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Daily News Analysis

The Hindu Important News Articles & Editorial For UPSC CSE

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Edition: International Table of Contents

Page 04 : GS 3 : Indian Economy – Infrastructure – Energy

Prime Minister Narendra Modi inaugurated the fourth Global Renewable Energy Investors Meet and Expo in Gujarat, highlighting India's commitment to renewable energy and rapid economic growth.

- He detailed government initiatives, including new industrial cities, high-speed rail, research funding, and renewable energy targets, reinforcing India's leadership in green technology.

'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
AHMEDABAD

Prime Minister Narendra Modi on Monday inaugurated the fourth Global Renewable Energy Investors Meet and Expo (RE-INVEST) in his home State of Gujarat, and said that India was at the forefront of harnessing renewable energy sources, including solar power, to fight climate change.

Speaking on the occasion, Mr. Modi said 140 crore Indians had pledged to make the country the world's third largest economy, and the renewable energy sector would power the country's rapid economic growth in the years to come.

Sustaining at the top

"India aims to not only reach the top but to sustain at the position," Mr. Modi said, adding that the world believes India is the best bet of the 21st century.

"India is preparing a base not only for today but for the next thousand years," he said, adding that in the first 100 days of his third term, the government had taken multiple decisions to expand physical and social infrastructure.

PM Narendra Modi addressing the fourth Global Renewable Energy Investors Meet & Expo in Gandhinagar on Monday. VIJAY SONEJI

Mr. Modi outlined some of the major announcements of his government this time, including the decisions to create 12 new industrial cities and eight high-speed road corridor projects; the launch of over 15 semi-high speed Vande Bharat trains; promoting research with the inception of a fund worth ₹1 trillion; various initiatives to drive e-mobility; high-performance biomanufacturing and the Bio-E3 policy. The creation of a viability gap funding scheme for offshore wind energy projects worth more than ₹7,000 crore was a big move to promote off-shore wind farms in the coastal States, he said.

India has been well aware of its energy requirements to make it a developed nation by 2047, and had decided to build its future on the basis of renewable energy sources, including solar power, wind power, nuclear power and hydro power, he said, because conventional energy supply sources were depleting and were also highly polluting.

"India is the first G-20 nation to achieve the climate commitments set in Paris – nine years before the deadline," Mr. Modi said in his inaugural address at the event, in the presence of several Chief Ministers and other functionaries, and delegates from around 40 countries.

Lauding State governments for developing solar and wind energy infrastructure, he emphasised the government's target of achieving 500 GW of renewable energy by 2030, and said the government had "turned the green transition into a people's movement".

During his speech, the Bharatiya Janata Party (BJP) leader also recalled his re-election as Prime Minister for a third term, and added that the country's aspirations were the reason for it.

Mr. Modi also stressed that the poor, Dalits, and the deprived believed that the government's third term would become a guarantee for a dignified life for the marginalised sections of society.

Analysis of the news:

- **Steps taken by the Indian government to advance renewable energy and infrastructure development:**
  - **Expansion of Infrastructure:** Announced the creation of 12 new industrial cities and eight high-speed road corridors to boost economic growth.
  - **Railway Upgrades:** Launched over 15 semi-high-speed Vande Bharat trains to enhance connectivity.
  - **Research Funding**: Established a ₹1 trillion fund to promote research and development in various sectors.
  - **E-Mobility Promotion:** Initiated various measures to drive the adoption of electric mobility.
  - **Biomanufacturing:** Introduced the Bio-E3 policy to advance high-performance biomanufacturing.

- **Offshore Wind Energy:** Launched a viability gap funding scheme worth over ₹7,000 crore to support offshore wind projects.
- **Renewable Energy Targets:** Set a goal to achieve 500 GW of renewable energy by 2030.
- **Climate Commitments:** Achieved Paris climate goals nine years ahead of schedule.

These initiatives aim to reinforce India's position as a leader in renewable energy and sustainable development.

UPSC Mains PYQ : 2020

Ques : India has immense potential for solar energy though there are regional variations in its development. Elaborate.

Page 07 : GS 3 : Science and Technology

Advancements in AI and NLP, particularly large language models, have revolutionised human-computer interactions but face challenges like high energy consumption and inaccuracies.

- Quantum computing, especially QNLP and QGen, offers promising solutions for more efficient, accurate, and sustainable AI systems.

How quantum computing can make large language models even better

Quantum processes can help LLMs lower their carbon footprint or become more sophisticated for the same energy usage; sidestep their predilection for 'hallucinating' information; improve the ability to understand syntactics; and are feasible for stationary and nonstationary data

Qudsia Gani
Rukhsanul Haq
Mohsin Ilahi

In recent years, the landscape of artificial intelligence (AI), particularly within the realm of natural language processing (NLP), has undergone a remarkable transformation. We have witnessed the rise of powerful large language models (LLMs) made by OpenAI, Google, and Microsoft, among others, and generative AI (Gen-AI), characterised by its unparalleled ability to generate data based on user inputs.

These sophisticated models have revolutionised human-computer interactions, bestowing upon users experiences akin to human understanding. The advent of these cutting-edge technologies and their wide availability has compelled people at large, industry stakeholders, and governmental bodies to pay attention to their implications.

Quantum natural language processing has emerged as an active and burgeoning field of research with potentially profound implications for language modelling. Representative illustration. GOOGLE DEEPMIND

Problems with current LLMs

LLMs are a cornerstone in AI and mirror the complexities of human language processing. They can classify text, answer questions, and translate between languages. But they also consume a lot of energy to be trained and when put in use.

For example, as models go, LLMs are much larger than other AI applications such as computer vision. The energy consumption of a large language model (LLM) is determined mostly by the number of parameters it has. Larger models demand more computational power for both training and inference. For example, GPT-3 has 175 billion parameters and required around 1,287 MWh of electricity to train. This is around what an average American household consumes in 120 years.LLMs also surpass non-AI applications in this regard. Training an LLM with 1.75 billion parameters can emit up to 284 tonnes of carbon dioxide, which represents more energy than that required to run a data centre with 5,000 servers for a year.

It's important that we lower LLMs' carbon footprint to ensure they are sustainable and cost-effective. Achieving these goals will give LLMs more room to become more sophisticated as well.

Another shortcoming of LLMs pertains to their pre-trained nature, which restricts the level of control users have over their functioning. These models are trained on large datasets, with which they develop awareness of word-use patterns in diverse linguistic contexts. But such training often also results in "hallucinations." Essentially, LLMs may generate text that is contextually coherent but factually incorrect or semantically nonsensical. This arises from limitations inherent to the training, when the model's understanding may diverge from reality.

A third limitation revolves around the abilities of current LLMs to understand syntactics. Syntax refers to the structural arrangement of words and phrases in a sentence. LLMs excel at processing the semantic (meaning-related) aspects of natural language but struggle with syntax. For example, they may overlook or misinterpret syntactic cues and impede their ability to generate contextually appropriate text.In sum, we need to develop sustainable, energy-efficient approaches that yield more accurate language models.

Syntactics and semantics

Quantum computing is a highly promising way to address these challenges. It harnesses the remarkable properties of quantum physics like superposition and entanglement for computational needs. In particular, quantum natural language processing (QNLP) has emerged as an active and burgeoning field of research with potentially profound implications for language modelling.

QNLP incurs lower energy costs than conventional LLMs by leveraging quantum phenomena. QNLP models also require far fewer parameters than their classical counterparts in order to achieve the same outcomes (on paper), thus promising to enhance efficiency without compromising performance.

This processing paradigm takes advantage of quantum correlations, an approach in which the system focusses on grammar (syntax) and meaning (semantics) together rather than separately as conventional systems do. QNLP achieves this using a better "mapping" between the rules of grammar and quantum physical phenomena like entanglement and superposition. The result is a deeper, more complete understanding of language.

The approach is also expected to mitigate the "hallucinations" that plague many existing LLMs, as the resulting QNLP models are better equipped to distinguish the contexts of various pieces of information and produce more accurate outputs.

With the help of QNLP, researchers also hope to uncover the mental processes that allow us to understand and create sentences, yielding new insights into how language works in the mind.

Time-series forecasting

From the basic details of quantum mechanics, we learn that a quantum system (like an atom or a group of particles) can be described by a quantum state – a mathematical representation that keeps evolving with time. By studying this representation, we can determine the expected outcomes of an experiment involving that system. Based on the same idea, researchers have proposed a quantum generative model to work with time-series data.

> LLMs are a cornerstone in AI and mirror the complexities of human language processing. They can classify text, answer questions, and translate between languages. But they also consume a lot of energy

A generative model is a mathematical model that generates data, if required, with a user's inputs.

A general model designed to run on a quantum computer is a quantum generative model (QGen). Here, the techniques of quantum computing can be used to create or analyse sophisticated time-series data that conventional computers struggle with. Time-series data is data of something that has been recorded at fixed intervals. This new data can then be used to teach quantum algorithms to identify patterns in the data more efficiently, to solve complex problems related to forecasting (e.g., stock market trends), and/or to detect anomalies.

On May 20, 2024, researchers in Japan reported that a QGen AI model they built could successfully work with both stationary and nonstationary data.

Stationary data refers to information that doesn't change much over time. It stays fairly constant or fluctuates around a stable average. For example, the current price of a commodity like gold or the world's population can be considered stationary: the data doesn't show big changes in trends over a short period and the values move within a predictable range. On the other hand, nonstationary data keep changing, such as ambient temperature, stock prices, and the GDP. Classical methods struggle to analyse such data accurately.

In the new study, the researchers built a time-series QGen AI model and evaluated its performance by applying it to solve plausible financial problems. They wrote in their preprint paper: "Future data for two correlated time series were generated and compared with classical methods such as long short-term memory and vector autoregression. Furthermore, numerical experiments were performed to complete missing values. Based on the results, we evaluated the practical applications of the time-series quantum generation model. It was observed that fewer parameter values were required compared with the classical method. In addition, the quantum time-series generation model was feasible for both stationary and nonstationary data."

That fewer parameters were required means the model based on the quantum computer could solve the same problems as a classical computer but while requiring less computational resources.

In sum, quantum computing holds considerable potential to revolutionise AI applications, particularly in addressing the challenges posed by current LLMs.

By embracing QNLP and QGen-AI, together with advancements in time-series forecasting, we can pave the way for sustainable, efficient, and performant AI systems.

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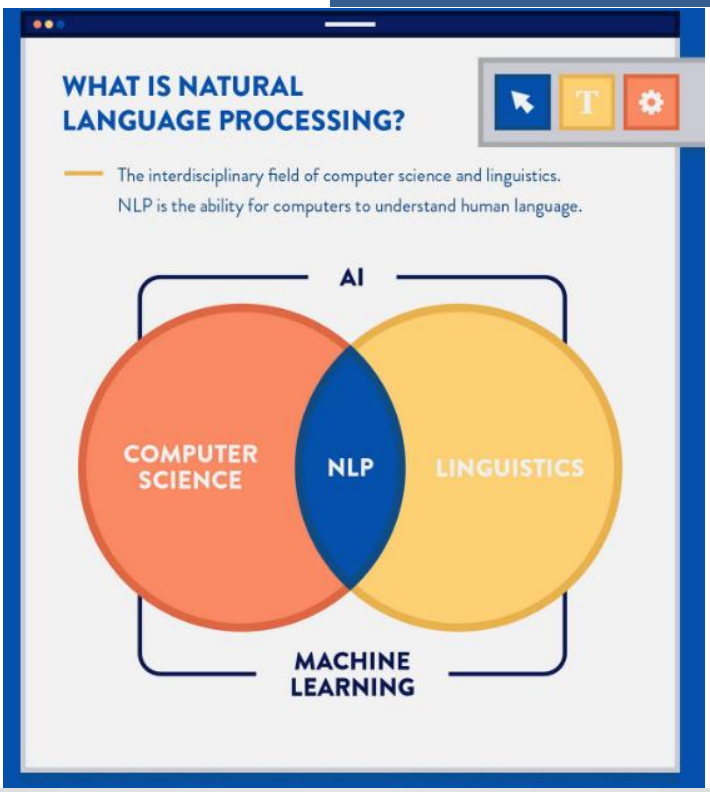
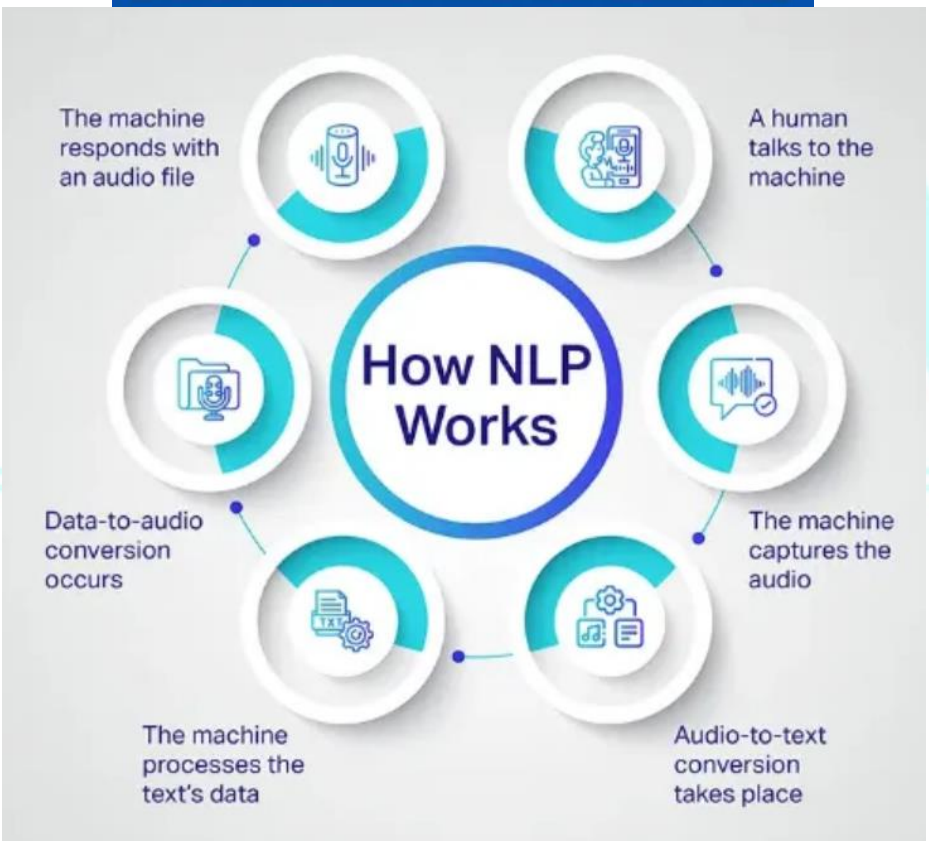
Transformations in AI and NLP:

- The landscape of AI, especially in natural language processing (NLP), has seen remarkable advancements.
- Large language models (LLMs) from OpenAI, Google, and Microsoft have revolutionised human-computer interactions through generative AI.





Problems with Current LLMs:

- **High Energy Consumption:** LLMs require significant computational power due to their large number of parameters. For instance, GPT-3 consumed 1,287 MWh of electricity for training, equivalent to an average household's 120-year energy consumption.
- **Pre-trained Nature and Hallucinations**: LLMs generate contextually coherent but factually incorrect outputs, due to the limitations of their pre-training.
- **Syntactic Issues:** While LLMs excel in semantic understanding, they struggle with syntax, misinterpreting cues essential for generating accurate text.

Syntactics and Semantics with Quantum NLP:

- **Quantum Computing:** Quantum computing leverages phenomena like superposition and entanglement to reduce energy costs and enhance efficiency.
- **Quantum Natural Language Processing (QNLP):** QNLP addresses the limitations of current LLMs by integrating syntax and semantics more effectively, lowering hallucinations, and improving context comprehension.
- **Improved Language Understanding:** QNLP offers a deeper understanding of language by better mapping grammar rules with quantum phenomena.

Time-Series Forecasting:

- **Quantum Generative Model (QGen):** Quantum computing can handle time-series data, using fewer parameters than classical models.
- **Advantages of QGen:** It is effective for both stationary (stable) and nonstationary (fluctuating) data, offering more efficient pattern detection and anomaly identification.
- **Recent Research:** A Japanese study demonstrated that a QGen AI model outperforms classical methods in financial problem-solving with fewer computational resources.

Conclusion:

- Quantum computing, particularly QNLP and QGen, holds significant potential to overcome current LLM challenges, enabling more sustainable, efficient, and powerful AI applications.

Page 10 : GS 2 : Indian Polity

The ongoing violence in Manipur has reignited debates around Centre-State relations and the use of emergency provisions, particularly Articles 355 and 356,

- The news highlights constitutional obligations and the challenges of maintaining law and order in federal governance.

How do emergency provisions impact Centre-State relations?

What is the federal structure of governance in India? How do Articles 355 and 356 affect federalism?

Rangarajan R.

The story so far:
The recent spate of renewed violence in Manipur has once again triggered the discussion around Centre-State relations and the use of emergency provisions by the Centre.

What is our federal set-up?
India is a federation with governments at the Centre and the States. The Seventh Schedule to the Indian Constitution distributes the power between the Union and States. Under this scheme, it is the domain of the State governments to maintain law and order in their respective States.

What are emergency provisions?
The emergency provisions are provided in Part XVIII of the Constitution. Articles 355 and 356 deal primarily with the affairs of government in a State under this part. Article 355 imposes a duty on the Centre to protect every State from external aggression and internal disturbance. It also specifies that the Centre should ensure that every State government operate according to the Constitution. Article 356 allows for the imposition of the President's rule if a State's government cannot function in accordance with constitutional provisions. While in the U.S. and Australia, federal government functions also involve protecting States, their constitutions do not contain provisions for removing State governments.

B.R. Ambedkar explained the purpose of Article 355, keeping in mind the federal character of our polity, that if the Centre is to interfere in the State's administration under Article 356, it must be by or under some obligation which the Constitution imposes on the Centre. Hence, Article 355 was incorporated to check any arbitrary or unauthorised use of Article 356.

What have the courts ruled?
Dr. Ambedkar again in the constituent Assembly wished that Articles 355 and 356 would never be called into operation and would remain a dead letter. However, principles and federalism that Article 356 was misused on several occasions removing elected governments that enjoyed majority in the States. Reasons varied from loss in Lok Sabha elections to deterioration of law and order in the States. It was only after the Supreme Court's categorical judgement in the S R Bommai case (1994) that such misuse was restricted. The court held that Article 356 should be imposed only in the event of a breakdown of constitutional machinery, as distinguished from an ordinary breakdown of law and order. It also held that the imposition of the President's rule is subject to judicial review and should not be misused for political reasons.

On the other hand, the scope of Article 355 has been widened by various Supreme Court rulings. In *State of Rajasthan Vs Union of India* (1977), the court had a narrow interpretation of Article 355 as justifying the employment of Article 356. However, in subsequent cases such as *Naga People's Movement of Human Rights Vs Union of India* (1998), *Sarbananda Sonowal Vs Union of India* (1997), the legal position with respect to Article 355 has shifted. The scope of actions under this article has been widened to permit all statutorily and constitutionally available actions by the Union to discharge its duties of protecting the State and ensuring that its governance is in accordance with the Constitution.

What are the suggestions?
The Sarkaria Commission on Centre-State Relations (1987), the National Commission to Review the Working of the Constitution (2002), and the Punchhi Commission on Centre-State Relations (2010) have all opined that Article 355 not only imposes a duty on the Union but also grants it the power to take necessary actions for the effective performance of that duty. Imposition of the President's rule under Article 356 must be used as a last resort in situations of utmost gravity and urgency.

The situation in Manipur is grave. Large-scale violence against innocent civilians, women and children; looting of ammunition from police armoury; drone and missile attacks targeting civilians cannot be viewed as just an ordinary breakdown of law and order. Constitutional as well as political expediency, considering that the same party is in power at the Centre and the State, has resulted in Article 356 not being invoked. However, under Article 355, all possible instructions and actions should continue to be pursued to restore normalcy at the earliest.

Rangarajan R is a former IAS officer and author of 'Polity Simplified'. Views

THE GIST

- India's federal system divides powers between the Union and State governments, with States responsible for maintaining law and order.
- Articles 355 and 356 of the Constitution allow the Centre to intervene in States under certain conditions. Article 355 mandates the Centre to protect States from internal and external threats, while Article 356 permits the imposition of President's rule if a State's government fails to function according to the Constitution.

Federal Structure of India:

- India follows a federal system with distinct governments at the Centre and in the States.
- The Seventh Schedule of the Constitution distributes powers between the Union and States, with law and order being the State's responsibility.

Emergency Provisions:

- Part XVIII of the Constitution outlines emergency provisions, with Articles 355 and 356 focusing on the Centre's duty towards States.
- Article 355 mandates the Centre to protect States from external aggression and internal disturbances and ensure State governments function according to the Constitution.
- Article 356 allows for the imposition of President's rule when a State government cannot operate constitutionally.

Purpose of Article 355:

- Dr. B.R. Ambedkar incorporated Article 355 to justify the Centre's intervention under Article 356 only in cases of constitutional obligation, preventing arbitrary use of power.

Judicial Interpretation:

- Article 356 was often misused to dismiss State governments until the Supreme Court's S.R. Bommai case (1994), which restricted its use to situations where there is a breakdown of constitutional machinery, not merely a law and order issue.
- Article 356 is subject to judicial review and should not be used for political reasons.
- The Supreme Court has broadened the scope of Article 355 in various rulings to permit all actions necessary to protect States and ensure constitutional governance.

Commissions' Recommendations:

- The Sarkaria Commission (1987), National Commission to Review the Constitution (2002), and Punchhi Commission (2010) recommended using Article 356 as a last resort, emphasizing the Centre's duty under Article 355.

Manipur Crisis:

- The ongoing violence in Manipur represents a serious constitutional and law-and-order crisis.
- While political considerations may prevent the invocation of Article 356, all actions under Article 355 must continue to restore peace.

UPSC Mains PYQ : 2018

Ques : Under what circumstances can the Financial Emergency be proclaimed by the President of India? What consequences follow when such a declaration remains in force?

Page 11 : GS 3 : Environment

The Cheetah Action Plan (CAP) aims to introduce African cheetahs into India to restore ecosystems and boost eco-tourism.

- However, challenges include extended captivity, high cheetah mortality, and habitat concerns, raising doubts about the project's long-term success.

EXPLAINER

Kuno National Park in Madhya Pradesh was found to be the most suitable for introducing the cheetahs because of its habitat and adequate prey base. PTI

What is the current status of the introduction of African cheetahs?

Project Cheetah has encountered significant setbacks, including prolonged captivity and cheetah fatalities; with long-term success hinging on finding sufficient habitat, scientific management, and community support, the project's future depends on overcoming these enormous challenges

Ravi Chellam

The Cheetah Action Plan (CAP) represents India's ambitious effort to introduce African cheetahs into its ecosystems, with a focus on both conserving the species and restoring the health of savanna habitats. However, the project has faced several challenges since its inception, including extended captivity of the cheetahs and fatalities, raising questions about its long-term prospects.

What is Project Cheetah?

The CAP states that the translocation of a large carnivore, African cheetahs in this case, is a strategy to conserve threatened species and restore ecosystem functions. It also states that India plans to assist the Government of Iran, and the international conservation community with conserving the Asiatic cheetah and increasing its distribution range to include protected landscapes in India.

The CAP also says cheetahs will be a flagship species for the degraded dry-open forest/savanna ecosystems in India and increase the value of restoring and conserving them, as well as improve the fortunes of local communities through eco-tourism. It has been estimated that the released population should reach the carrying capacity of Kuno National Park in about 15 years and that of the wider Kuno landscape in 30-40 years. According to the CAP, the introduction programme requires long-term (at least 25 years) financial, technical, and administrative commitments from the Ministry of Environment, Forests and Climate Change (MoEFCC), the National Tiger Conservation Authority (NTCA), the Madhya Pradesh Forest Department, and the Wildlife Institute of India.

Why are the African cheetahs in captivity?

Per the CAP, radio-collared male coalitions were to be released first from their holding enclosures (*bomas*) after a period of one to two months. The radio-collared females were to be released one to four weeks after the males, depending on how comfortable the males were in their new environment. India has missed these timelines. The quarantine period in Kuno for all the cheetahs was longer than specified. Once the cheetahs were released into the bomas, they endured a prolonged period of confinement. In fact, the 12 surviving adult cheetahs of the 20 brought from Africa have spent almost all of the last 12 months in captivity.

Such long-term captivity can only be interpreted as a misguided attempt by those managing the cheetahs to play it safe, possibly in the belief that the mortality of the cats can be mitigated in captivity and that they will also be easier to breed.

The problem? Captive cats quickly become unfit to be released to range free in the wild, which is Project Cheetah's objective. A Namibian policy categorically restricts the captivity period for wild large carnivores to three months. If the period exceeds this duration, the carnivore should either be euthanised or be held permanently in captivity.

As per this policy, the 12 adult cheetahs and the 12 cubs currently in Kuno are unfit to be released into the wild.

Why did so many cheetahs die after moving?

Deaths and births are part and parcel of the lives of all species. That said, in such international projects, utmost care should be taken to assess and choose individual animals before they are imported. Once the cats are in India, we are responsible for deploying the best available knowledge and management practices to ensure they thrive, not just survive.

There have been failures on both these fronts. One female cheetah imported from Namibia had a pre-existing and chronic renal ailment resulting in her death in captivity in March 2023. A male from South Africa died in captivity in April 2023 due to suspected hypokalaemia and the resulting acute heart failure. A female from South Africa died in captivity in May 2023 as she was mauled by a male coalition in an enclosure while the managers were trying to get her to mate. All three cats died before they were released at all.

In late May 2023, three of the four cubs born to Jwala were found dead due to heat stroke. Between July 11 and August 2, 2023, two males from South Africa (one free-ranging and the other in captivity) and one female from Namibia (free-ranging) died. The official reason was that these cats contracted dermatitis, followed by myiasis and septicaemia. The root cause was allegedly the growth of a winter coat during the Indian summer and monsoons. This is physiologically impossible since a shorter day length is required for the winter coat to grow.

In January 2024, a male from Namibia died in captivity due to septicaemia. In August 2024, another male from Namibia – the only free-ranging African cheetah in Kuno – died apparently due to drowning. A few cheetah researchers with decades of experience said none had heard of a single instance of a free-ranging cheetah drowning.

Two of the cubs born in a litter of six died in June and August 2024. One cub's spine was broken.

Why are the cheetahs located in Kuno?

The CAP states that 10 sites were surveyed in five central Indian States to determine their suitability for introducing African cheetahs. Of these, Kuno National Park in Madhya Pradesh was found to be the most suitable for introducing the cheetahs because of its habitat and adequate prey base.

But even in Kuno, the cheetahs have largely been held captive. About 80 sq. km has been fenced off in Gandhi Sagar Wildlife Sanctuary and cheetahs were initially supposed to be released there by December 2023 or January 2024. Now the plan seems to be to introduce the cats in late 2024 or early 2025.

A captive breeding facility for the African cheetahs is being built in the Banni grasslands of Kachchh, Gujarat. Some cheetahs are likely to be housed here. Nauradehi Wildlife Sanctuary in Madhya Pradesh has also been mentioned as a potential site for introducing African cheetahs.

Who is responsible for the cheetahs?

An expert committee appointed by the NTCA and chaired by Rajesh Gopal has the overall responsibility for guiding the project. The NTCA and the MoEFCC are the institutions responsible for all high-level decision-making, including negotiating with the African countries to procure the cheetahs.

The Wildlife Institute of India has been providing technical inputs and the Madhya Pradesh Forest Department has been responsible for the field implementation.

Will Project Cheetah have measurable outcomes?

The CAP outlines both short-term and long-term success criteria for introducing cheetahs in India. In the short term, the goals include a 50% survival rate for the first year, cheetahs establishing home ranges, successful reproduction in the wild, and generating revenue for local communities through eco-tourism. These goals are currently not being met due to prolonged captivity, which contradicts the plan's original prescriptions.

Long-term success is measured by cheetahs becoming a stable part of the ecosystem with natural survival rates, establishing a viable metapopulation, improving habitat quality and prey diversity, and benefiting local economies through sustainable conservation efforts.

Does Project Cheetah have a sunset clause?

In some sense, the long-term criteria for success like the establishment of a viable metapopulation in India should be viewed as the sunset clause. Such projects will need almost constant management attention.

The timelines stretch across a minimum of 15 years but more realistically 30 to 40 years, as per the CAP.

But the big question still remains: does India have sufficient habitat (4,000 to 8,000 sq. km) of the required quality to establish a viable population of free-ranging cheetahs in the wild?

Ravi Chellam is a wildlife biologist and conservation scientist based in Bengaluru. He is CEO of Metastring Foundation and Coordinator of Biodiversity Collaborative. The views expressed by him are independent and personal

Project Cheetah Overview

- **Cheetah Action Plan (CAP): India's** initiative to introduce African cheetahs into its ecosystems, aiming to conserve the species and restore savanna habitats. It also supports future collaboration with Iran on Asiatic cheetah conservation.

- **Project Management And Stakeholders:** The NTCA, MoEFCC, Wildlife Institute of India, and Madhya Pradesh Forest Department oversee the project, with guidance from an expert committee.
- **Eco-tourism:** Cheetahs are intended to be a flagship species, promoting the restoration of dry-open forest ecosystems and benefiting local communities through eco-tourism.

Challenges of Long-Term Captivity

- **Extended Captivity:** The 12 surviving adult cheetahs have spent most of their time in captivity, contradicting the plan's objective to release them into the wild. Prolonged captivity renders cheetahs unfit for release.
- **International Standards:** Namibian policy limits captivity for wild carnivores to three months, after which they are either euthanized or held permanently.

Cheetah Deaths

- **Mortality Issues:** Several cheetahs have died due to pre-existing conditions, poor management, or environmental factors like heatstroke. There are concerns about their suitability for survival in the Indian climate.

Location and Habitat

- **Kuno National Park:** Chosen as the most suitable site for cheetahs, although the animals have largely been held in captivity. Plans to release cheetahs in Gandhi Sagar Wildlife Sanctuary and Banni grasslands are delayed.
- **Habitat Concerns:** Doubts remain about the availability of sufficient high-quality habitat (4,000-8,000 sq. km) needed to sustain a viable cheetah population.

Measurable Outcomes

- **Short-term Goals:** Cheetah survival, home range establishment, reproduction, and eco-tourism have not been met due to extended captivity.
- **Long-term Goals:** Establishing a stable metapopulation and improving local economies through conservation efforts are the project's ultimate aims, with a timeline extending up to 40 years.

Term In news : Line of Actual Control (LAC)

The Union Ministry of External Affairs recently said that about 75% of the "disengagement problems" with China on the military standoff along the Line of Actual Control in eastern Ladakh have been "sorted out".

About Line of Actual Control (LAC):

- The LAC is the demarcation that separates Indian-controlled territory from Chinese-controlled territory.
- Although not recognised as an official border, it serves as a de facto border between India and China.
- India considers the LAC to be 3,488 km long, while the Chinese consider it to be only around 2,000 km.
- It is divided into three sectors:
  - the eastern sector which spans Arunachal Pradesh and Sikkim
  - the middle sector, in Uttarakhand and Himachal Pradesh, and
  - the western sector in Ladakh.
- It runs along Tibet and Xinjiang on the Chinese side.

- The LAC has always remained a major cause of tension between India and China. There are areas along the border where India and China have differing perceptions of the LAC.
    - Due to both sides undertaking patrolling upto their respective perceptions of the LAC, transgressions do occur.
- India's claim line is the line seen in the official boundary marked on the maps as released by the Survey of India, including both Aksai Chin and Gilgit-Baltistan. This means LAC is not the claim line for India.
- In China's case, LAC is the claim line except in the eastern sector, where it claims the entire Arunachal Pradesh as South Tibet.

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Daily News Analysis

Page : 09 Editorial Analysis

Women-led development in the Rajya Sabha

Kusum Sudhir

Joint Secretary (Interpretation) Rajya Sabha Secretariat, Parliament of India

The phrase 'women-led development', which was recognised as one of the six focal points during India's presidency of the G20, has always been a cornerstone of the government's priorities and policies. Under a women-led development approach, women are not just beneficiaries of development, but also set the agenda for development. They are key participants in planning and decision-making.

Measures in the House

At a time when women are leading governance and development initiatives across the world, India's legislature, a pivotal organ of its democracy, cannot afford to be left behind. It is in this backdrop that the Vice President of India and the Chairman of the Rajya Sabha, Jagdeep Dhankar, has introduced a slew of progressive measures in the proceedings of the House as well as in the Secretariat. Mr. Dhankar has always held the view that the role of women in Parliament is enormous. He has stated that women are the backbone of Parliament and the country's economic development.

When the nation witnessed the historic passage of the Nari Shakti Vandan Adhiniyam (Women's Reservation Bill), 2023, Mr. Dhankar, in a historic move, reconstituted the panel of vice-chairpersons to include only women. He emphasised that this would "send a powerful message to the world at large and it would symbolise that they held a 'commanding position' during this epochal moment of change".

Mr. Dhankar also began the practice of nominating four women members, who constitute 50% of the panel of vice-chairpersons. As a result, S. Phangnon Konyak became the first woman Rajya Sabha member from Nagaland to preside over the House. Eminent athlete P.T. Usha also created history by becoming the first nominated MP in history to become the Vice Chairperson of the Rajya Sabha.

Under India's presidency, the G20 New Delhi Leaders' Declaration underscored that investing in the empowerment of all women and girls has a multiplier effect in implementing the 2030 Agenda for Sustainable Development. India is already working tirelessly towards goal 5.5 of the Sustainable Development Goals, which calls for "women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life." The Rajya Sabha Secretariat is expected to set the highest standards in this direction.

Initiatives in the Secretariat

With the aim of striking a gender balance at the Rajya Sabha Secretariat, Mr. Dhankar has started many new initiatives. For example, the sections related to House duty were conventionally considered a male domain because they involved late sittings. The Chairman felt the need to break such stereotypes and so, all the gazetted women officers of the Secretariat were trained to perform House-related duties. Today, the Table of the House is largely being 'womanned' by female officers. Accordingly, a duty roster is prepared and women officers are deputed on chamber duty. Moreover, an application-based system called 'Vahan' was introduced to address the problem of commutation during late sitting hours. Through this app, women officers can avail themselves of commutation facilities during odd hours. In addition, through a process of selection, some women officials of the Secretariat have been appointed as chamber attendants. This has created a favourable atmosphere even inside the House for women MPs.

During various interactions with the officers of the Secretariat, Mr. Dhankar has unequivocally stated that women-led development is going to be the future road map of the Rajya Sabha Secretariat. The process has already begun. Women officers have been appointed in key positions and leading roles in the Rajya Sabha Secretariat. Today, responsibilities such as human resources, the legislative section, and the capacity-building division have been entrusted to women officers of the Secretariat. Besides, high skill-based work such as officiating in Parliamentary Standing Committees of the Rajya Sabha is being done by women at various levels. Even some senior positions in security service are being occupied by women officers. Top performing women officers are being recognised and rewarded all across the services. A woman officer of the Secretariat has been appointed as master trainer for iGOT-Karmayogi Bharat. The noteworthy aspect about introducing women-centric measures in the Secretariat is the spirit of congeniality. Gender sensitisation workshops and talks have been organised to create a healthy culture of gender parity.

The Chairman, from time to time, has also impressed upon the need of synergising work with creativity and recreation. The celebration of women's day in the Secretariat is a case in point. Women's day programmes are conceptualised, organised and executed by women officers or employees. These events give them many opportunities to showcase their talents.

In a vibrant democracy, it is healthy to have regular interactions between the legislature and academia. The buck should not just stop at the Secretariat. Therefore, Mr. Dhankar offered to invite five interns from Miranda House in Delhi for a 15-day course on parliamentary procedures.

The Rajya Sabha under Mr. Dhankar's chairmanship is leading by example in translating the ideal of women-led development into a reality. This may pave the way for other legislatures in India to follow suit.

The Rajya Sabha under Jagdeep Dhankar's chairmanship is leading by example in translating the ideal of women-led development into a reality

GS Paper 02 : Indian Polity

PYQ: (UPSC CSE (M) GS-2 2021): "Though women in post-Independent India have excelled in various fields, the social attitude towards women and feminist movement has been patriarchal." Apart from women education and women empowerment schemes, what interventions can help change this milieu? (150 w /10 m)

UPSC Mains Practice Question Discuss the significance of the Nari Shakti Vandan Adhiniyam (Women's Reservation Bill), 2023, in empowering women in the Indian Parliament. How do recent initiatives contribute to women's leadership in governance and decision-making? (250 w /15 m)

Context :

- Under Vice President Jagdeep Dhankar's leadership, the Rajya Sabha has introduced progressive measures to empower women in Parliament, symbolised by the reconstitution of the vice-chairpersons panel with women members.
- These initiatives align with the government's women-led development approach, ensuring women play pivotal roles in decision-making and leadership positions.

What are the women centric measures taken?

- **Women inclusive democracy:** At a time when women are leading governance and development initiatives across the world, India's legislature, a pivotal organ of its democracy, cannot afford to be left behind.
- **Vice-Presidents women led intervention in the proceedings of house:** VP has introduced a slew of progressive measures in the proceedings of the House as well as in the Secretariat.
  - Mr. Dhankar has always held the view that the role of women in Parliament is enormous.
  - He has stated that women are the backbone of Parliament and the country's economic development.
- **The Nari Shakti Vandan Adhiniyam (Women's Reservation Bill), 2023:** Mr. Dhankar, in a historic move, reconstituted the panel of vice-chairpersons to include only women.
- **Local and global positioning of women:** He emphasised that this would "send a powerful message to the world at large and it would symbolise that they held a 'commanding position' during this epochal moment of change".

- **Women nomination increased:** Mr. Dhankar also began the practice of nominating four women members, who constitute 50% of the panel of vice-chairpersons.
  - Phangnon Konyak became the first woman Rajya Sabha member from Nagaland to preside over the House.
  - Eminent athlete P.T. Usha also created history by becoming the first nominated MP in history to become the Vice Chairperson of the Rajya Sabha.
- **Under India's G20 presidency:** The G20 New Delhi Leaders' Declaration underscored that investing in the empowerment of all women and girls has a multiplier effect in implementing the 2030 Agenda for Sustainable Development.
- **Gender Equality:** India is already working tirelessly towards goal 5.5 of the Sustainable Development Goals, which calls for "women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic, and public life."
  - The Rajya Sabha Secretariat is expected to set the highest standards in this direction.

Initiatives in the Secretariat

- With the aim of striking a gender balance at the Rajya Sabha Secretariat, Mr. Dhankar has started many new initiatives.
  - Breaking the stereotypes from male focussed to women oriented duties: The sections related to House duty were conventionally considered a male domain because they involved late sittings.
    - Now efforts are made that all the gazetted women officers of the Secretariat were trained to perform House-related duties.
- **Empowering the women staff:** Today, the Table of the House is largely being 'womanned' by female officers.
  - Accordingly, a duty roster is prepared and women officers are deputed on chamber duty.
  - Moreover, an application-based system called 'Vahan' was introduced to address the problem of commutation during late sitting hours.
  - Through this app, women officers can avail themselves of commutation facilities during odd hours.
  - In addition, through a process of selection, some women officials of the Secretariat have been appointed as chamber attendants. This has created a favourable atmosphere even inside the House for women MPs.

Women led growth is the future

- **Progressive moves in Rajya Sabha:** During various interactions with the officers of the Secretariat, Mr. Dhankar has unequivocally stated that women-led development is going to be the future road map of the Rajya Sabha Secretariat.
- **Rise in leadership roles for women**: Women officers have been appointed in key positions and leading roles in the Rajya Sabha Secretariat.

- **Placing trust in women's capacity**: Responsibilities such as human resources, the legislative section, and the capacity-building division have been entrusted to women officers of the Secretariat.
- **High skill-based work:** Such as officiating in Parliamentary Standing Committees of the Rajya Sabha is being done by women at various levels.
- **Occupation of senior positions:** In security service are being occupied by women officers. Top performing women officers are being recognised and rewarded all across the services.

What are the key outcomes from Nari Shakti Adhiniyam (2023)?

- **33% Reservation for Women in Legislatures:** The Bill reserves 33% of seats for women in the Lok Sabha and State Legislative Assemblies, aiming to increase women's participation in governance.
- **Long-term Impact on Women's Representation:** The Bill ensures that women are better represented in the political process, potentially reshaping the political landscape by empowering women as decision-makers.
- **Women as Key Participants in Development:** By providing more opportunities for women in legislatures, it aligns with the goal of women-led development, where women set the agenda for governance and development policies.

Way forward:

- **Strengthening Legal Frameworks and Enforcement**: Enhancing the implementation of existing laws, along with stricter penalties for gender-based violence, will ensure a safer environment for women.
- **Promoting Economic Empowerment and Education:** Expanding access to education, financial resources, and skill-building opportunities for women can bridge economic disparities, empowering them to take leadership roles in governance, business, and community development.
