

PERFECT 7

**Weekly
Current Affairs**

An Initiative of **Dhyeya IAS**



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A New Paradigm

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DHYEYA IAS : AN INTRODUCTION



Vinay Kumar Singh
Founder & CEO

The guiding philosophy of the institute, throughout, has been creation of knowledge base. Dhyeya IAS inculcates human values and professional ethics in the students, which help them make decisions and create path that are good not only for them, but also for the society, for the nation, and for the world as whole. To fulfill its mission in new and powerful ways, each student is motivated to strive towards achieving excellence in every endeavor. It is done by making continuous improvements in curricula and pedagogical tools.

The rigorous syllabi not only instills in them, a passion for knowledge but also attempts to teach them how to apply that knowledge in real-life situations. The programmes lay emphasis on well-rounded personality development of the students and also in inculcating the values of honesty and integrity in them.



Q.H. Khan
Managing Director

Dhyeya IAS is an institution that aims at the complete development of the student. Our faculty are hand-picked and highly qualified to ensure that the students are given every possible support in all their academic endeavors. It is a multi-disciplinary institution which ensures that the students have ready access to a wide range of academic material. Our brand of education has broad horizons as we believe in exposure. Our students are encouraged to widen their knowledge base and study beyond the confinements of the syllabus. We aim to lend a gentle guiding hand to make our students recognize their inner potential and grow on their own accord into stalwarts of tomorrow's society.

PERFECT 7 : AN INTRODUCTION



Kurban Ali
Chief Editor

With immense pleasure I would like to inform you that the new version of 'Perfect 7', from the Dhyeya IAS, is coming with more information in a very attractive manner. Heartily congratulations to the editorial team. The 'Perfect 7' invites a wider readership in the Institute. The name and fame of an institute depends on the caliber and achievements of the students and teachers. The role of the teacher is to nurture the skills and talents of the students as a facilitator. This magazine is going to showcase the strength of our Institute. Let this be a forum to exhibit the potential of faculties, eminent writers, authors and students with their literary skills and innovative ideas.

Please do visit our website www.dhyeyaias.com and our youtube channel for regular and updated information on current affairs.



Ashutosh Singh
Managing Editor

We have not only given the name 'Perfect 7' to our magazine, but also left no stone unturned to keep it 'near to perfect'. We all know that beginning of a task is most vital and full of challenges. So we met the same fate.

Publishing 'Perfect 7' provided us various challenges because from the beginning itself we kept our bar too high to ensure the quality. Right from the very first issue we had a daunting task to save aspirants from the 'misinformation' or 'overdose of information'. Focussing on civil services examination 'Perfect 7' embodies in itself perfect friend and guide in your preparation. This weapon is built to be precise yet comprehensive. It is not about bombardment of mindless facts, rather an analysis of various facets of the issues, selected in a systematic manner. We adopted the 'Multi Filter' and 'Six Sigma' approach, in which a subject or an issue is selected after diligent discussion on various levels so that the questions in the examination could be covered with high probability.

Being a weekly magazine there is a constant challenge to provide qualitative study material in a time bound approach. It is our humble achievement that we feel proud to make delivered our promise of quality consistently without missing any issue since its inception.

Your suggestions and popular demands always motivate us and keep our morale high.

May this version of 'Perfect 7' instill a new energy and a new spirit in you. We wish that the bond of affection between you and Dhyeya IAS reaches at a new height.



Send us your suggestions, comment, views and feedback for guiding us on

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PREFACE



Dhyeya family has decided to bring a new colourful and vibrant version of **'Perfect 7'** – a panacea for current affairs, which will add positive and dynamic energy in your preparation.

'Perfect7' is an outstanding compilation of current affairs topics as per the new pattern of Civil Services Examination (CSE). It presents weekly analysis of information and issues (national and international) in the form of Articles, News Analysis, Brain Boosters, PIB Highlights and Graphical Information, which helps to understand and retain the information comprehensively. Hence, **'Perfect 7'** will build in-depth understanding of various issues in different facets.

'Perfect7' is our genuine effort to provide correct, concise and concrete information, which helps students to crack the CSE. This magazine is the result of the efforts of the eminent scholars and the experts from different fields. **'Perfect 7'** is surely a force multiplier in your effort and plugs the loopholes in the preparation.

We believe in environment of continuous improvement and learning. Your constructive suggestions and comments are always welcome, which could guide us in further revision of this magazine.

Omveer Singh Chaudhary

Editor
Dhyeya IAS

As a proud jewel of Dhyeya IAS, **'Perfect 7'** now comes in a new coloured avatar. **'Perfect 7'** is a quintessential part of your preparation strategy for Civil Services Examination. A regular and manageable dose of current affairs will now reach you in new format, making it more reader friendly. Our humble attempt to serve you is surely rewarded by your appreciations. It encourages us to innovate and provide the best as per our ability.

A dedicated team of experts at Dhyeya IAS toils night and day to make your dream of Civil Services come true. I heartily thank and express my gratitude to the esteemed readers and all the people involved in making this magazine a shining star in the galaxy of Dhyeya IAS.

Rajat Jhingan

Editor
Dhyeya IAS

PERFECT 7

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An Initiative of Dhyeya IAS

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(Broadcasted on YouTube & Dhyeya-TV)

7 IMPORTANT ISSUES

01

A.I. and Robotics for Make in India: A New Paradigm

Why in News?

- ◆ An AI and Robotics Technologies Park (ARTPARK) set up by the Indian Institute of Science (IISc) in Bengaluru will work towards enabling development of technologies and products along with significant participation in line with India's push for self-reliance.
- ◆ Bengaluru's ARTPARK will promote technology innovations in AI (Artificial Intelligence) & Robotics leading to societal impact by executing ambitious mission mode R&D projects in healthcare, education, mobility, infrastructure, agriculture, retail and cyber-security focusing on problems unique to India.

Introduction

- ◆ ARTPARK is a Section 8 company (not-for-profit) company, which has been recently setup by Indian Institute of Science, with support from Department of Science and Technology (Govt. of India) and Department of IT-BT (Govt. of Karnataka) to further the Advancement of AI and Robotics Technologies via Innovations and Translation, to benefit society.

- ◆ With seed funding of ₹170 crore (\$22 million) from the Department of Science and Technology (DST) under the National Mission on Inter-disciplinary Cyber-Physical Systems (NM-ICPS), it will bring about collaborative consortium of partners from industry, academia and government bodies. This will lead to cutting edge innovations in terms of new technologies, standards, products, services and intellectual properties, the DST said.
- ◆ It will promote technology innovations in niche areas by executing ambitious projects in various sectors by focusing on problems unique to India.
- ◆ Some of these facilities will be key enablers for whole new sets of technologies, products and services.
- ◆ Generous additional support of the Karnataka government to the ARTPARK hub brings extraordinary value in increasing its effectiveness, reach and use, the DST added. As it sets a template of centre-state partnership in the frontier areas

of technology- a theme which will receive focus in the soon to be released Science, Technology and Innovation Policy 2020.

- ◆ ARTPARK will also develop AI & Robotics facilities to support technology innovations.

Innovations underway in ARTPARK

- ◆ It will develop DataSetu which will enable confidentiality and privacy-preserving framework to share data and run analytics spurring the data-sharing ecosystem and create a data marketplace, boosting AI applications and solutions, the DST said.
- ◆ One such service will be BhashaSetu which will enable real-time Indic language translation, both of speech to speech and speech to text. This will further unlock the economic potential of the country, and enable all Indian citizens to equitably participate in the economic progress, regardless of their language, it added.
- ◆ Avtaar Robotics: Avtaar robotics allows robotic nurses such as

"Asha" to transport healthcare professionals' skills along with emotions across the globe. Connecting avatar robots to remote human workflows with 5G & Wifi 6 can create jobs in the developing world.

- ◆ Drone skyways: Akashmarg- Just like we have roads on the ground, we need roads in the skies for autonomous operation of drones.
- ◆ Remote learning labs: Project Eklavya- Millions of school kids in India don't have access to good schools and labs. Remote labs enabled by robotics can create equal access to learning for millions of young learners in the developing world.
- ◆ The NM-ICPS with its 25 hubs has a unique architecture that envisages a strong collaboration and co-ownership among the triple helix of industry, academia and government with full flexibility.
- ◆ ARTPARK, in collaboration with AI foundry, will run a novel ARTPARK Venture Studio that will mentor technopreneurs who will take the outputs of the mission mode projects to launch new startups.

National Mission on Inter-disciplinary Cyber-Physical Systems (NM-ICPS)

- ◆ Cyber Physical Systems (CPS) are new class of engineered systems that integrate computation and physical processes in a dynamic environment.

◆ CPS encompasses technology areas of Cybernetics, Mechatronics, Design and Embedded systems, Internet of Things (IoT), Big Data, Artificial Intelligence (AI) and many more.

◆ The CPS systems are intelligent, autonomous and efficient and are expected to drive innovation in sectors as diverse as agriculture, water, energy, transportation, infrastructure, security, health and manufacturing. Thus, it is heralded as the next paradigm shift in technology that can exponentially spur growth and development.

◆ To harness the potential of this new wave of technology and make India a leading player in CPS, the Union Cabinet approved the launch of National Mission on Interdisciplinary Cyber-Physical Systems (NM-ICPS) to be implemented by the Department of Science & Technology (DST) with a total outlay of Rs. 3660 Crore for a period of five years.

◆ The Mission aims to create a strong foundation and a seamless ecosystem for CPS technologies by coordinating and integrating nationwide efforts encompassing knowledge generation, human resource development, research, technology and product development, innovation and commercialization.

◆ The mission will be implemented through a network of 15 Technology Innovation Hubs (TIHs),

6 Sectoral Application Hubs (SAHs) and 4 Technology Translation Research Parks (TTRPs). Each hubs and technology parks will follow a technology life cycle approach, addressing all stages viz.

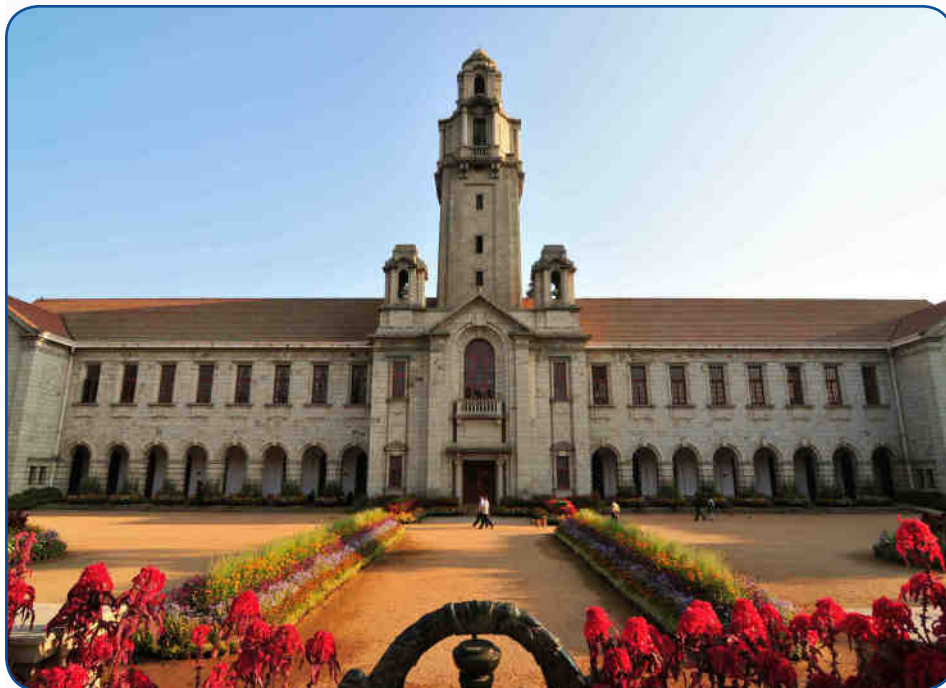
- ◆ The first Phase of NM-ICPS will focus on establishing six Technology Innovation Hubs (TIHs) in the following domain areas:

1. Artificial Intelligence and Machine Learning
2. Technologies for Internet of Things and Everything (IOT & IOE), Sensors, Activators and Control
3. Databanks & Data Services, Data Analytics
4. Advanced Communication Systems
5. Robotics & Autonomous Systems
6. Cyber Security and Cyber Security for Physical Infrastructure

- ◆ The first phase of NM-ICPS will be implemented by Science and Engineering Research Board (SERB).

Technology Innovation Hubs

- ◆ Technology Innovation Hubs (TIHs) will be the nodal centres spearheading the activities in a specific domain.
- ◆ With leading-edge knowledge, competency and facilities, the hubs will attract potential and harness expertise available nationwide, thus fostering research innovation, world class technology and product development.
- ◆ It shall coordinate across the country and build linkages with research institutes and labs in India and abroad.



- ◆ TIHs will work in close collaboration with industry to deliver commercial technology and products and build a vibrant innovation ecosystem by providing a reliable platform for technology-based start-ups and entrepreneurs.

India's AI Powered Future

- ◆ In India, robotics has already reached an advanced stage where crucial sectors, such as healthcare, are utilizing the technology to enhance their offerings. Robotic medical assistants are being used to constantly monitor and interpret the vital stats of patients. These revolutionary medical assistants are also capable of analysing patient symptoms and designing a course of treatment. From dispensing drugs to conducting

screening tests, robots can now share a lot of responsibilities with humans.

- ◆ Robots are also replacing humans in warehouses where jobs are labour-intensive and potentially dangerous. From heavy lifting to inventory collection, robots are capable of taking care of all warehousing tasks. In fact, thanks to the massive potential of robotics in warehousing, the Indian market for warehouse automation is projected to grow at a CAGR of 10-12% during 2015-2020, and is expected to reach \$3.49 billion by 2020.
- ◆ You'd be surprised to know that the first robot-assisted surgery took place way back in 2002 in New Delhi. Steps are being taken

to increase the number of surgeons trained to perform robotic surgeries from existing 120 surgeons to 300 by 2020.

Way Forward

- ◆ At the forefront of India's manufacturing process would be the companies with advanced and innovative automation technologies. New technologies just like the industrial revolution will surely revolutionize the way India manufactures. The increasing emphasis on the new initiative, "Make in India", will shoot up the demand for robotics technology. The need for meeting global manufacturing standards and huge opportunities for foreign players will be definitely witnessed shortly by Indian robotics industry. 🇮🇳🇮🇳🇮🇳

General Studies Paper- III

Topic

- Achievements of Indians in Science & Technology; indigenization of technology and developing new technology.

Topic

- Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

Q. With the innovation in the field of Robotics and Artificial Intelligence, the Indian manufacturing sector cannot remain untouched. Highlight the role robotics and A.I. are poised to play in Indian manufacturing ecosystem.

02

Understanding J&K Roshni Act and Related Issues

Why in News?

- ◆ J&K administration most recently has asked the High Court to review its ruling (October 9 order) that scrapped the Roshni Act, under which encroachments on state land were regularised.
- ◆ The high court's decision to deem the Act unconstitutional and illegal had also raised concerns within the government, given that hundreds of its officials were involved in implementing the legislation that was legally passed by the state assembly in 2001.

Background

- ◆ J&K was the first region in India to implement a land reform law in 1950 but a lot of land grab took place due to lax governance, with political elites encroaching on valuable land and the poor doing the same for inexpensive land.
- ◆ In 2001, the National Conference government, led by Farooq Abdullah, enacted the Jammu and Kashmir State Land (Vesting of Ownership to the Occupants) Act that sought to regularise unauthorised land.
- ◆ Anybody who had grabbed this land in the past, could now come to the government, make an application and pay a certain fee. Once the fee was paid, the land or property would be regularised in the hands of the owner.

- ◆ The J&K government then said they would collect fees to the tune of roughly Rs 25,000 crore, which would then be used to upgrade the region's electricity generation, thus bringing "roshni" into the lives of the Kashmiris.
- ◆ The idea was to raise Rs 25,000 crore to build infrastructure for electricity, or roshni. Subsequent governments under the PDP and the Congress extended the cut-off date to 2007.
- ◆ However, there were fears that this was just a way of favouring the elite.
- ◆ On 9 October this year, the J&K High Court declared the Roshni Act as "unconstitutional, contrary to law and unsustainable". Following this, the J&K administration on 31 October cancelled all land transfers that took place through the legislation.
- ◆ The revenue department had been tasked with working out a plan to retrieve large tracts of state land regularised under the Act.

Regularising Land Grabbing

- ◆ A major problem of the Roshni Act was that it applied to only those who had grabbed land by 1990. Therefore, there were a lot of complaints from those who had taken land between 1990 and 2001.

- ◆ In 2003, the PDP-Congress government led by Mufti Mohammad Sayeed amended the law to shift the cut-off date from 1990 to 2004.
- ◆ In 2007, the cut-off date was further shifted by the Ghulam Nabi Azad government to 2007.
- ◆ However, in 2014, a report by the Comptroller and Auditor General of India (CAG) found irregularities in the transfer of the encroached land to occupants from 2007 to 2013. The report noted that the government had only collected Rs 76 crore of the estimated Rs. 25,000 crore.
- ◆ By 2014, the BJP had formed a government at the Centre. Four years later, the then J&K governor Satya Pal Malik repealed the Roshni Act. Thus, those who have got their land regularised by paying the fee can keep it, but now fresh applications were allowed.
- ◆ Now, the government has set up a committee to recover all the land that was regularised through the Roshni Act, in the next six months.

Objections to the Act

- ◆ The selling and buying of land under the Act was verified and approved by the revenue department concerned, led by revenue inspectors and first class executive magistrates. The proper

mutations were done and land documents were given to people from time to time.

- ◆ In 2018, Satya Pal Malik, the then governor of the state of J&K, repealed the Roshni Act, putting a stop to transactions under the act. Two years later, on October 31, 2020, the J&K administration stated that the Roshni Act had “failed to realise the desired objectives and there were also reports of misuse of some of its provisions”. It said there had been allegations of corruption and the Act had failed to deliver the benefits it had been envisaged for.
- ◆ The administration’s statement came three weeks after the Jammu and Kashmir high court termed the Roshni Act unconstitutional and ordered a CBI probe into an alleged land scam worth Rs 25,000 crores.
- ◆ While hearing a public interest litigation filed in 2011 by S.K. Bhalla through his lawyer Sheikh Shakeel and a civil miscellaneous petition filed in 2014 by advocate Ankur Sharma, both alleging large scale encroachments of state and forest lands in J&K, a division bench of the high court comprising Chief Justice Gita Mittal and Justice Rajesh Bindal in its order last month came down heavily on the authorities.
- ◆ Following the court’s decision, the administration of J&K led by

Lieutenant Governor Manoj Sinha declared that all the actions taken under the J&K State Land (Vesting of Ownership to the Occupants) Act, 2001 – also known as the Roshni Act – are “null and void”.

- ◆ When the Roshni Act was passed, the government at that time had estimated that 20,64,972 kanals (one kanal = 505.85 square metres) of state land worth approximately Rs 25,448 crores had been encroached upon. The allegations of corruption and nepotism ruined the scheme.
- ◆ According to a report in Tehelka, the beneficiaries included political parties like the Congress and the National Conference. Their headquarters in Kashmir, on land owned by the Khidmat trust and Nawai Subah Trust, occupy prime real estate in upmarket areas of Srinagar.
- ◆ Other beneficiaries included Ghulam Mohi-ud-Din Malik, a former J&K assembly speaker, former member of the legislative council K.K. Amla, retired bureaucrats including Syed Mohammad Aga, former Chief Secretary of J&K, and Mohammad Shafi Pandit, former J&K Public Service Commission Chairman, retired judges including Hakeem Imtiyaz Hussain, former J&K High Court judge, and doctors including the valley’s leading nephrologist, Dr Muneer Khan.
- ◆ The State Vigilance Commission (SVC) had also registered FIRs

against Baseer Ahmad Khan, the current advisor to the J&K lieutenant governor, as well as another IAS officer for the alleged misuse of their official positions for the illegal transfer of government land in Gulmarg, Kashmir’s famous ski resort, by misusing provisions of the Roshni Act.

U-Turn in J&K Government’s Review Petition

- ◆ The Jammu and Kashmir government has moved an application before the J&K high court to advance its hearing of the review petition on the October 9 judgment of the J&K high court where a division bench of Chief Justice Gita Mittal and Justice Rajesh Bindal had held that the Roshni act was “completely unconstitutional, contrary to law and unsustainable.”
- ◆ Another key demand in the government’s review petition is to avoid “an unintended roving inquiry by the CBI, which may go on endlessly without generating the results sought by the high court.” The government wants Central Bureau of Investigation to tailor its investigation in order to be “more result-oriented” and “focus on the influential and powerful people who defrauded the state.”
- ◆ It wants the agency to refrain from a detailed investigation



into thousands of government functionaries who implemented the act. "Any inquiry should best take on fraud or malafide or criminal intent," the petition advises. "Any inquiry should focus only on encroachment of government land or obtaining government land through fraudulent means."

- ♦ The government, however, is keen for the agency to scrutinise the "design of legal and policy framework and changes" made to the Roshni Act. The Act was enacted in 2001 under a National Conference government. Subsequent changes were made under governments led by Kashmiri parties.

- ♦ The review petition also asks that the cases registered by Jammu and Kashmir's Anti-Corruption Bureau not be transferred to the Central Bureau of Investigation. So far, the Anti-Corruption Bureau has registered 17 First Information Reports on alleged illegalities under the Roshni Act.

Way Forward

- ♦ Land ownership for the poor and Bhu-daan movement has been the landmark of economic redistribution in India. But there has been numerous instances where in the name of the welfare of the masses, the elite and powerful has pocketed resources and accumulate huge amounts of wealth. And when the whole scheme is exposed, the relief

is sought in the name of a handful few genuine cases, who are made as poster boys in the media. This trend has long been repeated in Indian politico-economic system where the funds and benefits released for the poor reaches the masses in just small negligible amounts. An administration

overhaul and total transparency with accountability is the need of the hour.



General Studies Paper- II

Topic:

- Parliament and State Legislatures - structure, functioning, conduct of business, powers & privileges and issues arising out of these.

Topic:

- Important aspects of governance, transparency and accountability, e-governance-applications, models, successes, limitations and potential; citizens charters, transparency & accountability and institutional and other measures.

Q. Explain J&K Roshni Act. Why this act has been in the news? Also discuss how the schemes to benefit the poor and masses sometimes leads to accumulation of wealth for the powerful and elite and how can it be avoided.

03 Balancing Liberalisation and Subsidies in Farming Sector: The Raging Debate

Context

- ◆ On September 27, President Ram Nath Kovind gave his assent to three contentious farm bills passed by Parliament — The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020 (FAPAFS), the Farmers Produce Trade and Commerce (Promotion and Facilitation) Act, 2020 (FPTC) and the Essential Commodities (Amendment) Act, 2020 (EC). Essentially changing the rules around sale, storage and pricing of farm produce, the bills will permit private buyers to buy and hoard essential commodities for future sales, which only government-authorised agents could do earlier, along with changing the rules for contract farming. Farmers have their concerns based on their perception of the law and the debate around liberalisation of farming sector continues. There is a difference between subsidy and liberalisation.

Background

- ◆ In the US, the agriculture sector is expected to receive \$46 billion in federal subsidies this year. This accounts for about 40 per cent of the total farm income and, if not for those subsidies, the US farm income was poised to decline in 2020, according to a report by The New York Times.
- ◆ European Union's Common Agricultural Policy spending has averaged €54 billion annually since 2006.
- ◆ Without some support from the state, the smallest of Indian peasants would be even more vulnerable. According to provisional numbers from the 10th Agriculture Census 2015–2016, in India, "smallholder and marginal

farmers" (those with less than two hectares of land) account for 86.2 per cent of all cultivators — that is, almost 126 million people. For them, it is inconceivable to carry their produce to other states or far-off places to sell.

Farmer's Concern

- ◆ Since the Minimum Support Price (MSP) is not mentioned in the bills, they fear that they will lose the assured option of selling to the APMC mandis and that this will lead to corporate exploitation.
- ◆ They apprehend a process of corporatisation of agriculture in the absence of regulation, as agribusiness firms might well be able to dictate both the market conditions (including prices) and the terms of contract farming as small farmers do not have the same bargaining power.
- ◆ It would be far more prudent to increase public investment in agriculture in terms of infrastructure and in the form of income support schemes like the Rythu Bandhu in Telangana or the Krushak Assistance for Livelihood and Income Augmentation in Odisha. This, coupled with ensuring that no transaction can be done below the MSP, would help alleviate some rural distress.
- ◆ For making farming sustainable, the government should draw inspiration from Andhra Pradesh's community managed farming model which promotes agro-ecological principles with the use of locally produced, ecologically sustainable inputs, focusing on soil health, instead of depending on chemical fertilisers. This model is more resilient as well as more biodiverse in nature and provides a safety net to farmers.

Government Control Over Farm Sector

- ◆ In 1979, as onion prices plummeted, farm distress gripped the nation — not for the first time and not for the last. For four days in November 1980, tens of thousands of peasants blocked roads and railways in different parts of Maharashtra under the organised umbrella of a group called the Shetkari Sanghatana. Led by a former UN bureaucrat, Sharad Joshi, the farmers were venting fury against the government. Despite a costly subsidy system, they said, farmers had to spend as much as Rs 180 for every Rs 100 they earned. "We do not want alms," they sloganeered, "[only] a return on our sweat and toil."
- ◆ In the years that followed, Joshi would take his fight against India's agricultural policies to Parliament, vociferously opposing socialism and alleging that the government's intervention had only made farmers poorer. Several economists joined the chorus: The subsidy system is misdirected, they all said, and protectionism only perpetuated poverty. Export barriers meant farmers were denied profits during a surplus and the lack of savings hurt them twice as hard when times were tough.
- ◆ Yet, decades later, Joshi's reformist message is all but dead in India's political discourse on agriculture. In the aftermath of more protests and farmer suicides, election rhetoric remains driven by charity and populism — not reform and rejuvenation.
- ◆ Farmers across the country are caught in a tight web of restriction and regulation, which has turned the farm economy into a weak charity institution, perennially

dependent on the government. Take agricultural marketing, for instance – the vital link between the farmer and the consumer, which is still largely monopolised and dominated by government licensees.

- ◆ In an attempt to prevent the exploitation of farmers by free-market traders through the 1960s, the government led by Jawaharlal Nehru instituted the Agricultural Produce Marketing Regulation (APMR) Act. Under the law, farmers were required to sell their bulk produce solely to licensed traders in government-run market yards, while exporters, processors and retailers purchased the crop in turn from the traders.
- ◆ The monopoly raised several issues that survive to this day. Transportation costs were high, since processors and retailers could not source the crop directly from the farm without routing it through a market yard. Poor storage facilities at the yards meant that crops were regularly lost before they could make their way to the consumer (as per various estimates, anywhere around 5-7 per cent of food grains and 25-40 per cent of fruits and vegetables perish each year even today). Worse, in the absence of market competition, licensed traders began to form cartels in the market yards to drive down the price at which crops were bought from farmers.
- ◆ The economics of the APMR Act is simple: a handful of traders buying crops from several desperate farmers are able to negotiate a low price through an artificial dearth

of demand in the market yard, while the middlemen, in turn, take advantage of burgeoning consumer demand in the towns and cities to turn over a huge profit. As a result, farmers only earn a pitiful fraction of the price at which crops are sold to the end consumer, despite little to no value being added. For instance, as per some recent reports, onions were selling in Mumbai at over 20 times what the cultivating farmer in Nashik earned.

- ◆ In a liberalised market, a farmer would be able to sell directly to the processor or retailer and garner a higher price by bypassing the cartel and cutting costs. Competition from these other buyers would also drive licensed traders in the market yards to offer farmers a higher price. With increased economic activity closer to the farms, investment would be made on better infrastructure overall to facilitate it.

Politics and Farm Sector

- ◆ Politics has been a major hurdle in India's farm sector reforms since independence.
- ◆ Throughout India's agricultural history, the knee-jerk reaction to farm distress has been populism and charity: short-term relief policies that inherently depend on state control, whether through state-owned banks or market yards.
- ◆ A liberalised farm economy with limits to government control would make populist measures more difficult to roll out.
- ◆ State control, therefore, allows political parties to promise easy

sops in exchange for quick votes, even if the benefits of populism are short-lived.

- ◆ Worse, the electoral success of populist relief measures makes sure that populism breeds more populism.
- ◆ The lobby of licensed traders has also proven hard to overcome.

Way Forward

- ◆ The answer to ending India's periodic bouts of farm distress lies not in populism but in liberalisation. Aside from short-term relief measures, India has to turn its farm economy from a charity institution to a vibrant, self-sustaining growth sector. Farmers need secure environment rather than to swing between government control and threat of private exploitation. Food is a basic human need and primary activities related to food production and cultivation cannot be treated on the same principles of economics as academics think. The healthy and open-minded debate is the only way forward to a sustainable solution. 🔄🔄🔄

General Studies Paper- III

Topic:

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

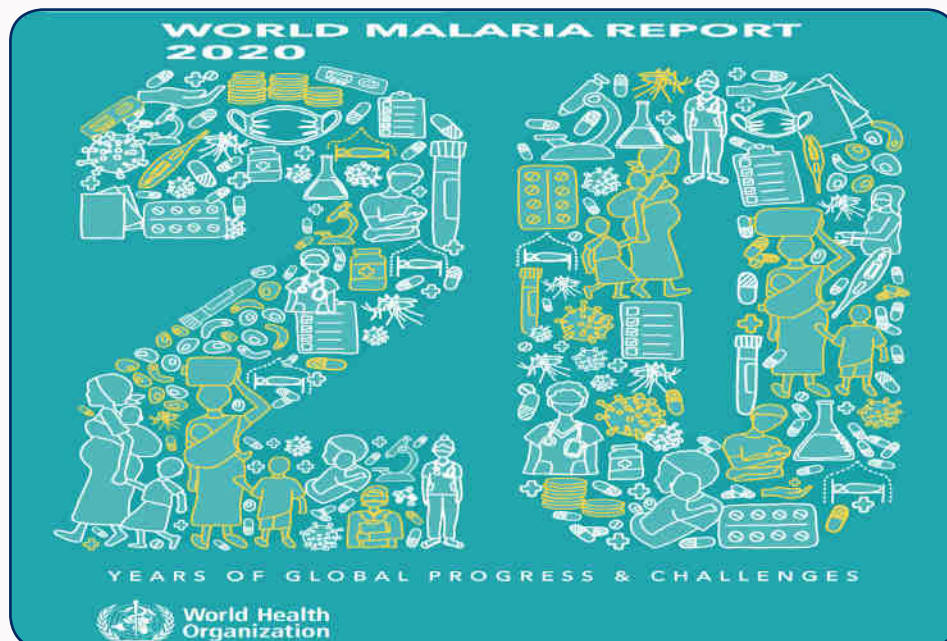
Q. Discuss the furore over the farm bills and throw some light on the provisions of the bills under the consideration. Also discuss the impact of politics and farm sector reforms in India.

04

World Malaria Report-2020 and India : An Overview

Why in News?

- ◆ The World Malaria Report (WMR) 2020 released by WHO, which gives the estimated cases for malaria across the world, based on mathematical projections, indicates that India has made considerable progress in reducing its malaria burden.
- ◆ India is the only high endemic country which has reported a decline of 17.6% in 2019 as compared to 2018. The Annual Parasitic Incidence (API) reduced by 27.6% in 2018 compared to 2017 and by 18.4% in 2019 as compared to 2018. India has sustained API less than one since year 2012.



73% and 74%, respectively. India contributed to the largest drop in cases region-wide .

Challenges for Malaria Prevention During Covid-19

Background

- ◆ The World Malaria Report 2020, said that in 2019, malaria cases globally numbered about 229 million, an annual estimate that has remained virtually unchanged over the last four years.
- ◆ Last year, the disease claimed about 4,09,000 lives, compared to 4,11,000 in 2018.
- ◆ Countries in South-East Asia made particularly strong progress, with reductions in cases and deaths of 73% and 74%, respectively. India contributed to the largest drop in cases region-wide
- ◆ Countries in South-East Asia made particularly strong progress, with reductions in cases and deaths of

- ◆ By April 2020, the severe acute respiratory syndrome coronavirus 2 (SARS-CoV2), causing COVID-19, had spread to all malaria endemic countries, and by the end of the second week of November 2020, about 22 million cases and 600 000 deaths had been reported in these countries.
- ◆ The COVID-19 pandemic and restrictions related to the response have caused disruptions in essential malaria services.
- ◆ Furthermore, early messaging targeted at reducing coronavirus transmission advised the public to stay at home if they had fever, potentially disrupting treatment seeking for febrile diseases such as malaria.

- ◆ In March 2020, as the COVID-19 pandemic spread rapidly around the globe, WHO convened a cross-partner effort to mitigate the negative impact of the coronavirus in malaria-affected countries and contribute to the COVID-19 response.
- ◆ Many countries have also reported moderate levels of disruptions, and modelling analysis shows that reductions in access to effective antimalarial treatment of 10%, 15%, 25% and 50% in sub-Saharan Africa in 2020 could lead to an additional 19 000, 28 000, 46 000 and 100 000 malaria deaths, respectively, by the end of 2020, even if all prevention campaigns are completed.

Global Statistics

- ◆ The report noted that the 11 highest burden countries - Burkina Faso, Cameroon, the Democratic Republic of the Congo, Ghana,

India, Mali, Mozambique, Niger, Nigeria, Uganda and Tanzania - account for 70% of the global estimated case burden and 71% of global estimated deaths from malaria.

- ◆ According to the WHO report, progress against malaria continues to plateau, particularly in high burden countries in Africa.
- ◆ Gaps in access to life-saving tools are undermining global efforts to curb the disease, and the COVID-19 pandemic is expected to set back the fight even further.
- ◆ As in past years, the African Region shouldered more than 90% of the overall disease burden.
- ◆ Since 2000, the region has reduced its malaria death toll by 44%, from an estimated 6,80,000 to 3,84,000 annually.
- ◆ However, progress has slowed in recent years, particularly in countries with a high burden of the disease. A funding shortfall at both the international and domestic levels poses a significant threat to future gains. In 2019, total funding reached \$3 billion against a global target of \$5.6 billion.
- ◆ Funding shortages have led to critical gaps in access to proven malaria control tools.
- ◆ In the WHO Region of the Americas, malaria cases reduced by 40% (from 1.5 million to 0.9 million) and case incidence by 57%. The region's progress in recent years has suffered from the major increase in malaria in Venezuela, which had about 35 500 cases in 2000, rising to over

467 000 by 2019. Brazil, Colombia and Venezuela account for over 86% of all cases in this region.

- ◆ Since 2015, the European Region has been free of malaria.

India's Shining Performance

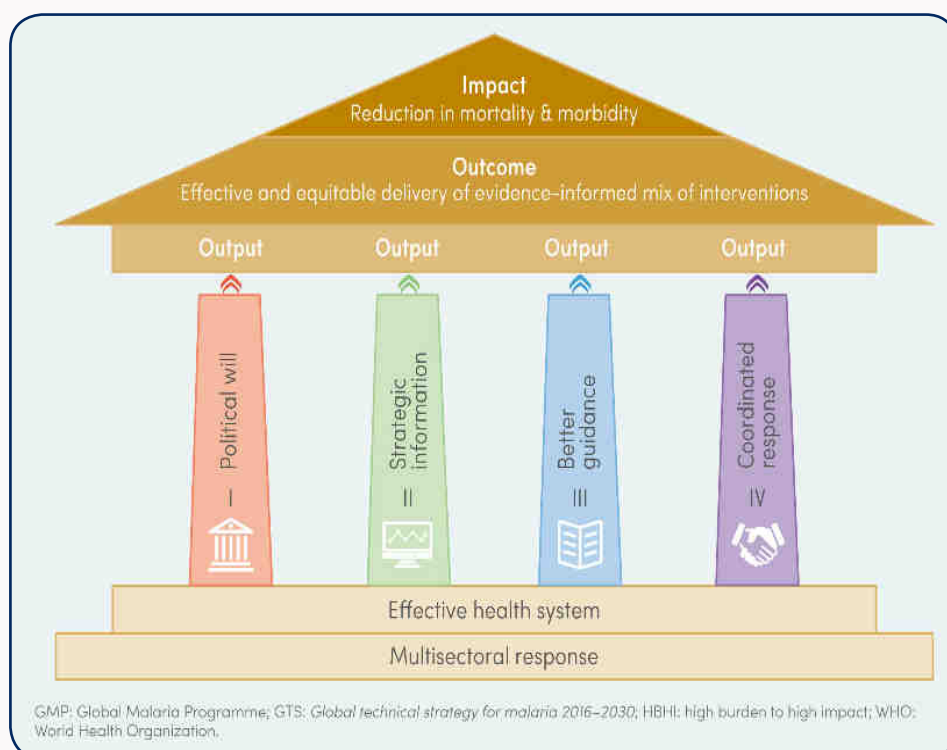
- ◆ India has contributed to the largest drop in cases region-wide, from approximately 20 million to about 5.6 million. The percentage drop in the malaria cases was 71.8% and deaths was 73.9% between 2000 to 2019.
- ◆ India achieved a reduction of 83.34% in malaria morbidity and 92% in malaria mortality between the year 2000 (20,31,790 cases, 932 deaths) and 2019 (3,38,494 cases, 77 deaths), thereby achieving Goal 6 of the Millennium Development Goals (50-75% decrease in case incidence between 2000 and 2019).
- ◆ Decrease in incidence of Malaria cases is also exhibited in the year-on-year tally. The cases and fatalities have declined significantly by 21.27% and 20% in the year 2019 (3,38,494 cases, 77 deaths) as compared to 2018 (4,29,928 cases, 96 deaths). The total number of malaria cases reported in 2020, till October, (1,57,284) has further decreased by 45.02 percent as compared to corresponding period of 2019 (2,86,091).
- ◆ Malaria Elimination efforts were initiated in the country in 2015 and were intensified after the launch of National Framework for Malaria Elimination (NFME) in 2016 by the Ministry of Health and

Family Welfare. National Strategic Plan for Malaria Elimination (2017-22) was launched by the Health Ministry in July, 2017 which laid down strategies for the next five years.

- ◆ The first two years saw a 27.7% decline in cases and 49.5% reduction in fatalities; 11,69,261 cases and 385 deaths in 2015 to 8,44,558 cases and 194 deaths in 2017.
- ◆ States of Odisha, Chhattisgarh, Jharkhand, Meghalaya and Madhya Pradesh disproportionately accounted for nearly 45.47 percent (1,53,909 cases out of India's 3,38,494 cases) of malaria cases and 70.54 percent (1,10,708 cases out of India's 1,56,940 cases) of falciparum Malaria cases in 2019. 63.64% (49 out of 77) of malaria deaths were also reported from these states.
- ◆ Due to the efforts made by the Government of India in provision of microscopes, rapid diagnostics Long Lasting Insecticidal Nets (LLINs) – about 5 crores have been distributed in 7 North-East States, Chhattisgarh, Jharkhand, Madhya Pradesh and Odisha up to 2018-19 and another 2.25 crore LLINs are being supplied/distributed during current financial year to high burden areas leading to reduction in endemicity in these otherwise very high endemic states. Additional procurement of 2.52 crore LLINs is initiated. Use of LLINs has been accepted by the community at large and has been

one of the main contributors to the drastic malaria decline in the country.

- ◆ WHO has initiated the High Burden to High Impact (HBHI) initiative in 11 high malaria burden countries, including India. Implementation of “High Burden to High Impact (HBHI)” initiative has been started in four states i.e. West Bengal and Jharkhand, Chhattisgarh and Madhya Pradesh in July, 2019. A key strategy to reignite progress is the “High burden to high impact” (HBHI) response, catalyzed in 2018 by WHO and the RBM Partnership to End Malaria continued to make impressive gains in India, with 18% reductions in cases and 20% reductions in death respectively, over the last 2 years.
- ◆ Malaria has been made notifiable in 31 states/UTs (Andhra Pradesh, Arunachal Pradesh, Assam, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Manipur, Mizoram, Nagaland, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, Uttar Pradesh, Uttarakhand, West Bengal, Puducherry, Chandigarh, Daman & Diu, D&N Haveli and Lakshadweep) and decline has



been observed in the hitherto high endemic states. Percentage of decline in the year 2019 as compared to 2018 is as follows: Odisha – 40.35%, Meghalaya- 59.10%, Jharkhand – 34.96%, Madhya Pradesh –36.50% and Chhattisgarh –23.20%.

- ◆ The figures and trends between last two decades clearly show the drastic decline in malaria. The malaria elimination target of 2030 looks achievable building on the Union Government’s strategic interventions in this regard.

Way Forward

- ◆ Pandemic has severely impacted the global fight against malaria. India’s shining performance surely reflects the hardwork of grass-

root level health care providers and India’s political will to tackle the menace of malaria. India still is not spending the adequate amount of the percentage to GDP on health sector as the proportion of population demands. And the pandemic has further led to technical recession. India need to focus on such health issues and move swiftly to solidify its gains it has made in malaria prevention. <<<>>>

General Studies Paper- II

Topic:

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

Q. Highlight the policies adopted in India for malaria prevention and how it has successfully led to lowering the incidence of disease in India. Also comment on the future challenges to disease prevention which has been caused by the pandemic.

05

India-Canada Relations: Concerns Unaddressed

Why in News?

- Recent comments by Canadian politicians around the ongoing farmers' protests in India continue to make waves in New Delhi. On December 4, the Indian foreign ministry summoned the Canadian High Commissioner to India, Nadir Patel, and "informed that comments by the Canadian Prime Minister, some Cabinet Ministers and Members of Parliament on issues relating to Indian farmers constitute an unacceptable interference in our internal affairs," according to a statement it released.

Background

- The Canadian Prime Minister, earlier this week while extending his support to the farmers protest, had said, "I would be remiss if I didn't start by recognising the news coming out of India about the protests by farmers. The situation is concerning, and we are all very worried about family and friends. I know that's the reality for many of you." His political rhetoric drew widespread flak across India.
- Incidentally, the Trudeau government has also been a supporter of Khalistanis in Canada. Not only did the Modi government register its protest against Trudeau's mollicoddling of Khalistanis, but Punjab chief minister Amarinder Singh also expressed his displeasure over



the Canadian Prime Minister's politics, during his visit to India.

- In a sign that comments by Canadian Defense Minister Harjit Singh Sajjan and Prime Minister Justin Trudeau, among others, continue to rankle the Indian government to the point that it is willing to wade into a serious diplomatic row with Ottawa, the statement added: "Such actions, if continued, would have a seriously damaging impact on ties between India and Canada." This is the strongest reaction so far from the Indian government on the issue.

History of India Canada Relationship

- Since India's Independence, Canada has recognised the country as a major power in Asia that was crucial in maintaining the balance of power in the

region. Canada's association with the British Commonwealth, its federal democratic character, and its rich ethnic diversity laid the foundations for bilateral relations between India and Canada.

- Ottawa believed that enhanced ties with India would allow Canada to extend its reach to other Afro-Asian countries and pursue its foreign policy in relative autonomy. Canada further sought to position itself as a "bridge" between the US and India, i.e. to moderate the US' views about India and vice versa.
- During the Cold War period, the personal equation between Indian Prime Minister Jawaharlal Nehru and his Canadian counterparts, Louis St. Laurent and later Lester Pearson, helped develop some strategic understanding between the two sides. During this period, India became the largest

recipient of Canadian external assistance. Under the Colombo Plan, Canada provided grants to India's civil nuclear programme, which it believed would highlight the importance of the peaceful use of nuclear energy. Moreover, Canada's assistance was aimed at furthering bilateral cooperation by encouraging mutually beneficial research and industrial activities in both countries. However, Canada's status as a founding member of the North Atlantic Treaty Organization (NATO) was at odds with India's Non-Aligned Movement (NAM) membership and its aim to maintain strategic neutrality between the two Cold War blocs.

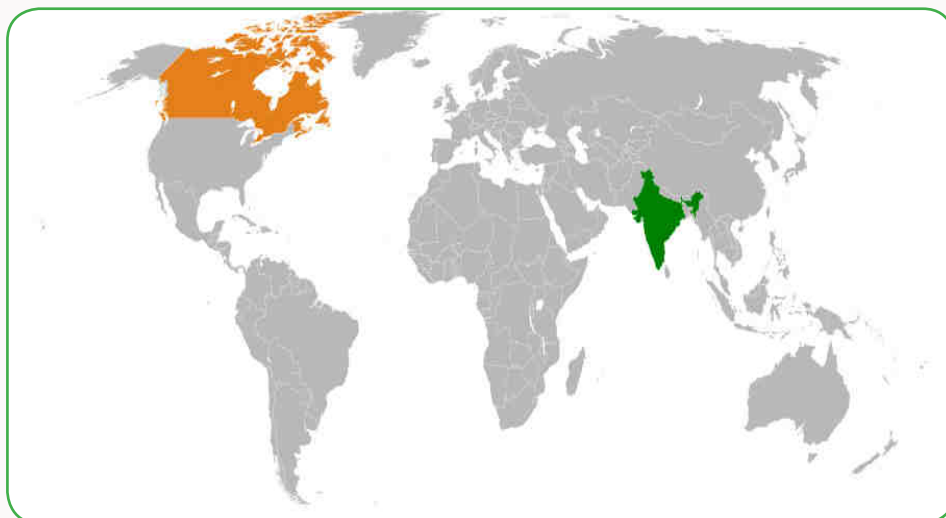
Relationship Being Odd from Long Time

- ♦ Faultlines first emerged in 1948 when Canada supported a plebiscite, followed by a ceasefire, in the Indian state of Kashmir, a position that was antithetical to India's interests. Differences over other issues of international importance further deepened the gulf between India and Canada.
- ♦ John Diefenbaker's Conservative Party-led government in Canada was considered to be closer to Pakistan under the leadership of Ayub Khan than to India.
- ♦ Canada was sympathetic to the US position on Vietnam in the International Control Commission established by the Geneva Conference in 1954, India was more sensitive to the interests of the Communist bloc.
- ♦ India's commitment to the NAM—a key feature of its foreign policy during the Cold War—therefore, did hinder New Delhi from envisioning greater relations with Canada.
- ♦ Canadian security interests were anchored with those of the US; its strategic objectives aligned closely to the US'. Thus, despite considerable opportunity in areas of trade and people-to-people ties, Canada could not foster closer relations with India owing to the latter's non-aligned status, which limited its outreach towards the Western bloc countries.
- ♦ In 1974, foreign-policy mandarins in Ottawa were infuriated when India carried out nuclear tests. They suspected that these tests were carried out using the Canadian CIRUS reactor. Out of three research reactors India had, only the Canadian-designed and cooperatively built CIRUS provided for plutonium, a prerequisite for developing nuclear bombs. Up until then, Canada had believed that New Delhi shared its ideological opposition to the development of nuclear weapons. The Indian nuclear tests challenged this notion, making Canada reassess its perception of Asia's emerging strategic dynamics.
- ♦ Canada viewed the Pokhran event as an act of betrayal by India, consequently, Canada suspended tentative nuclear cooperation with India. Then Foreign Minister Mitchell Sharp lamented that the “trust between the two countries was gone.”
- ♦ Canada's former PM Pierre Elliott Trudeau had previously cautioned his Indian counterpart, Indira Gandhi, of the consequences India would face if it developed nuclear weapons capabilities.
- ♦ The 1970s was a particularly difficult period for India–Canada relations. In the 1980s, India's relevance in Canada's foreign policy rose as Punjab accounted for a significant number of immigrants to Canada, a dynamic that was encouraged by the Liberal government policy to make family reunification the basis for immigration. However, India soon expressed concerns regarding the activities of Khalistan sympathisers in Canada, who espoused Punjab's secession from India. This again created tension in the bilateral ties, which reached one of its lowest ebbs in 1985, when Sikh extremists blew up Air India Flight 182 as it left Vancouver airport for India, killing all 329 passengers. Canadian agencies were accused of negligence and for causing significant delays in the investigation.
- ♦ The cessation of Cold War hostilities provided an opportunity for India and Canada to improve their relationship. In the 1990s, India embraced gradual economic liberalisation, rekindling Canada's interest in its economic prospects. In 1995, Ottawa released its “Focus India” document, identifying India as “an emerging economic power.”

- ◆ Despite some progress on the economic front, Canada's bureaucratic view on India's nuclear weapons, combined with an increasingly sophisticated political constituency, greatly hindered the growth of their bilateral relationship.
- ◆ In 2002, following the Gujarat riots, Canada officially suspended relations with the state. New Delhi's benign neglect of Canada thus partly stems from Ottawa's lack of concern for Indian sensitivities.
- ◆ In 2010, India's then Prime Minister Manmohan Singh visited Canada to attend the G-20 summit. During this visit, India and Canada achieved a major breakthrough in the area of civil nuclear energy. In 2015, PM Modi visited Canada and signed multiple Memorandums of Understanding (MoU) in areas including space, railways, civil aviation, and science and technology.

Canada's Misunderstanding of Indian Sensibilities

- ◆ India's concerns about the presence of radical elements within the Canadian Sikh diaspora are rooted in the troubled history of its northern state of Punjab. Between the 1980s and 1990s, the Khalistan movement in Punjab threatened India's territorial integrity and communal harmony. The situation in Punjab further deteriorated when Jarnail Singh Bhindranwale, a controversial figure who advocated for the



Khalistan cause, took control of the Golden Temple in 1984. Consequently, the state responded by using military action to evict Bhindranwale and suppress his overarching agenda of creating a separate Sikh homeland.

- ◆ While Sikh militancy has largely died down in India, concerns remain about the revival of the Khalistan movement.
- ◆ Amongst a small but highly motivated section of the Canadian Sikh diaspora, the movement has been heavily internalised. Such fundamentalists have maintained strong separatist sentiments, seeking inspiration from Sikh history and garnering support by publicising the apparent human rights excesses committed by security forces during the troubled years.
- ◆ In 2017, the management committees of 14 Canadian gurudwaras decided to ban the entry of Indian elected officials, Indian consular officials and members of organisations.

Way Forward

- ◆ Canada-India relations have remained very low as compared to the potential of the two nations and number of persons of Indian origin in Canada. Canada's domestic vote seeking politics has led to mishandling of Canada's international relations with India. Time and again Canada has been seen supportive of successionist movement against India, which has always alarmed Indian sensibilities.



General Studies Paper- II

Topic:

- Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

General Studies Paper- III

Topic:

- Role of external state and non-state actors in creating challenges to internal security.

Q. What are the reasons behind a low-key foreign relation between India and Canada? Suggest ways in which the bilateral relation can be strengthened.

06

Combating the Climate Crisis in 21st Century: The Top Priority

Why in News?

- ♦ The UN Secretary-General, António Guterres, has described the fight against the climate crisis as the top priority for the 21st Century, in a passionate, uncompromising speech delivered at Columbia University in New York.
- ♦ The landmark address marks the beginning of a month of UN-led climate action, which includes the release of major reports on the global climate and fossil fuel production, culminating in a climate summit on 12 December, the fifth anniversary of the 2015 Paris Climate Agreement.

Background

- ♦ Mr. Guterres (UN Secretary-General) began with a litany of the many ways in which nature is reacting, with “growing force and fury”, to humanity’s mishandling of the environment, which has seen a collapse in biodiversity, spreading deserts, and oceans reaching record temperatures.
- ♦ The link between COVID-19 and man-made climate change was also made plain by the UN chief, who noted that the continued encroachment of people and livestock into animal habitats, risks exposing us to more deadly diseases.
- ♦ And, whilst the economic slowdown resulting from the pandemic has temporarily slowed emissions of harmful greenhouse gases, levels of carbon dioxide, nitrous oxide and methane are still rising, with the amount of CO₂ in the atmosphere at a record high. Despite this worrying trend, fossil fuel production – responsible for a significant proportion of greenhouse gases – is predicted to continue on an upward path.

- ♦ The appropriate global response, said the Secretary-General, is a transformation of the world economy, flicking the “green switch” and building a sustainable system driven by renewable energy, green jobs and a resilient future.
- ♦ One way to achieve this vision, is by achieving net zero emissions. There are encouraging signs on this front, with several developed countries, including the UK, Japan and China, committing to the goal over the next few decades.
- ♦ Mr. Guterres called on all countries, cities and businesses to target 2050 as the date by which they achieve carbon neutrality – to at least halt national increases in emissions – and for all individuals to do their part.
- ♦ With the cost of renewable energy continuing to fall, this transition makes economic sense, and will lead to a net creation of 18 million jobs over the next 10 years. Nevertheless, the UN chief pointed out, the G20, the world’s largest economies, are planning to spend 50 per cent more on sectors linked to fossil fuel production and consumption, than on low-carbon energy.

Paris Agreement

- ♦ At COP 21 in Paris, on 12 December 2015, Parties to the UNFCCC reached a landmark agreement to combat climate change and to accelerate and intensify the actions and investments needed for a sustainable low carbon future.
- ♦ The Paris Agreement’s central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above pre-industrial levels and to pursue efforts to limit the

temperature increase even further to 1.5 degrees Celsius.

- ♦ Additionally, the agreement aims to increase the ability of countries to deal with the impacts of climate change, and at making finance flows consistent with a low GHG emissions and climate-resilient pathway.
- ♦ To reach these ambitious goals, appropriate mobilization and provision of financial resources, a new technology framework and enhanced capacity-building is to be put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The Agreement also provides for an enhanced transparency framework for action and support.
- ♦ The Paris Agreement requires all Parties to put forward their best efforts through “nationally determined contributions” (NDCs) and to strengthen these efforts in the years ahead. This includes requirements that all Parties report regularly on their emissions and on their implementation efforts.
- ♦ There will also be a global stocktake every 5 years to assess the collective progress towards achieving the purpose of the agreement and to inform further individual actions by Parties.
- ♦ The Paris Agreement opened for signature on 22 April 2016 – Earth Day – at UN Headquarters in New York. It entered into force on 4 November 2016, 30 days after the so-called “double threshold” (ratification by 55 countries that account for at least 55% of global emissions) had been met.

India’s Performance

- ♦ Sustainable Lifestyles - To put forward and further propagate a

healthy and sustainable way of living based on traditions and values of conservation and moderation. 2. Cleaner Economic Development - To adopt a climate friendly and a cleaner path than the one followed hitherto by others at corresponding level of economic development. 3. Reducing Emission intensity of Gross Domestic Product (GDP) - To reduce the emissions intensity of its GDP by 33 to 35 percent by 2030 from 2005 level.

- ◆ Increasing the Share of Non Fossil Fuel Based Electricity - To achieve about 40 % cumulative electric power installed capacity from non-fossil fuel based energy resources by 2030 with the help of transfer of technology and low cost international finance including from Green Climate Fund (GCF).
- ◆ Enhancing Carbon Sink (Forests) - To create an additional carbon sink of 2.5 to 3 billion tonnes of CO₂ equivalent through additional forest and tree cover by 2030.
- ◆ Adaptation - To better adapt to climate change by enhancing investments in development programmes in sectors vulnerable to climate change, particularly agriculture, water resources, Himalayan region, coastal regions, health and disaster management.
- ◆ Mobilizing Finance - To mobilize domestic and new & additional funds from developed countries to implement the above mitigation and adaptation actions in view of the resource required and the resource gap.
- ◆ Technology Transfer and Capacity Building - To build capacities, create domestic framework and international architecture for quick

diffusion of cutting edge climate technology in India and for joint collaborative R&D for such future technologies.

- ◆ During the UN's Climate Week in New York in 2019, India's Prime Minister committed to a target of 450 gigawatts (GW) of renewable energy installations, likely by 2030—equivalent to five times more than India's current installed renewable capacity (82.6 GW) and bigger than the size of India's electricity grid size in 2019 (362 GW).
- ◆ India is on the path to meet and overachieve its NDC targets with currently implemented policies. There is room to update and adopt more ambitious targets and accelerate the transition away from coal and towards renewable energy.

Putting a Price on Carbon

- ◆ For years, many climate experts and activists have called for the cost of carbon-based pollution to be factored into the price of fossil fuels, a step that Mr. Guterres said would provide certainty and confidence for the private and financial sectors.
- ◆ Companies, he declared, need to adjust their business models, ensuring that finance is directed to the green economy, and pension funds, which manage some \$32 trillion in assets, need to step and invest in carbon-free portfolios.
- ◆ Far more money, continued the Secretary-General, needs to be invested in adapting to the changing climate, which is hindering the UN's work on disaster risk reduction. The international community, he said,

has "both a moral imperative and a clear economic case, for supporting developing countries to adapt and build resilience to current and future climate impacts".

Way Forward

- ◆ India has a target of 175 GW of renewable energy capacity by 2022 and 450 GW by 2030, including an expansion of solar investments into the agricultural sector, harnessing the potential of off-grid solar PV pumps to not only provide reliable electricity for pump sets, but also to provide additional income generation opportunities for farmers. For the first time in 2018, solar investments exceeded investments in coal. Policy for 30% sales of electric vehicles by 2030, and in July 2020, India railways announced plans to achieve net zero emissions by 2030. It all suggests that India is taking its pledge very seriously than many developed nations. 

General Studies Paper- II

Topic:

- Important International institutions, agencies and for their structure, mandate.

General Studies Paper- III

Topic:

- Conservation, environmental pollution and degradation, environmental impact assessment.

Q. Tackling the climate crisis is the top priority as been highlighted by the UN Secretary-General, in this regard highlight India's pledge to the cause and analyse the performance so far.

07

Compressed Biogas: A Move towards Gas Based Economy

Why in News?

- ◆ India plans to start 5,000 compressed biogas plants over the next four years to curb oil imports and improve farm incomes.
- ◆ There will be an investment of Rs 2 lakh crore in setting up 5,000 plants that will produce gas from bio and crop wastes by 2023-24.

Introduction

- ◆ Government of India has been promoting Biofuels including CBG to increase the green-energy mix, reduce import dependence, create employment especially in semi-urban & rural areas and reduce pollution. Usage of CBG (Compressed Bio Gas) shall assist in achieving climate change goals of India as per the Paris Agreement 2015. This shall also be in alignment with schemes of Government of India like Swachh Bharat, Atmanirbhar Bharat and Make in India.

Bio-technology Fast-tracked Covid Vaccine Development

- Benefits of Converting Residue into CNG
- Responsible waste management, reduction in carbon emissions and pollution.
- Additional revenue source for farmers.
- Boost to entrepreneurship, rural economy and employment.
- Support to national commitments in achieving climate change goals.
- Reduction in import of natural gas and crude oil.
- Buffer against crude oil/gas price fluctuations.

- ◆ The 'SATAT' (Sustainable Alternative Towards Affordable Transportation) scheme on CBG was launched on 1.10.2018 which envisages targeting production of 15 MMT of CBG from 5000 plants by 2023. The Government of India has taken various enabling steps to ensure the success of the SATAT scheme.
- ◆ Oil Marketing Companies have offered long term pricing on CBG to make projects bankable and have agreed to execute long term agreements on CBG. The Minister said that Bio-manure, an important by-product of CBG Plants, is also in the process of being included in Fertilizer Control Order 1985. This will make it easier to market and provide an opportunity for organic farming across the country as the 5000 CBG Plants are expected to produce 50 MMT Biomanure.
- ◆ SATAT will establish an ecosystem for the production of compressed bio gas from various waste and biomass sources in the country leading to multiple benefits such as reduction of natural gas import, reduction of greenhouse gas emission, reduction in burning of agriculture residues, remunerative income to farmers, employment generation and effective waste management.
- ◆ The Government is in the process of including Compressed Bio-Gas under Priority Sector Lending.

Upfront Cost

- ◆ Setting up compressed biogas plants across the country will require an

investment of nearly Rs 1.75 lakh crore.

- ◆ To achieve this, public-sector oil marketers like Indian Oil Corporation Ltd. and Bharat Petroleum Corporation Ltd. have sought expression of interest from potential entrepreneurs to set up the plants and source the fuel produced from them.
- ◆ Oil marketing companies will guarantee offtake for the biogas produced at Rs 46 per kg exclusive of GST.
- ◆ The move is in line with government's target of reducing crude oil imports by 10 percent by 2022
- ◆ The plants are expected to produce 15 million tonnes of compressed biogas per annum—40 percent of India's current annual consumption of compressed natural gas of 44 million tonnes, according to a ministry statement. The government expects this initiative to generate direct employment for 75,000 people and produce 50 million tonnes of bio-manure for crops.

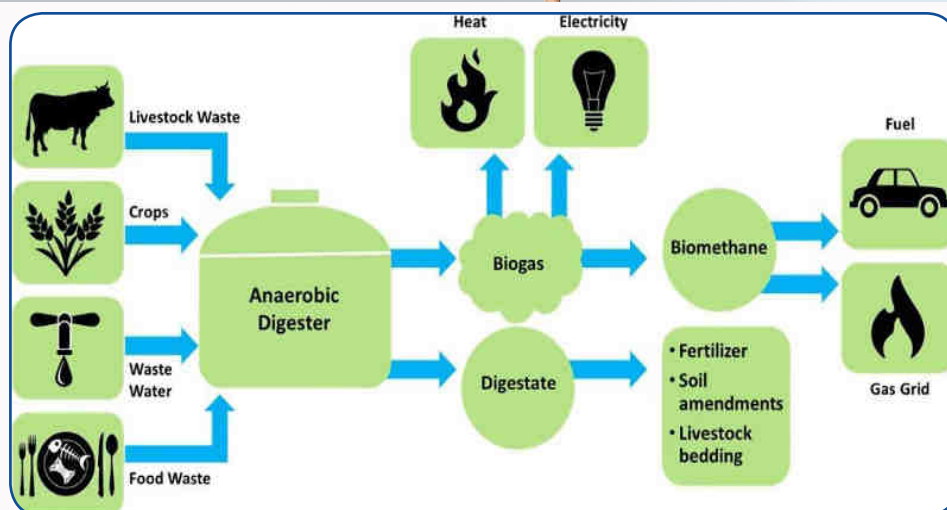
Gas Based Economy

- ◆ Biogas is produced naturally through anaerobic decomposition from waste or biomass sources like agriculture residue, cattle dung, sugarcane press mud and solid waste. It's then purified and compressed, which produces a fuel with methane content of over 95 percent.

- ◆ The biogas will be transported through cascades of cylinders to fuel station networks of oil marketers for marketing as a green transport fuel alternative.
- ◆ The government, also plans to integrate compressed biogas networks with city gas distribution networks to boost supplies to domestic and retail users in existing and upcoming markets.
- ◆ CBG is the replacement of natural gas and can be used in the transportation sector in place of Compressed Natural Gas (CNG). Presently, consumption of natural gas in India is around 140 MMSCMD out of which domestic production is only 70 MMSCMD and remaining 70 MMSCMD is imported which is around 50 per cent of total consumption.
- ◆ The government intends to move towards Gas based economy by increasing the share of natural gas in India's energy basket from present 6-7 per cent to 15 per cent by the year 2022. With the rising demand for natural gas in transport and industrial sector, CBG has been identified as a potential route.

Policy Moves on CBG

- ◆ The National Policy on Biofuels 2018 emphasises active promotion of advanced bio-fuels, including CBG. The Government of India had launched the GOBAR-DHAN (Galvanising Organic Bio-Agro Resources) scheme earlier this year to convert cattle dung and solid waste in farms to CBG and compost. The scheme proposes to cover 700 projects across the country in 2018-19. The programme will be



funded under Solid and Liquid Waste Management (SLWM) component of Swachh Bharat Mission-Gramin (SBM-G) to benefit households in identified villages through Gram Panchayats. The Ministry of New and Renewable Energy has notified Central Financial Assistance (CFA) of Rs. 4 crore per 4,800 kg of CBG per day generated from 12,000 cubic metres of biogas per day, with a maximum of Rs.10 crore per project.

- ◆ Compressed Bio-Gas can be produced from various bio-mass/waste sources, including agricultural residue, municipal solid waste, sugarcane press mud, distillery spent wash, cattle dung and sewage treatment plant waste. The other waste streams, i.e, rotten potatoes from cold storages, rotten vegetables, dairy plants, chicken/poultry litter, food waste, horticulture waste, forestry residues and treated organic waste from industrial effluent treatment plants (ETPs) can be used to generate biogas.
- ◆ Compressed Bio-Gas plants are proposed to be set up mainly through independent entrepreneurs.

The entrepreneurs would be able to separately market the other by-products from these plants, including bio-manure, carbon-dioxide, etc., to enhance returns on investment.

Way Forward

- ◆ Compressed Bio-Gas networks can be integrated with city gas distribution (CGD) networks to boost supplies to domestic and retail users in existing and upcoming markets. Besides retailing from OMC fuel stations, Compressed Bio-Gas can at a later date be injected into CGD pipelines too for efficient distribution and optimised access of a cleaner and more affordable fuel. 📌📌📌

General Studies Paper- III

Topic:

- Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

Topic:

- Investment models.

Q. Discuss the impact of India moving to a 'gas-based economy'. How does the compressed bio-gas fits into India's energy matrix?

7

IMPORTANT BRAIN BOOSTERS

01 Global Conference on Criminal Finances and Cryptocurrencies

1. Why in News?

- Over 2,000 representatives from 132 countries attended the virtual 4th Global Conference on Criminal Finances and Cryptocurrencies organised by the Interpol, Europol and the Basel Institute on Governance from November 18 to 19, 2020.



2. Background

- The conference is an initiative of the Working Group on Cryptocurrencies and Money Laundering established in 2016 by the three organisations (INTERPOL, Europol and the Basel Institute on Governance), launched with an objective of strengthening knowledge, expertise and best practices for investigations into financial crimes and intelligence on virtual assets and cryptocurrencies.
- In addition, the partnership also aims to create a network of practitioners and experts in this field, who can collectively establish best practices and provide assistance and recommendations inside and outside the platform.
- A multi-agency and multi-disciplinary approach involving both the private and public sectors is key to tackling criminal finances and the misuse of cryptocurrencies.

3. Discussion Points

- The conference underlined the need to extend capabilities on how to investigate virtual assets, and the necessity of applying rules to regulate virtual asset service providers to prevent money laundering.
- The conference agenda included trends and investigations on cryptocurrency crime, exploring criminal flows and operations in dark markets, ransomware and sextortion case studies, money laundering involving virtual assets, and the transfer of drug proceeds using cryptocurrencies.
- Participants at the conference endorsed recommendations on capacity building initiatives to extend capabilities on how to investigate virtual assets, establishing clear regulatory framework to prevent money laundering, adopting 'follow the money' strategies against criminal proceeds, strengthening information exchange to dismantle criminal networks, and exploiting new technologies in criminal finances investigations.

5. Cryptocurrency

- A cryptocurrency is a digital asset designed to work as a medium of exchange.
- It is not issued by the government and its economic value is determined by the supply of cryptocurrency in relation to demand.
- Bitcoin, first released as open-source software in 2009, is the first decentralized cryptocurrency.
- Reserve Bank of India (RBI) banned all banking transactions by crypto traders in April, 2018.
- In March 2020, Supreme Court quashed an order by the Reserve bank of India (RBI) banning financial services firms from trading in virtual currency or cryptocurrency.
- India plans to introduce a new law banning trade in cryptocurrencies, placing it out of step with other Asian economies which have chosen to regulate the fledgling market. The bill is expected to be discussed shortly by the federal cabinet before it is sent to parliament.
- India's decision will be crucial as more Asian nation countries weigh pros and cons of virtual currencies. Rival China, which banned initial coin offerings and virtual currencies in 2017, recently allowed Bitcoin trading as virtual property, not as fiat money. It is also planning its own central bank digital currency. Both Singapore and South Korea regulate crypto trades.

4. Three Organisations

- **INTERPOL** : The International Criminal Police Organization, commonly known as INTERPOL, is an international organization that facilitates worldwide police cooperation and crime control.
- **Europol**: The European Union Agency for Law Enforcement Cooperation, better known under the name Europol, is the law enforcement agency of the European Union (EU) formed in 1998 to handle criminal intelligence and combat serious international organised crime and terrorism through cooperation between competent authorities of EU member states.
- **Basel Institute on Governance**: The Basel Institute on Governance is an independent, international non-profit organisation dedicated to preventing and combating corruption and other financial crimes and to strengthening governance around the world. The organisation was established in Basel, Switzerland in 2003 by Professor Mark Pieth.

02 India's Path to Economic Recovery

1. Why in News?

- India's economy is firmly on the path of a V-shaped recovery after the collapse in the first quarter, and further improvement is expected in the third quarter, 'notwithstanding some moderation' in November's indicators, the Ministry of Finance said, attributing the recovery to the unlocking process along with 'astute' stimulus measures.



2. Going Towards Normalcy

- Business activity in India's manufacturing sector surged to its highest level in 13 years. The seasonally adjusted headline of Nikkei Manufacturing Purchasing Managers' Index (PMI), compiled by IHS Markit, rose from 56.8 in September to 58.9 in October.
- The Nomura India Business Resumption Index (NIBRI) increased to 84.4 for the week ending November 1, the highest value since the imposition of the lockdown; 100 indicates pre-pandemic levels of economic activity.
- The Asian Development Bank (ADB) has upgraded its forecast in early week of December 2020, for the Indian economy, projecting 8 per cent contraction in 2020-21 as compared to 9 per cent degrowth estimated earlier, on the back of faster than expected recovery.
- The six-member MPC voted unanimously to leave the policy repo rate — the rate at which the RBI lends funds to banks — unchanged at 4 per cent for the third time in a row in the bi-monthly monetary policy announced (December 4).
- This effectively means lending rates in the banking system and EMIs on home, auto and personal loans will remain more or less steady.
- It also decided to continue with the accommodative stance of monetary policy as long as necessary — at least through the current financial year and into the next year — to revive growth on a durable basis and mitigate the impact of Covid-19, while ensuring that inflation remains within the target going forward.

5. Observations by Ministry of Finance

- "there is a growing cautious optimism that the steep plunges of April-June quarter may not resurface with significant progress in vaccines and contact intensive sectors increasingly adapting to a virtual normal," the ministry said in a monthly economic report.
- Agriculture, which has grown consistently at 3.4% through the first half of 2020-21, is expected to remain the economy's bright spot with rabi crop sowing showing a healthy rise by the end of November. By November 27, overall rabi crop acreage was 4.02% higher, with the area under pulses increasing 43.3%, the ministry pointed out.
- Distress in the rural labour force seems to have worsened. "The demand for jobs under the Mahatma Gandhi National Rural Employment Guarantee scheme (MGNREGS) has surged, with a y-o-y growth of 47.2% in November. Till November, 266.67 crore person days have been created under the scheme — a jump of 51.3% as compared to previous year.
- V-shaped recovery, evident at the half-way stage of 2020-21, reflects the resilience and robustness of the Indian economy. The fundamentals of the economy remain strong as gradual scaling back of lockdowns, along with the astute support of Atmanirbhar Bharat Mission has placed the economy firmly on the path of recovery.

3. Discussion Points

- The conference underlined the need to extend capabilities on how to investigate virtual assets, and the necessity of applying rules to regulate virtual asset service providers to prevent money laundering.
- The conference agenda included trends and investigations on cryptocurrency crime, exploring criminal flows and operations in dark markets, ransomware and sextortion case studies, money laundering involving virtual assets, and the transfer of drug proceeds using cryptocurrencies.
- Participants at the conference endorsed recommendations on capacity building initiatives to extend capabilities on how to investigate virtual assets, establishing clear regulatory framework to prevent money laundering, adopting 'follow the money' strategies against criminal proceeds, strengthening information exchange to dismantle criminal networks, and exploiting new technologies in criminal finances investigations.

4. Goldilocks Economy

- According to research published by Morgan Stanley, the Asian economies of India, China, Singapore and Indonesia are expected to rebound from the devastating effects of the COVID-19 pandemic, entering a 'Goldilocks' phase in 2021.
- A Goldilocks economy is a phrase that has been used to indicate a state which is : "neither strong nor weak."
- Some of the commonly accepted features of such economies are: low unemployment rate and low inflation.
- As far as GDP goes, a Goldilocks phase is typically witnessed when an economy is recovering from a slump. As a key metric indicating the health of an economy, the GDP is a broad measure outlining the total value of all finished goods and services produced in a country. Steady GDP growth of between two and three per cent is usually associated with a Goldilocks phase.

03

10,000 Honey Farmer Producer Organisations (FPOs)

1. Why in News?

- The Minister of Agriculture and Farmers' Welfare recently inaugurated the Honey FPO Programme of National Agricultural Cooperative Marketing Federation of India Limited (NAFED).

2. National Agricultural Cooperative Marketing Federation of India Limited (NAFED)

- NAFED has been appointed as the 4th National Implementing Agency other than SFAC, NABARD and NCDC for the creation of 10,000 FPOs by the Department of Agriculture, Cooperation & Farmers' Welfare (DAC&FW).
- NAFED has recently taken over the national level Federation of Indian FPOs and Aggregators (FIFA) with the aim of creating sustainable small holder institutions to enhance collective capacities, shortening of agri produce value chains for equitable returns to all stakeholders and leveraging technology for enhanced transparency, scale and seamless agri. produce trading.
- Creation of Honey FPOs is one of the thrust areas of FIFA's business plan.
- NAFED, through its empanelled Cluster Based Business Organisation (CBBO) Indian Society of Agribusiness Professionals (ISAP) has initiated the formation and promotion of FPOs of beekeepers and honey collectors in 5 States of India.
 - The areas covered under the programme are Sundarbans in West Bengal, East Champaran in Bihar, Mathura in Uttar Pradesh, Morena in Madhya Pradesh and Bharatpur in Rajasthan.



3. Beekeeping in India

- Beekeeping in India is highly predominant in the unorganized sector among the rural and tribal population.
- Despite having a huge potential of honey production in the country, the beekeeping industry is still underdeveloped.
- The adoption level of beekeeping is also quite less due to various constraints.

4. Government's Role

- Government of India is promoting the creation of FPOs in view of their significant role in fulfilling the mission of implementing agricultural reforms in the country.
- Promotion & Formation of FPOs is the first step for converting Krishi into Atmanirbhar Krishi. For this purpose new Central Sector Scheme for Formation & Promotion of new 10,000 FPOs was launched.
- FPOs will be developed by specialist 'Cluster Based Business Organizations (CBBOs)' engaged by Implementing Agencies.

5. Observations by Ministry of Finance

- "there is a growing cautious optimism that the steep plunges of April-June quarter may not resurface with significant progress in vaccines and contact intensive sectors increasingly adapting to a virtual normal," the ministry said in a monthly economic report.
- Agriculture, which has grown consistently at 3.4% through the first half of 2020-21, is expected to remain the economy's bright spot with rabi crop sowing showing a healthy rise by the end of November. By November 27, overall rabi crop acreage was 4.02% higher, with the area under pulses increasing 43.3%, the ministry pointed out.
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- V-shaped recovery, evident at the half-way stage of 2020-21, reflects the resilience and robustness of the Indian economy. The fundamentals of the economy remain strong as gradual scaling back of lockdowns, along with the astute support of Atmanirbhar Bharat Mission has placed the economy firmly on the path of recovery.

04 Virgin Hyperloop Technology

1. Why in News?

- Government think-tank NITI Aayog has formed a high-level panel to explore the technological and commercial viability of the Virgin Hyperloop technology for ultrahigh speed travel in India, weeks after its first test was completed with humans on board.



2. Background

- The Virgin Hyperloop test run was conducted on a 500-meter track in Las Vegas in the U.S.A. with a pod, as the hyperloop vehicles are called, travelling with passengers, including an Indian, inside an enclosed tube at more than 100 mph or 161 kmph.
- A Niti Aayog document, says that in view of the emerging transport technology and for gaining the first-mover advantage, it is essential to look into the technological and commercial viability of the Virgin Hyperloop technology.
- It is relevant to explore technological, commercial, financial (viability) and (assess) safety standards and regulations to procure new technology. It has been decided to constitute an Expert Committee, the document says.
- The mandate of the committee, the document says, "To study Virgin hyperloop technology and its commercial viability, (and) safety, regulation and finalise the document within six months' time of its first meeting."

3. The Test Run

- Virgin Hyperloop is an American transportation technology company that works to commercialize the high-speed technology concept called the Hyperloop, a variant of the vacuum train.
- Virgin Hyperloop, which was founded in 2014 on the premise of making Tesla and SpaceX CEO Elon Musk's vision of a futuristic transportation system of magnetically levitating pods traveling through nearly airless tubes at speeds of up to 760 mph (1,223 km/h) a reality.
- The Virgin Hyperloop has transported passengers on its high-speed pod system for the first time.
- The floating pod reached speeds of 107 mph and travelled 500 metres in just 15 seconds at Virgin's test track in the Nevada desert.
- Virgin Hyperloop's executives, Josh Giegel and Sara Luchian, were the first people to travel in the two-seater pod, called Pegasus.

5. India Moves Towards Hyperloop

- Maharashtra has deemed hyperloop a public infrastructure exercise and approved the Virgin Hyperloop-DP World Consortium as the original project proponent for the Mumbai-Pune hyperloop project.
- Virgin Hyperloop had last month announced a partnership with Bangalore International Airports to conduct a feasibility study for a proposed hyperloop corridor from the airport.
- With the NITI Aayog now stepping in, the report of the committee could act as a roadmap for charting the way forward for hyperloop in the country.

4. Hyperloop Technology

- Hyperloop, the next-generation mode of transportation that aims to take passengers and goods at speeds of over 1,000 kilometres per hour, has so far been a dream for commuters globally. The same time, the technology is still at a very early stage and it is only starting to be rolled out in different parts of the world right now.
- With hyperloop, vehicles accelerate gradually via electric propulsion through a low-pressure tube.
- The pod floats along the track using magnetic levitation and glides at airline speeds for long distances due to ultra-low aerodynamic drag.
- It is based on the world's fastest magnetic levitation (maglev) trains, then made faster by speeding along inside vacuum tubes.
- The Maglev train speed world record was set in 2015 when a Japanese train reached 374mph in a test run near Mount Fuji.
- Critics have pointed out that Hyperloop travel systems would involve the considerable undertaking of both getting planning permission and then constructing vast networks of tubes for every travel path.

05 Right to Property and Supreme Court

1. Why in News?

- A citizen's right to own private property is a human right. The state cannot take possession of it without following due procedure and authority of law, the Supreme Court has held in a judgment.
- The state cannot trespass into the private property of a citizen and then claim ownership of the land in the name of 'adverse possession', the court said.



5. Other Landmark Judgements

- Supreme Court of India in Handicraft Emporium v. Union Of India, observed that right to property is a human right as a constitutional right under Article 300-A, but it is not a fundamental right.
- The Supreme Court's judgement in the case of Vineeta Sharma v Rakesh Sharma has opined that a daughter of a joint Hindu family is also a legal heir and has the right to inherit the coparcenary property.

2. Case

- The Supreme Court has ruled that the Centre and state governments cannot have an "indefinite or overriding right" to continue occupying citizens' properties after acquiring them on any pretext and permitting such an act would be "no less than condoning lawlessness".
- Apex court has observed that although Right to Property is not a fundamental right protected under Part III of the Constitution of India, it remains a valuable Constitutional Right. The verdict was delivered in the matter in which the top court directed the Centre to return within three months over four acres land in Byppanahalli, Bangalore, to the legal heirs of one BM Krishnamurthy nearly 57 years of their acquisition.
- Referring to recent judgements, the verdict, penned by Justice Bhat said the right to property is a "valuable right ensuring guaranteed freedoms and economic liberty".

3. From Fundamental Right to Legal Right

- After the Indian Independence, when the Constitution of India came into force on 26th January, 1950, the right to property was included as a 'fundamental right' under Article 19(1)(f) and Article 31 in Part III, making it an enforceable right.
- the Supreme Court in the historic case known Fundamental Rights Case held that the right to property is no part of the basic structure of the constitution and therefore, Parliament can acquire or take away private property of persons for concerned good and in the public interest.
- Thereafter, Parliament passed the Constitution 44th Amendment which made right to property an ordinary legal right under Article 300-A.
- Supreme Court in one of the cases has made it clear that the executive cannot deprive a person of his right to property without the authority of law.
- The State can acquire a person's property for public purpose on payment of compensation, which need not be necessarily just equivalent of the value of the property so acquired, but such compensation must not be illusory and irrationally disproportionate.

4. Government has no Right to Encroach

- In another verdict in January 2020, Supreme Court has opined that, a citizen's right to own private property is a human right. The state cannot take possession of it without following due procedure and authority of law, the Supreme Court has held in a judgment.
- The state cannot trespass into the private property of a citizen and then claim ownership of the land in the name of 'adverse possession', the court said. Grabbing private land and then claiming it as its own makes the state an encroacher.
- A welfare state cannot be permitted to take the plea of adverse possession, which allows a trespasser i.e. a person guilty of a tort, or even a crime, to gain legal title over such property for over 12 years. The State cannot be permitted to perfect its title over the land by invoking the doctrine of adverse possession to grab the property of its own citizens

06

China to build Hydropower Dam on Brahmaputra

1. Why in News?

- China will build a major hydropower project on Brahmaputra river in Tibet and a proposal for this has been clearly put forward in the 14th Five-Year Plan (2021-25) to be implemented from next year.
- China will "implement hydropower exploitation in the downstream of the Yarlung Zangbo River" (the Tibetan name for Brahmaputra) and the project could serve to maintain water resources and domestic security.



2. Background

- China in 2015 operationalised its first hydropower project at Zangmu in Tibet, while three other dams at Dagü, Jiexu and Jiacha are being developed, all on the upper and middle reaches of the river. This will be the first time the downstream sections of the river will be tapped.
- Speculation about China planning to build a "super hydropower station" in Medog county, where the Yarlung Zangbo Grand Canyon is located, have circulated for years. Medog is the last county in Tibet which borders Arunachal Pradesh.
- China has already operationalised the USD 1.5 billion Zam Hydropower Station, the largest in Tibet in 2015.

3. About the Project

- The State-owned hydropower company POWERCHINA has signed "a strategic cooperation agreement" with the Tibet Autonomous Region (TAR) government to "implement hydropower exploitation in the downstream of the Yarlung Zangbo River" as part of the new Five-Year Plan (2021-2025).
- The mainstream of the Yarlung Zangbo River has the richest water resources in Tibet Autonomous Region, about 80 million kilowatt hours (kWh), while the 50-kilometer section of the Yarlung Zangbo Grand Canyon has 70 million kWh that could be developed with a 2,000-meter drop, which equals more than three Three Gorges power stations in Hubei province.

6. India's Concern

- Proposals for dams on the Brahmaputra have evoked concerns in India and Bangladesh, the riparian states, and China has downplayed such anxieties saying it would keep their interests in mind.
- As a lower riparian State with considerable established user rights to the waters of the trans-border rivers, the Indian government has consistently conveyed its views and concerns to the Chinese authorities and has urged them to ensure that the interests of downstream States are not harmed by any activities in upstream areas.
- It remains unclear whether technical feasibility studies for the downstream dams will be approved, as POWERCHINA is not the first hydropower company to push for ambitious dams downstream on the Zangbo.
- India has expressed concerns to China over the four dams on the upper and middle reaches, though Indian officials have said the dams are not likely to impact the quantity of the Brahmaputra's flows in India greatly because they are only storing water for power generation and the Brahmaputra is not entirely dependent on upstream flows with an estimated 35% of its basin is in India.
- A dam at the Great Bend, if approved, would raise fresh concerns considering its location downstream and just across the border from Arunachal Pradesh.

4. Benefits of the Project

- Tibet has about 200 million kWh of water resources, accounting for 30 per cent of the total in China.
- The 60 million kWh hydropower exploitation at the downstream of the Yarlung Zangbo River could provide 300 billion kWh of clean, renewable and zero-carbon electricity annually.
- The project will play a significant role in realising China's goal of reaching a carbon emissions peak before 2030 and carbon neutrality in 2060.
- According to China, it is a project for national security, including water resources and domestic security.
- The hydropower station could generate income of 20 billion yuan (USD three billion) annually for the Tibet Autonomous Region.
- It is also meaningful for the environment, national security, living standards, energy and international cooperation.

5. India-China on Rivers

- India and China established Expert Level Mechanism (ELM) in 2006 to discuss various issues related to trans-border rivers.
- Under existing bilateral Memorandums of Understanding, China provides hydrological information of Brahmaputra River and Sutlej River to India during the flood seasons.
- Under the arrangement, China provides flood season data of the Brahmaputra river between May 15 and October 15 every year.

07

Mission COVID Suraksha

1. Why in News?

- The Government of India (GOI) has announced the third stimulus package of Rs. 900 Crore for the Mission COVID Suraksha- The Indian COVID-19 Vaccine Development Mission.
- This grant will be provided to the Department of Biotechnology (DBT) for Research & Development of Indian COVID-19 vaccines.



2. Mission COVID Suraksha

- Mission COVID Suraksha is a targeted effort to enable development of indigenous, affordable and accessible vaccines for India and will complement the National Mission of Atmanirbhar Bharat.
- The COVID-19 Vaccine development Mission with end-to-end focus from preclinical development through clinical development and manufacturing and regulatory facilitation for deployment, would consolidate all available and funded resources towards an accelerated product development.
- This will help accelerate development of approx. 5 to 6 vaccine candidates and ensure that these are brought closer to licensure and introduction in market for consideration of regulatory authorities for introduction in public health systems, to combat further spread of COVID infection.
- A total of 10 vaccine candidates have been supported by Department of Biotechnology so far at both academia and industry and as on date, 5 vaccine candidates are in human trials including the Russian Vaccine Sputnik-V with at least 3 more in advanced stages of preclinical to enter human trials shortly.
- The DBT had earlier announced the programmes for vaccine development as well as other COVID-related solutions, but this mission will be dedicated purely to vaccine development.

3. Implementation

- The mission is led by Department of Biotechnology and implemented by a dedicated Mission Implementation Unit at Biotechnology Industry Research Assistance Council (BIRAC).
- The existing activities under National Bio Pharma Mission (NBM) and Ind-CEPI Mission will provide complementary strengths to this Mission.

5. Other Clinical Trials

- Five vaccines are under different phases of clinical trial in India with the Serum Institute of India conducting phase-3 trial of the Oxford-Astrazeneca Covid-19 vaccine, while the indigenously developed Bharat Biotech and ICMR vaccine has already started the phase III clinical trial.
- Indigenously developed vaccine by Zydus Cadila has completed phase-2 clinical trial in the country.
- Dr Reddy's Laboratories will soon start combined phase 2 and 3 clinical trials of the Russian Covid-19 vaccine Sputnik V in India.
- Biological E. Ltd has started early phase 1 and 2 human trials of its Covid-19 vaccine candidate.

4. Main Objectives of the Mission COVID Suraksha

- The important objectives of the fund will be
 - accelerating pre-clinical and clinical development;
 - licensure of COVID-19 vaccine candidates that are currently in clinical stages or ready to enter clinical stage of development,
 - establishing clinical trial sites, and strengthening the existing immunoassay laboratories, central laboratories and suitable facilities for animal studies,
 - production facilities and other testing facilities to support COVID-19 vaccine development.
- The other important objective will be supporting development of common harmonized protocols, trainings, data management systems, regulatory submissions, internal and external quality management systems and accreditations.
- Capabilities for process development, cell line development and manufacturing of GMP batches for animal toxicology studies and clinical trials will also be supported under the Mission.
- A key element will be development of suitable Target Product Profile so that vaccines being introduced through the mission have preferred characteristics applicable for India.

7 MCQ's WITH EXPLANATORY ANSWERS

(Based on Brain Boosters)

01 Global Conference on Criminal Finances and Cryptocurrencies

Q. Consider the following statements:

1. Global Conference on Criminal Finances and Cryptocurrencies is an initiative of the Working Group on Cryptocurrencies and Money Laundering established by the three organisations - NTERPOL, Europol and the Basel Institute on Governance.
2. Currently in India, Cryptocurrencies are banned. There can be no trade or transactions relating to cryptocurrencies.

Which of the following statements given above is/are correct?

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

Answer: (a)

Explanation. Statement 1 is correct. Over 2,000 representatives from 132 countries attended the virtual 4th Global Conference on Criminal Finances and Cryptocurrencies organised by the Interpol, Europol and the Basel Institute on Governance from November 18 to 19, 2020. It is launched with an objective of strengthening knowledge, expertise and best practices for investigations into financial crimes and intelligence on virtual assets and cryptocurrencies. In addition, the partnership also aims to create a network of practitioners and experts in this field, who can collectively establish best practices and provide assistance and recommendations inside and outside the platform.

Statement 2 is incorrect. Reserve Bank of India (RBI) banned all banking transactions by crypto traders in April, 2018. In March 2020, Supreme Court quashed an order by the Reserve bank of India (RBI) banning financial services firms from trading in virtual currency or cryptocurrency.



02 India's Path to Economic Recovery

Q. With reference to the economic recovery in post-Covid times, consider the following statements:

1. India is expected to have a V-shaped economic recovery.
2. Indian economy is said to enter the Economic- 'Goldilocks' phase in 2021 which will be marked with a slow but consistent growth in the GDP.

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

Answer: (c)

Explanation. Both the statements are correct. India's economy is firmly on the path of a V-shaped recovery after the collapse in the first quarter, and further improvement is expected in the third quarter, 'notwithstanding some moderation' in November's indicators, the Ministry of Finance said, attributing the recovery to the unlocking process along with 'astute' stimulus measures.

According to research published by Morgan Stanley, the Asian economies of India, China, Singapore and Indonesia are expected to rebound from the devastating effects of the COVID-19 pandemic, entering a 'Goldilocks' phase in 2021. A Goldilocks economy is a phrase that has been used to indicate a state which is: "neither strong nor weak." Some of the commonly accepted features of such economies are: low unemployment rate and low inflation. As far as GDP goes, a Goldilocks phase is typically witnessed when an economy is recovering from a slump.



03 10,000 Honey Farmer Producer Organisations (FPOs)

Q. With reference to the Honey FPOs, consider the following statements:

1. Government of India is promoting the creation of FPOs in view of their significant role in fulfilling the mission of implementing agricultural reforms in the country.
2. Beekeeping in India is highly predominant in the unorganized sector among the rural and tribal population. Despite having a huge potential of honey production in the country, the beekeeping industry is still underdeveloped.

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

Answer: (c)

Explanation. Both the statements are correct. NAFED has been appointed as the 4th National Implementing Agency other than SFAC, NABARD and NCDC for the creation of 10,000 FPOs by the Department of Agriculture, Cooperation & Farmers' Welfare (DAC&FW). NAFED has recently taken over the national level Federation of Indian FPOs and Aggregators (FIFA) with the aim of creating sustainable small holder institutions to enhance collective capacities, shortening of agri produce value chains for equitable returns to all stakeholders and leveraging technology for enhanced transparency, scale and seamless agri. produce trading. Creation of Honey FPOs is one of the thrust areas of FIFA's business plan.

Despite having a huge potential of honey production in the country, the beekeeping industry is still underdeveloped. NAFED will address the issues of beekeeping by acting as an intermediary and filling up the gaps between the elements of the beekeeping supply chain and also ensure price remuneration to the beekeeping farmers. Through these Honey FPOs, NAFED will also work for promotion of beekeeping as an occupation for unemployed women and tribal populations and uplift their livelihood.

04 Virgin Hyperloop Technology

Q. Consider the following statements with reference to the 'Virgin Hyperloop Technology':

1. Virgin Hyperloop technology is based on electric propulsion through a low-pressure tube. It will enable a vacuum train to take passengers and goods at speeds of over 1,000 kilometres per hour

2. The first test of hyperloop technology is held in Las Vegas in the U.S.A. with a pod, as the hyperloop vehicles are called, travelling with passengers, including an Indian.
3. India has not yet opted for this technology as it is expensive and yet in developmental phase.

Which of the statements given above is/are correct?

- a) 1 and 2
- b) 1 and 3
- c) 2 and 3
- d) All of the above

Answer: (a)

Explanation Statement 1 and 2 are correct. The Virgin Hyperloop test run was conducted on a 500-meter track in Las Vegas in the U.S.A. with a pod, as the hyperloop vehicles are called, travelling with passengers, including an Indian, inside an enclosed tube at more than 100 mph or 161 kmph. Virgin Hyperloop is an American transportation technology company that works to commercialize the high-speed technology concept called the Hyperloop, a variant of the vacuum train.

Hyperloop, the next-generation mode of transportation that aims to take passengers and goods at speeds of over 1,000 kilometres per hour, has so far been a dream for commuters globally. The same time, the technology is still at a very early stage and it is only starting to be rolled out in different parts of the world right now. With hyperloop, vehicles accelerate gradually via electric propulsion through a low-pressure tube. The pod floats along the track using magnetic levitation and glides at airline speeds for long distances due to ultra-low aerodynamic drag. It is based on the world's fastest magnetic levitation (maglev) trains, then made faster by speeding along inside vacuum tubes.

Statement 3 is incorrect. Maharashtra has deemed hyperloop a public infrastructure exercise and approved the Virgin Hyperloop-DP World Consortium as the original project proponent for the Mumbai-Pune hyperloop project. Virgin Hyperloop had last month announced a partnership with Bangalore International Airports to conduct a feasibility study for a proposed hyperloop corridor from the airport.

05 Right to Property and Supreme Court

Q. With reference to the 'Right to Property', consider the following statements:

1. Right to property was a fundamental right when the constitution was incorporated, later by 44th Amendment to the constitution, it became a legal right under Article 300-A
2. Right to property is also labelled as a 'human right' and the center cannot encroach upon the property of the common man in the name of 'adverse possession'

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

Answer: (c)

Explanation. Both the statements are correct. After the Indian Independence, when the Constitution of India came into force on 26th January, 1950, the right to property was included as a 'fundamental right' under Article 19(1)(f) and Article 31 in Part III, making it an enforceable right. Supreme Court in the historic case known Fundamental Rights Case held that the right to property is no part of the basic structure of the constitution and therefore, Parliament can acquire or take away private property of persons for concerned good and in the public interest. Thereafter, Parliament passed the Constitution 44th Amendment which made right to property an ordinary legal right under Article 300-A.

In a verdict in January 2020, Supreme Court has opined that, a citizen's right to own private property is a human right. The state cannot take possession of it without following due procedure and authority of law, the Supreme Court has held in a judgment. The state cannot trespass into the private property of a citizen and then claim ownership of the land in the name of 'adverse possession', the court said. Grabbing private land and then claiming it as its own makes the state an encroacher. 

06 China to build Hydropower Dam on Brahmaputra

Q. Consider the following statements:

1. Medog is the last county in Tibet which borders Arunachal Pradesh. Yarlung Zangbo Grand Canyon is located in this county.
2. It is in Medog county where China is planning to build a dam on Brahmaputra river.
3. India and China has no mechanism as yet to water sharing and emergency mechanisms for rivers which are originating in China and flowing in India.

Which of the statements given above is/are correct?

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

Answer: (a)

Explanation. Statement 1 and 2 are correct. China will build a major hydropower project on Brahmaputra river in Tibet and a proposal for this has been clearly put forward in the 14th Five-Year Plan (2021-25) to be implemented from next year. China will "implement hydropower exploitation in the downstream of the Yarlung Zangbo River" (the Tibetan name for Brahmaputra) and the project could serve to maintain water resources and domestic security.

Speculation about China planning to build a "super hydropower station" in Medog county, where the Yarlung Zangbo Grand Canyon is located, have circulated for years. Medog is the last county in Tibet which borders Arunachal Pradesh.

Statement 3 is incorrect. India and China established Expert Level Mechanism (ELM) in 2006 to discuss various issues related to trans-border rivers. Under existing bilateral Memorandums of Understanding, China provides hydrological information of Brahmaputra River and Sutlej River to India during the flood seasons. Under the arrangement, China provides flood season data of the Brahmaputra river between May 15 and October 15 every year. 

07 Mission Covid Suraksha

Q. Consider the following statements:

1. Mission Covid Suraksha is related to the development of indigenous, affordable and accessible vaccines for India.
2. Mission Covid Suraksha is directly let by the Department of Science and Technology.
3. Indian government is backing the mission with the monetary aid and is providing funds in tranches for the research.

Which of the statements given above is/are correct?

- a) 1 and 2 b) 1 and 3
c) 2 and 3 d) All of the above

Answer: (b)

Explanation. Statement 1 is correct. Mission COVID Suraksha is a targeted effort to enable development of indigenous, affordable and accessible vaccines for India and will complement the National Mission of Atmanirbhar Bharat. The COVID-19 Vaccine development Mission with end-to-end focus from preclinical development through clinical development and manufacturing and regulatory facilitation for deployment, would consolidate all available and funded resources towards an accelerated product development.

Statement 2 is incorrect. The mission is led by Department of Biotechnology and implemented by a dedicated Mission Implementation Unit at Biotechnology Industry Research Assistance Council (BIRAC). The existing activities under National Bio Pharma Mission (NBM) and Ind-CEPI Mission will provide complementary strengths to this Mission.

Statement 3 is correct. The Government of India (GOI) has announced the third stimulus package of Rs. 900 Crore for the Mission COVID Suraksha- The Indian COVID-19 Vaccine Development Mission. The DBT had earlier announced the programmes for vaccine development as well as other COVID-related solutions, but this mission will be dedicated purely to vaccine development. 

7 IMPORTANT NEWS

01

SIPRI Report: Global Weapon Industry

- ◆ U.S. and Chinese companies dominated the global arms market in 2019, while the West Asia made its first appearance among the 25 biggest weapons manufacturers, a report by the SIPRI research institute.
- ◆ The U.S. arms industry accounted for 61% of sales by the world's "Top 25" manufacturers last year, ahead of China's 15.7%, according to the Stockholm International Peace Research Institute. Total sales by the "Top 25" rose by 8.5% to \$361 billion, or 50 times the annual budget of the UN's peacekeeping operations.
- ◆ U.S. companies Lockheed Martin, Boeing, Northrop Grumman, Raytheon and General Dynamics clinched the top five spots, while China's AVIC, CETC and Norinco held spots six, eight and nine. U.S.



group L3Harris Technologies was in 10th place.

- ◆ For the first time, a company from the West Asia made it into the "Top 25": EDGE, of the United Arab Emirates, was formed by the consolidation of some 25 defence entities in 2019.
- ◆ In 22nd spot, EDGE "is a good illustration of how the combination of high national demand for military products and services with a desire to become less dependent

on foreign suppliers is driving the growth of arms companies in the Middle East," SIPRI researcher Pieter Wezeman said in the report.

- ◆ SIPRI also noted that French group Dassault had shot up from 38th to 17th place, boosted by exports of its Rafale fighter jets in 2019.

About Stockholm International Peace Research Institute (SIPRI)

- ◆ SIPRI is an independent international institute dedicated to research into conflict, armaments, arms control and disarmament. Established in 1966, SIPRI provides data, analysis and recommendations, based on open sources, to policymakers, researchers, media and the interested public. Based in Stockholm, SIPRI is regularly ranked among the most respected think tanks worldwide.



02

Gwalior and Orchha on UNESCO World Heritage Sites List

- ◆ The historical fort cities of Gwalior and Orchha in Madhya Pradesh have been included in the list of UNESCO's world heritage cities under its urban landscape city programme.
- ◆ The United Nations Educational, Scientific and Cultural Organization

(UNESCO), an agency of the United Nations, aims at promoting world peace and security through international cooperation in education, the sciences, and culture.

- ◆ After getting included in the heritage city list, the face of Gwalior

and Orchha will totally change and UNESCO along with the state tourism department will make a master plan for the beautification of the two places.

- ◆ A UNESCO team will visit the state next year and after having a look

at the heritage properties will prepare a master plan for their development and conservation.

- ◆ Under the plan UNESCO will suggest best measures and resources for the development of these places under the Historic Urban Landscape recommendations.
- ◆ Gwalior was established in 9th century and ruled by Gurjar Pratihara Rajvansh, Tomar, Baghel Kachvaho and Scindias. Gwalior is known for its palaces and temples, including the intricately carved Sas Bahu Ka Mandir temple.



- ◆ The Gwalior Fort occupies a sandstone plateau overlooking the city and is accessed via a winding road lined with sacred Jain statues. Within the fort's high walls is the 15th-century Gujari Mahal Palace, now an archaeological museum.
- ◆ Orchha is popular for its temples and palaces and was the capital of the Bundela kingdom in the 16th century. The famous spots in the town are Raj Mahal, Jehangir Mahal, Ram Raja Temple, Rai Praveen Mahal, and Laxminarayan Mandir



03

Jiuzhang: Light Based Super-computer

- ◆ Chinese scientists claim to have created the world's first light-based quantum computer which can solve problems far faster than a classical supercomputer, an advance hailed by experts as a "major achievement" that provides a fundamentally different approach to designing such powerful machines.
- ◆ Jiuzhang, the quantum computer, can reliably demonstrate "quantum computational advantage", a milestone in computing, state-run China Daily quoted a study published in the journal Science.
- ◆ Quantum computers excel at running simulations that are impossible for conventional computers, leading to breakthroughs in materials science, artificial intelligence and medicine.
- ◆ Jiuzhang takes its name from an ancient Chinese mathematical text. It can perform an extremely esoteric calculation, called Gaussian boson sampling, in 200



- seconds. The same task would take the world's fastest classical supercomputer Fugaku around 600 million years, the report said.
- ◆ It is the second such milestone after Google declared its 53-qubit quantum computer had achieved such a breakthrough last year.
- ◆ Jiuzhang used a new method of manipulating 76 photons to do calculations instead of Google's, which uses superconductive materials, the report said.
- ◆ Experts hailed China's quantum computer as a "state-of-the-art experiment" and a "major achievement" in quantum computing, as it proves the feasibility of photonic quantum computation, thus providing a fundamentally different approach to designing such powerful machines, it said.
- ◆ China has been investing heavily in mastering the quantum technology in recent years.
- ◆ In 2017, China had launched quantum communication satellite boosting hack proof and ultra-high security features, the Chinese Academy of Sciences (CAS) said.
- ◆ The Quantum Experiments at Space Scale (QUESS) satellite is the first-ever space-ground test platform for quantum communication, Wang Jianyu, executive deputy chief engineer of the project had told the official media earlier.
- ◆ Chinese officials claimed that the quantum satellite was expected to provide a full-proof hack-free communications which make foreign powers to monitor or intercept China's communication systems.



04

Regulation of Fantasy Sports Industry

- ◆ Government think-tank NITI Aayog's report calling for a single self-regulatory body for fantasy sports has come as a shot in the arm for the industry. Leading players like Dream11 and Games24x7 (which runs My11Circle) welcomed the move and said it would lend the industry credibility.
- ◆ Federation of Indian Fantasy Sports (FIFS) said Niti Aayog's draft guiding principles will offer the required impetus to "responsible growth" of online fantasy sports industry in India.
- ◆ It will also provide equal opportunities for all operators while protecting consumer interests and curbing any possible malpractices, the federation noted.
- ◆ In a draft report titled "Guiding Principles for the Uniform National-Level Regulation of Online Fantasy Sports Platforms in India", Niti Aayog noted that there is a public interest in the fantasy sports industry, receiving government recognition as an industry and having its own identity.
- ◆ It has pitched for setting up a single self-regulatory organisation for the online fantasy sports industry to be governed by the independent oversight board and also suggested restricting online fantasy games to users of 18 years and above.



- ◆ FIFS, a self-regulatory industry body for fantasy sports, has created standards of best practice and consumer grievance redressal mechanism for member operators and fantasy sports users, he added.
- ◆ As per Niti Aayog's draft guidelines, the extant legal ambiguity and differential treatment faced by fantasy sports games across the Indian states must be addressed through the creation of a uniform national-level safe-harbour for fantasy sports games. This, it said, will enable the implementation of a single national policy on fantasy sports and bring clarity to regulators, operators and consumers alike.
- ◆ A recent report by KPMG had noted that the number of users participating in online fantasy sports in India has grown at a compounded annual growth rate (CAGR) of 212 per cent, from 2 million users in June 2016 to 90 million users in December 2019.
- ◆ It estimated that the fantasy sports industry has the potential to attract foreign direct investment of more than Rs 10,00 crore over the next few years as well as generate 1.5 billion online transactions by 2023. Another report by PricewaterhouseCoopers India's stated that the fantasy sports industry has the potential to generate an additional over 5,000 direct and more than 7,000 indirect jobs in the next 2-3 years. 📈📊📉

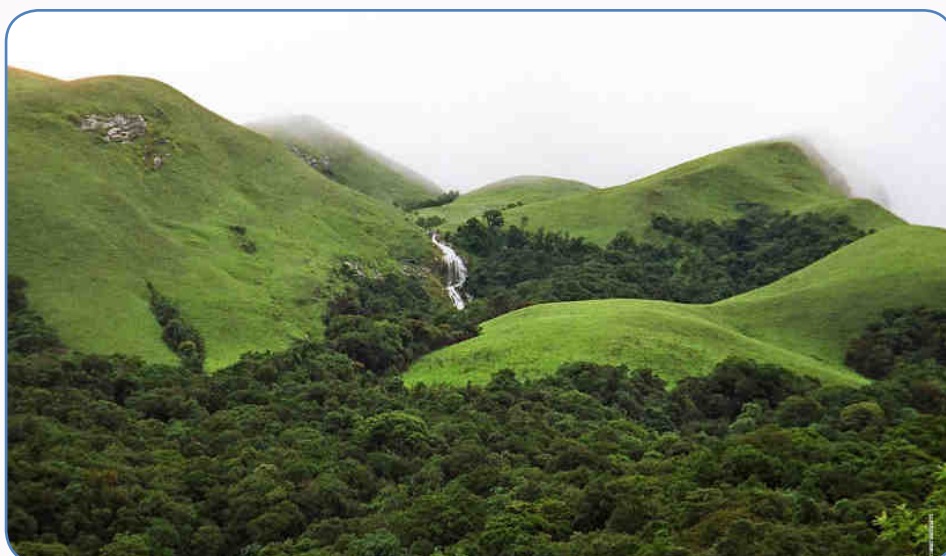
05

IUCN World Heritage Outlook 3

- ◆ The IUCN World Heritage Outlook 3 builds on previous reports from 2014 and 2017 to track whether the conservation of the world's 252 natural World Heritage sites is sufficient to protect them in the long term. It finds that climate change has overtaken invasive species as the top threat to natural World Heritage.
- ◆ India's iconic Western Ghats, inscribed by UNESCO in 2012 as a natural world heritage site, is threatened by population pressure, urbanisation and climate change, according to a new report by the International Union for Conservation of Nature

(IUCN). The IUCN World Heritage Outlook 3, published last week, builds on previous reports from 2014 and 2017 to track whether the conservation of the world's 252 natural world heritage sites is sufficient to protect them in the long term.

- ◆ The report said while the state of world heritage values in the property was considered as good at time of inscription and appears to remain so, there is some concern regarding threats from outside the site.
- ◆ Noting that a number of flagship mammals including parts of the single largest population of globally threatened landscape species occur in the property, the report said fragmentation caused by development pressure in the Western Ghats are shrinking the availability of wildlife corridors and suitable habitats outside protected areas.
- ◆ "The fact that so much biodiversity remains in the Western Ghats given the tremendous population pressure both within and surrounding the property is extraordinary.



- ◆ A large number of threats, which severely threaten the outstanding universal value of the world heritage property, exist and require coordinated conservation responses at all levels including political, sociological and biological," the report said. It said the ongoing pressure for development such as new road construction and broadening of existing roads, and power production would continue to place the property under threat.
- ◆ "Urbanisation together with agricultural expansion, livestock grazing and forest fragmentation

are also posing serious threats to the species and habitats of the Western Ghats. Climate change will probably exacerbate a system already under pressure and has the potential to impact on the large-scale monsoonal processes, which influence the Western Ghats," the latest assessment said.

- ◆ The IUCN World Heritage Outlook provides Conservation Outlook Assessments for all natural World Heritage sites. These assessments indicate whether a natural World Heritage site is likely to conserve its values over time. <<<

06

Countries of Particular Concern

- ◆ The United States has designated Pakistan and China among eight other countries that are of particular concern for violation of religious freedom, Secretary of State Mike Pompeo has said.
- ◆ Pakistan and China along with Myanmar, Eritrea, Iran, Nigeria, North Korea, Saudi Arabia, Tajikistan and Turkmenistan were placed in the list for engaging in or tolerating systematic, ongoing,

egregious violations of religious freedom.

- ◆ The State Department placed the Comoros, Cuba, Nicaragua and Russia on a Special Watch List (SWL) for governments that have engaged in or tolerated severe violations of religious freedom .
- ◆ "Religious freedom is an unalienable right, and the bedrock upon which free societies are built and flourish. Today, the United

States — a nation founded by those fleeing religious persecution, as the recent Commission on Unalienable Rights report noted — once again took action to defend those who simply want to exercise this essential freedom, Mr. Pompeo said.

- ◆ The U.S. also designated al-Shabaab, al-Qaida, Boko Haram, Hayat Tahrir al-Sham, the Houthis, ISIS, ISIS-Greater Sahara, ISIS-



West Africa, Jamaat Nasr al-Islam wal Muslimin and the Taliban as 'Entities of Particular Concern'

♦ Mr. Pompeo said the U.S. did not renew the prior 'Entity of Particular Concern' designations for al-Qaida

in the Arabian Peninsula and ISIS-Khorasan due to the total loss of territory formerly controlled by these terrorist organisations.

♦ The US Commission on International Religious Freedom (USCIRF) praised the State Department's move to put 10 nations in the list of Countries of Particular Concern (CPCs), including Nigeria for the first time, and four countries on the SWL for severe violations, pursuant to the International Religious Freedom Act (IRFA). 

07

Proposal for Conservation Reserves

- ♦ The Maharashtra forest department has proposed the declaration of 11 conservation reserves (CR) in western Maharashtra and Vidarbha. It has also requested allocation of Rs 20 crore annually for the conservation and management of CRs.
- ♦ The state forest department proposes to declare 11 areas in Kolhapur, Nagpur, Amravati, Satara and Sindhudurg districts as conservation reserves during a meeting with the State Board for Wildlife.
- ♦ Of this, Munia and Mogarkasa are in Nagpur; Mahendri in Amravati; Chandgad, Gaganbawda, Bhudargad, Vishalgad and Panhalgad in Kolhapur; Jor-Jambhali and Mayani in Satara and Amboli-Dodamarg in Sindhudurg. All the areas witness tiger movement.



- ♦ Mahendri reserve forest connects Melghat, Pench and Satpuda tiger reserves and has witnessed the presence of the big cats.
- ♦ According to the Union environment ministry, conservation reserves are protected areas that act as buffer zones or connectors and migration corridors between established national parks, wildlife sanctuaries and reserved and protected forests.

- ♦ As opposed to a forest reserve, national parks and sanctuaries, conservation reserves do not have eco-sensitive zones around it. However, any developmental or agricultural activity within the reserve needs approval from the state and central wildlife board.
- ♦ Currently, there are 92 conservation reserves across the country. 

7

IMPORTANT PRACTICE QUESTIONS (For Mains)



01

03

05

01

“Empowering women is the key to control population growth”. Discuss

02

“Access to affordable, reliable, sustainable and modern energy is the sine qua non to achieve Sustainable Development Goals (SDGs)”. Comment on the progress made in India in this regard.

03

Performance of welfare schemes that are implemented for vulnerable sections is not so effective due to absence of their awareness and active involvement at all stages of policy process. Discuss

04

What do you mean by Minimum Support Price (MSP)? How will MSP rescue the farmers from the low income trap?

05

On what grounds a people’s representative can be disqualified under the representation of people act, 1951? Also mention the remedies available to such person against his disqualification.

06

Data security has assumed significant importance in the digitized world due to rising cyber-crimes. The Justice B. N. Srikrishna Committee Report addresses issues related to data security. What, in your view, are the strengths and weaknesses of the Report relating to protection of personal data in cyber space?

07

“Empowering women is the key to control population growth”. Discuss

7

IMPORTANT FACTS (For Prelims)



01



03



05

01 Which country has recently designated countries Pakistan, China, Saudi Arabia etc. as 'Countries of Particular Concern', thereby putting them on a Special Watch List for violation of religious freedom?

United States of America

02 Which Indian, is named among six people selected as 'Asians of the Year' by Singapore's leading daily, The Strait Times for their contribution in the fight against Covid-19?

Adar Poonawalla, CEO, Serum Institute of India

03 Which Indian has been selected as the first CEO of WHO Foundation starting from 1st January 2020?

Anil Soni

04 Which international organisation has awarded, Invest India with Investment Promotion Award 2020?

United Nations Conference on Trade and Development

05 Which personalities are selected as Time magazine's 2020 "Person of the Year"?

Joe Biden and Kamala Harris

06 Which Indian has won Global Teacher prize and prize money of \$1 million for his extensive work in the field of the girl child education and revolutionising textbooks?

Ranjitsinh Disale

07 What is India's rank in Climate Change Performance Index (CCPI) 2021?

10th

7

IMPORTANT QUOTES (For Essay and Answer Writing)



01

01

"The upward course of a nation's history is due in the long run to the soundness of heart of its average men and women."

Queen Elizabeth II

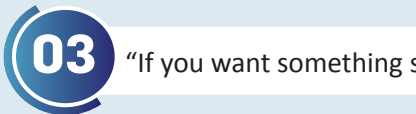


03

02

"There are risks and costs to action. But they are far less than the long-range risks of comfortable inaction."

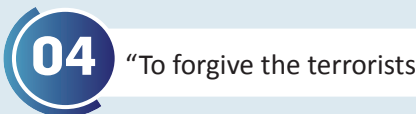
John Fitzgerald Kennedy



03

"If you want something said, ask a man; if you want something done, ask a woman."

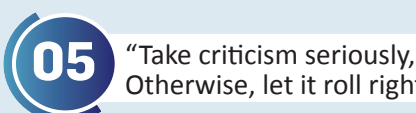
Margaret Thatcher



04

"To forgive the terrorists is up to God, but to send them to him is up to me."

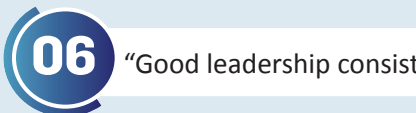
Vladimir Putin



05

"Take criticism seriously, but not personally. If there is truth or merit in the criticism, try to learn from it. Otherwise, let it roll right off you."

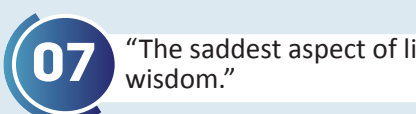
Hillary Clinton



06

"Good leadership consists of showing average people how to do the work of superior people."

John D. Rockefeller



07

"The saddest aspect of life right now is that science gathers knowledge faster than society gathers wisdom."

Isaac Asimov

AN INTRODUCTION

Dhyeya IAS, a decade old Institution, was founded by Mr. Vinay Singh and Mr. Q.H. Khan. Ever since its emergence it has unparalleled track record of success. Today, it stands tall among the reputed institutes providing coaching for Civil Services Examination (CSE). The institute has been very successful in making potential realize their dreams which is evident from success stories of the previous years.

Quite a large number of students desirous of building a career for themselves are absolutely less equipped for the fairly tough competitive tests they have to appear in. Several others, who have a brilliant academic career, do not know that competitive exams are vastly different from academic examination and call for a systematic and scientifically planned guidance by a team of experts. Here one single move invariably put one ahead of many others who lag behind. Dhyeya IAS is manned with qualified & experienced faculties besides especially designed study material that helps the students in achieving the desired goal.

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नोट (Note): अगर आपको हिंदी और अंग्रेजी दोनों माध्यम में अध्ययन सामग्री प्राप्त करनी है, तो आपको दोनों में अपनी ईमेल से **Subscribe** करना पड़ेगा | आप दोनों माध्यम के लिए एक ही ईमेल से जुड़ सकते हैं |

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