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ANDHRA PRADESH LAUNCHES CASTE CENSUS

Context

 Andhra Pradesh recently became the 2nd State after Bihar, to take up caste census to enumerate all communities in the state.

About

- The Andhra Pradesh government will extensively deploy the village secretariat system for the caste census along with the volunteer system.
- Officials in the village secretariat system across the state will verify the accuracy of information collected by the volunteers and correct it, if necessary, before making the final record.

Caste census: A historical context

- Caste-wise enumeration of the population was introduced under the British colonial administration in 1881 and continued till the 1931 census.
- However, independent India abandoned caste enumerations, citing potential for social division and strengthening caste hierarchies.
- Every Census in independent India from 1951 to 2011 has published data on Scheduled Castes and Scheduled Tribes, but not on other castes.

Arguments for a Caste Census

- Enables effective governance: Provides a comprehensive picture of India's caste composition, including marginalized communities and sub-castes.
- Tracks progress: The absence of official data on caste distribution makes it difficult to track progress in affirmative action, address castebased discrimination, and allocate resources effectively.
- Certainty in policy making: The available data does show that SC, ST and OBCs are lagging behind but there is no clarity over which caste groups are most progressive and which are the most marginalized, thereby hindering effective policy formulations.

Education & Employment Indicators by Social Group

The table shows the Percentage distribution of persons by general education level, workers in usual status by broad status in employment, and employees in posts and services of the Central government of the Central government

	ST	sc	ОВС	General	Data sources
Percentage distribution of per	sons of a	ge 7 yea	rs and	above by ge	neral education level
Literacy rate	69.6	72.4	76.9	85.9	Household Social Consumption on Education in India, NSS 75th Round (July 2017 - June 2018), NSO, MoSPI, Gol
Secondary Education	9.9	11.5	13.5	15.8	
Higher Secondary Education	6	7.7	9.4	12.8	
Graduate	3.3	4.1	5.9	12.3	
Post Graduate and above	0.7	0.9	1.2	3.4	
Percentage distribution of wo	rkers in u	sual sta	tus (ps	+ss) by broa	d status in employment
Regular wage/ Salaried	12.3	19.8	20.1	30.6	Periodic Labour Force Survey 2021-22, NSSO, MoSPI, Gol
Casual Labour	28.9	38.2	20	11.2	
Self-employed	58.8	42.1	59.9	58.2	
Percentage distribution of em	ployees i	posts	and se	rvices of the	Central Government
Group A	5.9	13.0	16.6	64.6	Annual Report 2021-22, Ministry of Personnel, Public Grievances and Pensions, Gol
Group B	7.1	16.8	16.7	59.5	
Group C	7.8	17.7	22.8	51.7	
Total	7.7	17.5	22.1	52.7	

- Social Justice: Enables better targeting of affirmative action programs and policies towards groups facing persistent discrimination.
 - There are many castes which are yet to receive welfare schemes from the government and the census will help them address this.
- Resource Allocation: Helps in equitable distribution of resources based on the needs of different caste groups.
- Social Reforms: Provides data-driven evidence for social reform initiatives addressing castebased disparities.

Arguments against a Caste Census

- Social Division: Critics argue it could solidify caste identities, exacerbate tensions, and lead to renewed claims of dominance and hierarchy.
- Unconstitutional: The Union Government has the sole right to conduct a census and not the states, thus violating Schedule VII of the Constitution, the Census Act, 1948 and the Census Rules, 1990.
 - Census was enumerated at Entry 69 in the Union List in the Seventh VII of the Constitution.
- Data Misuse: Concerns exist about potential misuse of data for political gains or discrimination against certain caste groups.
 - It can help the unscrupulous caste leaders to serve their narrow political interest at the cost of their caste brethren.
- New issues: The survey data can reopen the longstanding debate over the 50% ceiling on reservation imposed by the Supreme Court in its landmark ruling in Indra Sawhney v Union of India (1992).



- Logistical Challenges: Conducting a nationwide caste census is a complex and expensive undertaking, requiring careful planning and implementation.
- Alternative Data Sources: Some argue existing databases and surveys can provide sufficient data on caste and socioeconomic conditions.

Related Supreme court rulings:

- Indra Sawhney v Union of India, 1992: While upholding reservation for specific backward classes not covered under Scheduled Castes (SCs) and Scheduled Tribes (STs), it also emphasized the need for a "reasonable and adequate" data-driven approach to identify backward classes, raising the need for a caste enumeration.
- Janhit Manch vs. Union of India, 2020: In October 2020, the court ruled that the government is not obligated to conduct a caste census at present.
 - The decision on One Hundred and Third Amendment Act, 2019, was based on arguments that the existing Socio-Economic Caste Reservation (SECR) data and other surveys can provide sufficient information for affirmative action programs.
- Bihar Caste Census Case 2023: The court is currently hearing challenges to the validity of Bihar's 2023 caste census, which the state conducted independently.
 - Notably, the court refused to pass any order of stay or status quo to restrain the State from acting on the caste survey data.
 - The petitioners argue that the state has no authority to conduct such a census, while the Bihar government defends its action as necessary for effective social welfare policies.
 - The Supreme Court has adjourned the hearing pleas challenging the constitutionality of the caste-based survey conducted by the Bihar government till January 2024.

Way Ahead

 Caste data is key to understanding three important factors – the functioning of the labour market, wealth inequality and implementation of policy schemes, which may help to understand the country's development pattern.

- Such data will reveal inequalities in social structures, enable better policy formulation and identify obstacles in policy implementation to usher in an era of genuine equal participation and redistribution of power and resources.
- Hence, rather than politicising caste census, every political party should embrace the idea so that the state will fulfill its responsibility to ensure welfare of the most marginalized sections of the citizens.

Source: TH

AI GOVERNANCE ALLIANCE REPORT ON GENERATIVE AI GOVERNANCE

In Context

The Al Governance Alliance (AIGA) released
a series of three new reports on advanced
artificial intelligence (AI).

About

- The papers focus on generative Al governance, unlocking its value and a framework for responsible Al development and deployment.
 - In the report "Generative Al Governance: Shaping Our Collective Global Future," the highlight is on international cooperation.
 - It also urges a more inclusive access to AI both in terms of development and deployment.
 - Unlocking Value from Generative Al: Guidance for Responsible Transformation guides stakeholders on how to adopt generative Al more responsibly.
 - Particularly, it highlights use case evaluation, multistakeholder governance and transparent communication.
 - The Presidio Al Framework: Towards Safe Generative Al Model underscores the need for a framework that standardizes model lifecycle management.
 - It also focuses on shared responsibility and proactive risk management.

Al Governance Alliance (AIGA)

- The World Economic Forum launched the Al Governance Alliance in 2023.
- It is a dedicated initiative focused on responsible generative artificial intelligence (AI).

 It is a union of industry leaders, governments, academic institutions, and civil society organizations to champion responsible global design and release of transparent and inclusive AI systems.

What is Artificial Intelligence?

- Artificial intelligence (AI) is a wide-ranging branch of computer science concerned with building smart machines capable of performing tasks that typically require human intelligence.
- Artificial intelligence allows machines to model, or even improve upon, the capabilities of the human mind.
- From the development of self-driving cars to the proliferation of generative AI tools like ChatGPT and Google's Bard, AI is increasingly becoming part of everyday life — and an area every industry are investing in.

Generative AI

- Generative AI is a type of artificial intelligence technology that can produce various types of content, including text, imagery, audio and synthetic data.
- Generative AI models learn the patterns and structure of their input training data and then generate new data that has similar characteristics.
- ChatGPT, DALL-E, and Bard are examples of generative AI applications that produce text or images based on user-given prompts or dialogue.

Need for the Regulation

- Lack of transparency of AI tools: AI and deep learning models can be difficult to understand, even for those that work directly with the technology.
- Al is not neutral: Al-based decisions are susceptible to inaccuracies, discriminatory outcomes, embedded or inserted bias.
- Manipulation through Algorithm: Online media and news have become even murkier in light of Algenerated images and videos, Al voice changers as well as deep fakes infiltrating political and social spheres.
- Lack of Data Privacy: All systems often collect personal data to customize user experiences or to help train the All models.
- Uncontrollable Self AI: There also comes a worry that AI will progress in intelligence so rapidly that it will act beyond humans' control — possibly in a malicious manner.

- Safety and Security: Al systems, especially those in critical domains like healthcare, transportation, and finance, must meet certain safety standards.
- International Cooperation: Al development is a global phenomenon, and regulatory frameworks can help establish common standards and principles.
- Avoiding Misuse: Without regulations, there is a risk of AI being used for malicious purposes, such as deepfake creation, cyber attacks, or autonomous weapons.
- **Public Trust:** Establishing clear regulations can enhance public trust in AI technologies.

Way Ahead

- Al systems can raise ethical issues, such as bias, discrimination, and invasion of privacy.
- Regulations are necessary to ensure that Al technologies adhere to ethical standards and do not contribute to social inequalities.
- These dangers may be mitigated by implementing legal regulations and by guiding AI development with human-centered thinking.

Source: ET

COEVOLUTIONARY BALANCE BETWEEN PLANTS AND UNGULATES.

In Context

 Introduction of Alien Species causes disruption to the coevolutionary balance between plants and ungulates.

What are Ungulates?

- Ungulates are hoofed mammals that walk on their toes. The word ungulate comes from the Latin word "unguis", which means nail, claw or hoof.
- Ungulates are divided into two classes: eventoed ungulates such as deer, giraffe, antelopes, and odd-toed ungulates such as horses, zebras and rhinoceroses.
- They have the **ability to digest cellulose** as they graze on the plants.

What is the coevolutionary balance between Plants and Ungulates?

 Cellulose is the fibrous plant material which is hard to digest but due to presence of the specialised bacteria in the gut of ungulates they can digest cellulose.



- So, Plants evolve defenses to prevent herbivory and ungulates evolve ways to overcome these defences.
 - One important plant defence mechanism is using chemicals that can be toxic on consumption.
- Over thousands of years, mechanisms in ungulates evolved to tolerate or detoxify these chemicals and get to the nitrogen-rich foliage.

How does Introduction of Alien Species Affect it?

- The introduction of exotic invasive plants disrupts this coevolutionary balance and native ungulates lose out since they do not have mechanisms to address the **novel toxins in the ecosystem.**
 - Eating Lantana, for example, beyond a certain proportion of the diet can be poisonous for native Indian species.
- Invasive exotics outcompete native flora, diminishing the edible biomass available to native ungulates.

Concerns

- Native flora and fauna evolve countermeasures, and ecosystems reach a new altered equilibrium.
- Rapidly spreading invasives, shrinking habitats and fragmented landscapes leave ungulates facing an uphill battle.
- Protected area management often advocates creating grasslands from forests to increase the carrying capacity for ungulates, but this practice can exacerbate the problem as grasses have poor nutrient content compared to shrubs that herbivores eat.

Conclusion

- Understanding the cause-effect relations between ungulates and invasive plant dynamics is a critical management need that deserves high priority for research.
- It appears important to develop a new discourse that incorporates scientific evidence, stakeholder preferences and evidence-based management to develop approaches that safeguard all native species and prevent further erosion of plant biodiversity.

Source: DTE

SPORT SECTOR IN INDIA

Context

 The Prime Minister has inaugurated the sixth edition of the Khelo India Youth Games in Chennai.

About

- The Prime Minister of India recently credited the various reforms undertaken by the Union government for India's success in sports.
- Highlighting that sports was not just limited to the field, but also presents a huge economic opportunity, he said the country's sports-related industry will be worth at least ₹1 lakh crore in a few years.
- He asserted that India has a vast pool of sporting talent and is prepared to host the 2036 Olympic Games.

REFORMS TAKEN BY THE GOVERNMENT IN THE SPORTS SECTOR:

Talent Development and Athlete Support:

- Khelo India Program: Launched in 2017, this ambitious program identifies and nurtures young talent at the grassroots level through scholarships, training camps, and competitions across various sports.
- Target Olympic Podium Scheme (TOPS):
 Provides dedicated financial and logistical support to elite athletes with potential to win medals at the Olympic Games.
- National Sports Awards: Recognizes and rewards outstanding achievements of athletes, coaches, and administrators.
- Sports Authority of India (SAI): Revamped infrastructure and coaching staff at SAI training centers across the country.

Infrastructure Development:

- Khelo India Youth Games: Organizes annual national sports competitions for young athletes, utilizing upgraded infrastructure and facilities since 2018.
- Development of Sports Infrastructure Scheme:
 Provides financial assistance to states and sports
 bodies for upgrading existing and building new
 sports infrastructure.

Public-Private Partnerships (PPPs):
 Encourages private sector participation in development and management of sports facilities.

Governance and Policy Reforms:

- National Anti-Doping Agency (NADA):
 Strengthens anti-doping measures and implements stringent regulations to promote clean and fair competition.
- National Sports Development Code of India: Provides a framework for governance, funding, and development of sports in India.
- Empowering National Sports Federations (NSFs): Reforms NSFs to ensure transparency, accountability, and autonomy in their operations.

Promoting Sports as a Career:

- University Grants Commission (UGC) Sports
 Scholarship Scheme: Provides financial support to student athletes pursuing higher education.
- National Sports University: Established First
 National Sports University of the country in
 Manipur at a total sanctioned cost of Rs.643.34
 crore to provide world-class academic and
 athletic training.
- Career guidance and skill development programs: Equips athletes with skills and resources to transition successfully into postretirement careers.

Sports Sector in India

- The market size of the sports industry across India was about 142 billion Indian rupees in 2022 and is expected to reach 300 billion Indian rupees by 2027.
- Cricket remains the dominant sport, but other sports like kabaddi, football, badminton, and hockey are gaining popularity and attracting significant viewership and investment.

Drivers of Growth

- Rising disposable incomes: Increased spending power fuels participation in sports and consumption of sports-related goods and services.
- Government initiatives: Schemes like Khelo India and Target Olympics Podium Scheme prioritize athlete development and infrastructure improvement.

- Private sector participation: Investments by corporations and entrepreneurship in leagues, franchises, and sports infrastructure are on the rise.
- Media & technology: Improved broadcasting, digital platforms, and online gaming are expanding fan engagement and revenue streams.

Challenges and Concerns

- **Uneven development:** Cricket enjoys disproportionate attention and resources, hindering the growth of other sports.
- Infrastructure deficit: Lack of quality sporting facilities in rural areas and smaller towns limits access and talent development.
- Lack of grassroots focus: Focus on elite athletes often neglects broader participation and talent identification at the grassroots level.
- Doping and corruption: Combating these issues is crucial for building a fair and healthy sporting ecosystem.

Opportunities and Measures

- Diversification: Expanding focus on other sports, especially Olympic disciplines, has immense potential for growth and medal glory.
- Technology and innovation: Sports tech startups and data analytics can revolutionize training, fan engagement, and revenue generation.
- Rural outreach: Government and private efforts to develop rural sports infrastructure and talent identification programs are crucial for inclusivity.
- Women's sports: Increased participation and investment in women's sports hold tremendous potential for growth and empowerment.

Way Ahead

- The Indian sports sector is undergoing a fascinating transformation, fueled by rising incomes, increased awareness, and growing government and private sector investment.
- With its immense potential and ongoing developments, the Indian sports sector is poised for an exciting future.
- Addressing the challenges, capitalizing on opportunities, and fostering a collaborative ecosystem will be key to creating a thriving and inclusive sporting landscape that benefits all stakeholders.

Sixth edition of the Khelo India Youth Games

- Venue: Four cities of Tamil Nadu: Chennai, Madurai, Trichy and Coimbatore from 19th to 31st January 2024.
- Logo: Statue of Thiruvalluvar
- Mascot: 'Veera Mangai' (brave woman) Velu Nachiyar
 - Rani Velu Nachiyar, the princess of Ramanathapuram was the first queen to fight against the British colonial power for freedom in India. She is known by Tamils as Veeramangai.



- New developments:
 - Archery, athletics, badminton, and squash have been introduced in this edition.
 - Silambam, a traditional sport of Tamil Nadu, is being introduced as a demo sport.
- Background: The first edition was organised in 2018 in Delhi by the Ministry of Youth Affairs & Sports to revive the sports culture in India at the grass-root level.

Source: TH

MAPPING OF DEEP SEA CORAL REEF

Context:

- Scientists have mapped the largest deep-sea coral reef off the US Atlantic coast.
 - The Great Barrier Reef in Australia is the biggest tropical coral reef system in the world.

More about the News

- The reef was found at depths ranging from 200 metres to 1,000 metres where sunlight doesn't penetrate.
- It uses new underwater mapping technology that makes it possible to construct 3D images of the ocean floor.

Species for Deep Sea Corals

- There are **only six species** that create reefs.
- The most common of these is Lophelia pertusa, which forms massive reefs throughout the Atlantic Ocean, including the Gulf of Mexico and the South Atlantic Bight.

In Comparison to Shallow-water Corals

- Deep reefs cover more of the ocean floor than tropical and shallow-water reefs.
 - The world's largest tropical coral reef system, the Great Barrier Reef in Australia, stretches for about 2,301 kilometres.
- The deep-sea corals need to rely on alternative sources of food to obtain their nutrition, either by feeding on organic material falling from the surface or by feeding on small plankton. They lack algae, because algae cannot survive where there is no light. These are bright white in colour.
 - Shallow-water corals rely on photosynthetic algae that live within the corals and provide their hosts with nutrition. These are brown and green in colour.

Coral Reefs

- A coral reef is an underwater ecosystem characterized by **reef-building corals**. Reefs are formed of colonies of **coral polyps** held together by calcium carbonate.
- Corals share a symbiotic relationship with single-celled algae called zooxanthellae. The zooxanthellae also give corals their bright colour. The algae provides the coral with food and nutrients, which they make through photosynthesis, using the sun's light. Algae provides up to 90 per cent of the coral's energy. In turn, the corals give the algae a home and key nutrients.
- They provide habitat for sharks, swordfish, sea stars, octopus, shrimp and many other kinds of fish.

Conditions favourable to Corals

- **Temperature:** The temperature of the water should not be below 20°C. The most favourable temperature for the growth of the coral reefs is between 23°C to 25°C.
- The temperature should not exceed 35°C.
- **Salinity:** Corals can survive only under saline conditions with an average salinity between 27% to 40%.
- **Shallow Water:** Coral reefs grow better in shallow water having a depth less than 50 m. The depth of the water should not exceed 200m.

Significance

- Ecosystem value: Coral Reefs provide an important ecosystem for life underwater, protect coastal areas by reducing the power of waves hitting the coast, and provide a crucial source of income for millions of people.
 - The pristine and oldest ecosystem of corals share less than 1% of the earth's surface but they provide a home to nearly 25% of marine life.
 - Thousands of species can be found living on one reef.
- **Economy:** Coral reefs have an estimated global value of £6 trillion each year, due in part to their contribution to the **fishing and tourism industries** and the **coastal protection** they provide.
 - More than 500 million people worldwide depend on reefs for food, jobs and coastal defence.
- Protection from Storm: Coral reefs also provide protection from storm waves.
- Medicinal value: Extracts from animals and plants living on reefs have been used to develop treatments for asthma, arthritis, cancer and heart disease.

Threats

- These habitats are susceptible to similar risks, including climate change and disturbance from oil and gas drilling. These include:
 - Damage from drilling muds and oil spills:
 Deep-sea corals are often found in areas of oil and gas operations, so there is potential for damage from drilling muds and oil spills.
 It may permanently remove large areas of deep-sea coral habitat.

- Impacts of Climate Change: The increasing temperatures may shift species' distributions and increasing acidity may weaken coral skeletons, particularly in deeper waters.
- Human-caused, or anthropogenic activities: Pollution, overfishing, destructive fishing practices using dynamite or cyanide, collecting live corals for the aquarium market, mining coral for building materials, and a warming climate are some of the many ways that people damage reefs all around the world every day.
- Deep Sea Mining: It may destroy deep sea habitats, eradicate rare and unique species, and introduce sediment clouds, noise, toxic chemicals, vibration and other forms of pollution into deep sea.
- It is still an experimental field to harness
 the polymetallic nodules (PMNs) such
 as copper, nickel and cobalt, used for the
 production of technologies like wind turbines
 and hybrid cars.

Way Forward

- It is a crucial task due to their importance in maintaining marine biodiversity and providing economic, social, recreational, and cultural benefits.
- These include use of advanced science to manage ecosystem services in marine and coastal areas, identifying and protecting marine ecosystems, mapping and monitoring with advanced scientific tools like 3D mapping to help protect deep-sea coral reefs.

Source: TH

NEWS IN SHORT

NAGARA STYLE OF TEMPLE ARCHITECTURE

In Context

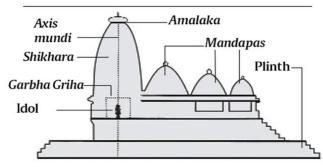
 The Ram temple in Ayodhya is designed in the Nagara style of temple architecture.

About

- The Nagara style of temple architecture emerged some time in the fifth century CE, during the late Gupta period, in northern India.
- It is seen in juxtaposition with the Dravida style of southern India, which too emerged in the same period.

- Features: Nagara temples are built on a raised plinth, with the garbha griha (sanctum sanctorum) — where the idol of the deity rests the most sacred part of the temple.
 - Towering over the garbha griha is the shikhara (literally 'mountain peak'), the most distinguishable aspect of Nagara style temples.
 - It also comprises a circumambulatory passage around the garbha griha, and one or more mandapas (halls) on the same axis as it.
 - Elaborate murals and reliefs often adorn its walls.

BASICS OF THE NAGARA STYLE



Based on sketches from EB Havell's *The Ancient* and *Medieval Architecture of India*, 1915. Not a visual representation of Ayodhya's Ram temple.

Source: IE

GUIDELINES FOR REGULATION OF COACHING CENTRES

Context

 Recently, the Department of Higher Education of the Union Ministry of Education has published 'Regulation of Coaching Centers 2024' Guidelines.

About

- It comes following complaints received by the government about rising cases of student suicides, fire incidents, lack of facilities in coaching incidents as well as methodologies of teaching adopted by them.
- The guidelines will provide assistance to the students in any study programme, competitive examinations, or academic support.

Key provisions of the guidelines

 Qualification of tutors: Only those with a minimum qualification of graduation are eligible to teach.

- Misleading claims: Coaching centres are prohibited from making false claims about ranks or marks to entice students.
 - Any form of misleading advertisement related to the quality of coaching or results is banned.
- Prioritising well-being of students: It prioritises mental well-being, fair practices, and inclusivity.
 - It bars coaching centres from enrolling students below 16 years of age, and stresses that student enrolment should be done only after secondary school examination.
- Focus on co-curricular activities: It advises coaching centres' focus on co-curricular activities as well for holistic development of students, and provides career guidance and psychological counselling for mental well-being of the students.
- **Exit Policy:** In the case of mid-course withdrawals, a **pro-rata refund** is mandated within 10 days.

Source: News On AIR

BUREAU OF POLICE RESEARCH AND DEVELOPMENT (BPRD)

In News

 The Bureau of Police Research and Development (BPRD) has warned users of different scams perpetrated through messaging platform WhatsApp.

About Bureau of Police Research and Development (BPRD)

- It was formally established in 1970 under the Ministry of Home Affairs giving a new orientation to the existing Police Research and Advisory Council (1966).
 - Over the years, It has also been entrusted with the responsibility of monitoring the training needs and quality of training in the States and Central Police Organisations.

Objectives:

- To identify the needs and problems of the police in the country,
- To undertake research projects and studies, and suggest modalities to overcome problems and challenges and meet the needs and requirements of the police.
- It was also mandated to keep abreast of the latest developments in the fields of science and technology, both in India and abroad, with a view to promoting the use of appropriate technology in police work.

 Initiatives: During the year 2008, the Government of India decided to create National Police Mission under the administrative control of BPR&D to transform the police forces in the country into effective instrument for maintenance of internal security

Source: TH

WILLINGDON ISLAND

In News

 The Cochin Port Joint Trade Union Forum has appealed to the Prime Minister to revive commercial activities on Willingdon Island.



Willingdon Island

- It is among the most beautiful locations in the Kochi area of Kerala.
- This man-made island is among the biggest of its kind in India.
- It was created in 1933 and named after the then British Viceroy of India, Lord Willingdon.
- The architect of this artificial island was Robert Bristow and currently, the land is under the Indian Navy and Cochin Port Trust.
- **Features :** It is a major commercial centre and has some of the best hotels in the city.
 - It is also home to the Kochi Naval Base of the Indian Navy, the Central Institute of Fisheries Technology and the Port of Kochi.
 - It handles millions of tonnes of freight every year.

Source: TH