

GOVERNANCE**World Happiness Report 2021**

The Sustainable Development Solutions Network for the United Nations released the World Happiness Report 2021, a day before the International Happiness Day.

This year it focuses on the effects of Covid-19 and how people all over the world have fared.

International Happiness Day

- It is celebrated every year on 20th March to highlight the importance of happiness in the diurnal lives of people.
- The United Nations started to celebrate the International Day of Happiness in 2013 but a resolution for the same was passed in July, 2012.
- This resolution was first initiated by Bhutan which emphasised on the importance of national happiness over national income since the early 1970s, thereby adopting the Gross National Happiness (GNH) over Gross National Product (GNP).

Gross National Happiness: The phrase 'gross national happiness' was first coined by the 4th King of Bhutan, King Jigme Singye Wangchuck, in 1972.

- The concept implies that sustainable development should take a holistic approach towards notions of progress and give equal importance to non-economic aspects of wellbeing.
- GNP is the total value of all finished goods and services produced by a country's citizens in a given financial year, irrespective of their location.

Theme of 2021: "Happiness For All, Forever".

Key Points

The World Happiness Report ranks 149 countries by how happy their citizens perceive themselves to be. The rankings are based on polling (Gallup World Poll) which looks at six variables:

- Gross Domestic Product Per Capita (Purchasing Power Parity).
- Social Support.
- Healthy life expectancy at birth.
- Freedom to make life choices.
- Generosity.
- Perceptions of corruption.

Respondents are asked to rate their own current lives on a 0-10 scale.

Top Performers:

- Finland has been ranked as the happiest country in the world for the fourth consecutive year.
- Followed by Iceland, Denmark, Switzerland, The Netherlands, Sweden, Germany and Norway.

Worst Performers:

- Afghanistan (149) is the most unhappy country.
- Followed by Zimbabwe (148), Rwanda (147), Botswana (146) and Lesotho (145).

India's Neighbours:

- Pakistan-105.
- Bangladesh-101.
- China-84.

India:

- India has been ranked 139, out of 149 countries evaluated.
- In 2020, India was ranked 144 out of 156 countries surveyed.

SOCIAL JUSTICE**Covid Increased Poverty: Pew Report**

Recently, a new research conducted by Pew Research Center has found that the coronavirus pandemic has pushed about 32 million Indians out of the middle class and increased poverty in the country.

The report is based on an analysis of **World Bank data**.

- Pew Research Center is a nonpartisan fact tank that informs the public about the issues, attitudes and trends shaping the world.

Key Points**Indian Scenario:**

- The poverty rate in India likely rose to 9.7% in 2020, up sharply from the January 2020 forecast of 4.3%.
- From 2011 to 2019, the number of poor in India was estimated to have reduced to 78 million from 340 million.

- In 2020, the number increased by 75 million.
- Poor: People with incomes of USD 2 or less a day.
- Increase in India accounts for nearly 60% of the global increase in poverty.
- Record increase in Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) participants as proof that the poor were struggling to find work.

Reduced Middle Class:

- The middle class in India is estimated to have shrunk by 3.2 crore in 2020.
- **Middle Class:** Includes people with incomes of approximately Rs. 700-1,500 or USD 10-20 per day.

Shrunked Low Income Group:

- The vast majority of India's population fall into the low income group.
- This group shrank from 119.7 crore to 116.2 crore per day, with about 3.5 crore dropping below the poverty line.
- **Low Income Group:** Includes people earning about Rs.150 to 700 per day.

Rich Population:

- The richer population also fell almost 30% to 1.8 crore people.
- **Rich:** Includes the people who earn more than Rs.1,500 a day.

Comparison with China:

- Like India, China has a large population of around 1.4 billion people. But the pandemic's effect on poverty was much smaller in China.
- It was the only major economy to grow in 2020 and that has helped poverty levels to remain "virtually unchanged".
- In January 2021, the International Monetary Fund in its World Economic Outlook Report, estimated India's economy to contract 8% in the Financial Year (FY) 2020 while China's economy was expected to expand by 2.3% in 2020.
- China's middle class is likely to see a miniscule dip of just one crore, while the number of poor people may have gone up by 10 lakh.

Reason:

- The lockdown triggered by the pandemic resulted in shut businesses, lost jobs and falling incomes, plunging the Indian economy into a deep recession.
- Sharp rise in global poverty was owing to the fact that many under the low income tier prior to the pandemic were living on the margin of poverty.

Effect:

- India and China also account for more than a third of the global population, with about 1.4 billion people each, the course of the pandemic in these two countries and how each recovers will have a substantial effect on changes in the distribution of income at the global level.
- It claws back several years of progress on the economic front.
- At least 271 million people were lifted out of multi-dimensional poverty between 2005-06 and 2016-17, claimed India's Voluntary National Review (VNR) of Sustainable Development Goals (SDG).

Indian Initiatives to Mitigate the Effects of Covid:

- Pradhan Mantri Garib Kalyan Yojana.
- Reserve Bank of India's Covid-19 Economic Relief Package.
- Atmanirbhar Bharat Abhiyan (self-reliant India).

ECONOMY**Open Market Operations by RBI**

The Reserve Bank of India (RBI) has decided to conduct simultaneous purchase and sale of government securities (G-Sec) under Open Market Operations (OMOs) for an amount of Rs. 10,000 crore each.

Key Points

Simultaneous purchase and sale of government securities under OMOs, popularly known as operation twist, involves purchasing G-Sec of longer maturities and selling equal amounts of G-Sec of shorter maturities.

Open Market Operations:

- Open Market Operations refers to buying and selling of bonds issued by the Government in the open market.

- One of the Quantitative Tools: OMO is one of the quantitative tools that RBI uses to smoothen the liquidity conditions through the year and minimise its impact on the interest rate and inflation rate levels.
- Quantitative tools control the extent of money supply by changing the Cash Reserve Ratio (CRR), or bank rate or open market operations.
- Qualitative tools include persuasion by the Central bank in order to make commercial banks discourage or encourage lending which is done through moral suasion, margin requirement, etc.

Impact on Money Supply:

- When RBI buys a Government bond in the open market, it pays for it by giving a cheque. This cheque increases the total amount of reserves in the economy and thus increases the money supply.
- Selling of a bond by RBI (to private individuals or institutions) leads to reduction in quantity of reserves and hence the money supply.

Two Types of OMOs: Outright and Repo.

Outright OMOs are permanent in nature: when the central bank buys these securities (thus injecting money into the system), it is without any promise to sell them later. Similarly, when the central bank sells these securities (thus withdrawing money from the system), it is without any promise to buy them.

Repo:

This is a type of operation in which when the central bank buys the security, the agreement of purchase also has specification about date and price of resale of this security. This type of agreement is called a repurchase agreement or repo. The interest rate at which the money is lent in this way is called the repo rate.

Similarly, instead of outright sale of securities the central bank may sell the securities through an agreement which has a specification about the date and price at which it will be repurchased. This type of agreement is called a reverse repurchase agreement or reverse repo. The rate at which the money is withdrawn in this manner is called the reverse repo rate.

The Reserve Bank of India conducts repo and reverse repo operations at various maturities: overnight, 7-day, 14-day, etc. These types of operations now become the main tool of monetary policy of the Reserve Bank of India.

AGRICULTURE**Refrigeration System Pusa-FSF**

Scientists from the ICAR-Indian Agricultural Research Institute (IARI) have developed an on-farm green energy refrigeration system (Pusa-FSF) and a technology for extraction of gluten from wheat dough and its regeneration in bajra (pearl-millet) and makka (maize) flour.

Key Points**Pusa-FSF:**

- Pusa Farm Sun Fridge (Pusa-FSF) is a 100% solar-powered battery-less cold store that can preserve around 2 tonnes of freshly-harvested produce at 3-4°C during the day and 8-12°C at nighttime.
- It has rooftop solar panels that generate 5 kilowatt (KW) power, which helps in running air conditioning.
- The panels also power a 105-watt submersible pump circulating about 1,000 litres of water from a tank through overhead PVC pipes.
- At night, there is only passive evaporative cooling, with the water chilled during the day acting as a natural heat sink.
- All farmers with solar pumps are a potential market for the Pusa-FSF. India has an estimated four lakh-plus installed solar water pumps.
- An average 5-horsepower pump costing Rs. 2.5 lakh attracts 70-90% subsidy.

Benefits:

- Farmers can store and preserve their own produce. It can avoid distress sales and help improve prices.
- It will help minimise post harvest losses.
- More room to grow perishable items such as tomatoes, fruits, other than Paddy and Maize.

Technology for Extraction of Gluten from Wheat Dough:

- **Need:** Bajra, maize, jowar (sorghum), ragi and other millets contain comparable levels of protein and more vitamins, minerals, crude fibre and other nutrients than wheat. But they don't have any gluten proteins, which results in poor dough quality.

- About the Technology: The technology imparts elasticity and structural strength to bajra and maize dough, making their chapattis as soft as from regular wheat atta flour.
- The proteins extracted and dried into powder have the capacity for regeneration or forming gluten networks in non-wheat dough.
- Scientists have developed gluten based 'Hallur' soft bajra flour, with the help of technology.

Other Technological Developments in the Field of Agriculture:

- Happy Seeder - machine for in-situ management of paddy stubble (straw).
- Precision Agriculture Technologies - Precision Agriculture (PA) is an approach to farm management that uses information technology to ensure that crops and soil receive exactly what they need for optimum health and productivity.

ENVIRONMENT AND BIODIVERSITY**Ranthambore Tiger Sanctuary: Rajasthan**

Six tigers are missing in Ranthambore Tiger Sanctuary (Rajasthan).

Key Points

- Ranthambore Tiger Reserve lies in the eastern part of Rajasthan state in Karauli and Sawai Madhopur districts, at the junction of the Aravali and Vindhya hill ranges.
- It comprises the Ranthambore National Park as well as Sawai Mansingh and Kailadevi Sanctuaries.
- The Ranthambore fort, from which the forests derive their name, is said to have a rich history of over 1000 years. It is strategically located atop a 700 feet tall hill within the park and is believed to have been built in 944 AD by a Chauhan ruler.
- This isolated area with tigers in it represents the north-western limit of the Bengal tiger's distribution range and is an outstanding example of Project Tiger's efforts for conservation in the country.
- India has 2,967 tigers, a third more than in 2014, according to results of a census made public in July 2020. Ranthambore, according to this exercise, had 55 tigers.

Features:

- The reserve consists of highly fragmented forest patches, ravines, river streams and agricultural land.
- It is connected to Kuno-Palpur Landscape in Madhya Pradesh, through parts of Kailadevi Wildlife Sanctuary, the ravine habitats of Chambal and the forest patches of Sheopur.
- Tributaries of River Chambal provide easy passage for tigers to move towards the Kuno National Park.

Vegetation and Wildlife:

- The vegetation includes grasslands on plateaus and dense forests along the seasonal streams.
- The forest type is mainly tropical dry deciduous with 'dhak' (Butea monosperma), a species of tree capable of withstanding long periods of drought, being the commonest.
- This tree is also called as 'Flame of forest' and is one of the many flowering plants that add colour to the dry summers here.
- The park is rich in wildlife with tigers at the apex of the food chain in mammals.
- Other animals found here are leopards, striped hyenas, common or hanuman langurs, rhesus macaques, jackals, jungle cats, caracals, blackbuck, Blacknaped hare and chinkara, etc.
- The park is rich in birds with about 272 species recorded so far.

IMPORTANT FACTS FOR PRELIM**US India Artificial Intelligence Initiative**

Recently, US India Artificial Intelligence (USIAI) initiative has been launched to scale up the science and technology relationship between India and the United States.

Key Points

- US India Artificial Intelligence (USIAI) is an initiative of Indo-US Science and Technology Forum (IUSSTF) which was established in March 2000.
- The Department of Science & Technology (DST), Government of India, and the U.S. Department of State are respective nodal departments for IUSSTF.
- The USIAI will focus on AI cooperation in critical areas that are priorities for both countries.
- Example: Healthcare, smart cities, materials, agriculture, energy, and manufacturing.

- It will bring together key stakeholders from India and the United States to create synergies that address challenges and opportunities at the interface of science, technology, and society.
- This will provide an opportunity to discuss the emerging AI landscape, and address the challenges of developing an AI workforce.

Related Recent Initiative:

- India has launched National AI Strategy (NITI Aayog) and National AI Portal (Ministry of Electronics and Information Technology) and has also started leveraging AI across various sectors such as education, agriculture, healthcare, e-commerce, finance, telecommunications, etc.
- Recently MyGov Corona Helpdesk Chatbot bagged two awards under categories (1) “Best Innovation for Covid-19 – Society” and (2) “People’s Choice Covid-19 Overall Winner” at the recently held CogX 2020. CogX is a prestigious Global Leadership Summit and Festival of Artificial Intelligence & Emerging Technology held annually in London.
- Recently, India joined the 'Global Partnership on Artificial Intelligence (GPAI)' as a founding member to support the responsible and human-centric development and use of AI.
- As per a recent report, India reported a 45% increase in the use of Artificial Intelligence, the highest among all countries, because of shift in buying behaviour and new business challenges (owing to Covid-19 pandemic).
- RAISE 2020 – ‘Responsible AI for Social Empowerment 2020’ was jointly organised by the NITI Aayog and the Ministry of Electronics and Information Technology (MeitY).
- Vaishwik Bhartiya Vaigyanik (VAIBHAV) Summit was organised in 2020 to discuss key areas like quantum technologies, artificial intelligence among others.

DAILY ANSWER WRITING PRACTICE

Qns. In India it is said that the wealth hierarchy mimics the caste hierarchy. In the light of this statement establish the relationship between caste and economic inequality in India and highlight the initiatives taken to address the caste inequality. (250 words)

Ans:

Caste hierarchy is one of the major reasons for this perpetual difference in socio-economic status in India. In most of the surveys it has been found that economic inequality in India is mostly along the caste lines for instance according to a recent paper by the World Inequality Database, India’s upper caste households earned nearly 47% more than the national average annual household income in 2012. Besides, India has been ranked 129 among 158 countries in the 2020 Commitment to Reducing Inequality (CRI) Index.

Relationship between caste and socio-economic inequality in India

- **Linkage Between Caste & Educational Backwardness:** The literacy rate for SCs is around 66% which is less than the national average of 74%. This disadvantage of education leads to their economic deprivation.
- **Linkage Between Caste & Employability:** Due to low education, lower castes are stuck in low salaried employment as agricultural labourers or low-skill labourers in the non-agricultural sector.
- **Linkage Between Caste & Land Ownership:** Upper castes are also major land owning classes in India. Being landless, lower castes have to resort to manual wage employment for their livelihood.
- **Linkage Between Caste & Entrepreneurship:** The NSSO data of 2011-12 shows that Dalits are least likely to start their own enterprises and most likely to work as labourers for others, with Scheduled Castes (SC) having the lowest relative share in the self-employed category and the highest share in the casual labourer category.

Policy measures designed to address caste inequality

Constitutional measures: In the Directive principles of the state policy and the Fundamental rights provisions have been made to equality in social order.

- Article 15 prohibits the discrimination on grounds of religion, race, caste, sex or place of birth.
- Article 16 ensures equality of opportunity in matters of public employment.
- Article 38 promotes welfare of the people by securing a social order permeated by justice- social, economic and political- and to minimise inequalities in income, status, facilities and opportunities
- Article 46 requires the State to promote the educational and economic interests of the weaker sections of the people, and, in particular, of the Scheduled Castes and the Scheduled Tribes.

Legislative measures: They aim to prevent the commission of offences of atrocities against the members of the Scheduled Castes and the Scheduled Tribes so that they could be secured and could improve their socio-economic status.

- The Scheduled Castes and Scheduled Tribes (Prevention of Atrocities) Act 1989
- The Protection of Civil Rights Act 1955
- The 'Prohibition of Employment as Manual Scavengers and their Rehabilitation Act 2013'

Economic measures: Various agencies have been established to provide financial assistance to lower caste population to address prevailing economic inequalities:

- National Scheduled Castes Finance and Development Corporation- to promote prosperity among Scheduled Castes by improving flow of financial assistance and through skill development & other innovative initiatives.
- National Safai Karamcharis Finance and Development Corporation for economic upliftment of safai karamcharis who mostly come from lower castes.
- Venture Capital Fund for Scheduled Castes to promote young entrepreneurs.
- Standup India scheme and Credit Enhancement Guarantee Scheme for Scheduled Castes.

Conclusion

Thus it is necessary to address the caste inequality if India aspires to end extreme poverty and attain the Sustainable Development Goals by 2030.

DAILY QUIZ

1. With reference to Tuberculosis, consider the following statements:

1. It is caused by bacteria.
2. It is a vector-borne disease.
3. It is both a preventable and curable disease.

Which of the statements given above is/are correct?

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

2. The 'Justice K T Thomas Committee', often seen in the news is related to?

- a) Prevention of organised transnational crime.
- b) **Prevention of damage to public property.**
- c) Protection of fragile ecosystems in western ghats.
- d) Pollution control measures in the national capital region.

3. Which of the following statements is/are correct regarding Anangpal II?

1. He was the ruler of present-day Delhi and Haryana in between the 8th-12th centuries.
2. He was defeated by Ghurid forces in the Battle of Tarain.
3. He founded a city named Dhillika Puri.

Select the correct answer using the code given below:

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

4. Consider the following statements:

1. It is one of the most pollution-free rivers of India.
2. It originates from the Vindhya mountains.
3. Banas, Kali Sindh, Sipra, Parbati are its tributaries.

The above statements most appropriately describe which of the following rivers of India?

- a) Narmada
- b) Tapi
- c) Son
- d) **Chambal**

5. With reference to Vehicle Scrapping Policy, consider the following statements:

1. It is formulated by the Ministry of Road Transport and Highways.
2. It envisages reducing air pollution and ensuring road safety.

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