NCSC IAS Current Affairs SEP C.A. Page No. 1

17th Sept, 2024

1. <u>Digi Yatra</u> GS 2 (Governance)

Why in News: Recent findings from a study highlight concerns about the potential misuse of facial recognition technology, such as the Digi Yatra app. While Digi Yatra aims to streamline airport check-ins and boarding, there is significant apprehension regarding the abuse of biometric data by private entities.

Digi Yatra: IT wanted guard rails

• More on News:

- Developed by: Digi Yatra Foundation and the Ministry of Civil Aviation
- Objective: To provide air travelers with a hasslefree, frictionless, and health-risk-free experience.
- Functionality: It uses facial biometrics as a single token to digitally confirm travel, identification, and health data.
- Technology: It is based on a Self-Sovereign Identity (SSI) ecosystem with Privacy by Design principles to ensure security and privacy of biometric and personal information.

Digi Yatra: IT wanted guard rails, aviation said app will be new normal

Ministries submitted inputs to study funded by Niti Aayog



port app may soon become the de facto gateway for checking in and boarding at all airports. These are among the key inputs provided by the ministries off, Civil Aviation and Home for a study on facial recognition technology and Digi Yatra, which was conducted by Vidhi Centre for Legal Policy with financial assistance from Niti Aayog, according to documents obtained by The Indian Express under the Right to Information (RTI) Act.

The inputs were submitted by the ministries between August and October 2022. Since its launch in December 2022, over 55 lakh people have downloaded the Digi Yatra app, and more than 3 crore passengers have used it to CONTINUED ON PAGE 2

 Process: It links a traveler's boarding pass to a facial recognition system (FRS) for quicker identification and smoother passage through boarding gates and pre-security checks.

cial recognition technology such as Digi Yatra by private entities and more guard rails are needed

to prevent the misuse of biomet-

ric data. And, the showpiece air-

Face Recognition Technology

- o Facial recognition is a way of identifying a human face through technology known as biometrics, oftentimes mapping facial features from a photograph or video and then comparing the information with a database of known faces to find a match.
- o It uses technology and biometrics typically through AI to identify human faces.

2. Rs 6,000-crore scheme to boost precision farming GS 3 (Agriculture)

Why in News: The Centre is planning to earmark Rs 6,000 crore to promote precision farming. In this regard, a
Smart Precision Horticulture Programme will be launched by the Union Ministry of Agriculture under the existing
Mission for Integrated Development of Horticulture (MIDH) scheme.

Precision farming

About

- Precision farming, also known as precision agriculture, is a modern agricultural practice that uses advanced technology like GPS, sensors, data analytics, drones, and remote sensing to monitor and manage crop production with high accuracy.
- The goal is to optimize inputs (like water, fertilizers, and pesticides) based on site-specific conditions to maximize yield, minimize waste, and reduce environmental impact.

Benefits

- **Increased Productivity:** By monitoring field variability, farmers can tailor inputs to meet the specific needs of crops, leading to improved yield and efficiency.
- **Resource Optimization:** Precision farming ensures judicious use of water, fertilizers, and pesticides, reducing waste and lowering production costs.
- **Environmental Benefits:** Reducing the use of chemicals minimizes soil and water contamination, promoting sustainable agricultural practices.

Risk Management: Through real-time data collection and analysis, farmers can make informed decisions, reducing risks related to unpredictable weather and crop diseases.

Challenges

- High Initial Cost: Implementing precision farming technologies requires significant investment in tools and infrastructure, which can be a barrier for small farmers.
- Technical Expertise: Farmers need to be trained to use precision tools, interpret data, and implement the findings in their agricultural practices.
- **Digital Divide:** Access to reliable internet connectivity, especially in rural areas, limits the adoption of precision farming in many regions.
- Data Processing Management: and interpreting large amounts of data requires specialized software and skills, which are not always available to small-scale farmers.

Precision farming (PF) in India

Context

SMART PRECISION HORTICULTURE PROGRAMME

Govt plans ₹6,000-cr scheme to boost precision farming

Likely to cover 15,000 acres in 5 yrs, benefit 60,000 farmers

ter, fertilisers and pesti-

cides to increase produc tion quality and quantity

all while insulating farm

ers from vagaries of cli-

mate change and other

uncertainties, besides

ensuring sustainable

nization, Primary Agricultural

Credit Societies and SHGs are eli-gible for loans with interest sub-

vention of 3% for using technolog

vention of 3% for using technological solutions in farm practices. These practices include farm/ harvest automation; purchase of drones, putting up specialised sensors on field; use of blockhain and Ali nagriculture; remote sensing and Internet of Things (loT). Apart from offering financial support, the Centre is also consid-

farming

THE CENTRE is contemplating to earmark ₹6,000 crore to promote precision farming, a modern approach that uses smart technol ogy such as Internet of Things Artificial Intelligence, drones and data analytics to boost produc tion through maximal use of re-sources while minimising envi-

ronmental impact. Union Ministry of Agriculture is planning a Smart Precision Ho rticulture Programme under the existing Mission for Integrated Development of Horticulture (MIDH) scheme it is learnt

It will cover 15,000 acres of land in five years from 2024-25 to 2028-29 and is expected to benefit about 60,000 farmers, sources said. At present, the Agriculture Infrastructure Fund (AIF), launched during Covid-19, has provisions for financing infrastructure projects for smart and precision agriculture. Under AIF, individual farmers as well as farmers' communities such as Farmer Producer Orgafit about 60 000 farmers, sources

ering collaborating with the Netherlands and Israel, where tech-based modern farming so-lutions are being used, through Centres of Excellences (CoEs), the sources said. The number of CoEs is likely to be 100 in the part five Positive impact is likely to be 100 in the next five years. Under Indo-Israel Agri-culture Project, 32 CoEs have al-SMART AND precision agriculture m use of resources like wa

ready been set up across 14 states. The Centre has also set up 22 Precision Farming Development Centres (PFDCs) across the country to test new techi gies and modify them according to local needs

According to the Ministry, these 22 PFDCs are located acros State/Central Agricultural Unive-rsities, ICAR Institutes and IITs in TN, Karnataka, Madhya Pradesh. Odisha, Rajasthan, Haryana, Tela-ngana, West Bengal, Ladakh, UP, injab, Gujarat, Uttrakhand Maharashtra, Chhattisgarh, Jharkhand, Bihar, Himachal Jharkhand, Bihar, Himachal Pradesh, Kerala, Manipur and Assam. Besides, funds are re-leased to states/UTs for projects involving use of Al and machine learning, under schemes like the National e-Governance

- As a modern approach to farming, precision agriculture focuses on all aspects of resources (soil, water, nutrients) required for farming.
- However, in India, the practice is so far developed for nutrient-use efficiency (NUE) and wateruse efficiency (WUE).
- PF in the Indian landscape is yet to become an integral part of mainstream farming systems.

Steps taken

- The National Mission on Sustainable Agriculture (NMSA) and Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), which focus on water-use efficiency and soil health monitoring.
- The government has also promoted the use of drones, soil health cards, and satellite-based
- The government has also announced a Digital Public Infrastructure (DPI) for agriculture that will provide farmers with access to technology and information.
- PF technology is being developed and disseminated through the 22 Precision Farming **Development Centres** in the country.
- The Agriculture Infrastructure Fund (AIF), launched during Covid-19, has provisions for financing infrastructure projects for smart and precision agriculture.
- Also, funds are released to states/UTs for projects involving use of AI and machine learning, under schemes like the National e-Governance Plan in Agriculture.

Area Under Precision Farming

- Precision farming in India is still at a nascent stage, with a limited area under coverage, mostly in states like Punjab, Haryana, Maharashtra, and Andhra Pradesh.
- The technology has been mainly adopted in large commercial farms and regions with advanced irrigation facilities.

Challenges in India

- Fragmented Land Holdings: The small size of farms in India poses a challenge for the large-scale implementation of precision farming technologies.
- Cost and Awareness: Small farmers often lack awareness and resources to invest in high-tech
- Infrastructure Gaps: Lack of robust digital infrastructure in rural India limits the reach of precision farming tools.

Ph: 9100791003 Website: https://delhiiasinstitution.com/ Email: iasncsc@gmail.com

- Proposal to launch scheme to boost precision farming
 - Scheme to promote precision farming
 - The Indian government is planning to allocate Rs 6,000 crore to promote precision farming.
 - It will utilize smart technologies like IoT, AI, drones, and data analytics to enhance productivity and resource efficiency while reducing environmental impacts.
 - The Union Ministry of Agriculture is working on launching a Smart Precision Horticulture Programme under the Mission for Integrated Development of Horticulture (MIDH).

Coverage

The scheme will cover 15,000 acres of land in five years from 2024-25 to 2028-29 and is expected to benefit about 60,000 farmers.

Role of Agriculture Infrastructure Fund (AIF) in promoting precision farming

- Currently, the AIF has provisions for financing infrastructure projects for smart and precision agriculture.
- Under AIF, individual farmers as well as farmers' communities such as Farmer Producer
 Organization, Primary Agricultural Credit Societies and SHGs are eligible for loans with interest
 subvention of 3% for using technological solutions in farm practices.
- These practices include:
 - farm/ harvest automation;
 - purchase of drones, putting up specialised sensors on field;
 - use of blockchain and AI in agriculture;
 - remote sensing and Internet of Things (IoT).

Collaboration with other countries to promote precision farming in India

- The government is also collaborating with countries like the **Netherlands** and **Israel** for advanced farming solutions, with a plan to establish **100** Centres of Excellence (CoEs) in five years.
- Already, 32 Indo-Israel CoEs have been set up in 14 states.

3. Why Supreme Court must look into Compensation for Surrogates GS 2 (Social Issues)

• Why in News: Since the enforcement of the Surrogacy (Regulation) Act and the Assisted Reproductive Technologies (Regulation) Act, 2021, several concerns have emerged, particularly regarding the prohibition on payments to surrogate mothers. These concerns are currently being challenged in the Supreme Court for their constitutional validity. The debate centers on whether the prohibition on payments to surrogates adequately addresses potential exploitation and if it properly compensates the labor involved in surrogacy.

• Concerns with Prohibition on Payments

 Legal and Ethical Issues: The Surrogacy Act prohibits any form of payment to surrogates, limiting compensation to medical expenses and insurance coverage.
 This prohibition may exploit surrogates by mother or he dependents on he reposes the Apy Willing room between the of 25 to 55 years can act as a surrogate, one he lifetime, a mixturally, which includes eagle of medical expenses and a provision immarane. He informed consent to delar immarane, the mixture of the consent of the c

Pay the bearer

As SC hears challenges to Surrogacy Act, compensation in such arrangements requires closer examination

in such arrai

The first types that course is indulad with morgan, annive 2006, were cased of diabete morgan, in the 2006, were cased of the secondary of the course of the

Transitioning from a primarily commercial arrangement that clinics and other intermediaries facilitated, to one where intending parents are to seek 'help' from a' willing woman' to act as a surrogate, has not been smooth. There have been instrangements going undergoound, 'et, several of those who desire parenthood via surrogacy have struggled to find someone who would agree. Both these extremes

2016, when a separate Surrogacy Bill was an nounced, that a prohibition on payments wa proposed. There have been legitimate con cerns of possible exploitation around the hier archy between intending cougles and clinic on the one hand and poor or distrayed women who acted as surrogates at the behes of intermedaines, on the other. It remains de batable if removal of provisions for any lain of payment to the surrogate necessarily ad dresses this concern.

Another important argument agains payment model has been that it amounts the sale of children. The draft ART Bills dressed this by proposing schedules of p ment at different points in the pregnancy, that it is amply clear that the payment is the "service" of gestation.

measure practice, governing gestandasium measure practice, and measure practice practice with resemblative deviations bodies like the appropriate measure practice of practice with resemblative deviations bodies like the appropriate practice with resemblative certify religions and a supplications, certify religions and a supplications, certify religions and a supplications of the practice and a procedure, in the Act. The term "service" is arranged with perspective practice and a procedure, and a supplications, and is used in the context of context of the c

woman' to act as a surrogate, has in smooth. On the one hand, there have b stances of arrangements going under, with reports of rackets being busted, other, several of those who desire pare via surrogacy have struggled to find so who would agree. Both these extreme the need for regulating fair compen While the legislative intervention has so important issues aside, it remains so whether the Supreme Court views th tion of failmess in compensation as

of Political Science, University of Hyderaba Views are person

Email: iasncsc@gmail.com

undervaluing their labor and failing to address the power imbalances between surrogates, commissioning parents, and clinics.

Ph: 9100791003 Website: https://delhiiasinstitution.com/

- o Impact on Surrogate Mothers: Historically, surrogate mothers received payments for their services, which has been replaced by the altruistic model where compensation is limited to expenses and insurance. The argument that this prohibition equates to a form of child sale has been debated. Additionally, the disparity in how surrogate labor is valued compared to other medical and legal professionals involved raises concerns about fairness and recognition of the labor involved.
- O Parliamentary Recommendations: Prior to the Act's enactment, the Parliamentary Standing Committee recommended allowing "reasonable compensation" beyond just medical expenses. It suggested compensation for lost wages, psychological counseling, and other support for surrogates. This recommendation reflects the recognition of surrogacy as a significant labor and suggests that fair compensation should be provided to avoid exploitation and ensure ethical practices.

• Fallout of the Act

- Underground Practices: The prohibition has led to instances where surrogacy arrangements go underground, with reports of illegal surrogacy rackets. This suggests that while the law aims to regulate surrogacy, it may inadvertently push practices into exploitative environments.
- Struggles in Surrogacy Arrangements: The shift has made it challenging for intending parents to find willing surrogates.
- Supreme Court's Role: The Supreme Court's examination of these issues will be critical in determining whether the prohibition on payments adequately addresses concerns of fairness and exploitation. The Court's decision will impact the future regulation of surrogacy and ensure that surrogates are fairly compensated for their labor.

4. Two Years of Project Cheetah GS 3 (Environment)

- Why in News: An ambitious project of the Central government of reintroducing Cheetahs in India successfully completed two years after being declared extinct in 1952. The Cheetah Action Plan (CAP) is India's initiative to reintroduce African cheetahs into the country's ecosystems.
- What is Project Cheetah?
 - Launched in: 2022
 - Project Cheetah is India's ambitious attempt to introduce African cats in the wild in the country. Cheetah were the only large carnivore species that went extinct in Independent India.
 - The project is the first-ever intercontinental translocation of the big cats.
 - As part of the project, 20 cheetahs have been brought to the Kuno National Park in Madhya Pradesh so far -- eight from Namibia in September 2022 and 12 from South Africa in February 2023.
 - Current status:

Ph: 9100791003

- Since they arrived in India, eight adult cheetahs -- three females and five males -- have died.
- Seventeen cubs have been born in India, with 12 surviving, bringing the total number of cheetahs, including cubs, in Kuno to 24. Currently, all are in enclosures.
- Objective: Introduce African cheetahs to India to conserve the species and restore degraded dry-open forest/savanna ecosystems. The cheetahs are intended to boost eco-tourism and benefit local communities.
- Timeline: The population is expected to reach Kuno National Park's carrying capacity in about 15 years and the wider landscape in 30-40 years.
- Why Kuno National Park? Kuno was chosen as the most suitable location among ten surveyed sites due to its habitat and prey base. However, cheetahs have been held captive here longer than planned.

Project Cheetah audit: Lack of coordination between Centre, state, 'unjustified' expenses

KNP officials say report not final, will respond to all questions raised



General of Madhya Pradesh has flagged concerns over the management of Project Cheetah at Kuno National Park (KNP), highlighting a "lack of coordination" between central and state government departments as well as

nment departments as well as uses regarding expenditure. The concerns were raised in a mple audit of records – from igust 2019 to November 2023 that was made public Monday response to an RTI query by

These are not allegations, just juestions that will be answered in the coming months. It is wrong o state this is a final report. We will give all responses in coming othases," an official said. KNP director Uttam Sharma

was no intension for needin tentroduction "in the work plan an management plan", and that "th ere are no documents detailing where the cheetah reintroduction work began and how it started". The audit noted that Kun was to be developed as an alter nate habitat for Asiatic ilons, a

tate government was "comletely serious" about it.
"Thus, it was not clear whethen he cheetah reintroduction would be conducted within Kund lational Park. Consequently, no nanagement plan specifically ad-

dressing cheetah reintroductis is available. The report said. The cheetah reintroductis is being conducted according the Cheetah Action Plan 20 prepared by the Centre. The isport said: "It is evident from thatements of the Forest Divisi there was a lack of coordinatis between the departments of the Covernment of India and the Covernment of India and the Covernment of India and the Title said the Covernment of Covernment of Plading Prades "It is also clear the groun clear the ground the Covernment of India and Ind

stween the departments of the overnment of India and the wernmentof Madhya Pradesh "It is also clear the groun aff and the Forest Divisio ere not involved in site select on or the cheetah reintrodux

Email: iasncsc@gmail.com



Cheetah reintroduction is being conducted accordin

The report also flagged a "unjustified" openfluxer of wo 890 Jah under Jahour expense 1890 Jah under Jahour expense the Sundament of the Sundament wendpolment and alternative sources of income for the local sources of income for the local provided. The audit noted the residents near forests should be provided. The audit noted the 1900 Jahour Landament 2023; it was found that, in mo moval and trench deepenin work, amounting to 1N 9,110,558, was carried out usin 1900 machines instead of Jahour 1900 machines 1900 machines 1900 machines 1900 machines 1900 machines 1900

The audit further said the were irregularities in the co struction of a 5.9-km wall. Its ef 67 fewer bags of cement we used than required, leading to substandard construction", at that there was an excess payme of R8-4.14lakh. It also said that alty was not deducted for mate als such as sand, gravel, stone, as louders used in the construction.

The Forest Division said dispagnetis in come tusque and spyments were "the to technical seasons and corrective measures oud be taken in future projects." coording to audit report, from D21-22 to 2023-24 (up to muny 2024), the expenditure on roject Chestah was 444.44 cross this hyan bot in accordance with approved management in 'Insplighted POP Packash umar's stansfer not long after the credered training from Namibia, ying the "benefits of this traintities of the control of the good of the tustiles of in the good of the second good good of the second good go o Additional sites like **Banni Grasslands** in Gujarat and **Nauradehi Wildlife Sanctuary** in Madhya Pradesh are being considered for cheetah introduction.

• Current Issues with the Project

- Extended Captivity: The cheetahs have faced prolonged captivity, far beyond the planned 1-2 months.
 This extended confinement has led to concerns about their readiness for the wild.
- o Radio-collared males and females were supposed to be released in stages but have faced delays. The extended captivity may affect their ability to adapt to the wild.
- Cheetah Fatalities: Several cheetahs have died due to health issues or accidents. Problems include preexisting health conditions, improper management, and environmental stressors.

Indian military export to Israel — aiding genocide GS 2 (International Relations)

• Why in News: The Supreme Court of India recently dismissed a petition by former civil servants, academics, and

activists in the case of **Ashok Kumar Sharma and Others vs Union of India**. The petition sought to suspend existing and future licences for the export of military equipment to Israel, citing concerns over international humanitarian law violations amid ongoing conflict in Gaza. The Court's decision raises questions about judicial review limits on executive foreign policy decisions, especially concerning international humanitarian law.

Judicial Review Limits

Court's Dismissal Rationale: The Supreme Court declined to rule on the merits, focusing instead on procedural aspects. It stated that international obligations are not binding in this context, as Israel was not a party to the case. This approach overlooks the fact that the challenge was directed at the Indian government and companies, not Israel.

and others in blanch and business and the supervisor for claims for the control of the supervisor for claims for the control of the supervisor for claims for the supervisor for supervisor for the supervisor for supervisor for the supervisor

Indian military export to Israel — aiding genocide

- International Obligations and Domestic Law: The Court's reasoning contradicts its previous judgments, which emphasized interpreting domestic law in light of international obligations. Despite the ICJ's detailed orders and obligations under conventions like the Genocide Convention, the Court failed to enforce these international norms domestically.
- Foreign Policy and Contractual Concerns: The Court cited potential breaches of contract and other fallout as reasons for dismissing the petition. It overlooked that the government could invoke force majeure to halt arms exports due to international legal obligations, thus prioritizing commercial interests over humanitarian concerns.

• Fallout of the Decision

- o **Impact on Humanitarian Crisis**: The Supreme Court's dismissal could impede efforts to halt military aid to Israel, amidst severe humanitarian crises in Gaza. This inaction might contribute to the ongoing devastation and international criticism of Israel's conduct.
- Judicial Review in Foreign Policy: The decision underscores the constraints of judicial review over executive actions in foreign policy, especially in contexts involving humanitarian law violations. It highlights a gap in enforcing international legal commitments within domestic judicial frameworks.
- Legal and Ethical Implications: The Court's stance raises significant concerns about India's adherence to
 its international legal obligations, potentially undermining global trust in India's commitment to human
 rights and humanitarian laws.

6. <u>How do Emergency Provisions Impact Centre-State Relations?</u> GS 2 (Governance)

• Introduction:

o The recent surge in violence in Manipur has reignited discussions o Centre-State relations in India,

How do emergency provisions

impact Centre-State relations?

particularly regarding the use of emergency provisions.

 These provisions allow the central government to intervene in the affairs of state governments under specific circumstances.

India's Federal Structure:

- India operates under a federal system, where governance is shared between the Centre and the States.
- The Constitution, through its Seventh
 Schedule, divides powers between the two levels of government.
- Law and order are primarily the responsibility of the State governments.
- However, in cases where there is a breakdown of governance, the Centre has the authority to intervene under certain emergency provisions.

• Understanding Emergency Provisions:

- The emergency provisions are encapsulated in Part XVIII of the Constitution, specifically Articles 355 and 356.
- Article 355 mandates the Centre to protect states from external aggression and internal disturbances, while ensuring that state governments function according to the Constitution.
- O Article 356 grants the Centre the power to impose President's Rule in a state if it fails to comply with constitutional norms. These provisions are unique to
- o India, as similar federal systems like the U.S. and Australia do not allow the central government to remove state governments.

Historical Context and Judicial Interpretation:

- B.R. Ambedkar, while drafting these provisions, expressed hope that they would remain unused.
- However, Article 356 has been misused on numerous occasions to remove state governments, often for political reasons.
- o It was only after the landmark 1994 Supreme Court judgment in the **R. Bommai case** that limitations were imposed on the use of Article 356.
 - The court ruled that it could only be invoked in cases of a constitutional breakdown, not merely for a law-and-order issue.
 - Additionally, the court emphasized that the imposition of President's Rule would be subject to judicial review.
- o On the other hand, the scope of Article 355 has expanded through various court rulings.
- Initially interpreted narrowly, cases like Naga People's Movement of Human Rights vs Union of India (1998) have broadened its application, allowing the Centre to take a wider range of actions to fulfil its duty of protecting states.

• Recommendations from Various Commissions:

- Several commissions have examined the use of emergency provisions in Centre-State relations.
- The Sarkaria Commission (1987), the National Commission to Review the Working of the Constitution (2002), and the Punchii Commission (2010) all concur that Article 355 places a duty on the Union government, but any actions under Article 356 should be used as a last resort.
- o They emphasize that it should only be invoked in extreme situations.

The Case of Manipur:

- The violence in Manipur has brought the issue of emergency provisions to the forefront once again.
- The situation in the state, marked by widespread violence, looting of police ammunition, and targeted attacks, goes beyond a simple law-and-order breakdown.
- Yet, despite the severity of the crisis, Article 356 has not been invoked.
- This is likely due to political considerations, as the same party holds power both at the Centre and the
- However, Article 355 is being utilized, and the Centre is taking steps to restore normalcy through various instructions and actions.

Conclusion:

- While India's federal structure emphasizes state autonomy, emergency provisions like Articles 355 and 356 give the Centre considerable power to intervene when necessary.
- However, these provisions must be used judiciously to maintain the delicate balance between the Centre and the States.
- The situation in Manipur highlights the complexities of this relationship, where political, constitutional, and legal factors all play a role in determining the extent of the Centre's involvement.

7. India's Renewable Energy Revolution Story GS 3 (Economy)

Why in News:

- At the 4th Global Renewable Energy Investors Meet and Expo (RE-INVEST 2024) in Gandhinagar, the PM declared that India's solar revolution story will be painted in gold when the history of the 21st century is written.
- This is because installed solar energy capacity in India has increased by 30 times in the last 9 years reaching 89.43 GW (as of August 2024).
- The PM also highlighted that the government has taken many big decisions in the green energy sector.

Renewable Energy Installed Capacity in India:

- As of August 2024, Renewable Energy (RE) sources (including large hydropower) have a combined installed capacity of 199.52 GW.
- The following is the installed capacity for Renewables:

Wind power: 47.19 GW Solar Power: 89.43 GW

Biomass/Cogeneration: 10.35 GW

Small Hydro Power: 5.07 GW

Waste To Energy: 0.60 GW

Large Hydro: 46.92 GW

o As per REN21 Renewables 2024 Global Status Report, India stands 4th globally in RE installed capacity (including large hydro), 4th in Wind Power capacity and 5th in Solar Power capacity.

Growth of Renewable Energy Installed Capacity in India:

- o India's installed non-fossil fuel capacity has increased 396% in the last 8.5 years and stands at more than 207.76 GW (including large hydro and nuclear), which is about 46% of the country's total capacity.
- The country has set an enhanced target at the UNFCCC's COP26 (Glasgow, 2021) of 500 GW of non-fossil fuel-based energy by 2030 - the world's largest expansion plan in renewable energy under the Panchamrit Pledge

Renewable energy sector will power India's growth'

At investors' meet in Gujarat, PM Modi outlines major announcements of his govt. in first 100 days of third term; says that India is first G-20 country to reach the Paris climate goals ahead of time

The Hindu Bureau

Email: iasncsc@gmail.com

- Key Growth Drivers of Renewable Energy in India:
 - O Government commitments:
 - Reduce India's total projected carbon emission by 1 Bn tonnes by 2030,
 - Reduce the carbon intensity of the nation's economy by less than 45% by the end of the decade,
 - Achieve net-zero carbon emissions by 2070.
 - Proposed solar cities and parks:
 - The government approved solar city per state and the setting up of 57 solar parks of 39.28 GW capacity across the nation.
 - The government is also giving a push to Floating PV Projects.
 - National Green Hydrogen Mission: The government launched the mission with an aim to produce 5
 million metric tonne (MMT) green hydrogen per annum with an associated renewable energy capacity of
 about 125 GW by 2030.
 - Off-shore Wind Energy: The medium and long-term targets for off-shore wind power capacity additions are 5 GW by 2022 and 30 GW by 2030.
 - Wind-Solar Hybrid Policy: In 2018, national policy was announced to promote an extensive gridconnected wind-solar PV hybrid system for efficiently utilising transmission infrastructure and land.
 - AatmaNirbhar Bharat: The PLI scheme in Solar PV manufacturing was introduced under AatmaNirbhar Bharat.
 - o **Promoting FDI:** Up to 100% FDI is allowed under the automatic route for renewable energy generation and distribution projects subject to provisions of the Electricity Act 2003.
 - Union Budget 2024 Highlights:
 - The Centrally Sponsored Scheme for Solar Power (Grid) has been allocated INR 10,000 Cr.
 - PM-Surya Ghar Muft Bijli Yojana has been allocated INR 6,250 Cr. Under this scheme, the government provides funds and helps in installation of solar rooftops in every household.
 - Exemption of Basic Customs Duty (BCD) on imports of 25 critical minerals important for the renewable energy sectors has also been announced.

About the RE-INVEST 2024:

- Organised by the **Ministry of New and Renewable Energy (MN**RE), Government of India, **RE-Invest is a global platform** bringing together key players in the renewable energy sector.
- The conference will delve into the future of energy, exploring trends, technologies, and policies shaping the global renewable energy landscape and help in achieving UN SDGs 7 and 13.
- This unique platform will foster collaboration, knowledge sharing, and investment opportunities to advance India's renewable energy goals.
- Government Initiatives/ Achievements in the Green Energy Sector Highlighted by the PM at the RE-INVEST 2024:
 - A new Bio E3 (Biotechnology for Economy, Environment, and Employment) policy has been approved for promoting high performance bio manufacturing.
 - For offshore wind energy projects, a viability gap funding scheme has been approved with an outlay of ₹Rs 7000 crore
 - o The Union government has set aside a ₹1 trillion research fund for taking several initiatives for electric mobility and high-performance bio manufacturing.
 - o **India is the first G-20 country to meet climate commitments** made in Paris nine years before the deadline.

MCQ Current Affairs 17th Sept, 2024

1. Which one of the following best describes 'Syntretus perlmani', recently seen in the news?

- a) A viral pathogen
- b) A rare type of beetle species
- c) A new species of parasitoid wasp
- d) A newly identified species of butterfly

2. Consider the following statements regarding the Line of Actual Control (LAC):

- A. It is a military demarcation line that separates the Indian and Pakistani-controlled parts of Jammu and Kashmir.
- B. It is not recognised as an official border.

Which of the statements given above is/are correct?

- a) A only
- b) Bonly
- c) A and B
- d) Neither of two

3. Consider the following statements regarding Integrated Ocean Energy Atlas:

- A. It provides information about the potential of ocean energy resources encompassing marine meteorological and hydrological energy forms.
- B. It is developed by the India Space Research Organisation (ISRO).

Which of the statements given above is/are correct?

- a) A only
- b) Bonly
- c) A and B
- d) Neither of two

4. Consider the following statements regarding CREATE setup:

- A. It is an initiative of the Union Ministry of Micro, Small & Medium Enterprises.
- B. It helps advance rural industrialization and fostering enterprise creation.

Which of the statements given above is/are correct?

- a) A only
- b) B only
- c) A and B
- d) Neither of two

5. Consider the following statements regarding Smart Precision Horticulture Programme:

- A. It is an initiative under the Mission for Integrated Development of Horticulture (MIDH) scheme.
- B. It uses smart technology like the Internet of Things, Artificial Intelligence, drones and data analytics to boost production.

Which of the statements given above is/are correct?

- a) A only
- b) Bonly
- c) A and B
- d) Neither of two

Ph: 9100791003 Website: https://delhiiasinstitution.com/ Email: iasncsc@gmail.com

Answers Current Affairs 17th Sept, 2024

- 1. c
- 2. b
- 3. a
- 4. c
- 5. c

