

# 13 June 2021: UPSC Exam Comprehensive News Analysis

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## B. GS 2 Related

### Category: INTERNATIONAL RELATIONS

1. [Reviving the spirit of multilateralism](#)

### Context:

- The ongoing **47th edition of the “Group of seven” summit** in Carbis Bay, southwest England.

### Background:

#### **Group of Seven:**

- The Group of Seven (G7) is an inter-governmental political forum **consisting of Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.**
- The member countries figure in the list of the world’s largest IMF-advanced economies and **wealthiest countries.** As of 2018, the G7 accounts for close to 60% of global net wealth.
- The G7 was **formed in 1975** in the aftermath of the 1973 Oil Crisis. The G7 became the G8 with Russia’s admission into the group in 1998. But it reverted to the G7 in 2014, following Russia’s annexation of Crimea.
- The G7 is not based on a treaty and has **no permanent secretariat or office.** The G7’s presidency rotates annually among the members.

### Details:

- The following are the major takeaways from the second day of the summit.

#### **“Build Back Better World” (B3W) project:**

- The “Build Back Better World” (B3W) project envisages to collectively **mobilize hundreds of billions of infrastructure investment for low- and middle-income countries.**
- The B3W project aims to offer a **“values-driven, high-standard and transparent”** partnership.

#### **Carbis Bay Declaration:**

- In the light of the devastation caused by the COVID-19 pandemic, the ongoing summit seeks to address such future global health challenges.
- The ‘Carbis Bay Declaration’ is a landmark global health declaration **aimed at preventing future pandemics** under which G7 leaders have committed to use all their resources.
- The declaration based on the independent report titled ‘100 Days Mission to Respond to Future Pandemic Threats’ contains actionable recommendations on how governments and others can quickly respond to any future outbreaks.
- The G7 Carbis Bay declaration includes the following interventions:
  - Slashing the time taken to **develop and licence vaccines, treatments and diagnostics for any future disease to under 100 days**
  - Reinforcing **global surveillance networks** and genomic sequencing capacity
  - Support for **reforming and strengthening the World Health Organization (WHO)**
- Under the Carbis Bay Declaration, the UK, which holds the presidency for the G7 Leaders’ Summit 2021, will establish a new centre to develop vaccines to prevent zoonotic diseases spreading from animals to humans.

- The G7 nations are expected to collectively agree to provide a billion doses of Covid-19 vaccine in an effort to end the pandemic in 2022.

#### **Tackling China:**

- The second day of the summit saw leaders addressing the **issue of “strategic competition” with China**. The various initiatives announced during the summit can be viewed as moves to counter China and its moves.
  - The B3W project is aimed to **counter China’s Belt and Road infrastructure (BRI) initiative**. The emphasis on a transparent partnership stands in strong contrast to China’s BRI which has been widely criticized for pushing countries with unsustainable debt levels.
  - The G7 Carbis Bay declaration on reinforcing global surveillance networks to identify early threats from diseases appears as a **veiled reference to China’s failure to notify the world early regarding the COVID-19 pandemic**.
  - The UK which holds the presidency for G7 Leaders’ Summit 2021, has **invited India, along with Australia, South Korea and South Africa, as guest countries**. The presence of India, Australia and South Korea at the G7 summit is seen as a nod to the recognition of their discontent with the influence of China.

#### **Strengths of the G7:**

- The group is officially organized around shared **values of pluralism, representative government, and globalism**. It steadfastly promotes liberal democracy.
- Though it began as a forum for economic cooperation, over the years, the G7 has **taken up a host of issues ranging from economic growth to environmental issues and terrorism**.
- The G7 has been a formal, high-profile venue for **discussing and coordinating solutions to major global issues** in varied areas like trade, security, economics, and climate change. It has catalyzed or spearheaded several major global initiatives. The G7 agreement on a global minimum corporate tax being such an example.

For more information on this topic refer to:

#### **[UPSC Comprehensive News Analysis 06th June 2021](#)**

- Given the significant economic prosperity they enjoy, the member countries **wield enormous power and international influence in global affairs**.

#### **Challenges:**

##### **Internal differences:**

- The transactional approach to international relations under the Trump administration of the U.S. had cast doubts over the future of the G7.
- The **Brexit issue** has cast a shadow over the ties between the U.S. and the U.K. The current U.S. administration has steadfastly opposed Brexit and has raised concerns over Britain’s dispute with the EU over Northern Ireland.

- There continue to be some **differences over economic issues** between the member countries. Example- Taxation of the Big Tech.

**Decline in economic dominance:**

- From collectively producing around 70% of the world's GDP during the initial years, this number has come down to 40% over the years.

**The rise of other groupings:**

- The group has been criticized for its **outdated and narrow global representation**. The narrow global representation has also resulted in its ineffectualness to an extent.
- The larger G20 has become a more relevant multilateral body due to the inclusion of developing economies such as Brazil, China, India and South Africa.

**Conclusion:**

- The ongoing summit coming after a tumultuous period marked by transactional approach to international relations under the Trump administration of the U.S. is an indication of the new administration's intent to build closer coordination with traditional allies in the Global North and **renewed multilateralism**.
- Despite the existing challenges to the G7, the G7's ability to set the tone for cooperation on global issues has not diminished and this needs to be used to revive the emphasis on **multilateral co-ordination and co-operation in the spirit of globalization**.
- The G7 will have to take along other nations in the broader G20 to increase the effectiveness of its initiative.

## C. GS 3 Related

### Category: ENVIRONMENT AND ECOLOGY

#### 1. 'Operation Olivia' to the rescue of Olive Ridleys

**Context:**

- Indian Coast Guard's "Operation Olivia".

**Olive Ridley turtle:**

- The olive ridley sea turtle (*Lepidochelys olivacea*), also known commonly as the Pacific ridley sea turtle, is a species of turtle in the family Cheloniidae.
- The species is **one of the most abundant of all sea turtles** found in the world.
- It is **primarily found in warm and tropical waters, primarily in the Pacific and Indian Oceans**, but also in the warm waters of the Atlantic Ocean.

**Nesting habits:**

- Mating occurs in the offshore waters of the breeding grounds and females then come ashore to nest. **Sea turtles generally return to their natal beach**, or where they were born, to lay eggs as adults.
- The Olive Ridley have a unique nesting habit. They indulge in mass nesting called
  - An arribada is a mass-nesting event when thousands of turtles come ashore at the same time to lay eggs on the same beach.
- Breeding and nesting of the Olive Ridley Turtles is observed **from November to December**.

**Threat:**

- Heavy **predation of Olive Ridley turtle eggs** by dogs and wild animals
- **Dense fishing activity** along the coasts of Andhra Pradesh, Odisha and Bengal, especially ocean-going **trawlers, mechanized fishing boats and gill-netters** pose a severe threat to turtles.
- **Beach soil erosion**

**Conservation status:**

- The Olive Ridley is listed as **vulnerable** under the International Union for Conservation of Nature's Red list.
- It is included in **Schedule I of the Indian Wildlife Protection Act, 1972**, and in the **Appendix I of the Convention of International Trade in Endangered Species of Wild Fauna and Flora**.

**Details:**

- The annual "Operation Olivia" helps protect Olive Ridley turtles as they congregate along the Odisha coast for breeding and nesting.
  - There are three beaches along the Odisha coast including **Gahirmatha, the mouth of the Devi river, and Rushikulya**.
- The Coast Guard carries out **round-the-clock surveillance** from November till May utilising Coast Guard assets and helps **enforce laws near the rookeries**
- Measures taken include the enforcement of the following laws near the rookeries.
  - The compulsory use of **turtle excluder devices (TED) by trawlers** in the waters adjoining nesting areas
  - **Prohibiting the use of gill nets** on turtle approaches to the shore
  - Curtailing turtle poaching.

**Category: SCIENCE AND TECHNOLOGY**

**1. 'Monoclonal antibody treatment beneficial'**

**Context:**

- **Monoclonal antibody treatment** has emerged as a relatively effective and safer alternative in treating **COVID-19 patients**.

**Background:**

### Immune response in human beings:

- The body's immune system generates antibodies as a defense mechanism against unfamiliar molecules from bacteria and viruses, termed antigens.
- Antibodies bind to antigens and kill the invading pathogen.

### Monoclonal antibodies:

- **Monoclonal antibodies are identical copies of an antibody that targets one specific antigen.**
- Scientists can make monoclonal antibodies by exposing white blood cells to a particular antigen.
- Each monoclonal antibody is **specific to its matching antigen**. Scientists select a single white blood cell or clone and use this as the basis to produce many identical cells, making many identical copies of the monoclonal antibody.

### Monoclonal antibody treatment:

- **Monoclonal antibodies are produced in a laboratory setting and then infused into the blood.** These monoclonal antibodies fight disease by enlisting natural immune system functions.
- The Monoclonal antibodies help in reducing the symptoms and disease progression.
- Monoclonal antibodies have previously been **used to treat viral infections such as Ebola and HIV.**

### Details:

- Two of the Monoclonal antibodies being used in India include the **REGCov2 (Casirivimab and Imdevimab).**
- In these drugs, antibodies for COVID target specific proteins and destroy them before they initiate inflammation.

## D. GS 4 Related

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## E. Editorials

### Category: ECONOMY

#### 1. Bitcoin push

#### Context:

- **El Salvador became the world's first sovereign nation to adopt bitcoin cryptocurrency as legal tender**

#### Background:

#### Cryptocurrency:

- A cryptocurrency is a digital asset designed to work as a medium of exchange.

- Cryptocurrencies typically use decentralized control as opposed to centralized digital currency and central banking systems. Cryptocurrencies are **built on the back of blockchain technology, a system of distributed, cryptographically-secured account keeping.**
- **Bitcoin is the first decentralized cryptocurrency.**

#### **Status of cryptocurrencies:**

- Most countries have warned their citizens against investing in cryptocurrencies and transacting in them.
- Some countries have tried to use the blockchain technology to create government-sanctioned digital currencies. China, a hub of cryptocurrency activity, has issued a **digital Yuan** based on blockchain technology. The Bank of England has also proposed a **digital Sterling.**
- The RBI had virtually banned cryptocurrency trading in 2018. The Supreme Court had asked the Centre in 2019 to frame policies for crypto, and in 2020, struck down the curbs imposed by the RBI. **India has allowed the treatment of cryptocurrencies as commodities.**
- Bitcoin is the first and biggest of decentralized cryptocurrencies, which are **increasingly becoming mainstream.** Ethereum, Tether, and Binance Coin are some of the many others that have emerged after Bitcoin.
- As per available reports by the end of 2021, at least 4-5 more nations will adopt bitcoin as their sovereign acceptable currency.

#### **Details:**

- As per the new law of El Salvador, Bitcoin, as a legal tender, can be used in any transaction and businesses will have to accept that payment form.
- The law also states that tax contributions can be paid via Bitcoin and exchanges in the cryptocurrency will not be subject to capital gains tax.
- Under the new law, El Salvador will promote necessary training and mechanisms so that the population can access bitcoin transactions. However, those who do not have access to technologies that can carry out bitcoin are excluded from being required to accept it as payment.
- The **bitcoin-dollar exchange rate will be set by the market.**

#### **Significance/Relevance of the move:**

##### **Reduce the cost of remittances:**

- El Salvador's economy is heavily reliant on remittances. According to World Bank data, remittances made up almost \$6 billion in 2019, which was **about 20% of the country's GDP.**
- A large chunk of that \$6 billion is lost to intermediaries who take a cut of the financial transactions in dollars.
- The adoption of Bitcoins will not only help El Salvadoreans **save on transaction fees of banks and agencies but also offers a faster method** to transfer such remittances.

##### **Mitigate the negative effects of being a dollarized economy:**

- El Salvador is among the few countries in the world that don't have their own fiat currency, and uses the US dollar as a legal tender. **El Salvador fully 'dollarised' its economy in 2001.**
  - There are 14-15 countries, which don't have their currency and they typically use the US dollar.
- One of the downsides of a dollarized economy is that it gets linked to the monetary policies of the Federal Reserve of the U.S.
- **The U.S. Federal reserve has been increasingly setting rates that has been benefitting the U.S. economy but was harming the economic stability of El Salvador** and Bitcoin was being adopted in order to mitigate these negative impacts.
- Bitcoin or any other form of cryptocurrency is as good as the dollars for such dollarized economies.

#### **Boost financial inclusion:**

- El Salvador's decision to make bitcoin a legal tender will boost financial inclusion in their country as majority of the population does not have access to formal banking channels.

#### **Impetus to economy:**

- The government also believes that the move will **boost investments, tourism and innovation and bring economic development for the country.**

#### **Concerns:**

- Experts have warned of the following concerns with the adoption of Bitcoin as a legal tender.

#### **Decentralized control:**

- Given the essentially decentralized control approach associated with cryptocurrencies like the Bitcoin as against the traditional centralized digital currency and centralized banking systems, they **render government monetary policies ineffective.** This would rob the administration of a vital tool to control the economy.
- They are even deemed a threat to the official currency and monetary system.

#### **Anonymity:**

- Governments and economic regulators across the world are wary of private cryptocurrencies also because of the **lack of a central issuing authority or a central validating agency for transactions.**
- Hence these currencies can exist and thrive outside the realm of authority and regulation.
- Their anonymous nature also goes against **global money-laundering** its use in **illegal online marketplaces that deal with drugs and child pornography** has been well-documented.

#### **Security risk:**

- Bitcoin exchanges are digital and therefore **vulnerable to hackers, operational glitches, and malware.**
- By targeting and hacking a cryptocurrency exchange, hackers can gain access to thousands of accounts and digital wallets where the cryptocurrencies are stored.



- Example- **Gox hacking incident in 2014**, which saw the Japanese exchange close down after millions of dollars in bitcoin were stolen.

#### High volatility:

- Cryptocurrencies as commodities have been highly volatile.
- They have witnessed **massive swings in their values**. After its introduction in 2009, Bitcoin saw its biggest gain in value last year, having started 2020 at \$7,200 per coin and touching \$65,000 in April of 2021, before falling to \$30,000 in May.
- The move to make Bitcoin a legal tender brings financial risks to ordinary Salvadorans and their country, as the cryptocurrency gains and loses huge amounts of value in a short duration.

#### Carbon footprint:

- Another major problem associated with crypto currencies is the increasing energy use associated with them.
- **The 'mining' of Bitcoin**, where individuals or companies set up powerful systems to support the blockchain network, for which they are rewarded in the currency, consumes a lot of energy.
- Bitcoin production is estimated to generate between 22 and 22.9 million metric tonnes of carbon dioxide emissions a year. This is a major concern given the current efforts underway to mitigate GHG emissions in line with the Paris climate commitments.

#### Measures being taken to mitigate some of the challenges:

- The El Salvador government plans to protect citizens from the volatility of Bitcoin prices by **guaranteeing quick convertibility to dollars**.
- The government will enable the purchase of Bitcoins from people unwilling to hold Bitcoins through a **\$150-million trust** created at the country's development bank.
- The **use of Renewable energy for Bitcoin mining facilities** will help address the concerns associated with the large carbon footprint associated with Bitcoins.

## F. Prelims Facts

### 1. Meet *Bharitalasuchus tapani*, a carnivorous reptile that lived 240 million years ago

- The **Yerrapalli Formation of the Pranhita-Godavari Basin in Telangana** has had several fossils unearthed from it.
- One of the species identified includes a **carnivorous reptile** that lived 240 million years ago. It has been named **Bharitalasuchus tapani**.
- Studies have revealed that the reptile belonged to a family of extinct reptiles named **Erythrosuchidae**.
- The *Bharitalasuchus tapani* were robust animals with big heads and large teeth, and these probably predated other smaller reptiles. They were approximately the size of an adult male lion and might have been the **largest predators in their ecosystems**.
- Apart from this erythrosuchid reptile, the fossil assemblage of the Yerrapalli Formation includes many other extinct creatures such as **ceratodontid lungfish, rynchosaur and allokotosaurian**.

## 2. RNA into DNA

- **Deoxyribonucleic acid (DNA) and Ribonucleic acid (RNA)** are important molecules in cell biology, responsible for the storage and reading of genetic information that underpins all life.
- They are both linear polymers, consisting of sugars, phosphates and bases, but there are some key differences which separate the two.
  - Unlike **DNA which is double stranded, RNA is single-stranded.**
  - The bases in DNA are Adenine ('A'), Thymine ('T'), Guanine ('G') and Cytosine ('C'). **RNA shares Adenine ('A'), Guanine ('G') and Cytosine ('C') with DNA, but contains Uracil ('U') rather than Thymine.**
  - Unlike DNA which replicates and stores genetic information and functions as a blueprint for all genetic information contained within an organism, **RNA converts the genetic information contained within DNA** to a format used to build proteins, and then moves it to ribosomal protein factories.
    - **Transcription is the process of copying a segment of DNA into RNA.** The segments of DNA transcribed into RNA molecules that can encode proteins are said to produce messenger RNA.

### Context:

- A new study notes that as against the current understanding that only DNA transcription into RNA as being possible, the reverse can also happen.

## G. Tidbits

### 1. Great apes in peril

- A recent study notes that the **African great apes, which includes chimpanzees, bonobos and gorillas** are under threat from massive **habitat reduction and destruction.**
- The study looked at the **impact of climate change, human population growth and human land use** on great ape habitat range, and developed estimates for habitat loss in the best and worst case scenarios.
- The researchers predict that Africa's great apes, which include gorillas, chimpanzees and bonobos, will lose 85 per cent of their habitat range by 2050.
- Climate change, human land use and population growth push vegetation and other food sources uphill, leaving the survival of Africa's great apes, as well as other land animals, up to their ability to climb and adapt to new environments.
- African ape populations **are currently endangered, largely due to habitat loss, poaching, pet trades and climate change.**

### 2. FAME II to spur new tech, says Venu

- With an aim to promote eco-friendly vehicles, the government had launched the **FAME India scheme (Faster Adoption and Manufacturing of (Strong) Hybrid and Electric Vehicles in India)** in 2015.

- The second phase of FAME India Scheme focuses on **supporting electrification of public and shared transportation** and aims to support electrification through **subsidies for electric vehicles**, including buses, passenger cars and two-wheelers.
- Out of total budgetary support, about 86 percent of fund has been allocated for Demand Incentive so as to create demand for xEVs in the country.
- The incentives for electric vehicles will help **increase penetration** and lead to the **indigenous development of future electric technology**.

## H. UPSC Prelims Practice Questions

Q1. Which of the following is/are correctly matched?

1. Operation Blue Star: eliminate armed militants who were holed up in the Golden Temple.
2. Operation Pawan: Indian Peace Keeping Force (IPKF's) operation to wrest control of Jaffna from the Liberation Tigers of Tamil Eelam (LTTE)
3. Operation Vijay: Indian operation to push back the infiltrators from the Kargil Sector
4. Operation Olivia: Indian armed forces ended the rule of the Nizam of Hyderabad

Options:

- a. 1, 2 and 3 only
- b. 2, 3 and 4 only
- c. 1, 3 and 4 only
- d. 1, 2, 3 and 4

Answer: a

Explanation:

- The annual "Operation Olivia" by the Indian Coast Guard helps protect Olive Ridley turtles as they congregate along the Odisha coast for breeding and nesting.
- The Coast enforce laws near the rookeries Guard carries out round-the-clock surveillance from November till May utilizing Coast Guard assets and helps

Q2. Consider the following statements with respect to Olive Ridleys:

1. Olive Ridleys are found in Atlantic, Pacific, Arctic and Indian Ocean.
2. The Olive Ridley is listed as vulnerable under the International Union for Conservation of Nature's Red list.
3. Coast of Odisha is the largest mass nesting site for them

Which of the above statements is/are correct?

- a. 1 only
- b. 2 and 3 only

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

**Answer: b**

**Explanation:**

- The olive ridley sea turtle (*Lepidochelys olivacea*), also known commonly as the Pacific ridley sea turtle, is a species of turtle in the family Cheloniidae.
- The species is one of the most abundant of all sea turtles found in the world.
- It is primarily found in warm and tropical waters, primarily in the Pacific and Indian Oceans, but also in the warm waters of the Atlantic Ocean.
- The Olive Ridley is listed as vulnerable under the International Union for Conservation of Nature's Red list.
- It is included in Schedule I of the Indian Wildlife Protection Act, 1972, and in the Appendix I of the Convention of International Trade in Endangered Species of Wild Fauna and Flora.
- The coast of Odisha is one of the largest mass nesting site for the Olive Ridley Turtles. There are three beaches along the Odisha coast including Gahirmatha, the mouth of the Devi river, and Rushikulya.

**Q3. Consider the following statements:**

1. Coral reefs occur in Shallow waters of the tropics
2. Only hard corals build reefs

**Which of the above statements is/are correct?**

- a. 1 only
- b. 2 only
- c. Both
- d. None

**Answer: c**

**Explanation:**

- Given that Coral reefs need sunlight they occur in shallow waters. Reef-building corals require warm water conditions to survive.
- Soft corals are not capable of building reefs.

**Q4. Recently, *Bharitalasuchus tapani* was in the news. What is it?**

- a. A new species of wasp from the genus Kudakrumia identified by scientists in Goa
- b. A carnivorous reptile that lived 240 million years ago

- c. A Zingiber from the Andaman and Nicobar Islands
- d. A newly discovered fish fossil from Assam

**Answer: b**

**Explanation:**

- The Yerrapalli Formation of the Pranhita-Godavari Basin in Telangana has had several fossils unearthed from it.
- One of the species identified includes a carnivorous reptile that lived 240 million years ago. It has been named *Bharitalasuchus tapani*. Studies have revealed that the reptile belonged to a family of extinct reptiles named Erythrosuchidae.
- The *Bharitalasuchus tapani* were robust animals with big heads and large teeth, and these probably predated other smaller reptiles. They were approximately the size of an adult male lion and might have been the largest predators in their ecosystems.

**Q5. Consider the following statements:**

1. The Chief Secretary in a State is appointed by the Governor of that State.
2. The Chief Secretary in a State has a fixed tenure.

**Which of the statements given above is/are correct?**

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

**Answer: d**

**Explanation:**

- The Chief Secretary in a State is appointed by the government of the state.
- The Chief Secretary in a State does not enjoy a fixed tenure.

## I. UPSC Mains Practice Questions

1. Bitcoin has seen greater formalization and mainstreaming in the last one year. In this context, explain how cryptocurrencies like Bitcoin work? Why are governments and central banks wary of them? (15 marks, 250 words)[GS-3, Economy]
2. The G7 countries seek to overcome internal differences and strengthen their economic and geopolitical bond to face multiple challenges from fighting COVID-19 to tackling the rise of China. Discuss in the context of its latest summit. (15 marks, 250 words)[GS-2, International Relations]