and Herat in the west</b>. India is developing this highway.</p>	 <p>A map of Afghanistan showing the Zaranj-Delaram highway and the Ring Road. Key locations include Mazar-e-Sharif, Herat, Salma Dam, Kabul, Ghazni, Kandahar, and Chabahar port. Neighboring countries are labeled: Pakistan, Iran, and India. The Khash Rud river is also shown.</p>



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<p><b>Kharshi - Khanabad base in Uzbekistan.</b></p>	<p>U.S. Deputy National Security Adviser Elizabeth Sherwood-Randall and U.S. Special Representative on Afghanistan Zalmay Khalilzad are discussing the possibility of an American military base in one of the Central Asian countries, including in Uzbekistan, where the U.S. had shut down its Karshi-Khanabad base in 2009.</p>	
<p><b>Varosha - Cyprus</b></p>	<p>Turkey plans to reopen Cyprus town of Varosha amid Greek objection.</p> <p>Varosha is an abandoned southern quarter of the Cypriot city of Famagusta. Before 1974, it was the modern tourist area of the city. Its inhabitants fled during the Turkish invasion of Cyprus in 1974 when the city of Famagusta came under Turkish control, and it has remained abandoned ever since.</p>	
<p><b>Tunisia</b></p>	<p>It is witnessing protests after the President has removed the Prime Minister and has suspended the legislature for 30 days, allegedly for the mismanagement of COVID- 19 pandemic.</p> <p>Arab Spring 2010 a democratic movement in the Arab world originated from Tunisia.</p>	



### INTERNATIONAL RELATIONS & SECURITY

<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Demchok Sector – Ladakh</b></p>	<p><b>Demchok Sector is located in Ladakh along the LAC.</b></p> <p>Chinese nationals displayed banners in protest from across the Indus river, close to the Line of Actual Control (LAC), when Indian villagers were celebrating the birthday of the Dalai Lama in Demchok in eastern Ladakh.</p>	
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"><b>Nagorno Karabakh</b></p>	<p>It is a disputed territory between Armenia and Azerbaijan.</p> <p>Armenian Prime Minister said he would request the deployment of Russian border guards along his country's frontier with Azerbaijan to prevent further escalation after new clashes.</p> <p>Last year Armenia and Azerbaijan fought a six-week war over the breakaway region of Nagorno-Karabakh.</p> <p>Internationally this region is recognized as a part of Azerbaijan, but most of it is governed by the unrecognized Republic of Artsakh (formerly named Nagorno-Karabakh Republic (NKR)) since the first Nagorno-Karabakh War.</p>	

## PRACTICE QUESTIONS

### MCQS

**Q.1) Which of the following countries are members of SCO and share border with Afghanistan?**

- 1. Turkmenistan
- 2. Iran

- 3. Pakistan
- 4. Tajikistan

Select the correct answer using the code given below:

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

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- (c) 3 and 4 only                      (d) 1, 2 and 3

**Q.2) Which of the following released "Fit for 55 package"?**

- a) ASEAN                                  b) BRICS  
c) G20                                        d) EU

**Q.3) Mekong River passes through which of the following countries?**

1. China                                      2. Bhutan  
3. Myanmar                                  4. Malaysia

Select the correct answer using the code given below:

- (a) 2 only                                      (b) 1 and 3 only  
(c) 1, 3 and 4 only                          (d) 1, 2, 3 and 4

**Q.4) The North Sea is bordered by which of the following countries?**

1. Ireland                                      2. England  
3. Denmark                                   4. France

Select the correct answer using the code given below:

- (a) 1 and 2 only                              (b) 1, 2 and 4 only  
(c) 2, 3 and 4 only                          (d) 1, 2, 3 and 4

**Q.5) Consider the following statements:**

1. The 7th Indian ocean naval symposium was hosted by French Navy.

2. It is an alliance meant for maritime security.

Which of the statements given above is/are correct?

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

## DESCRIPTIVE QUESTIONS

- Q1.** Do you think India can manage regional challenges emanating from withdrawal of US troops from Afghanistan? What are the options available to India in this context?
- Q2.** "India's defence preparedness is facing challenges emanating from the threat of two-front war". In this context discuss the need for defence reforms and explain how the proposed 'Integrated Theatre Commands' will help India improve its defence preparedness.

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

# SOCIETY AND SOCIAL JUSTICE

# GS PAPER I & GS PAPER II (MAIN)

## UTTAR PRADESH AND ASSAM MANDATE TWO CHILD POLICY

#DEMOGRAPHICS

PRIMARY SOURCE THE HINDU

Uttar Pradesh government has unveiled its **New Population Policy 2021-30** to reduce maternal and infant deaths in a time-bound manner. In the draft of the **Uttar Pradesh Population (Control, Stabilization, and Welfare) Bill-2021** issued by the State Law Commission, '**Bacche Do He Acche**' has been highlighted. Assam has also brought a similar policy.

### ABOUT UTTAR PRADESH POPULATION POLICY

#### Aims of the Policy

- Decrease the total fertility rate
- Increase modern contraceptive prevalence
- Increase male methods of contraception use
- Decrease maternal mortality rate
- Decrease infant mortality rate
- Decrease under 5 mortality rate

#### Five key targets

- Population control
- Ending curable maternal mortality and illnesses
- Ending curable infant mortality and ensuring betterment in their nutrition status
- Betterment of sexual and reproductive health-related information and facilities among the youth
- Care of elders

The proposed policy announces **several incentives and disincentives** for parents who follow the two-child policy or have only one child:

- Two additional increments during service period.

- Subsidy towards purchase of plot or house site or built house.
- Rebate on charges for utilities such as water, electricity, water, house tax
- Preference to single child in admission in all education institutions
- Preference to single child in government jobs.
- Free health care facility and insurance coverage to the single child till he attain the age of twenty years
- **The violation of the policy is penalised with measures** such as barring for elections.

### ASSAM'S TWO CHILD POLICY

The Assam government has decided to apply "population norms" in all government schemes. The State government has already implemented the **Population and Women Empowerment Policy** of Assam that makes any person with more than two children ineligible for government jobs and election to the panchayats and civic bodies.

### FACTORS AFFECTING POPULATION GROWTH

- **Infant mortality:** Higher infant mortality results in parents having more children as they are not sure of their survival.
- **Early Marriage** increases likelihood of more children being born to a female.
- **Level of education especially that of women:** Fertility usually declines with increase in education levels of women. Education leads to empowerment of women and greater control over their bodies.
- **Use of contraceptives** helps to prevent unwanted pregnancies and also helps in spacing between children.
- **Abortion policies:** Making it easier to abort children will give women more control over their reproductive rights. This will result in prevention of many unwanted pregnancies. However, the issue of sex selective abortion should be balanced with this.

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## SOCIETY AND SOCIAL JUSTICE

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- **Son-Meta Preference:** The belief that a boy child will take care of a couple during their old age, ritualistic needs in Hinduism.
- **Poverty:** Poor people especially in rural areas think more children as more working hands for the future. Also, as they do not invest on child education the cost of raising a child is low for them.
- **Population Momentum:** India has high bracket of population in reproductive age group.

### IMPACT OF HIGH POPULATION GROWTH

- Pressure on limited resources especially in rural areas and environmental degradation. For ex. Land parcels get distributed in each generation reducing their economic feasibility.
- Inadequate attention to children's health and education. Such a child is not given opportunity to realise its full potential and often results in child delinquency.
- Impact on women: Women are worst hit, due to frequent child births from an early age most of their productive age is lost in giving birth, taking care and raising a child. Along with this, the burden of running a household and her professional commitments takes a heavy toll on her health and psyche.

### EFFICACY OF LINKING POPULATION NORMS TO GOVT JOBS/BENEFITS

- **Lack of evidence** that coercive disincentives control population. In fact, States that provided better healthcare services have achieved population stabilisation eg: Kerala
- **Women lack reproductive agency:** Denying jobs or govt benefits to women who do not meet the population norms will end up disempowering them. lack reproductive agency as females have children under pressure from other members of family. The choice to have or not have children is seldom that of the female.
- **Socio-economic reasons of population growth remain unaddressed** by disincentive measures. Factors that lead couples to have more children such **son-metapreference, son to take care during old age** and ritualistic needs etc needs to be addressed by proper communication, women empowerment and creating a welfare state looking towards needs of old age.

- It goes against India's commitment to a rights-based approach to family planning.
- Most of the present growth in India's population is currently due to **population momentum** i.e. the high percentage of population in the child bearing age. Thus, despite having only two children India's population will continue to grow. To accelerate population stabilisation what is needed is not two child policy but different sets of policies which delay child birth and lead to greater spacing between children.
- Already factors like higher education among females, late age of marriage and nuclearization of family, increased cost of raising a child, increasing access and acceptability of contraceptives and changes in values towards individualisation have led to total fertility rates falling across India.
- States having high TFR such as Bihar, Assam and UP are also expected to reduce their TFRs in the coming decade and reach replacement level.

### ARGUMENTS FAVOURING TWO CHILD POLICY

- **Precedence of such policies pursued in various States:** Various states have framed laws that set the two-child limit as a criterion for certain government jobs and elected posts. For ex. In Rajasthan, Madhya Pradesh, Haryana and Maharashtra.
- **Constitutionally allowed:** Population control and family planning are in the Concurrent List, permits both Union and state legislatures to enact laws on population control and family planning.
- India population in 2021 is estimated to be 1.39 Billion (139 Crores) while China is inhabited by nearly 143 crore. Which means soon, **India will overtake China.**
- High fertility rate leads to undue burden on females who are denied education and employment opportunities and sometimes forced to raise children from a late adolescent age.

### ARGUMENTS AGAINST TWO CHILD POLICY

- **Programme of Action of the International Conference on Population and Development (UN 1994)** to which India is a signatory, strongly affirms against coercion, incentives and disincentives.
- **National Population Policy 2000** supports a target-free approach and explicitly focuses on education, maternal and child health and survival, and the

## SOCIETY AND SOCIAL JUSTICE

availability of health-care services, including contraceptive services, as key strategies for population stabilisation.

- Union government has maintained that family welfare programme in India is **voluntary** in nature and it is the prerogative of the clients to choose a family planning method best suited to them as per their **reproductive right**.
- Economic Survey notes that **India is set to witness a “sharp slowdown in population growth in the next two decades”**. By the 2030s, some States will start transitioning to an ageing society as part of **“demographic transition”** which sees nations slowly move toward a stable population as fertility rates fall with an improvement in social and economic development indices over time.
- **India’s Total Fertility Rate (TFR) is declining**. It is now 2.2 per woman, nearing the Replacement Rate (RR) of 2.1. Currently, as many as **23 States and Union Territories**, including all the States in the south region, already have fertility below the replacement level of 2.1 children per woman.
- Coercive policies in a society with high preference for male children will **impact child sex ratio**.
- Population control laws could lead to problems of imbalance. **China one-child norm enforced in 1980s was abandoned** after it resulted in skyrocketing of aged dependents, insufficient people of working age, and a huge excess of aged people needing costly medical care.
- Any limiting of children forces people to disown children especially disabled children etc.

### GOVERNMENT INITIATIVES TO CONTROL POPULATION

- India was one of the first country to form a comprehensive policy on population control. During the 1970s, government launched mass sterilisation campaigns, which were very unpopular. However, following the **Cairo Declaration on Population and Development** government moved towards a rights based family planning oriented strategy to stabilise population.
- **National Population Policy 2000** gave a focused approach to the problem of population stabilization. The **National Commission on Population** was formed which is chaired by the Prime Minister. It has

the mandate to review, monitor and give directions for implementation of the National Population Policy.

- **Constitution (84th Amendment) Act, 2002** extended the freeze on the state-wise allocation of seats in the Lok Sabha and the Rajya Sabha to 2026.
- **Jansankhya Sthirata Kosh (National Population Stabilization Fund)** under MoH&FW with a mandate to undertake activities aimed at achieving population stabilization
- Focus on institutional deliveries, strategies to reduce IMR and MMR etc by programs such as Janani Suraksha Yojana (JSY), NRHM, ICDS etc.
- Addition of new contraceptive choices like Injectable Contraceptive DMPA (**Antara**) Centchroman pill (**Chhaya**) and Progesterone only pill (**POP**) in the National family planning programme.
- **Mission Parivar Vikas** for substantially increasing the access to contraceptives and family planning services in the 145 high fertility districts of seven High Focus States (HFS) with a TFR of 3 and above. These are the states of: Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand and Assam.
- Subsequent finance commissions have incentivised states to control population.

### India’s Demography transition

India is said to witness a rapid demographic transition in the next 2 decades with demographic dividend expected to peak by 2041. Coupled with the declining share of young and increasing old age population, India will need to reorient its socio-economic policies in accordance with the changing demography as shown below

Population (Age-Group)	2011	2041
0-19	41%	25%
20-59	51%	59%
Greater than 60	8%	16%

Thus, India is experiencing a unique phase in its demographic history, when the percentage of population in India’s working age group is particularly high. This ‘youth bulge’ is expected to last till 2041 after which age profile of India’s demographic will start ageing. Also, as the major economies of the world such as China, Japan and Europe age and face a shortage of labour and working age people India with its educated



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and young labour force can satisfy their needs.

This demographic dividend is particularly important in a country's developmental journey. Due to the youth bulge, countries have been able to expand their economies by setting up manufacturing facilities, expand service sector. However, to reap the demographic dividend this population needs to be educated, healthy and equipped with necessary skills to make a difference. Following policies are advocated by analysts:

- **Focus of job creation:** While around 60% of India is projected to be in the working age (20-59), the labour force participation today is at meagre 53%. Thus, we need to have a sustainable long-term vision for job creation
- **Skilling and Reskilling:** Being at the cusp of 4th industrial revolution the 21st century jobs require skilling and reskilling. Thus social-economic policies targeting skill development should be designed such that they are in a continuum with education that focuses on enhancement of learning capabilities
- **Consolidation of schools:** With decline in share of young (0-19) to about 1/4th, policies targeting consolidation of schools need to be promoted without affecting access
- **Upgradation of health facilities:** With an abysmal hospital beds per 1000 population of 0.7, India needs to upgrade health care facilities particularly in the tertiary sector keeping in view of the increasing share of old age population.
- **Retirement Age:** Given the increase in healthy life expectancy beyond 60, India should increase its retirement age at least up till 65 as has been contemplated by developed countries.
- **Push for mode-4 labour agreements:** This will allow Indians to service in the advanced economies which are facing labour shortages. This in turn will let Indian earn more remittances.

Thus, in order to become a \$5 trillion economy, India needs to employ an inclusive approach that focuses on each section of the population structure that is witnessing a change.

### WAY FORWARD

- Population control strategy should be voluntary, right oriented and choice based.

- Increasing access to information and reproductive health services, delaying age of marriage, first pregnancy and empowering the women to take informed decisions on spacing between children.
- Focus on women empowerment should be central to this effort. Female education and higher labour force participation should be promoted.
- Economic survey has suggested that India needs a diversified approach to the population issues. At one end are states which have high TFR (ex. Assam, Bihar, UP) and other end are states where TFR has already fallen below TFR level (ex. Kerala, TN, Karnataka etc.). In this regard, it has suggested:

For States with TFR <RR	For States with TFR >RR
Old age population - increasing dependency ratio - <b>old age policy</b>	Young population - <b>education and skill development policy</b>
Investment in health; palliative care	Job creation
Increased migration (internal and external)	Sustainable development threat
Suggestion - Increase retirement age	Suggestion - Merging of schools - focus on quality - 100% enrollment (Rajasthan model)

- Further, to hasten the drop to replacement levels of fertility, states should tackle the socio-economic issues confronting India's largely youthful demography rather than seeking neo-Malthusian approaches on population control.

## HUMAN TRAFFICKING: A SOCIAL EVIL

#VULNERABLE SECTIONS

**PRIMARY SOURCE** THE HINDU

The Ministry of Women and Child Development has released draft 'Trafficking in Persons (Prevention, Care and Rehabilitation) Bill, 2021'. This has brought Human Trafficking in highlight.

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- **Human Trafficking** refers to buying and selling of the human beings for illegal and unlawful purposes.
- A 2014 report stated that approximately 16 million women are victims of sex trafficking in India a year. According to NCRB data Mumbai and Kolkata had the highest cases of trafficking in women and children, mainly for forced marriage, child labour, domestic help and sexual exploitation.



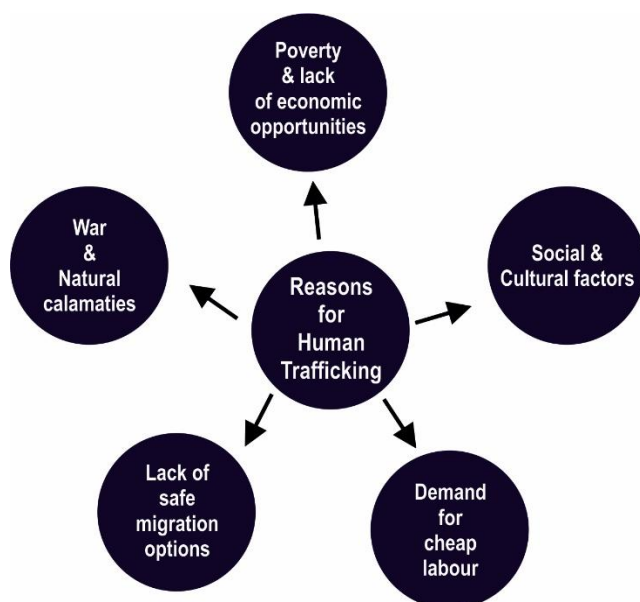
- Trafficking in Human Beings or Persons is prohibited under the Constitution of India under **Article 23 (1)**
- The **Immoral Traffic (Prevention) Act, 1956 (ITPA)** for prevention of trafficking for commercial sexual exploitation.
- **Criminal Law (amendment) Act 2013** added section 370A IPC which provide for comprehensive measures to counter the menace of human trafficking
- **Protection of Children from Sexual offences (POCSO) Act, 2012** to protect children from sexual abuse and exploitation
- Other specific legislations like Prohibition of Child Marriage Act, 2006, Bonded Labour System (Abolition) Act, 1976; Child Labour (Prohibition and Regulation) Act, 1986; Transplantation of Human Organs Act, 1994 .

India has ratified:

- United Nations Convention on Transnational Organised Crime (UNTOC)
- SAARC Convention on Preventing and Combating Trafficking in Women and Children for Prostitution

### COVID AND HUMAN TRAFFICKING

- A study by United Nations Office on Drugs and Crime (UNODC) revealed the devastating impact of COVID-19 on victims and survivors of human trafficking. It has exacerbated existing vulnerabilities
- Dramatic increases in unemployment and reductions in income, especially for low wage and informal sector workers increased the vulnerability to Human trafficking
- COVID-19 impacts the capacity of state authorities and NGOs to provide essential services to the victims of this crime
- Women and Children are more vulnerable to trafficking for Sexual exploitation and forced labour due to loss of jobs and shut down of schools
- COVID-19 is making the task of identifying victims of human trafficking even more difficult. They are also more exposed to contracting the virus, less equipped to prevent it, and have less access to healthcare to ensure their recovery.



### CONSTITUTIONAL & LEGISLATIVE PROVISIONS RELATED TO HUMAN TRAFFICKING IN INDIA

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## SOCIETY AND SOCIAL JUSTICE

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# KERALA MODEL OF ANTI-DISCRIMINATION LAW

#DISCRIMINATION #LEGISLATION

**PRIMARY SOURCE**

THE HINDU

*Kerala has introduced a draft legislation to deal with increasing practices of discrimination in the society. Similar legislation can be enacted by other states leading to expansion of civil rights covered under the legislation.*

### SALIENT FEATURES OF ANTI-DISCRIMINATORY LAW DRAFTED BY KERALA

- **Prohibits Discrimination** - which are beyond the control of an individual or those that constitute a fundamental choice.
- **Recognize various kinds of discrimination** such as direct, indirect, aggravated discrimination, harassment, and victimization. Therefore, legal prohibition against harmful social practices is introduced. Boycotting persons and targeted violence also fall within the umbrella of the proposal.
- **Impose an anti-discrimination duty** on private employers, landlords, service providers and persons holding significant social and economic power.
- **Provide for civil remedies** against the perpetrators of discriminatory practices and grant remedies.
- **Affirmative Action** - whereby public authorities are obliged to progressively realise diversification of their workforces by recruiting members of disadvantaged sections excluded from society, such as transgender persons or persons with disabilities.
- **State Equality Commission** - to adjudicate complaints and to provide policy recommendations to the State government.

### DISCRIMINATIONS IN INDIAN SOCIETY

- Discriminations practiced in India operate on various levels and can be categorised as direct discrimination, indirect discrimination or intersectional discrimination.

- **Direct Discrimination** - is characterised by the intent to treat less favourably a person or a group.
  - **Eg:** An employer refuses to interview a candidate because he belongs to a scheduled caste. This is direct discrimination in relation to caste.
  - **Eg:** An employer fires a female employee after her marriage because he makes a stereotypical assumption that married women do not make efficient workers. This is prima facie direct discrimination in relation to gender.
- **Indirect Discrimination** - Discriminatory practices may also be indirect in nature, whereby policies that seem neutral and not expressly targeted at a particular group, still cause a disproportional adverse impact on disadvantaged sections of society.
  - **Eg:** An employer pays part-time workers at a lower hourly rate than full-time workers, for doing the same work. A majority of part-time workers in his establishment are women but a majority of full-time workers are men. This is prima facie indirect discrimination in relation to gender.
- **Intersectional Discrimination** - Intersectional Discrimination happens when two or multiple grounds operate simultaneously and interact in an inseparable manner, producing distinct and specific forms of discrimination.
  - **Eg:** Discrimination on the basis of the intersection of personal characteristics, such as that faced by Dalit women as Dalits, as women and in the unique category of Dalit women.

### NEED FOR NATIONAL LEGISLATION TO TACKLE DISCRIMINATION

- To tackle the dimensions of discrimination being practiced in the society, legal remedies in the form of comprehensive anti-discrimination legal framework is required to fill the existing legal gap.
- Discrimination compromises human dignity which is basic structure of Constitution under Article 21 of the Constitution.

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## SOCIETY AND SOCIAL JUSTICE

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- Organisations and individuals will be more cautious against implicit discrimination.
- The legislation will give easy legal recourse against discrimination
- Most often the targets of such discriminatory practices are vulnerable sections such as SC, ST, Minorities, LGBT community and women etc. They need protection of law for a full life.
- **Article 15 of the Constitution** does not take care of discrimination practiced by a private person or corporation. Also, does not tackle discrimination on the ground of language, ethnicity, sexual orientation, disability status etc.
- **Declaration on principles of Equality** calls for universal right to equality. It demands equality as an entitlement and human right. It also calls for right to non-discrimination as a free-standing autonomous right.
- **Anti-Discrimination and Equality Bill** was introduced in Parliament in 2016 but it lapsed.
- **Entry 8 (Actionable Wrongs) of Concurrent List of Seventh Schedule** can introduce an ANTI-DISCRIMINATORY LAW that attracts civil penalties for those engaging in discriminatory practices.
- In 2006, the **Sachar Committee** recognized the necessity for anti-discrimination legislation. The **Expert Group on Equal Opportunity Commission**, led by Prof. N.R. Madhava Menon reaffirmed this.

### CHALLENGES WITH ENACTING LEGISLATION AGAINST DISCRIMINATION

- It is a social problem. Using laws to remedy a social problem often does not bring anticipated results. Thus, the issue of discrimination should be handled by public education and morality.
- The legislation can lead to many cases. Already courts suffer from high pendency of cases. Thus, justice might not necessarily flow.
- Such a law may be open to misuse.
- Not a clear and objective definition of discrimination will reduce the impact of law.

### WAY FORWARD

- Thus, if this Bill is enacted, it will be the largest expansion of civil rights in the State of Kerala since the commencement of the Constitution and can be a model for other States to follow.
- States have an important role in promoting right to equality. If States take the lead and introduce anti-discrimination laws, national anti-discrimination law (Anti-Discrimination and Equality Bill, 2016) that covers services and institutions under the Union government's jurisdiction could have greater support.

## RIGHT TO EDUCATION ACT

#EDUCATION

PRIMARY SOURCE | THE HINDU

*Unified district information system for education (UDISE) plus 2019-20 report by Ministry of Education revealed that most of the schools in the country didn't meet the RTE mandated Pupil teacher ratio (PTR).*

### SALIENT FEATURES OF RTE, ACT, 2009

- **Free and Compulsory education**
  - Every child in the age group of 6-14 has the right to free and compulsory education in a neighbourhood school, till the completion of elementary education.
- **No screening procedure**
  - Prohibits donation, capitation fee, screening test/interview of child or parents for admissions.
- **Continuous and Comprehensive Evaluation (CCE)**
  - It mandates Continuous and Comprehensive Evaluation to assess and evaluate student's learning instead of conventional examinations. Moves away from exam centric approach to comprehensive year round assessment.
- **Infrastructure and Teacher norms**
  - The Act lays down the norms for Pupil Teacher Ratios (PTR is 30), buildings and infrastructure.
- **25% Quota for poor**
  - RTE Act mandates unaided and non-minority private schools to keep aside 25% seats for



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## SOCIETY AND SOCIAL JUSTICE

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underprivileged children of society through a random selection process.

- **Role of Parents and Community**

- The act insists upon schools to constitute School Management Committees (SMCs) comprising local authority officials, parents, guardians and teachers. The SMCs shall form School Development Plans and monitor the utilization of government grants and the whole school environment.

- **Mechanism available if RTE is violated:**

- The National Commission for the Protection of Child Rights (NCPCR) shall review the safeguards for rights provided under this Act, investigate complaints and have the powers of a civil court in trying cases.

### ACHIEVEMENTS

- **Improvement in Gross Enrollment Ratio (GER):** GER increased to 89.7 percent at Upper Primary level, 97.8 percent at Elementary Level.
- **Improved Infrastructure and Teacher ratio:** Pupil-Teacher Ratio improved at all levels of School Education
  - PTR for Primary became 26.5
  - PTR for Upper Primary became 18.5
- Improved facilities like toilets has reduced drop-out rates of Girls and **reduced the Gender gap in the attendance.**
- **Decreased Child Labour:** Child labour in 2011 has decreased by around 20 percent from 2001 census figures
- Compulsory education till 14 years of age has **reduced the incidents of Child Marriages** in India: NHFS data revealed a significant decline in the prevalence of child marriage from 2005-06 to 2015-16 (47% to 27%)

### SHORTCOMINGS OF THE RTE ACT

- **Poor Learning Outcomes**
  - Though RTE improved the GER, the learning outcomes of children remained poor. ASER survey found out that nearly 50% of the 5th standard children are unable to read and write basic text and cannot solve basic arithmetic
- **Blind towards early childhood education**

- RTE act focuses on education of children in the 6-14 age group. The responsibility of early childhood education was given to anganwadi centres. However, a realisation has dawned that lack of focus on Early childhood education is responsible for weak foundational skills which reflect in poor learning outcomes for children later.

- **RTE Act visualise education Input centric**

- The RTE Act is very input centric and goes in great detail about these. However, it is silent on aspects of pedagogy, learning outcomes etc.

- **Amendment to No detention Policy**

- The policy of holding back children who obtained poor marks was a major reason for Dropout rate. So, RTE strictly prohibited this detention policy.
- However, the recent amendment to RTE in 2018 revoked this policy citing the poor learning outcomes as a reason for it. But the poor learning outcomes are due to failure in implementation of Continuous and comprehensive evaluation (CCE).

- **Issues with 25% quota**

- Most of the states did not achieve the 25% quota for disadvantaged sections in private schools
- Delay in reimbursement of fee by the government
- Discriminatory behaviour towards these children and difficulties experienced by students to blend in with a different socio-cultural environment

### WAY FORWARD

- Focus of the RTE Act must **shift from enrolment to attendance** and quality. There is no database on attendance of students. So, the local authority must maintain a database of student attendance within its jurisdiction
- Time to move from Right to education to Right to Quality education
- Ensuring teachers to complete their basic teacher training
- Using digital technologies in teaching and innovations in pedagogy such as use of toys and audio-visual mechanism.
- **Expanding the ambit of the Act** to all children between the ages of three to 18 years, thus including early childhood education and secondary education.



## SOCIETY AND SOCIAL JUSTICE

- **Change the curriculum framework:** The current structure of school education to be restructured based on the development needs of students.
- Development of curriculum in mother tongue for primary education.
- Rationalisation of schools: Small single teachers unviable schools should be merged with larger schools with provision for free transport service.

The new Education Policy 2020 has made many changes in this direction. Hope this policy will bring quality and inclusive education to Children of India.

- **Religious segregation:** Indians' commitment to tolerance is accompanied by a strong preference for keeping religious communities segregated. Most of them said **they do not have much in common with members of other religious groups**, and majority people in the six major groups say their close friends come mainly or entirely from their own religious community.
- **National Identity:** Nearly two-thirds of Hindus (64%) say it is very important to be Hindu to be truly Indian. Among Hindus who say it is very important to be Hindu to be truly Indian, 80% also say it is very important to speak Hindi to be truly Indian
- **Dietary laws are central to Indians' religious identity:** Majority of Hindus and Muslims say that following customary dietary laws (Hindus can't eat beef and muslims can't eat pork) are central to their religious identity
- **Religion based national identity and customary dietary laws are less prevalent in South India**

## RELIGIOUS FREEDOM

#COMMUNALISM

**PRIMARY SOURCE** | THE HINDU

*Pew Research Centre, a non-profit organisation based in Washington DC, has conducted a survey on religious attitudes in India.*

### Free to choose

More than 80% of adults across all major religions in India said that they were free to practice their religion in the country

Religion	% of Indian adults who said...		
	They are very free to practice their religion	Respecting all religions is very important to being truly Indian	Respecting other religions is a very important part of their religious identity
Hindus	91	85	80
Muslims	89	78	79
Christians	89	78	78
Sikhs	82	81	75
Buddhists	93	84	86
Jains	85	83	73
General population	91	84	80

### CONSEQUENCES OF THESE RELIGIOUS ATTITUDES

- **Religious tolerance:** Broadly, there is religious freedom and tolerance in the country as most people are allowed to practice their religions.
- **Communalism:** These attitudes will lead to a belief that people belonging to different religions would have different social, political and economic interests
- **Ethno-Nationalism:** Linking religion with national identity results in ethnocentric nationalism. Indian nationalism is not based on common religion, language or ethnicity. This kind of ethnic-nationalism may lead to development of tendencies like **Anti-globalisation, Xenophobia** and **discrimination against minority religions** etc.
- **Infringement of Individual rights:** Individual's choices of food and marriage (Inter-faith) will be infringed upon
- **Fundamentalism:** These attitudes may result in fundamentalism or religious revivalism. Fundamentalists believe that all the other aspects of life- social, political ,cultural and economic should be governed by religious doctrines. It is against reason, rationality, humanism and secularism.

### KEY FINDINGS OF THE SURVEY

#### 1. Positives that point towards religious tolerance

- **Religious freedom:** People in all six major religious group overwhelmingly say they are very free to practice their faiths, and most say that people of other faiths also are very free to practice their own religion.
- **Religious tolerance:** Most of the people believe that respecting all religions is not only important part of their religion but also very important to being a true Indian

#### 2. Worrying signals of religious intolerance

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## SOCIETY AND SOCIAL JUSTICE

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### NIPUN BHARAT PROGRAM

#SCHEMES #TRIBAL DEVELOPMENT #EDUCATION

PRIMARY  
SOURCE

pib

- **NIPUN Bharat stands for National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN- Bharat).**
- It is a program launched by Union Ministry of Education. The mission has launched under the centrally sponsored scheme of Samagra Shiksha.
- The program aims to ensure that every child in the country necessarily attains foundational literacy and numeracy by the end of Grade 3, by 2026-27.

#### FOCUS AREAS OF THE SCHEME

- Providing access and retaining children in foundational years of schooling
- Teacher capacity building: A special package
- Development of high quality and diversified student and teacher resources/learning materials.
- Tracking the progress of each child in achieving learning outcomes: Goals of the mission will be in the form of Lakshya Soochi or Targets of Foundational Literacy and Numeracy. The Targets have been developed from nursery to class 3 and based on learning outcomes developed by NCERT.

#### OUTCOMES EXPECTED

- Foundational skills enable to keep children in class thereby reducing dropouts and improve transition rate from upper primary to secondary stages.
- Activity based learning and conducive learning environment
- Innovative pedagogies such as toy based and experiential learning

- Intensive capacity building of teachers
- Holistic development of child by focusing of physical and motor development, socio-economic development, literacy and numeracy development, cognitive development, life skills etc. These will be reflected in a Holistic Progress Card.
- Steeper learning trajectory for children
- Since almost every child attends early grades, thus, focus at that stage will also benefit socio-economic disadvantageous groups. This will ensure access to equitable and inclusive quality education.

### SCHOOL INNOVATION AMBASSADOR TRAINING PROGRAM

#SCHEMES #TRIBAL DEVELOPMENT #EDUCATION

PRIMARY  
SOURCE

pib

- It is a scheme launched by Union Ministry of Education and Union Ministry of Tribal Affairs.
- The program aims to train 50,000 school teachers on innovation, entrepreneurship, Intellectual Property Rights, design thinking, product development, idea generation etc.
- The program has been designed by the Innovation Cell of the Ministry of Education and AICTE for school Teachers based on its "Innovation Ambassador Training Program for Higher Educational Institution's faculty members".
- The training will be delivered in online mode only.

## PRACTICE QUESTIONS

### MCQS

**Q1. Consider the following statements:**

1. India has ratified the United Nations Convention on Transnational Organised Crime (UNTOC).

2. Trafficking in Human Beings is prohibited under the Constitution of India under Article 29.

Which of the statements given above is/are correct?

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## SOCIETY AND SOCIAL JUSTICE

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

**Q2. According to Economic Survey, India's demographic dividend is expected to peak by which of the following year?**

- (a) 2021                      (b) 2041  
(c) 2061                      (d) 2081

**Q3. Consider the following statements regarding Right to Education Act, 2009:**

1. 86<sup>th</sup> Constitutional Amendment introduced Article 21A making education a Fundamental Right for all children in the age group 6-14 years.
2. Private schools shall admit at least 25% of the children in their schools without any fee.

Which of the statements given above is/are correct?

- (a) 1 only                      (b) 2 only

**Q4. Antara and Chhaya programs are related to which of the following:**

- (a) National Family Planning Programme  
(b) Digital India Programme  
(c) National Rural Drinking Water Programme  
(d) National Mental Health Programme

**Q5. Consider the following statements:**

1. Population control and family planning is a Concurrent List subject.
2. All states of India have successfully achieved the replacement rate of population.

Which of the statements given above is/are correct?

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

## DESCRIPTIVE QUESTION

**Q1.** Covid-19 has exaggerated the problem of human trafficking in India. Discuss the constitutional and legislative measures that have been undertaken in this regard. (15 marks)

**Q2.** More than a decade in implementation, discuss how successful has Right to education Act 2009 been in extending free education to all. (10 marks)

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

# GEOGRAPHY, ENVIRONMENT, BIODIVERSITY & DISASTER MANAGEMENT

# GS PAPER (PRELIMS) AND GS PAPER I & III (MAIN)

## NATIONAL GREEN TRIBUNAL

#ENVIRONMENT PROTECTION

PRIMARY  
SOURCE

The Indian  
EXPRESS

SECONDARY  
SOURCE

DownToEarth

*National Green Tribunal remains in news throughout the year. Its activism has on the one hand yielded some very timely judgments, but it also faces a lot of challenges.*

*Recently, the Supreme Court dismissed a challenge to a National Green Tribunal (NGT) ban on the sale and use of firecrackers during the COVID-19 pandemic in the National Capital Region (NCR) and all cities where the ambient air quality is in the poor or above categories.*

### RATIONAL BEHIND THE ESTABLISHMENT OF NGT

- Increasing complexity of the environmental litigations.
- Need to involve experts in adjudication process.
- Increasing pendency in Courts
- Rigidity imposed by the existing court system
- To maintain proper balance between sustainable development and environment regulation.

The 'tribunalisation' of environmental justice is driven by the recognition that justice would be **cost-effective, accessible and give scope for utilising expertise** in the respective fields.

### ABOUT NATIONAL GREEN TRIBUNAL

The National Green Tribunal has been established under the National Green Tribunal Act, 2010 for effective and expeditious disposal of cases relating to environmental

protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property.

Chairperson of NGT can be judge a of the Supreme Court or Chief Justice of a High Court.

The Tribunal shall not be bound by the procedure laid down under the Code of Civil Procedure, 1908, but shall be guided by principles of natural justice.

It is mandated to make endeavour for disposal of applications within 6 months of filing.

New Delhi is the Principal Place of Sitting of the Tribunal with benches at Bhopal, Pune, Kolkata and Chennai.

Jurisdiction of NGT is over the following legislations:

1. Water (Prevention and Control of Pollution) Act, 1974
2. Water (Prevention and Control of Pollution) Cess Act, 1977
3. Forest (Conservation) Act, 1980
4. Air (Prevention and Control of Pollution) Act, 1981
5. Environment (Protection) Act, 1986
6. Biological Diversity Act, 2002
7. Public Liability Insurance Act, 1991

**Note: Wildlife Protection Act, 1972 is out of the jurisdiction of NGT.**

### ISSUES WITH NATIONAL GREEN TRIBUNAL

- **Insufficient administrative support supplied by the Government of India:** Absence of basic infrastructure and human resource.

## GEOGRAPHY, ENVIRONMENT, BIODIVERSITY & DISASTER MANAGEMENT

- **NGT has never functioned in full capacity:** NGT Act prescribes that the tribunal shall consist of a full-time chairperson and not less than 10 judicial and 10 expert members.
  - In the last nine years, the **NGT has never got the minimum strength of ten judicial** and ten expert members to address the increasing number of environmental litigations across the country. Currently, with only four judicial and two expert members, the NGT appears paralysed.
- **Closure of the regional branches:** Four zonal benches have been completely shut over the past one year.
- **Inability to hire expert members:** As the environment related matters become increasingly complicated, **NGT requires more and more specialized expert members.** But govt. has not shown any interest in this regard.
- In the absence of variety of expert members, decisions, especially those related to the quantum of compensation amount to be paid by the polluter are arrived at without any scientific basis. This has resulted in an increasing number of appeals against the NGT's decisions in the Supreme Court.
- **Issues related to implementation of the orders:** There is no institutional mechanism to ensure that the environmental regulatory authorities comply with the orders of the tribunal.
- No jurisdiction over Wildlife Protection Act, 1972 handicaps NGT to act to protect the flora and fauna.

This shows efforts in India have been directed towards diluting the role and function of the NGT. Given the current state of the NGT, it is reasonable to claim that the multiple objectives of access to justice, efficiency, cost-efficiency, and protection of the environment through the NGT Act, have been defeated.

The NGT deserves more attention today than what it has been hitherto. The Government of India must realise the risk of pending of thousands environmental litigations in zonal benches to its ambitious economic growth target and policy to lure investors. The government needs to provide adequate financial and human resources — if it does not want the NGT to wither away.

## GREEN SOHRA DEVELOPMENT PROGRAM



*The Union Minister of Home Affairs launched the 'Green Sohra Afforestation Program' under which multi-level farming will be adopted for the afforestation of Cherrapunji region.*

*Sohra is the name of Cherrapunji region in Meghalaya. Cherrapunji region once used to receive rainfall all year round however due to deforestation this situation has changed.*

- Under the program, Assam Rifles will lead efforts of afforestation in the region. 80% of land area will be planted with traditional and long lifespan trees while the remaining 20% will be used for animal feed, ornamental plants and nursery which will meet the needs of people and help reduce felling of long lifespan trees.

### MULTI-LEVEL FARMING

- It is a farming system in which trees or crops of varying heights are grown together in a field at the same time. It is also known as multi-tier or multi-storied cropping system. It is a kind of intercropping farming system.
- This system is mostly used in orchards and plantation crops for maximum use of solar energy. Crops and plants of varying height, rooting pattern and duration are cultivated together.
- In this system, tallest components have foliage of strong light demand and shorter components with foliage requiring shade.
- ICAR has been pushing for Multi-Level Farming as it can lead to doubling of farmer income.

### BENEFITS OF MULTI-LEVEL FARMING

- Higher income per unit area and more even distribution of income and employment throughout the year.
- Steady supply of farm and forest products all year round.



## GEOGRAPHY, ENVIRONMENT, BIODIVERSITY & DISASTER MANAGEMENT

- Maximisation of land use: All growing space is used as crop fit together vertically, horizontally and underground.
- Reduces impacts of hazards like high intensity rainfall, soil erosion and landslides.
- Efficient use of soil moisture at different depths of soil and catch solar energy at different heights.
- Effective weed control
- Prevents water from evaporation
- Effective utilization of leaching materials
- Provide micro-climate conditions that benefit crops underneath.
- It allows forests to grow 30 times faster and after 3 years no maintenance is required.

### EUROPEAN FLOODS

#DISASTERS

PRIMARY SOURCE

THE HINDU

- In July this year, several European countries have been affected by floods causing deaths and widespread damage.
- Floods affected several river basins across northern and central Europe including UK, Austria, Belgium, Croatia, Germany, Luxembourg, the Netherlands, Switzerland and Italy.

These **floods have followed unprecedented heat waves in the Pacific Northwest** and Northern Europe, prompting scientists to evaluate a possible connection to climate change.

#### CONNECTION BETWEEN FLOODS & CLIMATE

##### CHANGE

- Scientists had warned that extreme weather events would become more common as a consequence of climate change. Examples of such extreme events would include
  - Heavy rainfall;
  - An increase in the atmosphere's temperature allows it to absorb more water vapour, resulting in more precipitation.
- **Explanation:**

- The more CO<sub>2</sub> the world emits into the atmosphere, the warmer will be the air temperature. Warmer air holds more moisture and results in excess rainfall, which leads to flooding.
- Additionally, increasing temperatures at the poles result in slower movement of storms in the mid-latitudes. As a result, storms linger longer at a specific place. The combination of a slow-moving storm and the presence of surplus moisture in the atmosphere results in intense rainfall in one location within a short period of time.
- Climate change might also have resulted in the jet stream becoming more erratic, which could lead to more frequent extreme weather phenomena.

### FOREST RIGHTS ACT

#CONSERVATION #TRIBAL RIGHT

PRIMARY SOURCE

pib

A "Joint Communication" was signed between Ministry of Environment, Forest & Climate Change (MoEFCC), and Ministry of Tribal Affairs (MoTA) pertaining to **effective implementation of the Forest Rights Act (FRA), 2006** and for harnessing the potential for livelihood improvement of the Forest Dwelling Scheduled Tribes (FDSTs) and other Traditional Forest Dwellers (OTFDs).

#### HISTORICAL BACKGROUND

- Tribals and other traditional forest dwellers have been residing in deep forests since eternity.
- Along with their stay, they have also come to develop unique mutualistic relationship with the forest in terms of their dependence on forest resources.
- As the British rule started hunting for resources, they constrained the entry of Indians, especially tribals into the forests. Hence, fury of acts and policies such as the Indian Forest Act of 1927 curtailed centuries-old, customary-use rights of local communities.
- This continued even after independence till much later until enactment of The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006.

#### FOREST RIGHTS ACT, 2006

- The act recognize and vest the forest rights and occupation in Forest land in forest Dwelling Scheduled

## GEOGRAPHY, ENVIRONMENT, BIODIVERSITY & DISASTER MANAGEMENT

Tribes (FDST) and Other Traditional Forest Dwellers (OTFD) who have been residing in such forests for generations.

- The act also establishes the responsibilities and authority for sustainable use, conservation of biodiversity and maintenance of ecological balance of FDST and OTFD.
- It strengthens the conservation regime of the forests while ensuring livelihood and food security of the FDST and OTFD.
- It seeks to rectify colonial injustice to the FDST and OTFD who are integral to the very survival and sustainability of the forest ecosystem.

### THE ACT IDENTIFY FOUR TYPES OF RIGHTS

- **Title rights:** It gives FDST and OTFD the right to ownership to land farmed by tribals or forest dwellers subject to a maximum of 4 hectares. Ownership is only for land that is actually being cultivated by the concerned family and no new lands will be granted.
- **Use rights:** The rights of the dwellers extend to extracting Minor Forest Produce, grazing areas, to pastoralist routes, etc.
- **Relief and development rights:** To rehabilitate in case of illegal eviction or forced displacement and to provide basic amenities, subject to restrictions for forest protection
- **Forest management rights:** It includes the right to protect, regenerate or conserve or manage any community forest resource which they have been traditionally protecting and conserving for sustainable use.

### WHO CAN CLAIM THESE RIGHTS?

- Members or community of the Scheduled Tribes who primarily reside in and who depend on the forests or forest lands for bona fide livelihood needs.
- It can also be claimed by any member or community who has for at least three generations (75 years) prior to the 13th day of December, 2005 primarily resided in forests land for bona fide livelihood needs.
- The Gram Sabha is the authority to initiate the process for determining the nature and extent of Individual Forest Rights (IFR) or Community Forest Rights (CFR) or both that may be given to FDST and OTFD.

### Importance

- Recognized and provided the rights of Tribals and OTFD over forest resources.
- The Act has also helped in the reduction of Naxal problems. Because Land (Jameen) has been one of the three demands of this movement.
- Recognising the community rights over forest resources paves the way for management of forest by the dwellers.

### CHALLENGES

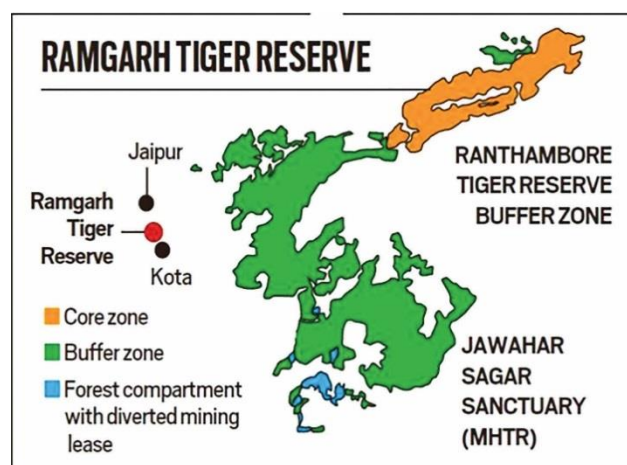
- **Administrative Apathy:**
  - The existing laws related to Environment and Wildlife protection are not compliant with FRA, 2006
  - Many incidents where Supreme Court had to intervene to enforce the provisions of the act.
- **Lack of Awareness:**
  - Specially among the tribals. This creates a demand reduction for the rights.
  - The forest bureaucracy has misinterpreted the FRA as an instrument to regularise encroachment instead of a welfare measure for tribals.
- **Reluctance of the forest bureaucracy to give up control**
  - As more and more people legally settle on forested lands, the forest officials fear loss of control over these lands.
- **Institutional Roadblock**
  - Rough maps of community and individual claims are prepared by Gram Sabha which at times often lack technical knowhow and suffers from educational incapacity.
  - Intensive process of documenting communities' claims under the FRA makes the process both cumbersome and harrowing for illiterate tribals.

### Way Forward

- Tribals have been living in harmony with forests and the biodiversity therein. The MoU recognises important role tribal and forest dwellers can play in protection of forests and biodiversity.
- Government views MFP rights as a means to curb Naxalism since states most affected by Naxalism are also home to people dependent on forest produce.

## GEOGRAPHY, ENVIRONMENT, BIODIVERSITY & DISASTER MANAGEMENT

- Recognition of CFR rights would shift forest governance towards community conservation that is more food security and livelihood oriented.
- Large-scale awareness campaigns are required at local level informing both tribal and lower-level officials.
- Developing a detailed strategy of training and capacity building of people responsible for implementing the FRA, such as Panchayats, Gram Sabha, village level Forest Rights committee etc.
- Relevant maps and documents should be made available to the Forest rights committee and claimants to simplify the task of the Gram Sabha in identifying and filing claims for individual and community rights.
- Providing clarity on the time limit for settling claims the act does not specify any time limit for resolving claims. In most of the areas, both the officials and beneficiaries are unaware of this fact.
- Centre should take more proactive role in pushing states to honour a law that could change the lives of millions.



- It is located in **Bundi** district of Rajasthan. It was notified as a wildlife sanctuary in 1982. It is adjoining the **buffer area** of the Ranthambore Tiger Reserve.
- It is home to a large number of wild animals, including sambhars, chitals, wild boards, caracals, chinkara, nilgai and striped hyena.
- Its flora consists of Dhok, Khair, Salar, Khirni trees with some Mango and Ber trees.

## TIGER CORRIDOR IN RAJASTHAN

#FAUNA

PRIMARY SOURCE | The Indian EXPRESS

*Rajasthan* government has planned to develop a tiger corridor connecting **Ranthambore tiger reserve, Ramgarh Vishdhari tiger reserve and Mukundra tiger reserve.**

- It will be a functional corridor which will help in dealing with the issue of **overpopulation of tigers** which Ranthambore is facing currently.
- **Ramgarh Vishdhari Sanctuary** will link **Ranthambore Tiger Reserve** in the Northeast & **Mukundra Hills Tiger Reserve** on the southern side.

### ABOUT RAMGARH VISHDHARI SANCTUARY

- It will be the **4th Tiger reserve** of Rajasthan and **52nd Tiger Reserve** of India.

### OTHER TIGER RESERVES IN RAJASTHAN

- Ranthambore Tiger Reserve in Sawai Madhopur
- Sariska Tiger Reserve in Alwar
- Mukundra Hills Tiger Reserve in Kota

## GANGA POLLUTION

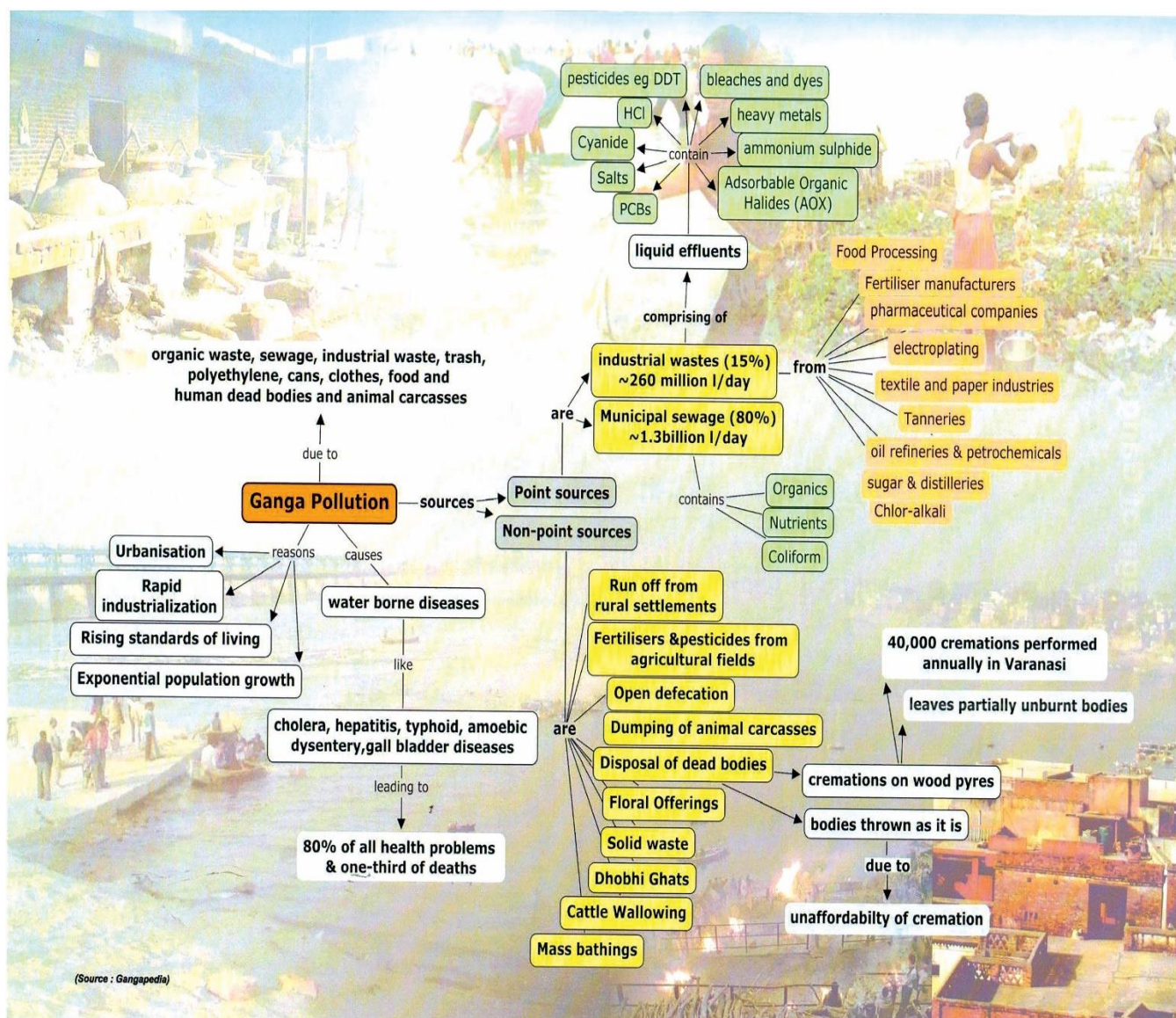
#POLLUTION

PRIMARY SOURCE | THE HINDU | SECONDARY SOURCE | MINISTRY OF JAL SHAKTI | SECONDARY SOURCE | DownToEarth

*Rapidly increasing population, rising standards of living and exponential growth of industrialization and urbanisation have exposed rivers to various forms of degradation. River Ganga is no exception. The deterioration in the water quality impacts the people's health. Ganga, in some stretches, particularly during lean seasons has become unfit even for bathing. The threat of global climate change, the effect of glacial melt on Ganga flow and the impacts of infrastructural projects in the upper reaches of the river, raise issues that need a comprehensive response.*



GEOGRAPHY, ENVIRONMENT, BIODIVERSITY & DISASTER MANAGEMENT



Sources of pollution of Ganga River

ISSUES FACED IN CLEANING GANGA RIVER

- **Inadequate Sewage treatment:** As opposed to around four thousand MLD treatment capacity available, Ganga basin produces around twelve thousand MLD sewage.
- **Industrial Effluents:** The contribution of industrial pollution, volume-wise, is about 20 per cent but due to its toxic and non- biodegradable nature, this has much greater significance.
- **Pollution from tributaries:** The industrial pockets in the catchments of Ramganga and Kali rivers and in

Kanpur city are significant sources of industrial pollution. The major contributors are tanneries in Kanpur, distilleries, paper mills and sugar mills in the Kosi, Ramganga and Kali river catchments.

- **Pollution from Agriculture:** The cumulative use of pesticides has doubled in the last one decade and most of it runs off in our rivers.
- **Disruption of e-Flow:** Many interruptions in the flow of the river lead to the reduction in the flow which results in reduced velocity and siltation. This also increases the pollutant concentration. The decrease in

## GEOGRAPHY, ENVIRONMENT, BIODIVERSITY & DISASTER MANAGEMENT

**flow** has led to an increase in groundwater extraction for various uses.

- **Challenges of Swachh Bharat:** About 180 mld sludge would be generated in five Ganga basin states when they become ODF and if proper faecal sludge **management** is not in place, it would invariably pollute the Ganga.
- **Inadequate focus on biodiversity:** River Ganga and its tributaries are home to various species such as Gangetic **Dolphin**, Gharial etc. Funds should be made available for their conservation.
- **Financing**
  - **Escalating costs due to delays** in setting up of STPs.
  - Inability to utilize funds out of the Clean Ganga Fund due to non-finalisation of action plan.
- **Lack of coordination:**
  - The cleaning of the Ganga requires seamless coordination between the agencies responsible for carrying out different tasks.

### NATIONAL MISSION FOR CLEAN GANGA (NMCG)

- It acts as implementation arm of National Ganga River Basin Authority (NGRBA) which was constituted under the provisions of the Environment (Protection) Act (EPA), 1986. NGRBA has since been dissolved, consequent to constitution of National Council for Rejuvenation, Protection and Management of River Ganga (referred as National Ganga Council).
  - A five-tier structure at national, state and district level to take measures for prevention, control and abatement of environmental pollution in river Ganga and to ensure continuous adequate flow of water has been put in place.
1. **National Ganga Council** under chairmanship of Prime Minister of India.
  2. **Empowered Task Force (ETF) on River Ganga** under chairmanship of Union Minister of Jal Shakti

(Department of Water Resources, River Development and Ganga Rejuvenation).

### 3. National Mission for Clean Ganga (NMCG)

#### 4. State Ganga Committees

5. **District Ganga Committees** in every specified district abutting river Ganga and its tributaries in the states.

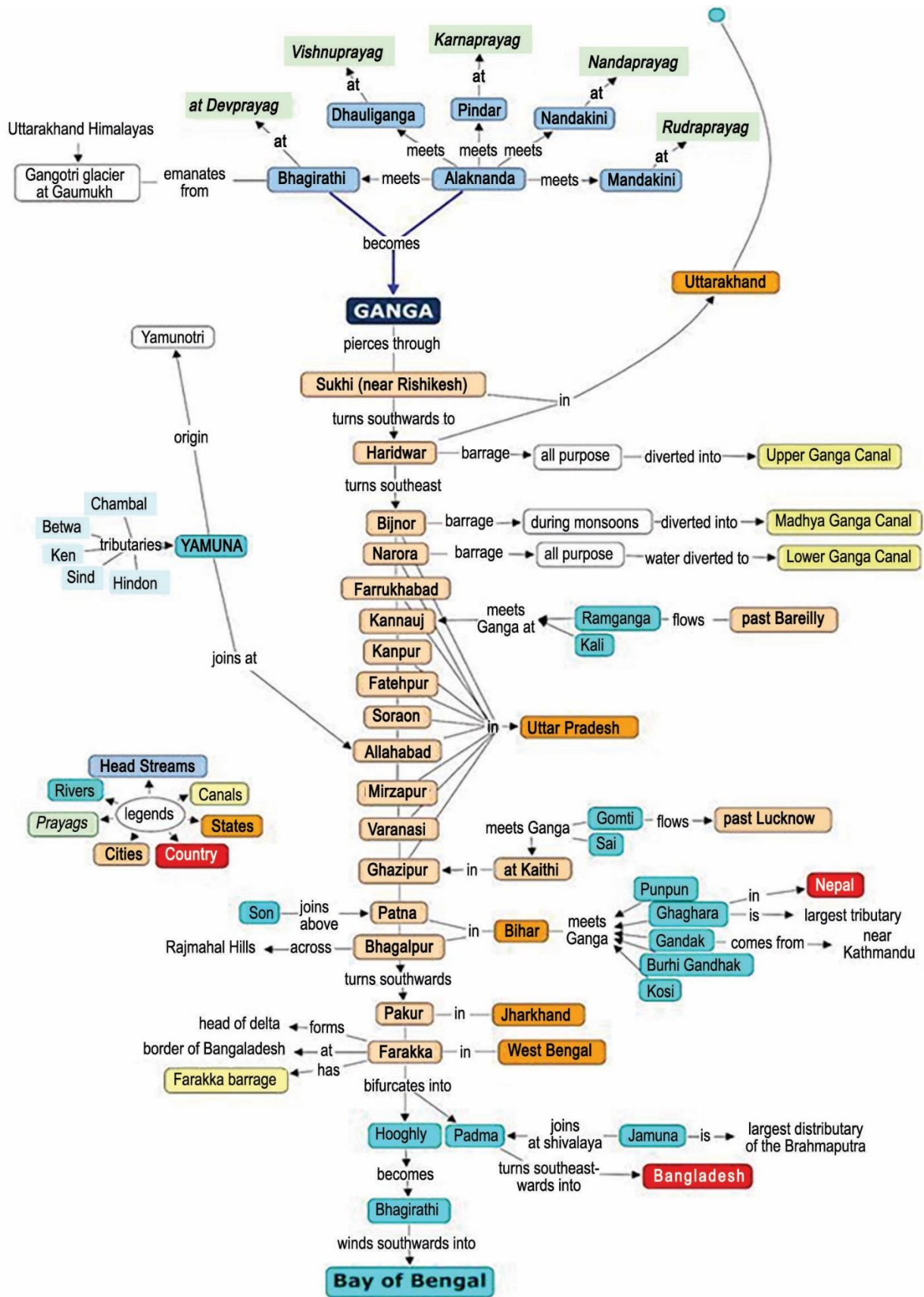
- NMCG has a two-tier management structure and comprises of Governing Council and Executive Committee. Thus, the newly created structure attempts to bring all stakeholders on one platform to take a holistic approach towards the task of Ganga cleaning and rejuvenation.

### WAY FORWARD

- **Multi-dimensional approach:** Many of the separated approaches like river-linking, riverfront development projects, access to toilets, making villages open defecation free, piped water supply in rural areas, need to integrate long-term ecological and sustainability goals.
- **Organic agriculture:** Agriculture along the entire riverbed should be organic.
- **Liquid Waste Management:**
  - Decentralization of STPs: at the colony level.
  - Reuse treated wastewater for irrigation and empty into natural drains. For all upcoming cities, smart cities and for those, whose master plans are not in place, earmark land for STPs.
- Develop and restore local storages (ponds, lakes, wetlands) as permanent solutions to both floods and droughts. Only 10 per cent of water received during monsoon rainfall is harvested. Restoration of ponds, lakes and wetlands should be an integral part of river restoration and conservation strategy
- **Restoring lower order streams** and smaller tributaries in the Ganga Basin.
- A comprehensive legislation for the river and establishment of river board for the entire river.



GEOGRAPHY, ENVIRONMENT, BIODIVERSITY & DISASTER MANAGEMENT



## GEOGRAPHY, ENVIRONMENT, BIODIVERSITY & DISASTER MANAGEMENT

# GROSS ENVIRONMENT PRODUCT

#ENVIRONMENTAL ECONOMICS

PRIMARY SOURCE

DownToEarth

The Uttarakhand government recently announced it will initiate valuation of its natural resources in the form of 'Gross Environment Product' (GEP), said to be along the lines of Gross Domestic Product (GDP).

There is a general agreement among the policy makers that the economic concepts of GDP, GNP or per capita income do not reflect the correct state of economic development of a state or country as these concepts do not reflect on the status of environment of the state/country impacted by economic growth.

Humans derive so much from resources and processes that are supplied by ecosystem, collectively termed as "Ecosystem Services". They include all the tangible and non-tangible assets or products which human get from nature like food, recreation, clean water, air and processes such as decomposition.

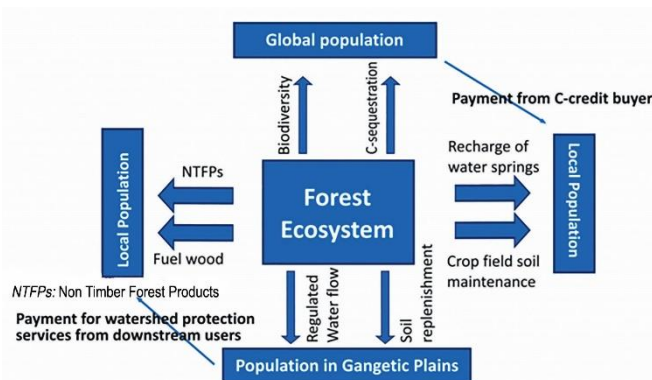
### GROSS ENVIRONMENT PRODUCT

Ecosystem products and services are essentials for human survival and development. Gross Ecosystem Product (GEP) aims to specific indicators to measure the total economic value of all ecosystem products and services.

GEP is the total value of final ecosystem goods and services supplied to human well-being in a region annually, and can be measured in terms of biophysical value and monetary value. Ecosystems that can be measured include natural ecosystems such as forests, grassland, wetland, desert, freshwater and ocean, and artificial systems that are based on natural processes like farmland, pastures, aquaculture farms and urban green land, etc.

GEP summarizes the value of ecosystem services in a single monetary metric. For instance, total value of forest ecosystem services flowing from Uttarakhand is about \$2.4 billion / year. At the Indian Himalayan-level, it is Rs 94,300 crore / year.

In some cases, the GEP could be more than the GDP. E.g., GEP was greater than GDP in Qinghai (China) in 2000 and was three-fourths as large as GDP in 2015.



### Ecosystem Services

### BENEFITS OF INTEGRATING GEP IN THE ACCOUNTING SYSTEM

- It is a better way to measure the status of ecosystem and can help us gauge our progress towards sustainable development.
- It can be utilized as an indicator to assess the performance of officials.
- It can be used as a rationale for compensation purposes. For example: Finance Commissions Horizontal revenue sharing.
- It will help us in our assessment of state of stress created by anthropogenic factors on eco-system and natural systems.

### Problems with in the implementation of GEP approach

- **Policy Failure**
  - Lack of recognition of ecosystem services in economic decision making, development planning and resource allocation. Value of ecosystem services is either ignored or poorly understood.
- **Market Failure**
  - Inadequate or missing market for many ecosystem service.
- **Institutional Failure**
  - Insufficient compensation for ecosystem services .
- **Knowledge gaps**
  - Challenges to provide economic value of ecosystem services, regulating and supporting services
  - Lack of baseline data

So we can easily comprehend how GEP tries to balance economy and ecology. If Uttarakhand is able to pull of a scientific and rational mechanism to calculate the GEP,

## GEOGRAPHY, ENVIRONMENT, BIODIVERSITY & DISASTER MANAGEMENT

that would lead to radical changes in our policy domain. However, there is a need for real-time data to better understand GEP. It is on the basis of this data that a future for the GEP could be determined.

### ASIAN ELEPHANTS



JNCASR, an autonomous institute of the Department of Science and Technology, has recently studied the social structure of male Asian elephants.

This study examines male associations in species in which males rove between social groups. It provides an example of how **ecological differences** could possibly drive differences in male societies in related species with similar male reproductive strategies.

The field study was carried out in **Nagarahole and Bandipur National Parks and Tiger Reserves**.

#### KEY HIGHLIGHTS OF THE STUDY

- The time spent by **male Asian elephants** in all-male and mixed-sex groups depends on the **age of the male**.
- **Adult Asian male elephants** preferred to spend their time **alone than in mixed-sex or in all-male groups**.
- Males were found mostly in the company of their **age peers** and less frequently with **young males (15 to 30 years of age)**. Also, **young males did not disproportionately** initiate associations with old males.
- **Adult male Asian elephants are less social than females**. They enter **musth** -- a mate-searching strategy for old (above 30 years of age) males, annually.
- **All-male groups** (in the absence of females) were **rare and small**.
- **Social learning** from older males did not seem to play a big role in male associations.

#### ABOUT ASIAN ELEPHANTS

**Characteristics:** It is polygynous, with males and females exhibiting different morphologies and adult lifestyles. It is the largest living land animal in Asia.

**Habitat:** India, Nepal, Bangladesh, China, Laos, Malay, Myanmar, Nepal, Thailand, Vietnam, Sumatra, Sri Lanka.

**Types:** Three **recognised subspecies of the Asian Elephant**.

- Sri Lankan Elephant
- Indian Elephant
- Sumatran Elephant

**IUCN Status:** Endangered

**Protection:** **Schedule I** of the **Wildlife (Protection) Act, 1972**. It is also listed in **Appendix I** of the **Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)**.

**Threats:** Human-Elephant conflicts like deforestation, human encroachment, and retaliation for crop destruction by elephants, illegal poaching for elephant skins and tusks, abusive handling methods when young calves that are illegally captured for the tourism industry are starved, tortured to 'break them'.

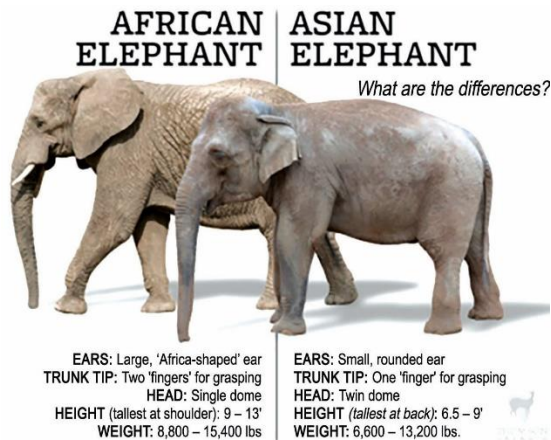
#### PROJECTS RELATED TO ELEPHANTS

- **Gaj Yatra** which is a nationwide awareness campaign to celebrate elephants and highlight the necessity of securing elephant corridors.
- **Project Elephant** was initiated by the Government of India in 1992 to provide financial and technical support for the preservation of the wild elephants in India.
- The **Monitoring the Illegal Killing of Elephants (MIKE) programme, launched in 2003**, is an international collaboration that tracks trends in information related to the illegal killing of elephants from across Africa and Asia, to monitor effectiveness of field conservation efforts.
- The Great Indian Bustard, Asian Elephant and Bengal Florican have been included in **Appendix I of UN Convention on Migratory Species in 13th Conference of the Parties (COP) to the Convention on Migratory Species (CMS)** in Gandhinagar (Gujarat).



**GEOGRAPHY, ENVIRONMENT, BIODIVERSITY & DISASTER MANAGEMENT**

**DIFFERENCE BETWEEN AFRICAN AND ASIAN ELEPHANTS**



They can be differentiated most easily by their ears, their head shape, and their tusks.

- African elephants have much **larger ears** while Asian elephants have **smaller, round ears**.
- African elephants have **rounded heads**, while Asian elephants have a **twin-domed head**.
- Both male and female African elephants can **have tusks**, but **only male Asian elephants** can grow them. It's important to note, however, that not all male Asian elephants nor all African elephants necessarily develop tusks.

**CROCODILES IN INDIA**

#FAUNA



Crocodile species in India. Odisha is the only state where all three species of Crocodiles are found in India.

**CROCODILES IN INDIA**

- Saltwater
- Gharial
- Mugger

► **SALTWATER**

**Characteristics:** It is the **largest living** reptile. It has a **wide snout** compared to most crocodiles. However, it has a **longer snout than the mugger crocodile**. Females are much smaller than males.

**Habitat:** In India, it inhabits **Odisha's Bhitarkanika National Park**, the **Sundarbans** in West Bengal and the

**Andamans and Nicobar Islands.** They can also be found across Southeast Asia and northern Australia.

**IUCN:** Least Concern

**Wildlife Protection Act, 1972:** Schedule I

**CITES:** Appendix I



► **GHARIAL**

**Characteristics:** It is among the **longest** of all living crocodylians. It has a distinct boss at the end of the snout, which resembles an **earthenware pot known as a ghara**, hence the name "**gharial**".

**Habitat:** Once inhabited all major river systems of the Indian Subcontinent, from the Irrawaddy River in the east to the Indus River in the west. Their distribution is now limited to only 2% of their former range.

**India:** Girwa River, Chambal River, Ken River, Son River, Mahanadi River, Ramganga River.

**Nepal:** Rapti-Narayani River

**IUCN Status:** Critically endangered

**Wildlife Protection Act, 1972:** Schedule I

**CITES:** Appendix I

**Sites:** The gharial reserves of India are located in three States of Uttar Pradesh, Madhya Pradesh and Rajasthan.

**National Gharial Wildlife Sanctuary** is in Chambal.



## GEOGRAPHY, ENVIRONMENT, BIODIVERSITY & DISASTER MANAGEMENT

### ► MUGGER

**Characteristics:** It is a **medium-sized broad-snouted** crocodile native to the **freshwater habitats**.

Mugger crocodile hatchlings are pale olive with black spots, the adults are dark olive to grey or brown.

**Habitat:** Iran, India, Nepal, Pakistan, Sri Lanka, Bangladesh (extinct in wild), Bhutan (extinct), Myanmar (probably extinct).

**IUCN:** Vulnerable

**Wildlife Protection Act, 1972:** Schedule I

**CITES:** Appendix I

**Site:** **Vadodara** is the only city in India where crocodiles live in their natural habitat amidst the human population.



## STATE ANIMAL & BIRDS IN LADAKH

#FAUNA

PRIMARY SOURCE

MONGABAY

*Ladakh pitches for a new state bird and animal after getting union territory status.*

### MORE ABOUT THE NEWS

- The bifurcation of the state of Jammu and Kashmir in 2019 led to the creation of **two separate union territories** – Jammu and Kashmir and Ladakh.
- Former state of J&K had the **Black-necked Crane** and **Kashmir stag** as its State Bird and State Animal.
- The **black-necked crane** is found **only in Eastern Ladakh** and **Hangul** is found **only in Kashmir Valley**.
- So black-necked crane could no longer be the State Bird for the UT of Jammu and Kashmir, and the Hangul could no longer be the State Animal of Ladakh.
- Local wildlife bodies **in Ladakh** are battling strongly for the **black-necked crane** and the **snow leopard** to be named as the State Bird and State Animal.

### ABOUT BLACK-NECKED CRANE

**Habitat:**

- This species is found in **India, China and Bhutan**. High altitude marshes and lakes of **Tibetan Plateau** and Sichuan (China), and **eastern Ladakh (India)** are the known breeding grounds. A small wintering population is also found in **Sangti and Zimithang valleys of Arunachal Pradesh** in India.

**Characteristics:** This bird is held sacred by **Monpas**, a major Buddhist groups of Arunachal Pradesh.

**Threats:** Human and climate change induced habitat loss, food shortage in wintering areas, and damage to the eggs and chicks, caused by feral dogs.

**Conservation:**

**IUCN:** Near Threatened

**CITES:** Appendix I

**Wildlife Protection Act, 1972 :** Schedule 1

### ABOUT SNOW LEOPARDS

**Habitat:** They live in the mountainous regions of central and southern Asia. In India, their geographical range encompasses a large part of the **western Himalayas** including **Jammu and Kashmir, Ladakh, Himachal Pradesh, Uttarakhand** and **Sikkim** and **Arunachal Pradesh** in the eastern Himalayas.

**Characteristics:** They act as an indicator of the health of the mountain ecosystem in which they live, due to their position as the top predator in the food web.

**Threats:** Poaching and illegal trade in body parts along with habitat destruction due to global warming.

**Conservation:**

**IUCN:** Vulnerable

**CITES:** Appendix I

**Wildlife Protection Act, 1972 :** Schedule 1

### ABOUT HANGUL

**Habitat:** It is found in dense riverine forests in the high valleys and mountains of the Kashmir Valley and northern Chamba district in Himachal Pradesh. It is found in Dachigam National Park, Sindh Valley, Rajparian wildlife sanctuary, Overa Aru wildlife sanctuary and in forests of Kishtwar and bhadrawah.

Only surviving species of red deer in India.

**Threats:** Habitat fragmentation; very low fawn-female ratio; influx of livestock herds of nomadic communities in Dachigam National Park; excessive predation of fawns by



## GEOGRAPHY, ENVIRONMENT, BIODIVERSITY & DISASTER MANAGEMENT

the Common Leopard, the Himalayan Black Bear and nomads' dogs.

**IUCN:** Critically Endangered

**Wildlife Protection Act, 1972 :** Schedule I

# PRACTICE QUESTIONS

## MCQS

**Q1. Consider the following statements with respect to National Green Tribunal (NGT):**

1. It has been established under the National Green Tribunal Act 2010.
2. It is bound by the procedure laid down under the Code of Civil Procedure, 1908.
3. It is mandated to dispose of cases within 6 months of filing.

Which of the statements given above are correct?

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

**Q2. Consider the following statements about Hangul or Kashmir stag:**

1. It is the only surviving species of red deer in India.
2. It is listed as "vulnerable" under IUCN' red list.

Which of the statements given above is/are correct?

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

**Q3. With respect to "Ramgarh Vishdhari Sanctuary", consider the following statements:**

1. It will be the 4th Tiger reserve of Rajasthan.

2. It will link Ranthambore Tiger Reserve & Sariska Tiger Reserve.

Which of the statements given above is/are correct?

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

**Q4. With respect to "Forest Rights Act,2006", consider the following statements:**

1. These rights can be claimed only by the members of the Scheduled Tribes and Scheduled Castes.
2. Gram Sabha is the authority to initiate the process for determining forest rights.

Which of the statements given above is/are correct?

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

**Q5. Consider the following pairs:**

1. Snow leopards: Vulnerable
2. Black-necked crane: Endangered
3. Gharial: Critically Endangered

Which of the pairs given above is/are correct?

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

## DESCRIPTIVE QUESTION

**Q1.** The dilution in the role and function of the National Green Tribunal (NGT) is detrimental to environmental protection in India. Examine. (10 Marks)

**Q2.** What is Gross Environment Product? Discuss its utility for sustainable development. Also highlight the challenges in the evaluation the Gross Environment Product. (15 Marks)

**Answers:** 1-c, 2-a, 3-a, 4-b, 5-b

# SCIENCE & TECHNOLOGY

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

## EOS-03 AND SMALL SATELLITE LAUNCH VEHICLE

#SPACE

PRIMARY SOURCE

THE HINDU

SECONDARY SOURCE

NSIL

ISRO is planning to launch EOS-03 earth observation satellite by the Small Satellite Launch Vehicle.

### ABOUT EOS-03

It is geo-imaging satellite for earth observation developed by ISRO. It will be launched in third quarter of 2021.

It would enable real-time monitoring of natural disasters like floods and cyclones.

EOS03 can also monitor changes in water bodies, plants, vegetation conditions and forest cover.

It will be launched by ISRO's **Small Satellite Launch Vehicle**.

### ABOUT SMALL SATELLITE LAUNCH VEHICLE (SSLV)

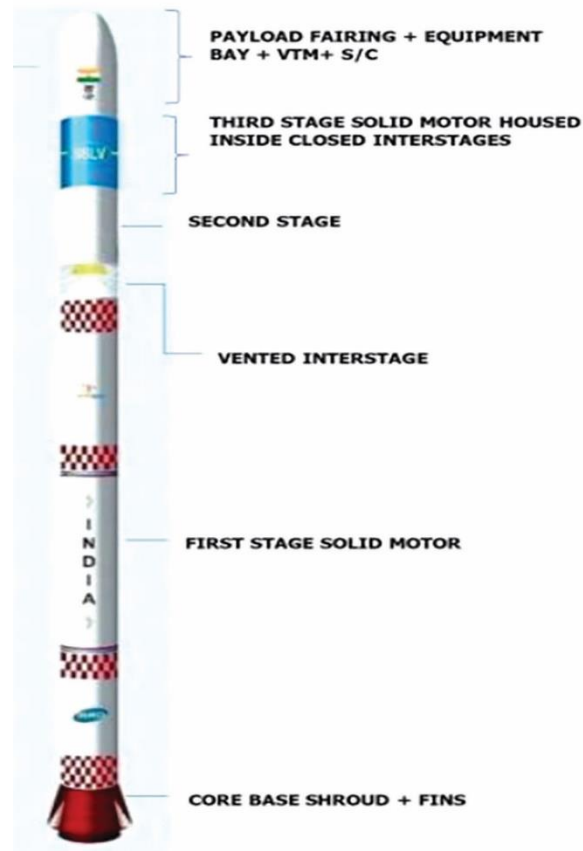
Developed by ISRO to cater to emerging global small satellite launch service market. It is designed to meet 'Launch on Demand' requirements in a cost-effective manner.

Manufacturing of SSLV will be through Indian industry partners led by New Space India Limited, ISRO's commercial arm.

#### It would help in:

- Reduced Turn-around time
- Launch of Demand i.e it can be launched on a short time based on the demand for launch services.
- Cost optimisation for realisation and operation
- Flexibility in accomodating multiple satellites (Ride Sharing)
- Minimum launch infrastructure requirements

- Heritage of proven design practices.



## BLACK HOLE AREA THEOREM PROVEN RIGHT

#PHYSICS #SPACE

PRIMARY SOURCE

The Indian EXPRESS

'Black Hole Area Theorem' by physicist Stephen Hawking stated that **it is impossible for the surface area of a black hole to decrease over time** i.e. area of their event horizons — the boundary beyond which nothing can ever escape — should never shrink. This has been proven right.

## SCIENCE & TECHNOLOGY

Black hole area theorem was derived from Einstein's theory of general relativity that defines gravitational waves and black hole.

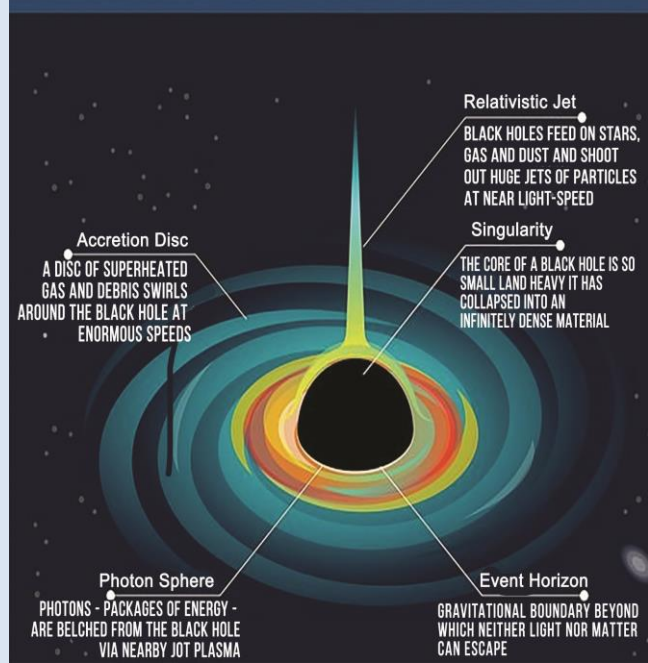
Einstein's general theory of relativity holds that the force of gravity arises from the curvature of space and time. The theory of special relativity argued that space and time are inextricably connected, but it didn't acknowledge the existence of gravity.

Scientists used Laser Interferometer Gravitational Wave Observatory (LIGO) to study the **merger of two blackholes** by studying gravitational waves coming from the event. Scientists observed that post the merger the area of the event horizon did not shrink.

### BLACK HOLE

- Black hole is a place in space where gravity pulls so much that even light cannot get out. The gravity is so strong because matter has been squeezed into a tiny space. This can happen when a star is dying.
- There are four types of black holes: **Stellar, intermediate, supermassive, and miniature.** The most commonly known way a black hole forms is by stellar death.
- Stellar black holes are made when the center of a very big star falls in upon itself, or collapses. When this happens, it causes a supernova.

## BLACK HOLE INFOGRAPHIC



- These gravitational waves were detected by the Laser Interferometer Gravitational-Wave Observatory (LIGO) in the United States, and by Virgo in Italy. LIGO is world's largest gravitational wave observatory comprising of two enormous laser interferometers.
- There are 3 LIGO's sisters' facilities: Virgo in Italy, GEO600 in Germany and KAGRA in Japan. LIGO-India is a planned Joint India-US detector at Hingoli District in Maharashtra.
- Neutron stars are formed when a massive star runs out of fuel and collapses.

### GRAVITATIONAL WAVES

- Gravitational waves are 'ripples' in space-time travelling at speed of light caused by some of most violent and energetic processes in Universe. They carry with them information about their cataclysmic origins as well as invaluable clues to nature of gravity
- Gravitational waves were first detected in 2015 by LIGO, located in US.
- Gravitational waves are created when
  - Objects move at very high speeds
  - When a star explodes asymmetrically (called a supernova)
  - When two big stars orbit each other
  - When two black holes orbit each other and merge.

## SUBORBITAL FLIGHT

#SPACE #TECHNOLOGY

PRIMARY SOURCE | The Indian EXPRESS

Virgin Group founder Richard Branson became the first billionaire to fly to the edge of space and back, riding aboard Virgin Galactic spacecraft in a suborbital flight.

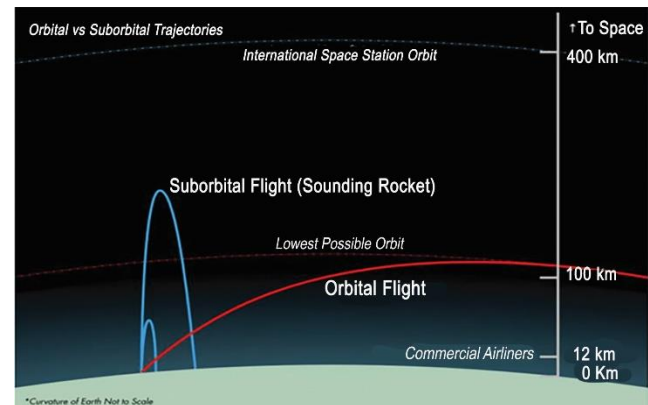
### ABOUT SUBORBITAL FLIGHT

- A Suborbital space flight is a spaceflight in which the spacecraft reaches outer space, but comes back to earth before completing one orbital revolution.
- Usually, the **Karman Line** (located above 100 km from the surface of the earth is considered to be boundary of space).
- When an object travels with a speed of more than 28,000 km/hr, the object is said to have attained escape velocity. Such an object will start to orbit

## SCIENCE & TECHNOLOGY

earth. Satellites need to sustain speeds more than this threshold to orbit earth.

- However, if an object has speed less than this but enough to reach about 100 km of height, it is considered to sub-orbital spaceflight. As such an object will return to Earth due to Earth's gravity.
- Sub-orbital flights will allow passengers on board to experience weightlessness.



## BIOLOGY AND BIOTECHNOLOGY

### DELHI GETS ITS OWN GENOME SEQUENCING CENTRE

#GENETICS #BIOTECHNOLOGY

PRIMARY SOURCE | THE HINDU

**Genome sequencing** means revealing the order of bases present in the entire **genome** of an organism. DNA nucleotides, or bases —Adenine, Cytosine, Guanine, and Thymine make up an organism's DNA. A genome is an organism's complete set of genetic instructions.

Our bodies are made up of millions of cells, each with their own complete set of instructions for making us, like a recipe book for the body. This set of instructions is known as our genome and is made up of DNA. Each cell in the body, for example, a skin cell or a liver cell, contains this same set of instructions.

- The instructions in our genome are made up of DNA.
- Within DNA is a unique chemical code that guides our growth, development and health.
- This code is determined by the order of the four nucleotide bases that make up DNA, adenine, cytosine, guanine and thymine, A, C, G and T for short.
- DNA has a twisted structure in the shape of a double helix.
- Single strands of DNA are coiled up into structures called chromosomes.

- Chromosomes are located in the nucleus within each cell.
- Within our chromosomes, sections of DNA are "read" together to form genes.
- Genes control different characteristics such as eye colour and height.
- All living things have a unique genome.
- Human genome is made up of **23 chromosome** pairs with a total of about 3 billion DNA base pairs. Some parts of genome are outside these chromosomes and are stored in the Mitochondria.

#### IMPORTANCE OF GENOME SEQUENCING

Sequencing the genome is an important step towards understanding it. It will help us:

- Find genes much more easily and quickly. A genome sequence does contain some clues about where genes are, even though scientists are just learning to interpret these clues.
- Understand how the genome as a whole works—how genes work together to direct the growth, development and maintenance of an entire organism.
- Study the parts of the genome outside the genes. This includes the regulatory regions that control how genes are turned on and off.
- Understand diseases including genotyping of specific viruses to direct appropriate treatment
- In the identification of mutations linked to different forms of cancer
- Understand the design of medication & more accurate prediction of their effects, in the

## SCIENCE & TECHNOLOGY

advancement of forensic applied sciences, biofuels, animal husbandry, etc.

- Understand evolution much more accurately.
- Forensics and crime investigation, paternity disputes, new technologies such as DNA Barcoding, DNA Computing etc.

### WHOLE GENOME SEQUENCING

- **Exome**, the portion of the genes responsible for making proteins occupies just about 1% of the actual gene. Rather than sequence the whole gene, many geneticists rely on "**exome maps**". However, the non-exome portions also affect the functioning of the genes.
- Hence to know which genes of a person's DNA are "mutated" the whole genome sequencing is required.
- Whole genome sequencing is the process of determining the complete DNA sequence of an organism's genome at a single time.
- This entails sequencing all of an organism's chromosomal DNA as well as DNA contained in the mitochondria and, for plants, in the chloroplast.
- In practice, genome sequences that are **nearly complete** are also called whole genome sequences.

### PROGRAMS FOR GENOME SEQUENCING

#### 1. IndiGen programme

- Aims to undertake **whole genome sequencing of a thousand Indian individuals** representing diverse ethnic groups from India.
- **Funded by the CSIR** under the Ministry of Science and Technology.
- Objective: **Create a pilot dataset to enable genetic epidemiology of carrier genetic diseases** towards enabling affordable screening approaches in India.
- Found that there is **32% genetic variations in Indian genome sequences**, unique as compared to global genomes.

#### 2. Human Genome Project (HGP)

- It was the international research effort to determine the DNA sequence of the entire human genome.
- The HGP gave us the ability, for the first time, to read nature's complete genetic blueprint for building a human being.
- It was coordinated by the National Institutes of Health, USA and the Department of Energy, USA.

- It revealed that there were about 20,000 human genes. According to the HGP, humans share 99.9% genes with each other.

#### 3. Genome India Project

- India's **gene-mapping** project that aims to form a grid after collecting 10,000 samples in the first phase from across India, to arrive at a representative Indian genome
- Department of Biotechnology, Ministry of Science and Technology will lead the project.
- It will enable new efficiencies in healthcare, medicine and life sciences. However, GIP also raises concerns pertaining to medical ethics, political misuse, etc.

#### 4. Genome mapping in Indian ocean

- National Institute of Oceanography is going to launch a project for Genome Mapping in the Indian Ocean.
- **Aim of the project:**
  - To gather samples for genome mapping of microorganisms in the Indian Ocean
  - To understand the biochemistry and the response of the ocean to climate change, nutrient stress and increasing pollution
- **Significance of the project**
  - Mapping of DNA and RNA will show the nutrients present in them, and also those lacking in different parts of the ocean.
  - Give holistic understanding about nutrient cycling and productivity of the oceans.
  - Generate new information about trace metals from underexplored regions of the Indian Ocean.
  - Show the presence of which these microbes have adapted to, in addition to their reaction to atmospheric carbon dioxide.

## WORLD'S FIRST CONJUGATE VACCINE FOR COVID-19

#GENETICS #BIOTECHNOLOGY

PRIMARY SOURCE THE HINDU

*BioFarma, a Cuban company, has stated that its **Soberana 2 vaccine** has 91.2% efficacy against COVID-19 in phase III trials. Earlier, the company had announced that its **Abdala***



## SCIENCE & TECHNOLOGY

**vaccine** had 92.8% efficacy against COVID-19 in late-stage trials.

### TYPES OF VACCINES

- Greater than 90% efficacy puts them in a select league with Pfizer-BioNTech and Moderna vaccines which too have a efficacy of more than 90%. Both the Soberana and Abdala are three-shot vaccines.

- Both are **subunit vaccines**, meaning that a part of the virus forms the antigen and is hitched on to another construct.
- In Abdala the spike protein of the coronavirus is combined with a chemically manufactured adjuvant.
- In Soberana 2, the spike protein is chemically linked to the tetanus toxoid, making it a conjugate vaccine.
- This vaccine can be stored in regular refrigeration settings of 2-8 degree Celsius.

Type of vaccine	Description	Diseases covered
<b>Live attenuated vaccines</b>	<ul style="list-style-type: none"> <li>• It contains a version of the living microbe that has been weakened in the lab so it can't cause disease.</li> <li>• These vaccines will replicate in a vaccinated individual and produce an immune response but usually can cause mild or no disease.</li> <li>• Immune response is excellent.</li> </ul>	Measles, mumps, rubella (MMR combined vaccine) Varicella (chickenpox) Influenza (nasal spray) Rotavirus
<b>Inactivated vaccines</b>	<ul style="list-style-type: none"> <li>• The virus is first killed with chemicals, heat, or radiation and then used to make the vaccine. No threat of disease. Don't require refrigeration are easy to store and transport.</li> <li>• May not always induce an immune response and response may not live longer. Several doses of whole cell vaccines may be required to evoke sufficient immune response.</li> </ul>	Hepatitis A, Influenza, Polio, Rabies
<b>Sub-unit vaccine</b>	A piece of the virus (antigen) that is important for immunity, like the spike protein of COVID-19, is used to make the vaccine.	Human papillomavirus vaccines
<b>Toxoid vaccines</b>	It contains a toxin or chemical made by the bacteria or virus. They make a person immune to the harmful effects of the infection, instead of to the infection itself.	Diphtheria and tetanus
<b>Biosynthetic vaccines</b>	It contain manmade substances that are very similar to pieces of the virus or bacteria.	HIV

### SUBUNIT VACCINES

- Like inactivated whole-cell vaccines, they do not contain live components of the pathogen. They differ from inactivated whole-cell vaccines, by containing only the antigenic parts of the pathogen.
- These **parts are necessary to elicit a protective immune response**. This precision comes at a cost, as antigenic properties of the various potential subunits of a pathogen must be examined in detail to determine which particular combinations will produce an effective immune response and guarantee that immunological memory will be formed.

- Subunit vaccines do not contain live components and are considered as very safe.

### PROTEIN BASED SUBUNIT VACCINES

- Present an antigen to the immune system without viral particles, using a specific, isolated protein of the pathogen.
- Weakness: Isolated proteins, if denatured, may bind to different antibodies than the protein of the pathogen.

### POLYSACCHARIDE VACCINES

- Some bacteria when infecting humans are often protected by a polysaccharide (sugar) capsule that

## SCIENCE & TECHNOLOGY

helps the organism evade the human defense systems especially in children.

- They create a response against the molecules in the pathogen's capsule. These molecules are small, and often not very immunogenic.
- As a consequence they tend to:
  - Not be effective in infants and young children
  - Induce only short-term immunity (slow immune response, slow rise of antibody levels, no immune memory).
- Example: Vaccines against Meningococcal disease.

### CONJUGATE SUBUNIT VACCINES

- Conjugate subunit vaccines create a response against the molecules in the pathogen's capsule.
- In comparison to plain polysaccharide vaccines, they benefit from a technology that binds the polysaccharide to a carrier protein that can induce a long-term protective response even in infants.
- **Carrier protein** - A protein linked to a weak antigen to increase its immunogenicity when used as a vaccines.

- Various protein carriers are used for conjugation, including diphtheria and tetanus toxoid.
- Conjugate subunit vaccines, can prevent common bacterial infections for which plain polysaccharide vaccines are either ineffective in those most at risk (infants) or provide only short-term protection (everyone else).

### RATIONALE FOR CONJUGATE COVID VACCINE

- Soberana-2 vaccine is the **only coronavirus vaccine** that relies on the **conjugate vaccine technology**.
- Subunit vaccines are most economical and Cuba has experience in development of sub-unit vaccines.
- **Spike protein** - the antigen or part of the SARS-CoV2 virus that all COVID vaccines target because it induces the strongest immune response in humans.
- However, the Cuban vaccines are based only on the part of spike protein that is involved in contact with the cell's receptor: the RBD (receptor-binding domain) which is also the one that induces the greatest number of neutralising antibodies.
- There is no disadvantage of using conjugate vaccines against COVID-19. However, they have generally been used against bacteria and not viruses.

## MISCELLANEOUS

### DOPPLER RADARS

#SCIENCE #PHYSICS #TECHNOLOGY

PRIMARY SOURCE *The Indian EXPRESS*

India Meteorological Department's (IMD) Doppler Radar in Mumbai, which surveys weather patterns and forecasts, stopped working after heavy rainfalls.

### MECHANISM OF DOPPLER RADAR

- They are based on Doppler Effect observed in sound waves. In radars, a beam of electricity- known as radio waves- is emitted from an antenna.
- When this beam moves an object in the atmosphere, the electricity scatters in all directions, with a few reflecting waves returning to the radar.

- Larger the object deflecting the beam, the more is the quantity of electricity that the radar gets in return.
- Observing the time required for the beam to be transmitted and back to the radar permits weather forecasting departments to "see" raindrops in the atmosphere, and measure their distance from the radar.

### SIGNIFICANCE

- It gives an idea about the location of targets along with their motion. Thus, it's makes it feasible track the orientation of rain drops and clouds.
- Doppler radars assist to track climate structure, cloud bands and gauge rainfall in an area of 500 km.
- Guide meteorologists in instances of severe climate activities like cyclones, thunderstorms, lightening and heavy rainfall.

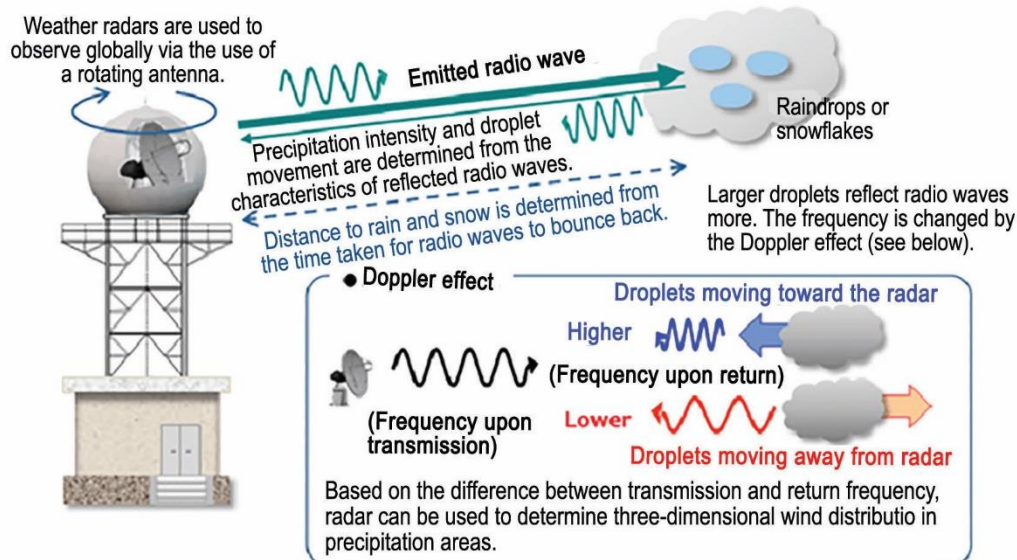
## SCIENCE & TECHNOLOGY

### ABOUT DOPPLER EFFECT

- As an object comes closer to the source, the frequency of incoming sound waves increases due to compression. As an object travels farther from the

source, the incoming sound waves stretch, registering a fall in frequency.

- This explains why as an object approaches we hear louder sound while when an object moves away from use we hear fainter sound.



## LIQUID NANO UREA

#NANOTECHNOLOGY

PRIMARY SOURCE

pib

IFFCO has entered into an MoU with public sector fertiliser manufacturers National Fertilisers Limited (NFL) and Rashtriya Chemicals and Fertilisers Ltd (RCF) for 'transfer of technology' aimed at increasing production Liquid Nano Urea.

### ABOUT LIQUID NANO UREA

- Developed by IFFCO. India will be first country to start commercial production of Liquid Nano Urea.
- It is a nanotechnology-based fertiliser. It contains nanoscale nitrogen particles which have more surface area and number of particles, which make it more impactful.
- Benefits of Nano Urea:
  - As compared to conventional urea, uptake of Nano Urea is more than 80%. It is thus required in lesser amounts as compared to the conventional urea fertiliser to fulfil plant's nitrogen requirement.
  - Cheaper than conventional urea
  - Reduced input costs to farmer.

- Easy to apply as when nano urea is sprayed on leaves Nano Urea
- Reduced transportation cost
- Easy to store
- Reduced import of conventional urea saving precious foreign exchange.
- Increased income for farmers.

## UV-C TECHNOLOGY

#SCIENCE #TECHNOLOGY #HEALTH

PRIMARY SOURCE

The Indian EXPRESS

The Ministry for Science and Technology has informed that Ultraviolet-C or UV-C Disinfection Technology will soon be installed in Parliament for the mitigation of airborne transmission of SARS-COV-2.

### UV-C AIRDUCT DISINFECTION SYSTEM

- Developed by CSIR-CSIO (Central Scientific Instruments Organisation).
- The system is designed to fit into any present air-ducts. Virucidal dosages, usage of UV-C depth and



## SCIENCE & TECHNOLOGY

house time may be optimized in keeping with the prevailing space.

- Using the system, virus can be deactivated in any aerosol debris using calibrated ranges of UV-C light.
- May be utilized in auditoriums, malls, academic Institutions, AC buses, and railways. The device is specifically developed to disinfect non-living things.

### ABOUT ULTRAVIOLET (UV)

- Ultraviolet (UV) is a form of light or radiation naturally emitted by the Sun. It covers a wavelength range of 100-400 nm. The human visible light ranges from 380-700 nm.
- UV is split into 3 bands: UV-C (100-280 nm), UV-B (280-315 nm) and UV-A (315-400 nm).
- UV-A and UV-B rays from the Sun are transmitted via our environment and all UV-C is filtered with the aid of using the ozone layer.

UVA	UVB	UVC
Accounts for <b>95%</b> of the UV radiation that reaches the earth's surface	Affects the top layer of skin	Does not reach the earth's surface (absorbed by atmosphere)
Used in tanning beds	Cause most sunburns	Is not normally considered a risk factor for skin cancer
Penetrates the second layer of skin	Linked strongly to skin cancer	Is found in man-made sources of UVC radiation (mercury lamps, welding torches)
Contributes to some types of sun damage	Damages DNA in your skin	Is used in tanning beds in the past
Causes wrinkles and premature aging of the skin	Burns unprotected skin in as little as <b>15 minutes</b>	
Penetrates clouds and glass windows—always use sunscreen		

### CAN UV-C KILL CORONAVIRUS?

- UV-C radiation (wavelength around 254 nm) has been used to disinfect the air in hospitals, laboratories, and in water treatment. But those traditional germicidal remedies are completed in unoccupied rooms as they are able to cause health problems.
- UV-C can destroy the outer protein coating of the SARS-Coronavirus. However, UV-C radiation used in this device could be harmful to the skin and eyes of living beings.

## BITCOIN HARDWARE WALLET

#TECHNOLOGY #CRYPTOCURRENCY

PRIMARY SOURCE THE HINDU

Payments firm Square would soon build a hardware wallet to store bitcoin.

- The pockets could be in the form of a plug-in device, just like a USB pen drive that stores, manages and secures a user's crypto assets.
- Each virtual asset is connected to a cryptographic password referred to as a 'personal key' to permit customers to access it. This key safeguards cryptocurrencies from robbery and unauthorized access.
- The asset owner, with the assist of a steady hardware pockets, can access the personal key to shop for and promote crypto assets from anywhere.
- Most hardware wallets permit customers to control a couple of accounts; a few even permit customers to connect with their Google or Facebook accounts.
- Popular hardware wallets encompass Trezor, Ledger, KeepKey and Prokey.

### HOW IS IT DIFFERENT FROM A SOFTWARE

### WALLET?

- Cryptocurrency keys can be saved in 2 types of wallets – software and hardware.
- Software wallets are like cell phone apps that digitally save non-public keys. Most software program wallets don't charge customers to save non-public keys. However, they can additionally gather a fee for buying and selling through the app. Software wallets may be susceptible to malware.
- Hardware wallets and gadgets act like cold storage for private keys. The passwords are covered via way of means of a PIN, making it hard for hackers to extract non-public keys because the records aren't uncovered to the Internet.




SCIENCE & TECHNOLOGY

# CRYPTOCURRENCY WALLETS

## HOT TO COLD

### ONLINE



Online cryptocurrency wallets are online digital wallets which can be accessed online through your internet browser.


**PROS:**

- Easy to set up
- Easy to access
- Free

**CONS:**

- Fake websites are endlessly trying to phish your private key.

### MOBILE



A Cryptocurrency Mobile Wallet is a digital wallet installed on your smartphone.


**PROS:**

- Easy to install
- Easy to set up
- Easy to carry
- Easy to make physical purchases

**CONS:**

- Private keys get lost very-
- App can get deleted accidentally

### DESKTOP



A desktop cryptocurrency wallet is a software which you download to your desktop and can access offline.


**PROS:**

- Easy to set up
- Easy to access
- Safer for online purchases

**CONS:**

- Regular updates
- Not practical to carry around.
- Not a longterm solution

### HARDWARE



A cryptocurrency hardware wallet is a pendrive-like wallet which stores your private and public key. The hardware wallet extremely versatile because they are easy to carry.


**PROS:**

- Offline
- Easy to carry
- Multipurpose

**CONS:**

- More expensive
- Not all models are user friendly

### PAPER



A cryptocurrency paper wallet is the private key written or printed on paper.

**PROS:**

- Offline
- A great back up system from your wallets other wallets

**CONS:**

- Gets damaged over time
- Easy to lose a

## SNIPPETS

### Nauka & European Robotic Arm

- **About NAUKA:** 'NAUKA' is multipurpose laboratory module of the International Space Station. Nauka has been developed by Russian Space Agency, Roscosmos. Nauka means science in Russia. It is largest space laboratory commissioned by Russia. The module was launched by **Proton rocket**, which is Russia's most powerful rocket.
- **About ERA:** It is a **robotic arm** similar to the human arm. It also has an elbow, shoulders and even wrists. The ERA is the first robot able to 'walk' around the Russian segment of the International Space Station. ERA has been developed by **European Space Agency**. The European Robotic Arm will assist transportation to the newly integrated NAUKA module in International Space Station.
- International Space Station is modular space station in low Earth Orbit. Five space agencies are participating in the program: NASA (USA), Roscosmos (Russia), JAXA (Japan), ESA (Europe) and CSA (Canada).



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## SCIENCE & TECHNOLOGY

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<b>Water on Ganymede</b>	<ul style="list-style-type: none"> <li>• Hubble Space Telescope has discovered evidence of water vapors in the atmosphere of Jupiter's moon Ganymede. This water vapor forms when ice from the Ganymede's surface sublimates - that is turns from solid to gas. Ganymede is the largest moon in the solar system.</li> <li>• Research has revealed that Ganymede holds more water than all of Earth's oceans. However, temperatures there are so cold that water on the surface is frozen solid. Ganymede's ocean would reside roughly 100 miles below the crust; therefore, the water vapor would not represent the evaporation of this ocean.</li> <li>• European Space Agency has planned for <b>JUICE Mission</b>, to be launched in 2022. JUICE stands for Jupiter Icy moons Explorer. This mission will explore Jupiter and three of its largest moons, with emphasis on Ganymede as a planetary body and potential habitat.</li> </ul>
<b>Galileo Project</b>	<ul style="list-style-type: none"> <li>• The aim of this project is to search for extraterrestrial technological signatures of Extraterrestrial Technological Civilisations. This ground based project searches for physical objects, and not electromagnetic signals, associated with extraterrestrial technological equipment. (search for signatures of life outside earth).</li> <li>• Astronomers in 2017 had discovered the first interstellar object from outside the solar system called 'Oumuamua'. The object did not resemble any comet or asteroid observed before.</li> <li>• The project will be financed by philanthropic efforts and is led by Harvard University Professor Avi Loeb.</li> </ul>
<b>'Borg' DNA</b>	<ul style="list-style-type: none"> <li>• Scientists have discovered these novel DNA sequences in wetland soil. These elements have been named 'Borgs' after a character from Star Trek movie, which has the ability to assimilate genes from other organisms.</li> <li>• Borgs are DNA sequences found outside the chromosomes. Other examples of Extrachromosomal elements are plasmids.</li> <li>• Borgs are novel Borgs have been found to share genes and proteins with organisms that oxidize methane, called methanotrophs, belonging to genus Methanoperedens. Methanotrophs are important from perspective of climate change, as they reduce atmospheric methanes.</li> </ul>

## PRACTICE QUESTIONS

### MCQS

**Q.1) Which of the following statements is/are correct?**

1. UV-A ray's accounts for more 70 present of the UV radiations that reaches the earth surface.

2. UV-B rays can only reach the outer layer of human pores and skin.

3. UV- C rays are found in man-made sources of radiations like- mercury lamps.

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## SCIENCE & TECHNOLOGY

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Select the correct answer using the code given below.

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

**Q.2) Doppler radar is used in which of the following processes?**

1. Weather
2. Aviation
3. Healthcare

Select the correct answer using the code given below.

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

**Q.3) Nauka module on the International Space Station (ISS) used as a docking port for spacecraft and as a door for cosmonauts to go out on spacewalks. It is related to which country?**

- (a) India                                      (b) USA  
(c) China                                      (d) Russia

**Q.4) Which of the following technologies is/are developed as part of Small Satellite Launch Vehicle (SSLV)?**

1. Flexible nozzle control
2. Electro-mechanical actuators for all stages
3. Velocity trimming module

Select the correct answer using the code given below.

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

**Q.5) Consider the following statements about Liquid Nano Urea:**

1. This urea has to be applied in the root zone of plants.
2. Urea used for fertilization will reduce, if Liquid Nano Urea is used.

Which of the statements given above is/are correct?

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

## DESCRIPTIVE QUESTION

**Q1.** Write a short note on various types of vaccines available and their relative effectiveness and concerns. (15 Marks)

**Q2.** Write a short note on the SSLV launcher being developed by India. How will it allow the Indian space program to capture a greater share in the global satellite launch market? (10 marks)

**Answers:** 1-d, 2-d, 3-d, 4-d, 5-b

# HISTORY, HERITAGE & CULTURE

# GS PAPER (PRELIMS) & GS PAPER I (MAIN)

## KAKATIYA RUDRESHWARA TEMPLE AS WORLD HERITAGE SITE

#ARCHITECTURE #ART & CULTURE

PRIMARY SOURCE UNESCO SECONDARY SOURCE THE HINDU

- **UNESCO** has inscribed the Ramappa temple as a World Heritage Site. India's 39<sup>th</sup> World Heritage site.
- **Rudreshwara temple**, popularly known as **Ramappa Temple (Kakatiyan Style of temple architecture)**, is located in Palampet, close to Hyderabad in Telangana.
- The temple is dedicated to **lord Shiva** and is built during the **Kakatiya period (1123-1232 AD)** under rulers **Rudradeva and Recharla Rudra**.

### SALIENT FEATURES: KAKATIYAN ARCHITECTURE

- The base of the temple is in stellate pattern and not square as in Dravidan or Nagara style.
- The took the Vesara style of Kalyan Chalukyas and evolved it suitable to local needs.
- **Masterful material selection:** Temple is constructed using sandstone. The temple has decorated beams and pillars of carved granite and dolerite. The temple is located close to Ramappa Cheruvu, a Kakatiyan-built water reservoir.
- **Distinctive Vimana:** The temple has pyramidal Vimana which appears like horizontally stepped tower made of lightweight porous bricks, called as '**floating bricks**', which helped reduce the weight of the roof.
- **Floating bricks:** Kakatiyas had pioneered a unique brick making technology by which high-strength bricks of very low weights could be manufactured. These bricks are called floating bricks.
- **Sculptures:** Temple's sculptures are of high artistic quality. They illustrate regional dance customs and Kakatiyan culture. The sculptures have a metal like

finish with its lustre intact even after 800 years of construction.

- **Sandbox technique:** The foundation of the temple is built using sand-box technique which is unique to Kakatiyan temple architecture. They understood the need for utilising sand as a material for the foundation.
- Other important Kakatiyan period structures:
  - Keerthi Thoranas of Warangal
  - Temple of Thousand Pillars at Hanumakonda

### ABOUT KAKATIYAS (1123-1232 AD)

- Important Rulers: Ganpatideva, Rudrama Devi (**Considered to be the first female monarch of India**), Prataparudradeva
- **Marco Polo visited Kakatiyan kingdom** during the reign of Rudrama Devi. He also mentioned about Motupalli port. He also highlighted that the Kakatiyan kingdom was famous for diamonds.
- Their capital was located at Orugallu, near Warrangal in Telangana.

### CONTRIBUTION OF KAKATIYAS

- Development and growth of Telugu Language
- **Religion:** Kakatiyas gave patronage to Saiva siddhanta
- **Irrigation:** They constructed a network of dams for irrigation and drinking water. Telanagana
- Promoted regional dance and music traditions.

## DHOLAVIRA AS WORLD HERITAGE SITE

#ARCHITECTURE #ART & CULTURE

PRIMARY SOURCE UNESCO SECONDARY SOURCE THE HINDU

UNESCO has inscribed the **Indus Valley Civilisation (IVC)** site of Dholavira as a World Heritage Site. Dholavira will be **40<sup>th</sup> site from India** which has been accorded the **World**

## HISTORY, HERITAGE & CULTURE

**Heritage Status by UNESCO.** Apart from India, Italy, Spain, Germany, China and France have 40 or more sites as World Heritage. It is only IVC era site from India to get World Heritage Status.

### ABOUT DHOLAVIRA

- Dholavira is located on the **Khadim Bet island** in the Rann of Kutch, Gujarat.
- Dholavira is one of the very few large Harappan settlements where an entire sequence spanning from early Harappan town / pre-urban phase to the height of the Harappan expansion and the late Harappan is observed.
- **Evidence of stratified society:** The homes in Dholavira suggest that **IVC was a stratified society** with different social status for different class of people.
- 6<sup>th</sup> largest Indus Valley Civilisation site.
- It consists of two parts: a walled city and a cemetery.
- Unlike Harappa and Mohen jo Daro which have two divisions (Citadel and Lower town), Dholavira consists of three divisions:
  - A fortified castle with attached fortified Bailey (residence for higher officials) and Ceremonial Ground
  - A fortified Middle Town
  - A Lower Town
- **Building Material:** Unlike other IVC sites where burnt bricks have been used, **construction is done by stone.**
- **Expansive Water Management:** Dholavira located in a water scarce region developed an expansive system letting them thrive in harsh environment.
- Dholavira has two stadium like structures which would have been used for dance performances, gathering etc.
- A series of reservoirs are found to the east and south of the citadel. The water management system here is designed to store every drop of water in the reservoirs.
- Few rock-cut wells are discovered here which are amongst oldest examples of well.
- **Hemispherical memorials:** Dholavira has some hemispherical structures. Archaeologists have traced the origin of Buddhist stupa in these memorials.

- **Dholavira signboard:** The Dholavira signboard is the **largest IVC written inscription known.** It is located close to the gate of the city.
- **Cemetery:** Dholavira has a large cemetery with cenotaphs of 6 types. However, there have been no discovery of human skeletons from Dholavira.
- **Bead processing workshops and artefacts**
- **Copper smelter has been discovered**

## TIPU SULTAN (1750-1799)

#PERSONALITIES #MODERNHISTORY

PRIMARY SOURCE THE HINDU

*Popularly known as the Tiger of Mysore and Tipu Sahib. He was son of Hyder Ali and succeeded his father in 1782 and ruled for about 17 years.*

*In Fourth Anglo-Mysore War between 1798-99, however, he was defeated when the forces of the British East India Company, the Marathas and the Nizam of Hyderabad came together. He was killed on May 4, 1799 while defending his fort of Srirangapatna, in Karnataka.*

### CONTRIBUTIONS OF TIPU SULTAN:

- **Military reforms:** He was a pioneer in the use of **rocket artillery** this was called **Cushoon**. He commissioned the military manual **Fathul Mujahidin**. He organised his army along the lines of modern army of France. He decided to develop a navy and established the office of **Mir Yam (Head of Navy)** and built dockyards at Mangalore, Molidabad and Wajidabad.
- **Land Revenue reforms:** Introduced a land revenue system (eliminating middlemen) which gave a boost to the Mysore silk industry and helped in establishing Mysore as a major economic power. He introduced a new coinage system
- He established the 40-acre Lalbagh Botanical Garden in Bengaluru.
- Tipu established banking networks and cooperatives, where capital was raised from the public (similar to banks inviting deposits), the principal held on an annual basis and returned with interest (or `nafa').

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## HISTORY, HERITAGE & CULTURE

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- He established trading houses for Mysore products worldwide, including places like Puducherry, Kutch, Karachi, Oman, Baghdad and Constantinople
- **International relations:** Tipu was also associated with the revolutionary ideas of France and was a full supporter of Republican polity setup. He helped found the **Jacobin club of Mysore**.

## HISTORIC URBAN LANDSCAPE APPROACH (HULA)

#ART & CULTURE #ARCHITECTURE

PRIMARY  
SOURCE

THE HINDU

*Madhya Pradesh has launched UNESCO's 'Historic Urban Landscape' project for Gwalior and Orchha cities of State.*

### HISTORIC URBAN LANDSCAPE APPROACH

- UNESCO's approach to managing historic urban landscapes is holistic by integrating the goals of urban heritage conservation and those of social and economic development. This method sees urban heritage as a social, cultural and economic asset for the development of cities.
- This approach moves beyond preservation of physical environment and focuses on the entire human environment with all its tangible and intangible qualities.
- It seeks to increase sustainability of planning and design interventions by taking into account the existing built environment, intangible heritage, cultural diversity, socio-economic and environmental factors along with local community values.

### ABOUT ORCHHA:

- It is situated on the bank of Betwa river in the Niwari district of Madhya Pradesh.
- Town was founded in the 16<sup>th</sup> century by the Bundela Rajput Chief, Rudra Pratap.
- *Famous places in Orchha:* Orchha fort (Blend of Rajput and Mandu architecture style), Orchha wildlife Sanctuary, Laxmi Narayan Temple, Chhatris, Chaturbhuj Temple, Ram Raja Temple, Sheesh Mahal.
- **Ram Raja temple** is the only place where lord Ram is worshipped both as a God and as a King.

- **Laxmi Narayan Temple** exhibits a unique architectural style, which is a mix of a fort and a temple.
- **Chattris of Orchha** are cenotaphs that were constructed in honour of its erstwhile rulers.

### ABOUT GWALIOR

- Capital of Central India before reorganisation of states in 1956.
- The city is known for Rajput (Raja Man Singh Tomar) and Maratha (Scindias) ruling dynasties.
- **Historical significance:**
  - The city was founded by Suraj Sen in 8th Century AD.
  - Gwalior inscription of Mihirkula reveals that Hunas also ruled the region.
  - Later the city came under the Gurjana Pratihara dynasty.
  - Later the city came under the control of Tomar dynasty, who made Gwalior its capital.
  - Scindias made Gwalior their capital in the 1830s and remained princely state during the British rule.
- **Architectural significance**
  - **Gwalior Fort:** The city is named after Gwalior Fort located on top of a Hilltop.
  - **Teli ka Mandir:** It is a hindu temple located within the Gwalior fort. The temple is famous for hybridity of Nagara and Dravida styles of architecture in a Rajput temple. The shape of the roof is pyramidal displaying characteristics of Dravidian influence whereas ornamentation is done in Northern Indian style.
  - **Chaturbhuj Temple:** It is a 9 century AD temple located inside Gwalior Fort constructed by Gurjara-Pratihara dynasty. The temple contains an inscription of '0' or zero. It is one of the earliest inscriptions of zero found in India.
  - **Man Mandir Palace:** The temple has been constructed by Man Singh Tomar. It is often referred as a painted palace because of painted effect due to styled tiles.
- **Cultural significance**
  - **Famous for Music: Gwalior gharana** is the oldest of Khayal Gharanas in the country.
  - **Raja Man Singh Tomar was a patron of Dhrupad. Tansen and Baiju Bawara** belong to Gwalior. Tansen Music Festival is celebrated here.



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**HISTORY, HERITAGE & CULTURE**


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## RAKHMABAI CASE

#MODERN HISTORY #PERSONALITIES

PRIMARY SOURCE *The Indian EXPRESS*

Recently, the controversy around 'Restitution of Conjugal Rights' has brought the focus back to the famous Rakhmabai Case, which was the first case in India on the 'Restitution of Conjugal Rights'.

### ABOUT RAKHMABAI RAUT

- She was one of the first women doctors to practice medicine in British India.
- She was the major cause behind the enactment of Age of Consent Act, 1891 which was the first check on child marriage in India.
- Rakhmabai was married at the age of 11 to Dadaji Bhikaji. However, she continued to stay with her family. This led to the famous Dadaji Bhikaji vs Rakhmabai case of 1885, in which Bhikaji asked for 'restitution of conjugal rights'. The judge ruled in her favour stating that Rakhmabai was married in 'helpless infancy' and hence cannot be forced.
- This initiated a lot of discussion in the society around the rights of women and child marriage. Later the Age of Consent Act, 1891 was enacted.

## DR KADAMBINI GANGULY

#MODERN HISTORY #PERSONALITIES

PRIMARY SOURCE *The Indian EXPRESS*

- She is the first woman to be trained as a physician in India. She was the first woman to get admission to Calcutta Medical College, from which she graduated in 1886.
- She was also active in India's women's rights movement. She was also one of 6 women to form the first all-women delegation of the 1889 Indian National Congress.

## 4000, YEAR-OLD SETTLEMENT FOUND

## DURING EXCAVATION IN ODISHA

#ARCHAEOLOGY #ANCIENT HISTORY

PRIMARY SOURCE *THE HINDU*

- Archaeologists have found distinct traces of three cultural phases at **Durgadevi Site in Balasore** district of Odisha. The finding belongs to three cultural phases including Chalcolithic (2000 to 1000 BC), Iron Age (1000 to 400 BC) and Early Historic Period (400 BC to 200 BC).
- The site has a circular mud fortification and lies between **Sona river** and **Burahabaling river**.

## SHYAMA PRASAD MUKHERJEE

#PERSONALITIES #MODERN HISTORY

PRIMARY SOURCE *THE HINDU*

- Recently, 120<sup>th</sup> birth anniversary of SP Mukherjee was celebrated.
- He was the youngest vice-chancellor to Calcutta University.
- He was against the communal politics of the Muslim League and other anti-national and disruptive forces resulted in his active association with the All India Hindu Mahasabha, where he ended up being President in 1944.
- He was part of the Constituent Assembly.
- He strongly backed for the partition of Bengal after the Noakhali riots. He launched the Bengali Hindu Homeland Movement which was a movement of Bengali Hindu people for the Partition of Bengal in 1947 to create a West Bengal in India, in the wake of Muslim League's proposal to include entire province of Bengal within Pakistan.
- He served as the **Minister for Industry and Supply**, he served in the first cabinet of PM Jawahar Lal Nehru. However, he later resigned in protest to **Nehru-Liaquat Pact**.
- Post-Independence, he devoted his time towards the cause of refugees and made extensive tours for their

## HISTORY, HERITAGE & CULTURE

relief and rehabilitations. He was against the special Article 370 for Jammu and Kashmir. He thought it would lead to balkanisation of India.

- He was the **founder of Bhartiya Jan Sangh** in 1951, which is the predecessor to the Bharatiya Janata Party.
- Through Maha Bodhi society, he strengthened India's cultural ties with other nations.

## SWAMI VIVEKANANDA

#PERSONALITIES #MODERNHISTORY

PRIMARY  
SOURCE

THE HINDU

- Born in Kolkata in 1863, he was known as Narendra Nath Datta in his pre-monastic life.
- He was a disciple of Sri Ramakrishna Parmahansa and a major force in the revival of Hinduism in India. He pushed for national integration in colonial India, and his famous speech remains as the one that he gave in Chicago in 1893 (Parliament of the World Religions).
- He established a new monastic order in **Baranagar** in Kolkata and went to explore India.
- During his travels, he was deeply moved by appalling poverty and backwardness of the masses. He was the first religious leader who highlighted that real cause of India's downfall was the neglect of masses and highlighted the immediate need to provide food and other necessities. He emphasised on improved methods of agriculture, village industries etc.
- According to him, the crux of problem of poverty in India was because of centuries of oppression, downtrodden masses had lost faith in their capacity to improve their lot. Therefore, it was necessary to infuse faith in their own capacities.
- Vivekanand believed that principle of Atman i.e. doctrine of potential divinity of soul, taught in Vedanta could ameliorate the condition of the poor people. Thus, the masses needed two kinds of knowledge: secular knowledge to improve their economic condition and spiritual knowledge to infuse in them faith in themselves.
- He preached 'neo-Vedanta', an interpretation of Hinduism through a Western lens, and believed in combining spirituality with material progress.
- He is known to have introduced the Hindu philosophies of Yoga and Vedanta to the West. In 1893, he took the name 'Vivekananda' after Maharaja Ajit Singh of the Khetri State requested him to do so.
- He formed the **Ramakrishna Mission in 1897** "to set in motion a machinery which will bring noblest ideas to the doorstep of even the poorest and the meanest." In 1899, he established the **Belur Math**, which became his permanent abode. He also wrote books like Karma yoga, Jnana yoga, Raja Yoga etc.
- In 1984, the Government of India declared that 12<sup>th</sup> January, the birthday of Swami Vivekananda, will be celebrated as National Youth Day.

## PRACTICE QUESTIONS

### MCQS

**Q1. This city was founded in the medieval era, showcase blend of Indo-Islamic architecture feature, and houses a famous temple of Chaturbhuj in Central India and Jahangir Mahal. Which of the following cities matches the above features?**

- (a) Orchha (b) Jaipur  
(c) Mandu (d) Ahmedabad

**Q2. Consider the following statements with respect to Tipu sultan.**

1. He was last ruler to fight Anglo-Mysore war.
2. He was the Indian ruler to employ rocket technology in warfare.
3. During his reign Mysore had close relations with France.

Which of the statements given above is/are correct?

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**HISTORY, HERITAGE & CULTURE**

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

**Q3. With respect to City of Gwalior, consider the following statements.**

1. It was founded by the Mughal rulers in Malwa region.
2. First evidence of written zero was founded here.
3. Unique style Saas-Bahu temple is situated in the city.

Which of the statements given above is/are correct?

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

**Q4. Consider the following statements with respect to Dholavira.**

1. It is situated in the dry region of Kutch.
2. Evidence of bead making, large water reservoir, and stone architecture was founded here.

Which of the statements given above is/are correct?

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

**Q5. Which of the following are not world heritage sites in India?**

1. Ghats of Varanasi
2. Ramappa Temple
3. Bodh Gaya
4. Temples of Kanchi

Select the correct answer using the code given below:

- (a) 2 only                                      (b) 1, 3 and 4 only  
(c) 3 and 4 only                              (d) 1, 2, 3 and 4

## DESCRIPTIVE QUESTION

**Q1.** Write a short note on the Kakatiyan Temple Architecture. (10 marks)

**Q2.** Write a short note on any one of the Harappan sites present in India. (10 marks)

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

**PART TWO**

**ETHICS, INTEGRITY**

**& APTITUDE**

**Coverage from varied sources**

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 ETHICS, INTEGRITY & APTITUDE
 

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# HUMAN CONSCIOUSNESS AND VALUES

#ETHICS #INTEGRITY #APTITUDE

PRIMARY  
SOURCE

THE HINDU

All the questions given below are connected with different shades of consciousness and values, and the answers for all these require deep insight about oneself, surroundings and their inter-relationship.

To answer these, this section is containing thoughts shared by people on human personality, consciousness and values.

So, by reading them, try to figure out the answers.

Q. "A man is but a product of his thoughts. What he thinks he becomes." – M.K. Gandhi (UPSC 2019)

Q. "Anger and intolerance are the enemies of correct understanding." – Mahatma Gandhi (UPSC 2018)

Q. One of the tests of integrity is complete refusal to be compromised. Explain with reference to a real life example. (UPSC 2017)

Q. The crisis of ethical values in modern times is traced to a narrow perception of the good life. Discuss. (UPSC 2017)

Q. All human beings aspire for happiness. Do you agree? What does happiness mean to you? Explain with examples. (UPSC 2014)

Q. The current society is plagued with widespread trust-deficit. What are the consequences of this situation for personal well-being and for societal well-being? What can you do at the personal level to make yourself trustworthy? (UPSC 2014)

Q. What do you understand by the following terms in the context of public service?

- a. Integrity b. Perseverance c. Spirit of service  
d. Commitment e. Courage of conviction  
(UPSC 2013)

## Giving, not hoarding, is the only hope in an increasingly violent world....

### Contrasting approach

Many years ago, when we stopped at an isolated spot on a highway running through Mandya in Karnataka, an old farmer came to us carrying sugarcane. I was so used to being accosted by hawkers and sellers that I began to wave him away politely as he approached. He smiled and continued walking wearily up the slope from the fields to the road. Even though everything about his appearance spoke of his poverty, it became clear that his goal was not to sell but to give his sugarcane to my children who had stepped out of the car. He **wanted nothing in return**.

I have forgotten many things, but not that unknown peasant who wanted to give something to a stranger and sought nothing in return. Recently, another example made me think about another philosophy of life.

Asha and her cousins triumphantly brought mangoes and guavas to their grandmother. They were holidaying at their village homestead and had lain in wait for the children from the village who used to raid their family orchard. The city children had pounced on village children of the same age, challenged them, and successfully retrieved all the "stolen goods."

### Contrasting thought process

Their grandmother looked at the fruits on the verandah and was not impressed.

## ASSESSMENT TIME

Let us start by reading, and pondering on the text given below.

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### 1. SHOULD WE CARE TO SHARE?

(# share)



## ETHICS, INTEGRITY & APTITUDE

*"What's the matter with you children? Don't you get to eat sufficient mangoes and berries from what is stored indoors for the family?"*

*"Yes, but this too belongs to the house."*

*"It belongs to your compound, grandmother."*

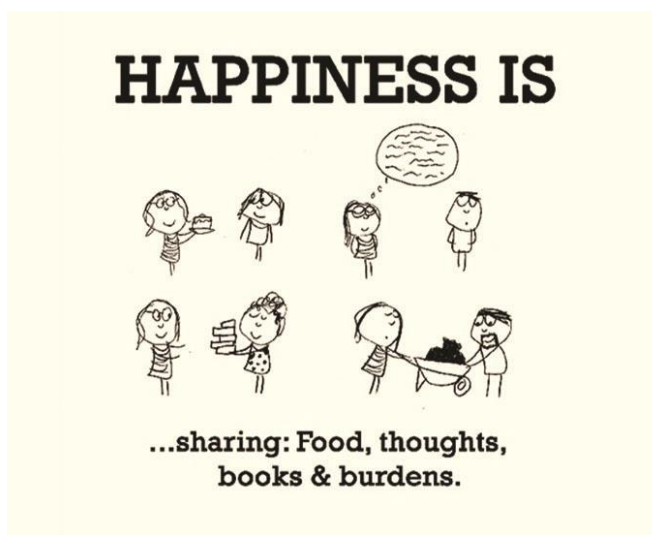
*"It belongs to us."*

*"They have no right to it."*

*The chorus of voices did not have an impact on their grandmother.*

*"Listen to me. After we eat well, the rest is to be left on those trees for those children to help themselves. It belongs to them. It is their right to raid the tree which has so much to give. Go and give all the fruits back to them and apologise for your rudeness."*

The city cousins were astounded at their **grandmother's philosophy**. It was **contrary to everything they had learnt so far about what they felt they owned**. The world was something to be understood in order to be conquered. Marks were to be won; likewise, games and quizzes. "My" lunch, "my" seat and desk and "my" toys and books.



Many social philosophers feel that if children were raised differently, there might be a real change in world politics and conflicts. That the collection and codification of information is only the beginning of education seems to have passed many peoples' understanding. **Education to refine the mind, to help young people to accept and give of themselves rather than hoard, is the**

**beginning of the only kind of wisdom that might one day save the world.** Humans have survived successfully everywhere not because primitive societies fought each other over resources **but because we suppressed our selfishness and learned to cooperate.**

In the history of time, our industrialised age is as yet only a blip. It is **not too late to teach the values of mutual progress and co-operation** in order to look beyond the self.

But we are also living in times when technology is persuading people to become more and more self-oriented. Sensitising large populations may never come through; but if pockets of understanding and perception are created, there might still be hope for an increasingly violent world whose leaders have forgotten that **sharing — not possessing — is the foundation of our existence.**

**What does sharing provides?**

**Ans. It gives us the right to live.**

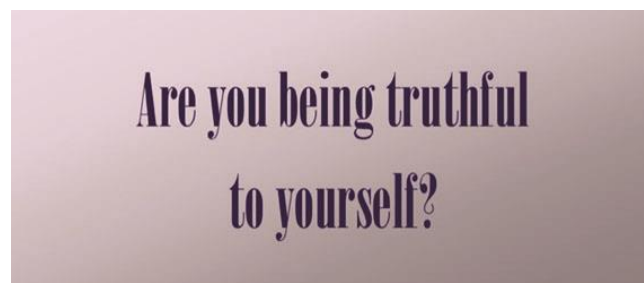
### 2. SHOULD WE ALWAYS BE TRUTHFUL?

*(# Be truthful)*

**Why do we ruin our peace by not being truthful?**

What is man but a fragment of the universe? Yet, we have pitted our puny selves against the infinite silence of space and dared to disturb the Moon, Mars and Saturn. Though taking a flight is now far more common than it used to be 40 years ago, I'm unfailingly impressed by our technological triumph every time I'm strapped down in a slender cigarillo of metal and glass as it roars down the runaway before it lifts off, carrying hundreds of passengers and their luggage.

**Consider our skills and deft manipulation of our external environment!**



We drill through mountains, make deserts bloom and get drinking water from the sea. School texts beautifully

## ETHICS, INTEGRITY & APTITUDE

illustrate our watery planet protected by small hands and fingers reminding children that we literally hold the planet in our hands. Is it not wondrous that the components that make up every single item that has smoothed our lives — from a wooden cot to a tube of toothpaste to a pair of scissors — has emerged from the great cornucopia that is Earth? From the humble grass that feeds our cattle to the materials needed to carry out intricate surgeries and help us communicate with people thousands of miles away? One only needs to read a novel set in the 18th century or the logbook of a ship's captain of that time to learn that not so long ago, it took six months to get a message across to another country or to the origin of contact of a ship as it sailed the vast oceans.

All these images **crossed my mind as I thought of our complex relationship with the truth. Why would such a successful species want to hide behind falsehood?**

**Demonstration:** Last year, in a class, the teacher pointed out the damage falsehood inflicts on one's physical and emotional health. "They are incalculable," he said, drawing our attention to the lie-detector or polygraph. The slightest resistance from the brain to the truth/lie challenge sets the machine leaping. So think how seriously a lie (even a social fib meant to enhance our personal status) can affect one's long-term health.

A chart prepared by **Ryan Morris and Shelley Sperry for an article in National Geographic Magazine** shows a wide pattern of lies and how not all lies are the same. These are:

*Personal transgressions to cover up a mistake or misdeed (22%)*

*For economic advantage and financial gain (16%)*

*To avoid a tough situation or escape from people or to evade them (14%)*

*Personal advantage for different sorts of benefits (15%)*

*For our own self-image (8%)*

*To make people laugh (5%)*

*To help others (5%)*

*For the sake of politeness (2%)*

*To hurt others (4%)*

*To disregard reality, to fantasize (2%)*

*When the motives are unclear even to the one who lies (7%)*

Most psychologists say that the **truth comes naturally** to everyone and that it **takes a clever and flexible mind to lie consistently**.

What about the half-truth? "Yes, he did borrow from me." That the borrower returned what he took might be suppressed in the telling. The problem with this is that the teller often forgets where he put the other half of the truth.

When **honesty is not only the best policy but also the best sleeping pill**, why are we ruining our inner environment the way we have the external?

### 3. SHOULD WE PRAISE AND REWARD?

(# Appreciate)

**Does this sound familiar?**

"I hope you won't forget that you got this chance because of me. It was I who introduced you...I who recommended you...if I hadn't spotted this opening you may never have made it..."

**Common trait**

Most people not only want to succeed but **wish to take credit for someone else's success**.

**Vanity and self-seeking attended** even the first recitation of Kamban's Ramayana in the temple at Srirangam. The poet had to satisfy various conditions demanded by the priests who asked for approval from a wide spectrum of society. This included the learned and influential Jains in the village of Tirunarunkontai, who wanted to know if they had been mentioned in the book. Kamban quoted verse 2-27-56 to satisfy them.

Even a great Chola-period poet could not ignore the realities of social ambition for being given credit or acknowledgement.

Perhaps, it is a deep mammalian trait — this longing for acknowledgement — which is synonymous with insecurity and identity in a group. When a corporate group surges ahead and wins a portion of the market, everyone wants a share of its financial success. "We thank all our employees for making this happen..." speeches are peppered with such sentiments but only a few people are rewarded for the work of many. Those

## ETHICS, INTEGRITY & APTITUDE

who study the behaviour of primates recognise a number of traits they share with human societies. Chimps compete continuously with one another, even while they live together and survive as a group. When the mother of a young chimp is not around, other adult females even try to harm her baby — so envious are they of any potential rival for food, space or attention. This partiality and meanness is a manifest part of life in a joint family of humans where some children are favoured above others. And so, the wheels of pride and prejudice are held firmly in place by the spokes of vigilant shareholders in credit and benefit-sharing.

### Contrast

**To speak ill of others is a dishonest way of praising ourselves.**  
**- Will Durant**

The opposite view is taken by emotionally mature people or those who are more philosophical in their outlook. They do not expect to be singled out for praise or reward for work undertaken because they see themselves as part of a larger plan.

*Do we know who really wrote the marvellous prayers and devotional poems we recite or teach our children to memorise?*

*They say that this king or that queen built this monument or bridge or fort. Really? What about the engineers and masons, the load-bearers and the artisans who did not even have artificial light to do the work?*

*How many of us think of the electricians who manage the lights and microphones at a complex performance of dance or music? Without them, would the performances be as effective as they usually are? No.*

Giving credit for the labour and time spent on team work is a ticklish thing. Years of grievance attend those who come up with good ideas and projects, but whose work is

cornered and absorbed without acknowledgement by seniors or peers who dishonestly take the credit for those very ideas. Of course, with collaborative work it is not always clear who did what; but an effort must be made to reward, or at least openly praise, the one who put it forward in the first place

### 4. SHOULD WE SPEAK UP AGAINST WRONG DEEDS?

*(# Speak against wrongs)*

**Life is everyone's business. Standing up and expressing your feelings is best!**

**In schools, colleges, offices and at home, how often do we stay silent because, speaking up would cause an uproar?**

Perhaps, a big factor is knowing when to assert yourself, either on your own behalf or on behalf of someone else. Despite the risks, here are a few reasons why standing up and expressing your feelings is best.

*One, silence is often seen to be a sign of approval. You could be seen as collaborating with a situation.*

*Two, it is selfish to take care of your own comfort and allow the wrong thing to happen. "Let's wait and watch" is a poor response when you know something bad might be averted if someone important heard the truth from you.*

*Three, honesty is a virtue which is in short supply. With it goes trust, especially when combined with tact and sensitivity. It is crucial to demonstrate that you are not afraid to speak the truth.*

*Four, sharing and communicating is a sign of confidence. No one else may know precisely what you do. So, your contribution might make a small difference to adjusting the big picture to everyone's benefit. Never withhold information.*

**The world suffers a lot. Not because of the violence of bad people, but because of the silence of good people.**  
**- Unknown**

## ETHICS, INTEGRITY & APTITUDE

*Lastly, when you speak up, it will almost certainly encourage others to do so too. Group silence, when everyone knows something wrong is being done, is as great an offence as a single person doing the wrong thing.*

The next time you are face-to-face with something that, either through ignorance or lack of information, is hurting someone or a process — speak up! You have a duty to yourself and to your friends, family and colleagues to right a wrong by registering your protest. It might be loud music in the neighbourhood which disturbs everyone, particularly infants and the elderly. It might be harassment of a domestic worker which you witness but hesitate to challenge, believing it is none of your business. It might be injustice or dishonesty which goes unchecked because no one thought it was his or her business.

**Speak up! Life is everyone's business.**

### 5. SHOULD WE BE OPEN TO LEARNING FROM ANYONE? (# open to learning )

**Basking in a life of comfort and convenience, have we forgotten the wisdom of the tribal communities and the role they played in ensuring our survival?**

In nearly every culture, there exists the notion that cultural refinement is city-based. Dwellers in the woods and forests are seen to be uncouth, undeveloped and far from 'civilized'. Organised economy, defence and learning are available only in cities which are considered safer than forests. And so it follows that moving away from 'kaadu' or the 'van' is a move in the right direction. In some cultures, the forest is the equivalent of wilderness — again, undesirable, and the opposite of security which assures pleasing gentility, polish and artful speech. **Tribals are viewed with some degree of disdain, as peoples who were bypassed by civilization and its benefits.**

*Are we confusing comforts and convenience with progress?*

*How has the human race survived?*

*How did India, for instance, evolve its food culture? Because for thousands of years, we have eaten the right food.*

*Who selected and developed the natural food Indians eat?*

*Who decided what roots and leaves one might eat safely?*

*Who found out which tubers and fruits are poisonous?*

*Who spread the word about which animal's flesh is suitable for humans and which ones should be avoided?*

*Who discovered dyes, resins and gums that are commercially produced today?*

It was **the adivasis**. They were our **first teachers**. They shared their knowledge by passing it on through stories and songs. The adivasis (original inhabitants) were the earliest occupants of our country. They spread across the Indian subcontinent; living in forested hills far away from the plains and viewing their forest homes as sacred.

Many years ago, when social worker Sudha Murthy visited a tribal settlement in Karnataka, she spoke

“EVERYONE YOU WILL EVER MEET KNOWS SOMETHING YOU DON'T.”

-BILL NYE-

with an elder of the community. She could not help noticing that he had beautiful teeth, his skin was barely wrinkled and his hair was still black. Unable to contain her curiosity, she asked about his youthful appearance. He smiled and said that he ate only forest products and never added salt to his food. He also pointed out that there were several medicinal plants in the forest which his forefathers had originally spotted. Many fruits now grown on the plains were originally identified by the tribals. The collection of wild honey for medicinal purposes was also started by them. He told her that it was the adivasis who found out that the fruit of the tomato plant may be eaten, but not its leaves which are toxic. Through trial and error, the adivasis cultivated useful foods and rejected the harmful ones. Imagine that! Our taste buds were honed by our tribal ancestors.

India has one of the largest tribal populations in the world — 90 million. There are 624 Adivasi communities who constitute 8 per cent of the population.

**Other contributions of tribals:**



## ETHICS, INTEGRITY & APTITUDE

Several Indian languages are a mix of mainstream languages and tribal dialects. Many art forms also draw inspiration from tribal art and crafts as they speak deeply to the origins of our sense of aesthetics. **Rich in a vibrant tradition but impoverished and marginalised due to prejudice against them, tribal society is distinguished by the absence of two things: obesity and the caste system.** Tribals do not exploit other people's labour, they do not ignore their widows, stigmatise raped women or leave their orphans to beg. Nor do they destroy nature to build edifices to human pride.

Therefore, not only should we respect the adivasis as we are historically indebted to them, but also because we have much to learn from them.

*In short:*

*Sharing; being truthful; praising others; taking a stand against wrongs; and learning from others inspire ethical approach, promote integrity, and nurture right aptitude.*

### 6. SHOULD WE BECOME PARTICIPANT IN IMPROVING GOVERNANCE?

*(# become active non-state actor)*

**It is something which keeps the true essence of democracy alive in a country**

*Supporting one's country policies and decisions is one part of keeping it on the path of prosperity and development, while keeping track of government activities, being vigilant about them and highlighting loopholes in policies are also needed in a democracy.*

In our country, we have people with different ideologies — some criticise the government policies and some support it, while others remain at the top of it appreciating the good policies and highlighting the drawbacks to improve governance. It's common nowadays to see society divided into segments each with a different perspective about the policies undertaken by their governments; it is something which keeps the true essence of democracy alive. There are many instances in the past of governance and society improving because of the **positive criticism** by some people or group of them. These examples give democracies around the world a

chance of improving the quality of governance and hence create a better society.

In recent years in India, there has been a gradual change in perspective of the people regarding their governments. While some of them are a very good sign of a progressive society, some of them are quite worrying too. There is a common notion among some citizens that if they speak something against the actions of their government, then it's probably against the nation too.

This idea which is significant in numbers need to be thoroughly assessed. Chances might be there that some of the criticism may not be on the right note, but many of it if considered by the governments can be helpful in the real-time assessment of the needs and expectations of the people from the government. Unfortunately, there is a decline in these voices nowadays. People who voted for the current government think that it's wrong to speak against the government which they elected to power.

People should realise that it is not the driving force of praise and overwhelming support which keeps the wheels of a government moving but also the **steering force of people's participation which keep a check on government, and modify it, if the policies fail to meet the expectations of society as a whole.** If people's criticism reaches the government's ear at an appropriate time and in significant numbers, then a lot of resources of the governmental machinery can be utilised wisely for some other activities which are brought to notice by the people itself.

Some experts believe that praise and support of people are very crucial for maintaining efficient governance as it keeps leaders and bureaucrats motivated to work more to increase the overall output of governmental activities on the ground. This is true in practice too but it should be kept in mind that the power vested in the hands of people in a democracy is not only utilised for blindly praising the government but it should be used as an aid, to advise and correct the government whenever required so that the efficiency and quality of governance is maintained.

**Note:** Above consideration on improving governance through people's participation is also asked in a question by UPSC:-



## ETHICS, INTEGRITY & APTITUDE

**UPSC Question:** "Effectiveness of the government system at various levels and people's participation in the governance system are inter-dependent." Discuss their relationship with each other in context of India.

### 7. SHOULD WE HAVE APATHY TOWARDS CLEANLINESS?

*Contributing in cleanliness)*

**A culture of cleanliness and tidiness must be inculcated from an early age**

Those who have travelled overseas are struck by the orderliness and cleanliness of public places in sharp contrast to what is happening back home. No one tells a child to keep the surroundings clean and not to litter. It is the way a child is brought up that inspires a desire for cleanliness.

That is the reason it is difficult to find even a scrap of paper or plastics on the streets or outside homes in many foreign countries. That applies to cleanliness on board trains, buses and trams that are in public service. No one throws anything outside a running train or bus as it is considered taboo.

We adopt a dual standard. We tend to keep our house and neighbourhood clean, but have no compunction in throwing dirt and discarded objects outside. The logic is someone is there to clean up and pick up the discard. People in general hold rivers in respect but do not hesitate to throw things in the river. That is the reason our rivers, lakes and other waterbodies are far from clean. Even the piped treated water that is supplied by municipal authorities is not fit for drinking. Most homes have some sort of filter to clean the water before use. Others may boil the water before use. In sharp contrast, a few cities round the globe claim proudly that their city water supply is fit for drinking straight from the tap.

I was away in a remote part of Japan waiting for a connecting train at a small wayside station. A young girl was also waiting for the train. I watched her taking out a candy from her bag and eat it. Afterwards, she walked briskly to a nearby waste bin provided on the platform to deposit the wrapper. Such is the level of awareness to keep surroundings clean from a young age. It is the culture of cleanliness and tidiness which is inculcated from an early age. It is not that our youngsters are not aware of the need to keep surroundings clean. But for

most others, it is sheer apathy and carelessness that makes them litter.

When a toilet is not available, what does a person do? He uses any public place to ease himself. I observed a person soiling a wall. I asked his companion why he was doing so. "Maybe, he couldn't have waited till he found a toilet," replied his friend. That person after finishing his business came near me, "Sir, you are right. But I couldn't help it. Please provide a toilet nearby." I kept quiet as I had no answer.



A few public toilets are maintained badly with poor cleanliness. These go out of water soon leaving a stinking mess. No wonder only a few persons patronise public toilets. However, 'pay and use' toilets maintained by attenders are better. While I was on a tour of Paris, I found a men's toilet was cleaned by a woman who used to dart in and out when there was no person inside. She was also in charge of the women's toilet. "Unisex" toilets are still not popular.

The Swachh Bharat programme was launched throughout the country with big fanfare. After six years, many toilets were built in villages and towns. Some of them were substandard that kept patrons away. Unfortunately, open defecation, especially in villages, is still going on. A similar sad story applies to the programme to clean the major rivers like Ganga and Yamuna. Thousands of crores of money are already spent with poor results. The major issue remains leakage of sewage water into the rivers. The priority should have been first to build treatment plants and then lead the clean water into the river. Such simple priorities are being overlooked in the enthusiasm to achieve something big. It has become more of publicity rather than actual work.

## ETHICS, INTEGRITY & APTITUDE

It is becoming clear that the **cleanliness drive has to start with the people**. The government and other agencies should act as facilitators to help plan and execute the work. Consultation with the people concerned goes a long way in the success of any cleanliness drive. A **cleanliness plan should be community based** rather than as a diktat from the government. **“Start early in life,”** is a good piece of advice for creating awareness of cleanliness. It is the duty and responsibility of every citizen to take care of cleanliness.

### 8. SHOULD WE ADMIT OUR MISTAKES?

*(# open to self-examination)*

**Admitting and learning from mistakes should be the right way to go, and Indians need to learn that**

A few months ago, I visited a museum of history in Berlin called the Topography of Terror. The exhibits in this indoors-and-outdoors museum portray heinous crimes committed by the Nazis. Here, the thought that came to me was of tolerance and conflicts of interest. **Topography of Terror is funded and managed by the German government — proof that Germans are fine with self-reflection and criticism.**

In many leading democracies, such introspection and criticism are tolerated. Consider the recent Boeing 737 MAX aircraft crashes. It was the U.S. media — including The New York Times, The Washington Post and USA Today — that were in the forefront of debates on certain technical flaws in the software used in the aircraft that could have led to the accidents. An article in The New York Times even said it was Boeing’s relentless competition with its European rival Airbus for orders from America’s own airlines that led to security lapses. American airlines were considering placing orders for hundreds of jet aircraft with Boeing’s European rival Airbus, which forced Boeing into a frenzied rush, and in record time it developed and deployed the 737 MAX 8, even overlooking certain key safety features. Americans, like Germans, aren’t afraid of such self-criticism.

Can I even imagine a museum in Delhi portraying some of the mistakes Indians have committed, in line with Topography of Terror? A museum on sati, the caste

system, honour killings, mob lynching and so on? Tolerance for criticism and dissent vary substantially across time and space. Our own level of tolerance, while far below that of the majority of developed countries, is still higher than that of many West Asian countries, China, and so on.

A few decades ago, our own tolerance level was arguably higher than it is today. Consider, for example, how Jawaharlal Nehru reacted to certain political caricatures criticising him, done by cartoonist R.K. Laxman. One morning, Laxman was surprised to receive a call from Nehru. The Prime Minister told him he had so enjoyed his cartoon that morning, and asked if he may have a signed copy of it.

**Tolerance for criticism, introspection, learning from mistakes and feedback loops are indeed hallmarks of logic and scientific methodology. If we don’t criticise other people’s mistakes and our own past acts, and, more important, learn from the mistakes, how can we progress?** If Germans can criticise their own past actions and make remarkable progress in terms of education, health and standard of living, why can’t we do it too? Let’s accept that we have made mistakes in the past (and make them in the present time, too), in order to move forward by learning from the mistakes, to march towards a better India.

#### ASSIGNMENT FOR SELF-PRACTICE

- Q. Did you find answers to the UPSC questions given at the top? If yes, then try to answer them.
- Q. Do you have a plan to inculcate and develop all the qualities mentioned above? If yes, then design approach/approaches for yourself.
- Q. Have you ever displayed the above qualities in demanding situations? If yes, then share those with apt examples.

GET STARTED !

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**ETHICS, INTEGRITY & APTITUDE**

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## CASE STUDIES FOR PRACTICE

### MAINS GS PAPER IV

**Case 1:** Rakesh is a responsible district level officer, who enjoys the trust of his higher officials. Knowing his honesty, the government entrusted him with the responsibility of identifying the beneficiaries under a health care scheme meant for senior citizens.

The criteria to be a beneficiary are the following:

- 60 years of age or above.
- Belonging to a reserved community.
- Family income of less than 1 Lakh rupees per annum.
- Post-treatment prognosis is likely to be high to make a positive difference to the quality of life of the beneficiary.

One day, an old couple visited Rakesh's office with their application. They have been the residents of a village in his district since their birth. The old man is diagnosed with a rare condition that causes obstruction in the large intestine. As a consequence, he has severe abdominal pain frequently that prevents him from doing any physical labour. The couple has no children to support them. The expert surgeon whom they contacted is willing to do the surgery without charging any fee. However, the couple will have to bear the cost of incidental charges, such as medicines, hospitalization, etc., to the tune of rupees one lakh. The couple fulfils all the criteria except criterion 'b'. However, any financial aid would certainly make a significant difference in their quality of life.

How should Rakesh respond to the situation? (250 words)

The case presents conflict between two foundational values of civil services, objectivity and empathy & compassion. On this account Mr. Rakesh will face ethical dilemma. Following are other values and issues involved in the case –

- Trust reposed by higher officials on Mr. Rakesh to implement the scheme with responsibility.
- Maintaining the integrity of criterion of the scheme.
- Socio-economic justice to old couple in unreserved category.

If Mr. Rakesh accommodates the old couple without fulfilling the criterion then significant difference in the quality of their life will happen. It will also amount to distributive justice of John Rawls. It will fulfill the spirit of equity of our constitution. State will also seem to oblige the social contract by helping citizens in need.

However accommodation under the scheme without fulfillment of criterion will destroy objectivity of Mr. Rakesh. He will also breach the trust reposed on him by superiors. Taking Adhoc decision will destroy work culture and objectivity in decision making. It may also create discontentment in reserved category for whom the scheme has been formulated. This will impact the image of civil service as being impartial and non-partisan. The decision will also go against the idea of Max Weber model of bureaucracy.

Mr. Rakesh must use emotional intelligence to deal with the situation. He must express the foundational values of empathy and compassion within the contour of legal and rational bureaucracy. Hence he can adopt following course of action –

- Recommend to the concerned ministry/authority to amend the criterion of the scheme to fully or partially accommodate unreserved category as well.
- For this he can prepare a detailed report highlighting the need among unreserved category as a tool of persuasion.
- On immediate basis he can arrange for some financial help to the old couple from self, family and friends, NGO's working in health sector, Philanthropist etc. This will save Mr. Rakesh from possible crisis of conscience and inner dissonance.

Mr. Rakesh must show attitude of committed bureaucrat. He must work with dedication to fulfill the constitutional promise of justice and support to senior citizens.

**Case 2:** As a senior officer in the Ministry, you have access to important policy decisions and upcoming big announcements such as road constructions projects before they are notified in the public domain. The Ministry is about to announce a mega road project for

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## ETHICS, INTEGRITY & APTITUDE

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which the drawings are already in place. Sufficient care was taken by the planners to make use of the government land with the minimum land acquisition from private parties. Compensation rate for private parties was also finalized as per government rules. Care was also taken to minimize deforestation. Once the project is announced, it is expected that there will be a huge spurt in real estate prices in and around that area.

Meanwhile, the Minister concerned insists that you realign the road in such a way that it comes closer to his 20 acres farmhouse. He also suggests that he would facilitate the purchase of a big plot of land in your wife name at the prevailing rate which is very nominal, in and around the proposed mega road project. He also tries to convince you by saying that there is no harm in it as he is buying the land legally. He even promises to supplement your savings in case you do not have sufficient funds to buy the land. However, by the act of realignment, a lot of agricultural lands has to be acquired, thereby causing a considerable financial burden on the government, and also the displacement of the farmers. As if this is not enough, it will involve cutting down of a large number of trees denuding the area of its green cover.

Faced with this situation, what will you do? Critically examine various conflicts of interest and explain what your responsibilities are as a public servant. (250 words)

This is a case of political corruption and test of my integrity and uprightness as a senior bureaucrat. The situation challenges my morality and professional ethics.

In this situation I have to fulfill my duty and responsibility as a senior bureaucrat –

- a) I have to work with integrity, honesty & truthfulness and diligence. I will make my intention clear for not being party to any form of corruption.
- b) I must give free and fair advice to political executive without any fear to usher in good and ethical governance.
- c) I must also guide my minister against ills of corruption for him and society.
- d) I must act in the interest of farmers, poor, environment and society as a whole.
- e) I must protect myself and my wife from any potential loss of reputation and dignity on account of charges of corruption.

- f) To fulfill my above duties I must muster courage and determination. I must protect myself from any internal hedonistic tendency and temptation through yoga, meditation and drawing motivation from literatures and life of great leaders and civil servants.

I will use Gandhiji's Talisman to take final decision. I will work in the interest of weak and vulnerable, farmers, environment and efficiently use public money to complete the project.

There are various conflicts of interest in the case –

- a) Professional interest of the concerned minister is in efficient execution of the road project. This will create social capital and increase trust and credibility of government. However his personal interest is alteration of the project and increase in price of his farmhouse.
- b) For me as a bureaucrat, it is in my professional interest to have cordial relation with my minister. But professional values, accountability and responsibility to nation is more important.
- c) For my wife there is opportunity to buy new asset, however not at the cost of my integrity, dignity and reputation.

Following are my responsibilities as a public servant –

- a) Safeguarding mine and my organisational values. I have to protect probity of my office, work culture of organisation and reputation of my ministry.
- b) I am responsible to guide my minister and persuade him against any act of corruption that will be subsequently known after audit or whistle blowing.
- c) I am responsible to fulfill fiduciary responsibility of government to complete the project cost effectively.
- d) In the spirit of ethical governance I must ensure minimum land acquisition, farmer's suffering and deforestation and loss to environment.
- e) Trust reposed by people in government must be not be breached.

First Cabinet Secretary of independent India **N.R. Pillai** said, "the public servant of the day, and still more of tomorrow, should be one rich in human sympathy and with a fully awakened social conscience." I will try to live upto his expectation.

**PART THREE**

**ESSAYS**

*of*

**THE MONTH**

**Selected essays from Rau's GSI students**



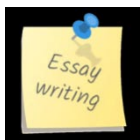
# INTROSPECTION AND PERSEVERANCE IN HARD WORK ARE KEYS TO SUCCESS

#PHILOSOPHICAL

SUBMITTED BY: ANKUR PANDEY

*Disclaimer: The viewpoints in the topic are strictly personal of the writer above. The role of Rau's IAS Study Circle is to present the write-up in its original form, hence the study circle neither endorses nor rejects any viewpoint in the submission. The purpose is only to showcase the manner of writing.*

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Dr. APJ Abdul Kalam was rightly said the people's president. He used to participate in events and communicate with people in general and youngsters in particular. In one such event in Chennai, a small boy asked him in 2002 that how can India become great again, as it used to be in the past? Dr. APJ Abdul Kalam replied that it is the people like you, with ignited minds, who will make the nation great.

Another student asked as to what we should do to make the nation great. Dr. Kalam gave the four-point formula – First, there should be a great vision. Second, you should continuously acquire knowledge. Third, you should work hard. Fourth, you should display perseverance. This is the mantra of success, he said.

In this essay, we will try to understand the message of Dr. Kalam, how introspection and perseverance can lead to success. After that, we will apply these abstract ideas to demonstrate the present situation and ultimately how we can make the nation great again.

## **Introspection and Perseverance: A civilizational idea**

Introspection refers to be aware of oneself. It means evaluating oneself and assessing our actions. At the same time, perseverance is our ability to display persistence and handle setbacks.

Since ancient times, India was a land of great scholars and rishis. They became great not because of some

supernatural boon but by constant introspection and perseverance in hard work.

A case in point can be Gautama Buddha. He had a thoughtful mind since childhood. He left home at the age of 29 and spent the next seven years introspecting and finding the truth. He got many setbacks in the process, but he displayed great perseverance and, at the age of 36, attained success by getting enlightenment.

Similar to Gautam Buddha, Ashoka, in the war of Kalinga, introspected that it is wrong to kill so many people for territorial conquest. After the war, he adopted the policy of Dhamma and spread his message by using stone pillars. Despite the enormous moral baggage of the past, he continued to do hard work, which ultimately led to an informed citizenry and good governance (a success for any king).

Moreover, the practice of meditation and the rich text of Aranyaka (books written in the forest) is a clear indication of the importance of constant introspection in living a happy life.

The power of perseverance can be seen in the recurrent incursions and large-scale loot by Turkish invaders. In 1000-1025 A. D., Mahmud of Ghazni invaded India 17 times. Temples were destroyed, treasuries looted, and villages burnt. It was a testing time for India. In 1033 A. D. Sohail Deopasi, a ruler of Bharuch in Central UP defeated a large army led by a nephew of Mahmud. This sent a clear message that India is not weak and can respond. Interestingly, no foreign invasion happened after the battle of Bharuch, and there was a period of peace for the next 150 years.

## **Introspection and Perseverance – Success stories in Recent times**

After getting Independence in 1947 from colonial rule, we have started our collective journey to make the nation great again.

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## ESSAYS OF THE MONTH

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At the time of Independence, India was a developing country characterized by shortages of food, medicine, and other essential things. Five-year Plans gave the vision and committed leadership, along with the people of India, have worked hard despite so many obstacles.

Constant introspection of our weaknesses led to GREEN REVOLUTION, which made India self-sufficient in terms of food grains. Similarly, we have achieved great strides in nuclear technology, space science, and other sectors. This was possible only because we were determined to do hard work despite the constraints of resources.

Building on this tradition, the government of India has brought several economic reforms like GST, IBC, RERA, Jam trinity, MPC, etc. These reforms are a step in the direction of India becoming a \$5 trillion economy. These reforms would not have been possible if it were not for proper introspection and perseverance. Inefficient fund delivery led to the introduction of JAM. Shortcomings in SARFAESI Act led to the introduction of IBC etc.

The government of India is working hard to build upon these reforms and amending them wherever required constantly.

After understanding the role of introspection and perseverance in hard work, let us now look into some of the renewed challenges faced by our nation.

### **Renewed Challenges – Need for Introspection and Hard work**

India needs to enhance its discussions on critical topics if we want to become a great nation. Today majority of our people are young. How to use these people as a demographic dividend by proper skilling and investment in health care? We should work hard on these reforms as there is a limited window of opportunity.

India is a water-scarce nation. This water crisis is going to be aggravated in the coming years. How can we shift to less water-consuming lifestyles? What policies should the government adopt? Can we learn from other similarly situated nations? These are the key questions that need to be introspected.

It is rightly said that success often requires breaking our habits. We need to move from this business as usual attitude. We cannot continue to waste food when there are so many hungry people in our country.

Thus, after acknowledging that many issues need to be resolved, a start can be made by setting up and bringing sensible reforms in our institutions like Election Commission, Judiciary, and Parliament. Strong institutions are not only drivers of economic growth but also protectors of democracy.

We need constant introspection in every field and learn from others. E.g., we should introspect why we cannot attract businesses that are moving out of China, why we are importing 80% of our toys from China, despite so much potential. Similarly, we should learn from Singapore, which has become a great transshipment hub just under 30 years of Independence.

No doubt, we have great potential and a rich heritage. If properly utilized, we can dominate the world landscape. Coherent vision has been set up in the form of New India and Aatmanirbhara Bharat. Now we should build upon this and follow the mantra of success given by our people's president. We should become the ignited minds and fulfill the trust that has been put upon us by Dr. APJ Abdul Kalam by making the nation great again within our lifetime.

# FARMING HAS LOST THE ABILITY TO BE A SOURCE OF SUBSISTENCE FOR THE MAJORITY OF FARMERS IN INDIA

#AGRICULTURE #ECONOMY

SUBMITTED BY: MUSKAN ARYA

*Disclaimer: The viewpoints in the topic are strictly personal of the writer above. The role of Rau's IAS Study*

*Circle is to present the write-up in its original form, hence the study circle neither endorses nor rejects any viewpoint*

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## ESSAYS OF THE MONTH

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*in the submission. The purpose is only to showcase the manner of writing.*

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Agriculture has always been vital to India. Agriculture with its allied sectors is the largest source of livelihood in India. 70% of the rural households still directly depend on agriculture. India has been blessed with a varied climate structure and a wide variety of soils. Land is naturally suitable for cultivating a number of crops to add diversity to our food basket. Yet this sector suffers from both structural and implementation problems, which have deterred it as a source of profitable employment. In India, 82% of farmers are small and marginal farmers (1-2 hectares of landholding). Their heavy dependence on rainfall (seasonal), indirect credit, and dependence on intermediaries for foodgrain procurement make it a complex mix. A further problem of high input costs, lack of availability of technology, less diversification, heavy dependence on pesticides and fertilizers make the industry unsustainable. The distress can be seen in the number of farmer suicides witnessed in India. According to NCRB 2019 data, farming is the cause of 7% of suicidal deaths in the country. On average, 28 farmers end their lives every day in India.

The problem of making agriculture from a mere subsistence model to a revenue-generating one requires a multi-prolonged strategy—issues from procurement of seeds and inputs to the final selling. **'Ashok Dalwai's report on Doubling of Farmer's income** laid a major emphasis on input cost reduction. Along with this, sustained credit support from the formal sector and effective implementation of schemes with timely disbursements are necessary.

India has been bestowed with a variety of climates. The first step towards making farming sustainable should be to adopt agro-climatic condition-based farming. The majority of farmers take a decision to sow the crop depending on the Minimum Support Price (MSP) announced by the government and prevailing market conditions. To induce farmers to adopt sustainable agricultural practices, the government should increase procurement of other crops on MSP. Climate suitable crops should be adopted by increased MSP as incentive for such crops. A positive step in this direction has been taken by Haryana Government, where they will pay ₹ 7000 per hectare for non-paddy crops. Ensuring a supply

of superior quality seeds locally, extending formal farm-based credit, insurance coverage at low premium rates (micro-insurance), and certainty of procurement by the government on MSP (crops other than rice) will boost the confidence of farmers to shift their pattern. Adopting agriculture suitable to climate will help us reduce resource exploitation, improve our soil condition and crop diversity, ultimately improving the nutritional intake, especially by pulses.

Majority of farmers being small and marginal, they can be organized in the Joint Liability Group (JLG). The concept is similar to that of self-help groups, where like-minded people come together to progress together. Such JLGs would enhance the credit procurement power of the group, machines lent can be used effectively, and ultimately it will help in better bargaining power while selling in the market. Collective sharing of the loans and the liability to pay will keep all members accountable and reduce the excessive burden on one. The timely repayment of loans will lead to better credit trust among the banks and farmers. There has been a rise of 38% NPAs in agricultural loans; this problem will be effectively tackled. Further, once JLGs are successfully operating, they can be formally registered with State Governments and upgraded to farmer producer groups or companies.

A major cause of distress among the farmers is the repayment of loans taken from informal sources. Farmer's land in a debt trap due to no document availability and spiraling interest rate. There are only 48,000 rural bank branches for 6 lakh plus villages in India. Further, the branches are skewed-greater presence in green revolution success areas. To make formal credit accessible, bank branches, especially of Small Finance Banks (SFBs) should be opened. SFBs have a 75% priority lending commitment to agriculture. Furthermore, microfinance institutions and post office banks should be encouraged. In areas that are far off, mobile banking should be adopted. This will also benefit farmers who cannot visit the branches often. PMGDISHA is a scheme of government by which it aims to train members from rural households to use the internet, including basic banking features. To enhance the coverage, bank applications should have regional language options. Further, the group of youth in the villages can be trained as Bank Mitras and act as a linking pin in the model. This will enhance rural employment generation as well.

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Further, research and development by agricultural universities in terms of seeds, practices, and crop protection should be encouraged. A gradual shift to organic inputs like biopesticides and biofertilizers should be encouraged. Under the Soil Health Card Scheme of the government, at least twice a year, testing of soil should be done. Farmers should be explained about the condition of their soil and ways to enhance production. Continuous research in the development of superior quality seeds will help to make agriculture a more sustainable option. In West Bengal, 'Muktoshri' arsenic-resistant variety of paddy was grown. This will help to tackle bioaccumulation. Such seeds should be available to farmers efficiently and effectively. For this community, seed banks can be set up. Such banks can be maintained at Panchayat Level, and agro-climatic suitable crop seeds can be made available. Women SHGs can be roped to take charge. Further pooling of good-quality seeds by farmers can also be a solution.

Agriculture in India accounts for maximum use of water, accounting for 75% of water used, both from underground and surface water. Further, the subsidized electricity and diesel pump sets worsen the exploitation. Subsidy of the government here is a huge burden on the exchequer as well. For this, a community partnership for managing water resources, especially by raving traditional sources-baolis, tanks, ponds, should be undertaken. MGNREGA has reaped success stories in various pockets of the country to make villages sustainable in water consumption by building infrastructure. Rainwater harvesting, agroforestry (Har Medh Par Ped) and sustaining water use is the effective way forward. Further, gradually the government can lower subsidy and divert it towards setting up of drip irrigation and sprinkler irrigation systems can be done.

In order to make agriculture a revenue-generating model, it is necessary to reduce its crop dependence nature. Agriculture in India is majorly rainfed, and this

brings in high chances of crop failure due to less rain. Sources of non-crop incomes are dairy, poultry, sericulture, agriculture, aquaculture, jatropha plantation, sea-weed cultivation, etc. The government has been productive in introducing a number of initiatives like Apiary on wheels to train farmers in beekeeping, but a regular and sustained approach is required. Recently, the government has introduced Shaphari Scheme to make shrimp production regulated and antibiotic-free. Such initiatives to check the quality, ensure pricing, and preventing farmers from being exploited are required to be carried on a large scale.

Further, a biogas plant can be set up by aggregating 2-3 villages with the help of the government to utilize the agriculture residue, get biogas as a cleaner fuel, and use the residue cultured as manure. India is 2<sup>nd</sup> largest producer of sugarcane in the world. To prevent distress selling and revive the sugar industry, ethanol production from it should be encouraged. This will further supplement the trending of the fuel program of the government.

Lastly, training farmers to adopt such practices and making them understand the benefits holds the key to bring change. Regional languages should be used to communicate with farmers through local newspapers, community radios, street plays, mobile apps, etc. NGOs, student groups from agriculture and science backgrounds can be referred to spread information.

Revival of rural income will help to improve the socio-economic conditions of people residing in rural areas (majority). It will keep a check on urban migration, open opportunities for better access to health and education, and improve the country's social fabric. The dream of economic and social justice in Preamble should keep the rural area in focus. In this way, we will realize the dream of Atmanirbhar Bharat through Atmanirbhar Villages.

## ESSAYS OF THE MONTH

# LIFE IS A LONG JOURNEY BETWEEN HUMAN BEINGS AND BEING HUMANE.

#PHILOSOPHICAL

SUBMITTED BY: KABIR SAINI

*Disclaimer: The viewpoints in the topic are strictly personal of the writer above. The role of Rau's IAS Study Circle is to present the write-up in its original form, hence the study circle neither endorses nor rejects any viewpoint in the submission. The purpose is only to showcase the manner of writing.*

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All of us (Homo Sapiens) are born as human beings. Before assigning any identity like male, female, white, black primarily, we are human beings. On the other hand, being humane means having a set of humanization values like empathy, compassion, kindness in oneself. These values also include constitutional values like equality, liberty, fraternity. A human being is born with an empty mind which converts into an open mind which is in harmony with existence after being humane.

An individual born as a human being must strive hard to be humane. Her life is a journey from being human beings to a humane being. Whether it's long or short journey depends upon the individual. Also, it's not necessary to be compassionate all time. It has some effects on circumstances and past experiences. We can't lead ideal life all time. Let us see how humanity had suffered when it went away from its humane nature.

To begin with, consider World War II (WWII), the First World War had demonstrated devastating impacts of chemical weapons. Millions lost lives mercilessly. But human beings didn't learn from it. Along with chemical weapons, biological war started. Japan invested heavily in developing biological weapons. A new competition started to create more dangerous bioweapons. Millions of animals lost their lives due to tests being done on them. Had humanity been more humane than, we would have been on a more developed stage of civilization today. This one example demonstrates why everyone must try to be compassionate.

Secondly, consider the economic sphere. As per the Credit Suisse report top, 1% of people holds almost 40% of the global wealth. In developing countries also inequality is increasing at a rapid pace. In India, too, inequality is rising, which affects our developmental aspects. This is a grim situation. Aggravating this situation are Multi-National Companies who evade taxes worth billions of dollars through manipulative practices like round-tripping, treaty shopping. Here selfishness prevails over humane nature. These billions of dollars could have been utilized for welfare programs in developing countries.

Furthermore, consider at the individual level. In Indian society, we see that domestic work is considered to be the duty of women only. This hinders women's participation in the labor force, as is evident from the Periodic Labour force Survey report. If both husband and wife are working, it's the equal responsibility of both of them to do domestic work and raise children. Expecting women to be solely responsible for household chores and at the same time go out and compete professionally isn't a humane attitude. This results in India's low performance on various indicators like Global Hunger Index, Global Environment Index, etc. So we have seen how being inhumane attitude costs us.

Now, let us see examples of humane behavior which have made this world a better place to live.

To start with, consider the example of the Indian National Movement. It showed how one human being could make a big difference. Indian National Movement under the leadership of M. K. Gandhi was based upon humane values of truth and non-violence.

Had it not been a non-violent movement, we wouldn't have been in a democratic setup today. These values on which we fought for independence played a crucial role in the drafting of the constitution. This led to the



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adoption of humane values like liberty, equality, fraternity, due to which we are a free society today.

Dr. APJ Kalam is a brilliant example of transformation from human being to being humane. Seeing his career, we can see humane values like compassion, empathy that he possessed. For example, when Dr. Kalam noticed broken pieces of glass were used at the top of the compound wall of the DRDO facility as a banner, he immediately asked to remove them. His motive behind this was to save birds from getting injured.

All these examples that we discussed make us realize the importance of being humane and why everyone must strive to be compassionate.

Let us shift our attention to inculcating humane values in an individual which ultimately will lead to a society with humane values. This will ultimately result in a peaceful world if every country follows it. Let us discuss this in the Indian context.

The essential tool which can transform a human being into a humane person is education. Real education is that which makes our life in harmony with existence. National Education Policy 2020 will have a crucial role here. The present Indian education system is solely based upon rote learning. Student's cognitive ability, practical knowledge aren't tested. All-time students are in the mode of competition and in fear of lagging behind others. Such students can't possess humane values easily who are only taught about marks and competition at the school level. So, the various facets of NEP 2020, like 6% GDP expenditure on education, less importance to rote learning, introduction to vocational courses, teachers training programs need to be implemented speedily.

Secondly, we must adhere to the principles of 'Certainty of Punishment' and 'Certainty of Praise'. Those individuals in a society whose inhumane behavior is harming our society need to be punished with certainty. And best punishment is awarding (giving) community

development work. We can start this at a small level like a traffic signal or railway platform. If we develop our system in such a way that an individual already knows that violation of traffic signal will undoubtedly lead to punishment in the form of managing traffic for next hour, then she wouldn't dare for violation. This will reduce many road accidents. Similarly, there must be certainty of praise for those individuals impacting society in a positive way. This will lead to a cohesive community with humane values.

Last but not the least step is the realization of goals mentioned in the preamble that is political, social, and economic justice along with environmental justice. We have achieved political justice through reservation for weaker sections in central and state legislature. But we are still away from achieving the remaining three, as evident in our global ranking on various indices. This is why we initially stated that it's not possible and necessary to be humane all time. We cannot expect humane attitude from a socially backward class oppressed for thousands of years. Also, we cannot expect a single mother of two children, harassed by dowry demands, faced discrimination at various stages of life to be humane. For her and her children's sake, she has to be selfish as per circumstances. Therefore, the state must strive hard to realize these constitutional goals. Without this, we cannot expect all to be humane at all times.

After all, things considered, we can certainly say that life is a journey between human beings and being humane. Everyone must try to make this journey short. We also saw how the human nature of humankind had saved the world till now. But we also need to understand we can't expect all to be humane all the time. The state must strive hard to achieve social, economic, political, and environmental justice. Despite this, we must strive hard to fulfill our life by being humane.

