MAN ANIMAL CONFLICT

➢ **Shifting elephants shifts conflict: What lessons from the past say**

➢ **The Supreme Court recently dismissed the Kerala government's appeal against the order of the Kerala High Court directing that Arikomban, the "rice tusker" of Munnar, be relocated to the Parambikulam tiger reserve.**

• The HC had on April 12 reiterated its earlier (April 5) order to relocate the animal, and given the state seven days to find a suitable forest corner away from human habitation for it — failing which it would have to go to Parambikulam.

➢ **What the HC said**

• In its April 12 order, the HC had rejected apprehensions of local people about having the translocated elephant in their midst (over the years, Arikomban has been blamed for several human deaths) saying they had no right "to decide on the nature of the animals that must be housed within the tiger reserve".

• The court found the apprehension that the elephant will pose a threat to the life and property of the villagers baseless, and said it was "appalled by the total insensitivity demonstrated to the plight of the animal in question".

• The court also added
  ✓ There is every likelihood that the availability of plentiful natural food and water resources there would deter it from foraging in human settlements.
  ✓ The fact that the elephant will be radio-collared and its movements monitored by the forest/wildlife officials ought to have sufficed to allay the apprehensions of the petitioner, as the 'surprise' element of any conflict situation is effectively removed.
  ✓ There is no material before us, either in the form of scientific opinion or otherwise, that would suggest either that the elephant would almost inevitably behave in the manner suggested by the petitioner.

➢ **Debatable conclusions**

• Evidence does not seem to agree with these conclusions.

• Records suggest that the availability of "natural food" is no guarantee that an elephant will not raid standing crops.

• Using a radio collar round the clock drains its battery too soon. To avoid frequent immobilisation to refit collars, locations may at best be tracked every hour — enough time for a bull elephant to spring a few surprises within a radius of 5-10 km.

• Radio-telemetry studies of translocated problem elephants suggest that shifting elephants also shift conflict.

➢ **Three studies, one outcome**

• India's first radio-telemetry study of a translocated problem elephant was conducted in 2006 on a large male shifted from the cropland of West Midnapore in South Bengal to the Mahananda Sanctuary in Darjeeling district in the North.

• Almost immediately, the elephant started damaging houses and raiding crops in villages and Army areas. In the first five months after its release, the elephant demolished 17 houses and raided 46 plots of cropland.

• The study concluded that translocation does not seem to be a good option to reduce conflict as in this case, it only shifted the area of conflict… A better option would be to capture and transform it to a 'kunki' (a trained elephant used to capture wild ones).

• Vinayaga, a bull that gained notoriety as a crop raider, was translocated from Coimbatore to the Mudumalai-Bandipur landscape in December 2018. It soon started using gaps in the elephant-proof trench to raid crops, until he was driven back.

• A field report by WWF-India said: "They say, 'old habits die hard', and rightly so because whenever elephant was driven away from the crop fields, it would retreat into the forest and stay close to the boundary waiting for an opportunity to go back again."

• Constant manning of the boundary forced Vinayaga to explore forest areas, indicating "that the animal could survive without raiding crop fields and was not averse in doing so". Yet, Vinayaga continued raiding farmland in Gudalur, and deterrents such as burnt dry red chilli had no effect on him.

• The most definitive study on translocated problem Asian elephants was conducted in 2012, in which a team of biologists monitored 12 male elephants translocated 16 times to different national parks in Sri Lanka.

• The study found: "Translocated elephants showed variable responses: 'homers' returned to the capture site, 'wanderers' ranged widely, and 'settlers' established home ranges in new areas soon after release. Translocation caused wider propagation and intensification of human-elephant conflict, and increased elephant mortality."

• Translocation, it concluded, "defeats both conflict mitigation and elephant conservation goals".

➢ **Likelihood and lessons**

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- Female and young male elephants live in groups while adult males remain solitary, except when part of a 'boy club' with less mature bulls. Males are more likely than herds to raid crops as they can grow bigger on nutrient-rich food and gain reproductive advantage.
- While aggression is part of this 'high-risk high-gain' strategy, very few bulls actually attack humans. But when a male repeatedly crosses that line, he is best removed before he becomes a bad influence for the lesser bulls in the group.
- A long-ranging species, elephants need people's support. Making the community suffer a few problem elephants often risks that fragile goodwill which is vital for the species. That is why the Wildlife Protection Act gives the chief wildlife warden the power to deal with problem animals as necessary.
- The four-member expert committee that the HC set up on March 29 had two serving forest officers, a wildlife biologist, and a veterinarian. They recommended that shifting Arikomban to Parambikulam TR was "most likely to avoid human-wildlife conflict" and "may gradually shape the animal's behaviour making it less likely to seek anthropogenic resources over time".
- When the safety of people and the animal is at stake, it may not be a difficult choice between betting on 'likelihood' and relying on the lessons from the past.

SCIENCE AND TECHNOLOGY

➤ **Web3**
- It is known as the decentralised web, and it caters to the next generation of the Internet, leveraging blockchain technology to create a more open and transparent web. And it's called Web3.
- Web3 is built on top of existing Internet infrastructure and not in competition with previous versions of the web platform. It allows for the creation and exchange of digital assets, decentralised applications (dApps), and smart contracts in the blockchain system.
- Blockchain is a decentralised digital technology that is designed to securely store data in a way where hacking and compromising is not easy like on current mediums and variants of the Internet. It is best known for its use in cryptocurrencies like Bitcoin and Ethereum, where it is used to store and transfer digital currencies in a secure and transparent way.

➤ **What are the key features of Web3?**
- One of the key features of Web3 is that it provides users with greater control over their data and digital assets. Instead of relying on centralised intermediaries, it offers options and mediums for an individual to have more privacy and, more importantly, security of the content and transactions.
- Web3 allows for peer-to-peer transactions and interactions, which means that users are in control of their data and can choose whom they share it with. This also means that Web3 is more secure, as there is no single point of failure that can be exploited by hackers.
- Another key feature of Web3 is the ability to create and use decentralised applications (dApps) and smart contracts. These dApps can be used for a variety of purposes, such as social media, finance, gaming, and more.
- However, there are many challenges that need to be overcome before Web3 can become a mainstream technology, such as scalability, interoperability, and user adoption.

➤ **How is Web3 different from Web2?**
- Web2, also known as the centralised web, is the current version of the Internet.
- It is characterised by the dominance of large, centralised platforms such as Google, Facebook, and Amazon. Among the main differences between Web2 and Web3 are:
✓ Centralisation vs. Decentralisation: Web2 is centralised, meaning that data is stored on centralised servers owned and controlled by large corporations. In contrast, Web3 is decentralised, meaning that data is stored on a decentralised network of computers that are owned and controlled by the users themselves.
✓ Intermediaries vs peer-to-peer: Web2 relies heavily on intermediaries such as banks, social media platforms, and online marketplaces to facilitate transactions and interactions. Web3 enables peer-to-peer transactions and interactions, meaning that users can transact directly with one another without the need for intermediaries like banks, for example.
✓ Data ownership and control: In Web2, large corporations like Facebook and Google have significant control over user data and can monetise it in ways that users may not be comfortable with. In Web3, users can choose to share data only with those they trust. In Web2, users must trust intermediaries to keep their data and transactions secure. In Web3, users can trust the network itself to keep their data and transactions secure.

➤ **What are the challenges for Web3?**
- Scalability: This is one of the biggest challenges. The current infrastructure of blockchain networks can only handle a limited number of transactions per second.
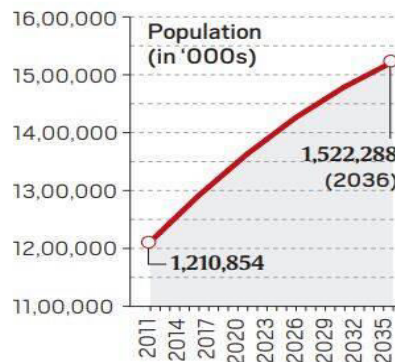
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- User Adoption: While blockchain technology has been around for over a decade, it is still relatively unknown.
- Interoperability: Web3 is being built by a wide range of developers and organisations, each with their own unique vision for how the technology should be implemented.
- Complexity: Technology requires a certain level of technical expertise to use and understand. This may be a barrier to adoption for some users who are not comfortable with technology or do not have the necessary technical knowledge.

➢ **Who is using Web3?**
- Cryptocurrencies: They are built on blockchain technology, which is a key component of Web3. These digital currencies enable secure, decentralised transactions without the need for intermediaries.
- Decentralised Finance (DeFi): DeFi is a movement that aims to build a new financial system on top of the blockchain technology. DeFi applications enable users to borrow, lend, and trade cryptocurrencies without the need for traditional financial intermediaries.
- Decentralised storage: Web3 is being used to create decentralised social networks like Mastodon, which are designed to be more user-centric. Web3 is also being used to develop decentralised identity verification systems.

DEMOGRAPHY

➢ **India becomes world's most populous nation**
➢ **CONTEXT: A UN report released recently has provided the first official confirmation of something that had been anticipated for months now — that India's population is expected to surpass that of China by the middle of this year (2023) at the latest.**
- The annual State of World Population report by the UN Population Fund (UNFPA) has pegged India's mid-2023 population at 1,428 million, marginally ahead of China's 1,425 million.
- In 2022, this same report had estimated China's mid-2022 population at 1,448 million, substantially more than that of India's 1,406 million.
- The emergence of India as the world's most populous country this year, therefore, has a lot to do with a relatively sharp drop in China's population — a reduction of 23 million (2.3 crore) in just one year.
- These are only estimates, arrived at using indirect methods and a variety of indicators like fertility and mortality rates. But the UNFPA reports (UNFPA refers to UN Population Fund's original name UN Fund for Population Activities), which have been coming out every year since 1978, are considered a reliable indicator of global population trends.
- In any case, population sizes are dynamic and it is difficult to capture an accurate number on any given day.
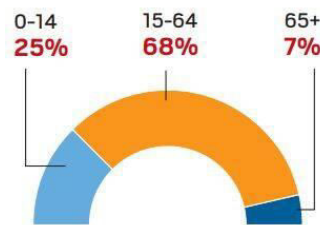

Source: Report of Technical Group on Population Projections, Census of India

➢ **Faster growth than India's own estimates**
- The most reliable figures for India's population comes from the Census that happens every 10 years. The last Census took place in 2011, and the 2021 exercise had to be postponed because of the coronavirus pandemic. The process has not yet been initiated.
- The 2011 Census had put India's population at 1,210 million (121.08 crore, 1,210,854,977 to be exact). In July 2020, the Census office had released population projections for years 2012-2036, which remain the official estimates of India's current population.
- According to these projections, India's population in 2023 was expected to be only 1,388 million (about 139 crore), significantly less than what the UNFPA's State of World Population report and several other estimates have been suggesting.
- According to these projections, India's population even in 2026 would be smaller than what UNFPA has estimated for the middle of 2023.

- Improvements in life expectancy and decline in mortality rates, both of them positive indicators, could be some of the major reasons for the faster-than-expected growth in population in the short term.

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Rising strength

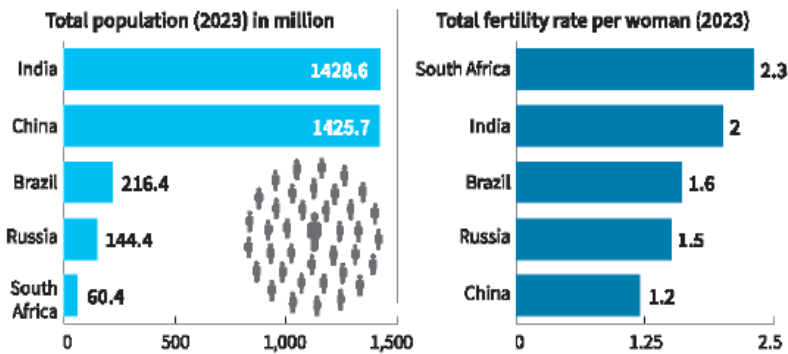The United Nations said in a report that India will have about 2.9 million people more than China in the middle of 2023. India was not expected to become the most populous nation until later this decade. But it happened quickly due to a drop in China's fertility rate. Among BRICS nations, India has the second highest total fertility rate of 2 while that of China's is the least at 1.2

SOURCE: AP, UN

- The UNFPA report says that if India's population continues to grow at the current pace (a shade below one per cent every year) it would double from the present value in the next 75 years. That would be the case with global population as well, currently slightly above 8 billion. Of course, both India's and the world's population are expected to stabilise much ahead of that.

➢ **Delayed Census**

- An authoritative assessment of India's current population has been hampered by an intriguing delay in carrying out the Census 2021 exercise.
- ✓ The pandemic is no longer an obstacle in carrying out any activity, but even more than a year after normalcy has been restored, there are no indications of the process being initiated in the near future. The Census exercise, being carried out every 10 years since the 1870s, has never been disrupted for this long.
- In December last year, the office of the Registrar General of India had pushed the deadline to freeze administrative boundaries, the first step in the Census exercise, to June 30 this year. That means that the work is unlikely to begin at least till the end of June. With General Elections scheduled for next year, the Census exercise is unlikely to proceed at a fast pace. It usually takes at least two years for the Census exercise to get completed. Many datasets take several years after the completion of the exercise to come out.
- ✓ The delay in completing the 2021 Census could have damaging implications for a variety of sectors, and could potentially impact India's growth prospects as well.
- ✓ The Census exercise produces basic input data for all sorts of indicators used for planning and policy implementation.
- ✓ These indicators are also used for investment and trade decisions by global partners. In the absence of reliable indicators, based on solid numbers from the Census, the quality of these decisions could suffer.

PRELIMS

1. **Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP)**

➢ **CONTEXT: G20 delegation visited Pradhan Mantri Bharatiya Janaushadhi Pariyojana Kendra.**

➢ **About**

- The "Jan Aushadhi Scheme" was introduced by the Department of Pharmaceuticals within the Ministry of Chemicals and Fertilizers in November 2008 with the goal of making generic medications accessible to everyone at reasonable prices.
- The programme was redesigned as the "Pradhan Mantri Bhartiya Jan Aushadhi Yojana" in **2015** to revitalise the supply of reasonably priced generic medications with efficacy and quality comparable to that of branded treatments.
- It was again renamed Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) to give the programme more momentum.
- The PMBJP's implementing body is the Pharmaceuticals & Medical Devices Bureau of India (PMBI)**.**
- Generic medications are priced between 50% and 90% less than comparable branded medications available on the market.
- The Scheme only permits the purchase of medications from suppliers accredited by the World Health Organization's Good Manufacturing Practices (WHO-GMP).

➢ **Objectives**

- Reducing patients' out-of-pocket expenses while increasing access to high-quality medications, supplies, and surgical equipment.
- To spread awareness about generic medications among the general public and refute the myth that generic drugs are of lower quality or more ineffective because they are more affordable.
- To make sure that all women in India have easy access to menstruation health services.

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- Create jobs by enlisting individual business owners in the launch of PMBJP Kendras
- ➢ **Performance**
- PMBJP reported revenue of Rs. 433.61 crores for the fiscal year 2019–20.
- As a result, the ordinary inhabitant of the nation has saved between 50% and 90% of the average market price on these drugs, amounting to about Rs. 2500 crore.
- Sales of Rs. 665.83 crores were made in the fiscal year 2020–21, saving the public around Rs. 4,000 crores compared to branded medications.
- In the fiscal year 2021–22, PMBI generated sales of Rs. 751.42 crores, which allowed people to save almost Rs. 4500 crores.
- This programme also offers a reliable source of independent work with consistent and sustained income.
- ➢ **Initiatives under Scheme**
- Januaushadhi Kendra
- Jan Aushadi Oxo – Biodegradable Sanitary Napkins: They are offered for just Rs. 1. These may readily be degraded by microorganisms without generating pollution because they are fully biodegradable.
- Janaushadhi Diwas**:** Every year, the Diwas is observed to raise awareness of the use of generic medications.
- Jana Aushadi Sugam Application: Also called the **e- aushadhi app** , it has been developed by the Development of Pharmaceuticals , Ministry of Chemicals and Fertilizers, and was launched in August 2019.
    - ✓ The application helps to locate nearby Janaushadi Kendras and compares prices of generic and branded medicines.

ANSWER WRITTING

Q. Analyze the impact of development projects and policies on tribal communities in India.
- According to the Ministry of Tribal Affairs, tribal people constitute 8.6% of India's population, but account for 46% of its total poverty.
- Development projects and policies in India have had a significant impact on tribal communities, who often live in remote and ecologically sensitive areas.

Impact of Development projects and policies on Tribal communities:

Positive impacts:
- Government policies and programs, such as the Forest Rights Act (FRA), Panchayats (Extension to Scheduled Areas) Act (PESA), and the Tribal Sub Plan approach, have aimed to promote the socio-economic development of tribal communities and protect their rights.
- The FRA and PESA provide legal recognition and secure the land rights of tribal people.
- The Tribal Sub Plan approach ensures earmarking of plan funds for tribal sub-plans in proportion to their population.
- Eklavya model residential Schools have been able to promote education among tribal communities.
- The PESA Act empowers tribal communities to govern their own affairs and strengthen local self-governance.

Negative impacts:
- Forced displacement:
- o Development projects such as mining, dam construction, and industrialization often require large tracts of land, which frequently results in the forced displacement of tribal communities.
- o The Vedanta Group's mining project in the sacred Niyamgiri Hills of Odisha was blocked by the Supreme Court because the tribe living there, Dongria Kondh, had not given their free, prior, and informed consent.
- Loss of livelihoods:
- o Development projects often lead to the loss of traditional livelihoods of tribal communities. The Virginius Xaxa committee report states that tribals have been pushed out of their traditional habitats due to land acquisition and displacement, which has impacted their agricultural and forest-based livelihoods.
- o The Sardar Sarovar Dam case is an example of this. The dam construction on the Narmada River in Gujarat resulted in the displacement of over 100,000 people, many of whom were tribal communities. The project also led to the submergence of fertile agricultural land and destruction of livelihoods.
- Destruction of cultural heritage:
- o Development projects and undue outside interference can also lead to the destruction of the cultural heritage of tribal communities, which is against the idea of 'Tribal Panchsheel' propagated by J.L. Nehru.
- Lack of recognition of land and water rights:
- o Tribal communities have been using their land and water resources for generations, but these are often violated by development projects.

Conclusion
- Development projects and policies have had both positive and negative impacts on tribal communities in India.
- The way forward involves ensuring the participation and consultation of tribal communities in decision-making processes and promoting their inclusion and empowerment in mainstream society.

5

MCQs

1. With reference to Web 3·0, consider the following statements :
   1. Web 3·0 technology enables people to control their own data.
   2. In Web 3·0 world, there can be blockchain based social networks.
   3. Web 3·0 is operated by users collectively rather than a corporation.
   Which of the statements given above are correct?
   a) 1 and 2 only   b) 2 and 3 only   c) 1 and 3 only   **d) 1, 2 and 3**

2. With reference to Indian laws about wildlife protection, consider the following statements:
   1. Wild animals are the sole property of the government.
   2. When a wild animal is declared protected, such animal is entitled for equal protection whether it is found in protected areas or outside.
   3. Apprehension of a protected wild animal becoming a danger to human life is sufficient ground for its capture or killing.
   Which of the statements given above is/are correct?
   a) 1 and 2   b) 2 only   c) 1 and 3   d) 3 only

3. MIKE programme which is an international collaboration that measures the levels, trends and causes of elephant mortality was established by which of the following?
   a) Wildlife Crime Control Bureau   b) IUCN
   c) UNEP   **d) CITES**

4. With reference to UN Population Fund (UNFPA) consider the following
   1. It is a subsidiary organ of the UN General Assembly and works as a sexual and reproductive health agency.
   2. The UN Economic and Social Council (ECOSOC) establishes its mandate.
   3. UNFPA is not supported by the UN budget
   4. UNFPA works directly to tackle Sustainable Development Goals on SDG3, SDG4 and SDG5.
   Which of the above statements is are correct?
   a) 1,2,3 and 4   b) 2, 3 and 4 only   c) 1, 3 and 4 only   d) 1,2 and 3 only

5. Consider the following statements with reference to population census in India
   1. Census is conducted under the provisions of the Census Act, 1948
   2. The Census Organisation set up on an ad-hoc basis for each Census.
   3. The census records are not open to inspection and also not admissible in evidence.
   Which of the above statement/s is/are not correct?
   a) 1 and 3 only   b) 1 and 2 only   c) 2 and 3 only   d) 1,2 and 3

6. Pradhan Mantri Bhartiya Jan Aushadhi Pariyojana (PMBJP) provides quality medicines to the masses at affordable prices. It is implemented by which of the following ministries?
   a) Ministry of Health and Family Welfare
   b) Ministry of Social Justice and Empowerment
   c) Ministry of AYUSH
   d) Ministry of Chemicals and Fertilizers

7. "SATHI" Portal recently launched by which of the following ministry?
   a) Ministry of Agriculture and Farmers Welfare
   b) Ministry of Environment Forest and Climate Change
   c) Ministry of Home Affairs
   d) Ministry of Finance

8. Mahananda Wildlife Sanctuary often mentioned in news is situated in which of the following state?
   a) Assam   **b) West Bengal**   c) Uttar Pradesh   d) Bihar

9. With reference to Animal Welfare Board of India (AWBI) consider the following statements
   1. Animal Welfare Board of India is established under the Prevention of Cruelty to Animals Act, 1960.
   2. It falls under the jurisdiction of Ministry of Environment Forest and Climate Change.
   3. It is chaired by Environment Minister
   Which of the above statement/s is/are not correct?
   a) 1 and 2 only   b) 1 only   **c) 2 and 3 only**   d) 3 only

10. Consider the following statements
    1. National Commission for Minorities (NCM) is a statutory body established under NCM Act,1992
    2. Chairman and members of NCM are appointed by President
    3. It does not include linguistic minorities within its ambit.
    Which of the following statements is/are correct?
    a) 1 and 3 Only   b) 2 and 3 Only   c) 1 and 2 Only   d) 3 Only

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