

21 Jun 2020: UPSC Exam Comprehensive News Analysis

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Nothing here for today!!!

B. GS 2 Related

Category: HEALTH

1. Fewer hospital-born babies as women fear virus

Context:



• Institutional deliveries during COVID-19 pandemic.

Background:

• In Madhya Pradesh, institutional deliveries shot up to 90% in 2019, and were growing by 2-3% each year marking good improvement in institutional deliveries.

Details:

• The **National Health Mission (NHM)** data notes that Madhya Pradesh has recorded a fall of 18.6% in institutional deliveries in April 2020, the first month of the COVID-19 lockdown, casting a shadow on an improving trend.

Concerns:

Medical Infrastructure:

- **Diversion of health infrastructure for the pandemic**, including accredited social health activists and auxiliary nurse midwives, and the 108 ambulance service, and disrupted transport network has contributed to the decline in institutional deliveries.
- Many **private health centres shut down** during the lockdown further limiting the available health infrastructure.

Fear of infection:

• The pandemic inhibited people from visiting a health centre, fearing they would contract COVID-19.

Effect on tribal population:

• Witnessing fewer institutional deliveries, tribal districts, most of which have **few private units and have low awareness levels,** were the hardest hit regions with drastic drop in institutional deliveries.

Steps taken:

• The Madhya Pradesh state government has directed district hospitals in all the 52 districts to **reserve** at least 30% services for non-COVID-19 care and to continue emergency care.

Way forward:

- There is the need to **strengthen primary and secondary-level health services** essential to deliveries.
- The State should assume the predominant role in providing quality universal maternal and child health services without too much dependence on private health services.

C. GS 3 Related

Category: ENVIRONMENT AND ECOLOGY



1. A struggle to co-exist with humans

Context:

• The article notes the changes observed in the Himalayan realm and the effect it has had on the ungulates (large hoofed mammals).

Details:

- There has been the increase in domesticated cashmere goats and stray dogs which have started hunting ungulates including threatened, endangered, and rare ones such as kiang, chiru, saiga and takin.
- The research study also draws similarities between the Himalaya and the Andes, both homes to unique ungulate fauna. Both are currently experiencing increased deglaciation, human colonisation, climate alteration and livestock & tourism-induced changes.

Concerns:

Threat posed by stray dogs:

- A research study notes that the 400 million free-ranging dogs through **disease**, **predation**, **and displacement** have had a detrimental effect on the ungulate communities on every continent.
 - o Dogs prey on saiga, blue sheep, argali, chiru, kiang, goral, ibex, sambar, chital and blackbuck.
 - o The high elevation dogs of Bhutan also harbour tapeworms which when consumed via grasses by yaks can cause **coenurosis**, a **neurological disease** that may result in about 10% mortality of young yaks.

Threat posed by human activities:

- Human activities such as the **seasonal relocation of agro-pastoralists** to collect the worm fungus Cordyceps can also have an impact on the ungulates. These high-elevation environments have experienced minimal direct human disturbance, and this movement can lead to the displacement of native species.
- Many apex predators of the region have also suffered due habitat conversion and loss of prey base.
- Overharvest, poaching, and wildlife slaughter constituting the major issues of the 19th and 20th century, will not be the most pressing in the 21st century instead, **climate change and rapid destruction of habitat** will constitute the key threat.
 - High-elevation ungulates have been known to be affected through changes in ice and snow and the availability of snow patches.

Way forward:

- There is the need for **conservation efforts** to protect the remaining fauna of the region.
- The conservation efforts can simultaneously recognize that disturbed habitat and altered communities still offer important contributions to **beta biodiversity.**
 - \circ In ecology, beta diversity (β-diversity or true beta diversity) is the ratio between regional and local species diversity.
 - Beta diversity measures the change in diversity of species from one environment to another.
 In simpler terms, it calculates the number of species that are not the same in two different environments.



Category: SCIENCE AND TECHNOLOGY

1. Antibodies against coronavirus start to decrease in 2-3 months, study finds

Context:

• Study on the **human immunity response** to COVID-19.

Background:

Immune response in Humans:

- When infected by a virus, **non-specific immune responses in the form of macrophages**, **neutrophils** and other cells tend to prevent the virus from causing symptoms.
- Soon after, the body makes antibodies specific to the virus called the **immunoglobulins IgG and IgM**, **called the adaptive response.**
- In addition, the **cellular immunity** kicks in when the **body makes** T **cells that destroy cells that** have been infected by the virus.
- The combination of adaptive response and cellular immunity may help prevent progression to severe illness or re-infection by the same virus. This process is often measured by the presence of antibodies in blood.

Details:

- A study published in Nature Medicine suggests that **antibodies formed against SARS-CoV-2 begin** to decrease in number, just two-three months after infection.
 - The study observed that IgG levels and neutralizing antibodies in a high proportion of individuals who recovered from SARS-CoV-2 infection start to decrease within two-three months after infection. This is unlike for 2002-2003 SARS and MERS coronavirus in which case the antibodies were found to last for longer periods.
- This does not necessarily mean that people previously infected with SARS-CoV-2 can be reinfected soon after. The study notes that even if the antibody level decreases, it might still be protective.
- Besides inducing neutralising antibodies, **novel coronavirus has also been found to induce cellular immunity**. As a result, the immune system's T cells and B cells are elevated in an infected person.
 - o The B cells produce antibodies.

Implications:

- The reduction in IgG and neutralizing antibody levels in the early convalescent phase might have implications for immunity strategy and serological surveys being undertaken.
- These data might indicate the risks of using COVID-19 'immunity passports' and support the **prolongation of public health interventions**, including social distancing, hygiene, isolation of high-risk groups and widespread testing.

Category: ECONOMY

1. Apparel exports slide 73% in April-May

Context:



• Export estimates released by the Ministry of Commerce.

Details:

- Textile and apparel exports during April and May 2020 have declined 73.1% (in dollar terms) compared to last year.
 - o Cotton textile exports were 64.6 % lower. Export of man-made (MMF) yarn, fabrics and made-ups was 71.1 % lower. Ready-made garment exports declined 78.1 %, according to the data shared by the Cotton Textiles Export Promotion Council (Texprocil).
 - o Export of cotton yarn has also declined steeply.

Challenges:

- Buyers in the U.S. and European Union (EU), the two major destinations for Indian cotton textiles and clothing, were **cancelling orders or invoking force majeure clauses within their contracts.**
- Buyers are also looking at **re-negotiating pre-existing orders.** Buyers of cotton yarn were **demanding a 15% to 20% price reduction**.

Way forward:

- The government should support the industry during this critical time. The government measures should **help enhance the overall competitiveness of the textile industry** so that India becomes a hub for fabric and yarn production to serve the domestic and export markets.
 - Textile and clothing exporters need production-linked incentives so that they are able to compete in the international market. The government should cover cotton yarn and fabrics under the scheme to reimburse State and Central levies.
 - o Cotton yarn could be given the 3% interest subvention benefit.
- The government should come out with measures to boost exports so that India does not lose out to competing countries.
 - The government can consider **relaxing trade restrictions**. Textile exporters are awaiting a nod to export PPEs and MMF masks and the government can give a nod to help India utilize the export opportunities and not lose out to countries such as Bangladesh and Vietnam already had advantages in the international market.

D. GS 4 Related

Nothing here for today!!!

E. Editorials

Category: INTERNATIONAL RELATIONS

1. Who does Galwan Valley belong to?

Context:

• Violence in the Galwan Valley on the India-China border has claimed the lives of 20 Indian soldiers.



Background:

- Recently, the Chinese Foreign Ministry in a statement claimed that the entire Galwan valley is located "on the Chinese side of the Line of Actual Control (LAC)", which followed a statement from the People's Liberation Army stating that "China always owns sovereignty over the Galwan Valley region".
- India has dismissed the claims.

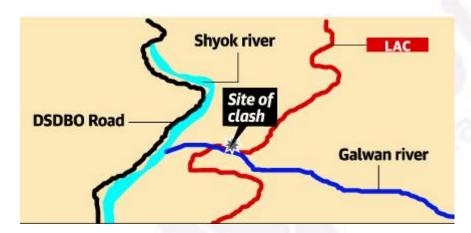
Details:

Galwan river and Valley:

- The Galwan river has its source in Aksai Chin, on China's side of the LAC, and it flows east to Ladakh, where it meets the Shyok river on India's side of the LAC.
- The Galwan valley refers to the land that sits between steep mountains that buffet the Galwan River.

Line of Actual Control:

• The LAC lies east of the confluence of the Galwan and Shyok rivers in the valley.



- After the clash on June 15, 2020, China has claimed that the entire valley lies on its side of the LAC, which pegs the LAC further west near the Shyok river.
- India has rejected the claim as "exaggerated and untenable".

Territorial claims and LAC claims:

- Territorial claims and LAC claims are not the same. The distinction between territorial claims and LAC claims is sometimes blurred.
- The LAC refers to territory under the effective control of each side, not to their entire territorial claim.

Strategic importance of Galwan valley:

- The Galwan valley is strategically located between Ladakh in the west and Aksai Chin in the east. At its western end are the Shyok river and the Darbuk-Shyok-Daulet Beg Oldie (DSDBO) road. Its eastern mouth lies close to China's vital Xinjiang Tibet road.
- China has been objecting to India's road construction activities at the western end of the valley, in the area between the Galwan-Shyok confluence and the LAC. India's newly built Darbuk Shyok Daulat Beg Oldie (DSDBO) road, which leads to the base of the Karakoram Pass, is within striking distance from the Galwan valley. The Chinese can disrupt traffic over an under-construction bridge



- along the DSDBO road, using heavy weapons.
- The Galwan Valley is also not far from Aksai Chin, which is occupied by China. China's highway number G219 passes through Aksai Chin, which is a vital artery linking the **sporadically restive Tibet** and Xinjiang, the gateway to **Beijing's ambitious Belt and Road Initiative.** In order to protect their strategic road in Aksai Chin built in the 1950s, the Chinese have unilaterally expanded their territorial claim line along commanding heights, including the Galwan Valley.

Concerns:

- Though the LAC has never been demarcated but there have not been previous incidents in the valley. By now staking a claim to the entire Galwan Valley and up to the confluence of the rivers, China is, in India's view, unilaterally altering the LAC.
- This goes against the **1993 Border Peace and Tranquility Agreement (BPTA)**, under which India and China agreed to strictly respect and observe the LAC between the two sides.

Category: POLITY AND GOVERNANCE

1. How are the Rajya Sabha polls different?

Context:

• Rajya Sabha elections.

Details:

• There are several features that distinguish elections to the Council of States, or the Upper House of Parliament, from the general elections. This article discusses the salient aspects of the Rajya Sabha elections.

Elections:

- The Legislative Assemblies send a batch of new members to the Upper House **every two years for a** six-year term.
- A third of Members of Parliament in the Rajya Sabha (which is a permanent House and is not subject to dissolution), from each State retire once in two years and polls are held to fill up the vacancies.
- In addition, vacancies that arise due to resignation, death or disqualification are filled up through bypolls after which those elected serve out the remainder of their predecessors' term.

Election system:

- Voting is by single transferable vote, as the election is held on the principle of proportional representation.
 - A single transferable vote means electors can vote for any number of candidates in order of their preference.
 - o This method avoids the principle of majority, which would mean that only candidates put up by ruling parties in the respective States will be elected.
- A candidate requires a specified number of first preference votes to win. To qualify, a candidate needs one point more than the quotient obtained by dividing the total value of the number of seats for which elections are taking place plus one.
 - o For instance, if there are four seats and 180 MLAs voting, the qualifying number will be



180/5 = 36 votes.

• Normally, the results are clear after one round itself. The extra candidate is eliminated for want of enough first preference votes. However, counting may go to the second round, if more than one candidate fails to get the specified number. In such a situation, the second preference polled by the candidates will be transferred to them with a diminished value. The total value of the votes polled by the remaining candidates both as first and subsequent preferences would be used to decide the winner.

Electorate:

- Only elected members of the State Legislative Assemblies can vote in a Rajya Sabha election.
- The **Delhi and Puducherry Assemblies** (Union Territories with legislative assembly) elect members to the Rajya Sabha to represent the two Union Territories.

Secret ballot:

- The Rajya Sabha polls have a system of open ballot, but it is a limited form of openness.
- There is no secret ballot in Rajya Sabha elections as a measure to check rampant cross-voting owing to corruption.
- In the Rajya Sabha election there is the system wherein each party MLA shows his or her marked ballots to the party's authorised agent, before they are put into the ballot box.
- Showing a marked ballot to anyone other than one's own party's authorised agent will render the vote invalid. Not showing the ballot to the authorised agent will also mean that the vote cannot be counted. And independent candidates are barred from showing their ballots to anyone.

Anti defection provision:

- The Supreme Court has ruled that **not voting for the party candidate will not attract disqualification under the anti-defection law** and stated that as voters, MLAs retain their freedom to vote for a candidate of their choice.
- However, the Court has observed that since the party would know who voted against its own candidate, it is free to take disciplinary action against the legislator concerned.

'None of the Above', or NOTA:

- The 'None of the Above', or **NOTA system does not apply to the Rajya Sabha polls.**
- The Election Commission of India (ECI) had previously issued two circulars giving Rajya Sabha members the option to press the NOTA button in the Upper House polls.
- However, in 2018, **the Supreme Court of India struck down the provision**, holding that the 'none of the above' option is only for general elections held on the basis of universal adult suffrage, and cannot be applied to indirect elections based on proportional representation.

Other aspects:

• The Supreme Court has ruled that a member can vote in a Rajya Sabha election even before taking oath as legislator. It ruled that voting at the Rajya Sabha polls, being a non-legislative activity, can be performed without taking oath. The court has held that a person becomes a member as soon as the list of elected members is notified by the ECI. Further, a member can also propose a candidate before taking oath.



F. Tidbits

1. IIT-Palakkad develops ultrasound for COVID-19 screening

- IIT-Palakkad has developed an automated **lung ultrasound (LUS) for COVID-19 screening and monitoring** through **cloud-based image analysis** and scoring system.
- The app, the first of its kind in India, is now available for clinicians to perform **automated analysis** by just uploading the ultrasound video.

2. Antibodies from convalescent plasma protect against COVID-19

- A recent research study has revealed that **neutralising antibodies present in the blood of COVID-19 infected** who have recovered offers powerful protection against novel coronavirus in animals.
- The research involved the passive transfer of neutralising antibodies into Syrian hamsters.
 - The animals that received high dose of antibodies did not lose weight and the amount of virus in the lungs was low compared with those that received low dose of the antibodies and the control group.
- The study argues that antibodies can be mass-produced either as a **treatment to prevent deterioration of the disease and as a preventive vaccine**, as in the case of Ebola virus.
 - According to the release, the antibodies can be injected into patients in the early stage of the disease to reduce the viral load and thus protect the patient from progressing to the severe form of the disease.
 - The study claims that the antibodies also may be used to provide temporary, vaccine-like
 protection against SARS-CoV-2 infection for healthcare workers, elderly people and
 others who respond poorly to traditional vaccines or are suspected of a recent exposure to the
 coronavirus.

3. China to set up 'security agency' in Hong Kong

- China will set up a "national security agency" in Hong Kong to oversee a forthcoming new law aimed at cracking down on dissent and pro-democracy movement in the city.
- The security agency would be established by China's Central government and would "supervise, guide, coordinate, and support" the maintenance of national security in the territory.
- The new law would criminalise secession, subversion of state power, terrorism, and colluding with foreign and external forces to endanger national security. The new law also would override any existing Hong Kong laws that may conflict with it once it is implemented.

4. Arms-laden drone downed in J&K

- The Border Security Force (BSF) has shot down a made-in-China hexacopter drone from Pakistan, loaded with a sophisticated rifle and grenades, along the **International Border in Kathua district of Jammu and Kashmir.**
- The BSF intelligence branch has been receiving inputs about the possible use of drones for ferrying arms and ammunition from Pakistan into India.

G. Prelims Facts



1. Wild animals in urban clusters

- The article notes the increasing instances of animal sightings in urban areas in current times.
 - o The reduction in traffic in the **Bosphorus marine route** during lockdown in Istanbul has resulted in dolphins increasingly being sighted near the shores of Istanbul.
 - As the Ganga became less polluted due to decreased industrial and human waste during lockdown, the Ganges dolphins and gharials (fish-eating crocodiles) have been sighted in larger numbers.
- There are concerns that COVID-19 could infect **mountain gorillas** which are likely to be particularly vulnerable as they share about 98% of their DNA with humans. They are already **endangered due to habitat loss, poaching and diseases** and only 900 mountain gorillas remain in the mountains of Central Africa.

2. Water worlds

- The study by NASA scientists has revealed that more than a quarter of the several dozen exoplanets they have analysed could be 'water worlds'. This includes some members of the Trappist-1 system.
 - **Exoplanets** are planets that orbit a star other than our sun. Or in simpler terms, an exoplanet is a **planet outside the Solar System**.
 - o The **TRAPPIST-1** system boasts the largest number of rocky worlds ever found in a habitable zone of a single star and lies only 40 light-years.
- Saturn's moon Enceladus and Jupiter's moon Europa are also considered as candidates that may support life, because scientists have spotted water plumes bursting from their icy shells.

H. UPSC Prelims Practice Questions

Q1. Which of the following pairs are correctly matched?

Titan: Saturn
 Enceladus: Saturn
 Europa: Jupiter
 Tethys: Jupiter
 Deimos: Mars
 Ganymede: Jupiter

Options:

a. 2 and 3 only

b. 4, 5 and 6 only

c. 1, 2, 3, 5 and 6 only

d. 1, 2, 3, 4, 5 and 6

Answer: c

Explanation:

Tethys moon: Saturn

Q2. Which of the following statement/s is/are correct?



- 1. The Bosphorus strait connects the Black sea with the Sea of Marmara.
- 2. The Dardanelles connects the Aegean Sea and Mediterranean Sea.

Options:

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

Answer: c

Explanation:

- Bosphorus strait is a natural strait connecting the Black Sea to the Sea of Marmara. Also known as the Strait of Istanbul, this water way links the European part of the city from its Asian part and thus remains as a very strategic waterway in the region.
- The Bosphorus strait is one of the world's important maritime routes for the transportation of oil from the Caspian Sea region and Russia to regions including Asia, Western and Southern Europe.
- The Bosporus connects the Black Sea with the Sea of Marmara.
- The Dardanelles connects the Aegean and Mediterranean Seas.

Q3. Which of the following statement/s is/are correct?

- 1. The ungulate Chiru is native to the Tibetan plateau.
- 2. They are hunted for their soft, light and warm underfur, known as Shahtoosh.
- 3. Chiru is classified as 'near threatened' under the IUCN red list.

Options:

- a. 1,2 and 3
- b. 1 and 3 only
- c. 2 and 3 only
- d. 1 and 2 only

Answer: a

Explanation:

- The Tibetan antelope or Chiru is native to the Tibetan plateau. In 1980s and 1990s, they had become endangered due to massive illegal poaching. They are hunted for their extremely soft, light and warm underfur which is usually obtained after death. This underfur, known as Shahtoosh is used to weave luxury shawls.
- Currently Chiru is classified as near threatened under IUCN classification.

Q4. Which of the following correctly describes beta biodiversity?

- a. It refers to the diversity within a particular area or ecosystem.
- b. It measures the change in diversity of species from one environment to another.
- c. It is a measure of the overall diversity for the different ecosystems within a region.
- d. It refers to the diversity or variability within species.



Answer: b

Explanation:

- Whittaker (1972) described three terms for measuring biodiversity over spatial scales: alpha, beta, and gamma diversity.
 - o Alpha diversity refers to the diversity within a particular area or ecosystem, and is usually expressed by the number of species (i.e., species richness) in that ecosystem.
 - Beta diversity measures the change in diversity of species from one environment to another.
 In simpler terms, it calculates the number of species that are not the same in two different environments. Thus, beta diversity allows us to compare diversity between ecosystems.
 - o Gamma diversity is a measure of the overall diversity for the different ecosystems within a region.
- Genetic diversity is the diversity or variability within species, community or assemblage.

I. UPSC Mains Practice Questions

- 1. In the light of the recent border violence in the Galwan valley, between India and China, analyze the strategic significance of the Galwan valley region. (10 marks, 150 words)
- 2. Discuss the salient features that distinguish elections to the Rajya Sabha from the general elections to the Lok Sabha. (10 marks, 150 words)