

# News Analysis (28 Jul, 2020)



etishtiias.com/current-affairs-news-analysis-editorials/news-analysis/28-07-2020/print

#### Governor's Power to Summon the House

## Why in News

The recent Rajasthan government crisis has brought into the spotlight the role of the **Governor** in summoning the House of the State Assembly.

## **Key Points**

#### • The Rajasthan's Case:

- The Rajasthan Governor has returned the proposal by the State Cabinet, seeking to convene a session of the Assembly, for the second time, which would have allowed the Rajasthan chief minister to prove his strength on the floor of the House.
- This has raised legal questions on the powers of the Governor to summon a House.

## • Powers to Summon the House:

- · Article 174 of the Constitution authorizes the Governor to summon, dissolve and **prorogue** the state legislative assembly.
- However, the Governor can exercise the above only **as per Article 163** of the Constitution which says that the Governor acts on the aid and advice of the Council of Ministers headed by the Chief Minister.
- In 2016, the <u>Supreme Court</u> in Nabam Rebia and Bamang Felix vs Deputy Speaker case (the Arunachal Pradesh Assembly case) said that the power to summon the House is **not solely vested in the Governor** and should be exercised with aid and advice of Council of Ministers and not at his own.
  - The Court highlighted the facts that the **Governor is not an elected authority and is** a mere nominee of the President, such a nominee cannot have an overriding authority over the representatives of the people, who constitute the House or Houses of the State Legislature.
  - Allowing the Governor to overrule the State Legislature or the State executive would not harmoniously augur with the strong democratic principles enshrined in the provisions of the Constitution. Specially so, because the Constitution is founded on the principle of ministerial responsibility.

- Governor's Discretionary Power:
  - Article 163 (1) essentially limits any discretionary power of the Governor only to cases
    where the Constitution expressly specifies that the Governor must act on his own and
    apply an independent mind.
  - The Governor can exercise his discretionary power under Article 174, when the chief minister has lost the support of the House and his strength is debatable.
    - Generally, when doubts are cast on the chief minister that he has lost the majority, the opposition and the Governor would rally for a **floor test**.
    - On numerous occasions, the courts have also clarified that when the majority of the ruling party is in question, a floor test must be conducted at the earliest available opportunity.
  - However in Rajasthan's case, despite requests from the chief minister, who is enjoying the majority, the Governor has used discretionary power twice and returned requests to call for a session.

#### **Floor Test**

- It is a **term used for the test of the majority**. If there are **doubts against the Chief Minister** (CM) of a State, he/she can be **asked to prove the majority in the House**.
  - In case of a **coalition government**, the **CM** may be **asked to move a vote of confidence and win a majority**.
- In the **absence of a clear majority**, when there is more than one individual staking claim to form the government, the **Governor may call for a special session** to see who has the majority to form the government.

#### **Source: IE**

# **INDIA-UK Free Trade Agreement**

## Why in News

Recently, India and the United Kingdom (UK) affirmed their shared commitment towards a **Free Trade Agreement** (FTA) during the 14<sup>th</sup> virtual **Joint Economic and Trade Committee (JETCO) meeting**.

The next meeting is scheduled to be held around September, 2020 in New Delhi to carry forward the dialogue.



# **Key Points**

- **Description:** The meeting was held by India and UK to revive and revitalise the long standing trade and economic linkages between them.
  - They agreed to an **early harvest scheme or a limited trade agreement** to lower tariffs on a small set of goods apart from easing rules for select services.
  - They also resolved to cooperate in the health sector especially in the wake of **Covid-19 pandemic**.
  - Previously, India and the UK were involved in discussing a **preferential trading arrangement** under the proposed **India-European Union FTA**.
  - In FTA, two trading partners eliminate or significantly reduce import duties on the maximum number of goods traded between them.
- **India-UK Trade:** India has had strong historical ties with the U.K. and currently, it is one of India's most important trading partners.
  - It is a significant partner of India as an **FDI investor after Mauritius and Singapore** which ranked second and first respectively.
  - Similarly, the U.K. is one of the **largest investors in India**, among the **G20 countries**.
  - The bilateral trade between the two countries stood at **15.5 billion USD** in 2019-20 as against 16.87 USD billion in 2018-19.
  - India has engagement with the UK in sectors like pharma, textiles, leather, industrial machinery, furniture, and toys.
  - India is also looking to the UK to support it with technology based products such as high quality cameras, medical devices, and automobiles.

### • Significance:

**Brexit:** The UK has been pushing India for a bilateral trading arrangement ever since it voted to **leave the** <u>European Union</u> (EU) in June 2016 and <u>left finally in january 2020</u>.

- However, India had been resisting these efforts as it decided that the <u>Brexit</u> process should complete first.
- India has been keen to understand how much of a "special and preferential" access the UK will get in the vast European market when it is out of the EU's single-market dynamics.
- Hence, these talks would help in intensifying the beneficial aspect of the UK as a trading partner of India.
- Exit from RCEP: India opted out of the <u>Regional Comprehensive Economic Partnership</u> <u>deal</u> in November 2019.

Therefore, there is renewed focus on trade deals with the US, the European Union and the UK, which are key markets for Indian exporters and are keen to diversify their sourcing.

• **Strategic Partner:** The UK is a permanent member of the UN Security Council, and one of the **strategic partners of India**.

Strengthening bonds with the trade would seek UKs support at global issues like **standoff with China** in the Ladakh sector of the Line of Actual Control (LAC) and **claim for permanent seat at UNSC**.

• **Review of Trades:** India could seek a review of trading agreements including renegotiating tariffs on some items along with the tightening of provisions governing **country-of-origin certification**.

#### **Joint Economic Trade Committee**

- **JETCO** provides a **forum to United Kingdom companies to enhance** their links and develop new partnerships with India business and decision-makers.
- Government to Government negotiations, which address issues of market liberalization and market access, are conducted through the JETCO process.
- The **UK India Business Council plays** a key role in feeding the views of the UK business community into the JETCO process with a view to achieving favorable outcomes for UK companies.
- One of the key objectives of the JETCO process is to unveil opportunities for UK's most prominent institutional investors to invest in India.

## **Way Forward**

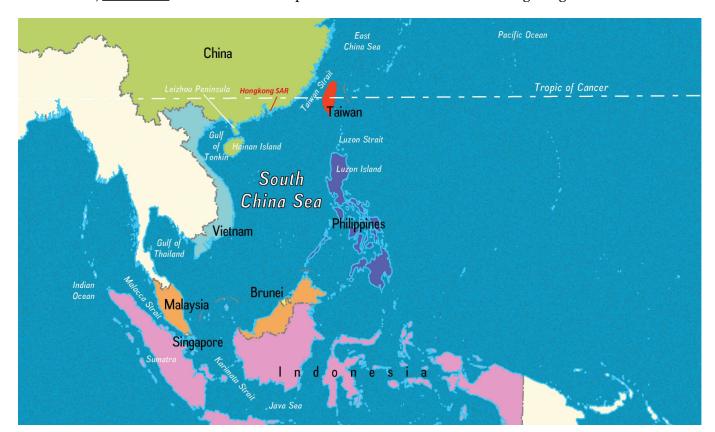
- India is one of the fastest growing large economies of the world and FTA with the UK has played a significant role in enhancing the trade volume of the country.
- However, according to policymakers, **FTAs signed by India with the UK have not brought** the expected tangible benefits and, on the contrary, have hurt the country's manufacturing sector due to liberal rules of origin.
- Therefore, there is a need for a **detailed assessment of FTAs in terms of goods, services and investment flows** by all the stakeholders involved.

#### **Source: PIB**

# **UK Suspends Extradition Treaty with Hong Kong**

#### Why in News

Recently, the UK government has suspended its extradition treaty arrangements with Hong Kong, in response to China's introduction of a **new security law** in the territory.



Earlier, Australia and Canada had suspended extradition treaties with Hong Kong.

# **Extradition Treaty**

- Extradition is the formal process of one state surrendering an individual to another state for prosecution or punishment for crimes committed in the requesting country's jurisdiction. It typically is enabled by a bilateral or multilateral treaty.
- The Extradition Act 1962 provides India's legislative basis for extradition.

## **New Security Law**

- On 30<sup>th</sup> June 2020, China's top legislature unanimously passed a new national security law for Hong Kong.
- The law **criminalises four activities** secession, subversion, organization and perpetration of terrorist activities, and collusion with a foreign country or with external elements to endanger national security.
- Some specific offences include damaging government buildings and lobbying against the Chinese government.

## **Key Points**

#### • UK's Latest Moves:

- Suspension of Extradition Treaty:
  - The extradition treaty means that, if someone in Hong Kong is suspected of a crime in the UK, then the British authorities can ask Hong Kong to hand them over to face justice and vice versa.
  - The **UK fears** the arrangement which has been in place for more than 30 years could see **anyone it extradites to Hong Kong being sent on to China**. Under the national security law, it is quite possible that Hong Kong residents are being sent to mainland China for trial.
- **Arms Embargo:** The UK government has also decided to extend its arms embargo (ban) which has been in place with China since 1989 to Hong Kong, stopping the UK exporting equipment, such as firearms, smoke grenades and shackles, to the region.
- **Citizenship for the Hong Kong People:** Plans for UK citizenship to around three million Hong Kong people by **early 2021**, in response to the security law.
- **Chinese Company removed out of 5G Network:** China's Huawei Technologies will be removed completely from Britain's **5G** network by **the end of 2027**.

#### • Reasons Behind the Moves:

- China did not tell the whole truth over the **Covid-19** outbreak.
- The new national security law **breaches the guarantees of freedoms**, including an independent judiciary, that have helped keep Hong Kong one of the world's most important trade and financial centres since 1997.
  - The national security law breaches an agreement made with the UK before Hong Kong a former British colony was handed over to China in 1997.
  - Under the 50-year agreement, China enshrined civil liberties including the right to protest, freedom of speech and the independence of the judiciary in Hong Kong's Basic Law, an approach which came to be known as "one country, two systems".
- Treatment of the **<u>Uighur</u>** minority in Xinjiang, an **autonomous territory** in China.
- The actions of the Chinese government in the **South China Sea**.
- The USA sanctions against Huawei due to national security risk.

## • China's Stand:

- China has accused **Britain of going along with the United States**.
- Officials in Hong Kong and Beijing have said the **law is vital to plug gaps in national** security exposed by recent pro-democracy and anti-China protests.
- China has repeatedly told Western powers to stop meddling in Hong Kong's affairs.

#### **Source: TH**

# India-Indonesia Defence Ministers' Dialogue

#### Why in News

Recently, the **Defence Ministers' Dialogue** between **India and the Republic of Indonesia** has been held in Delhi.

The **Indonesian Defence Minister General Prabowo Subianto** is in India for strengthening the ties between the two maritime neighbours.

## **Key Points**

- At the dialogue, India and Indonesia aimed at injecting a new momentum to their strategic
  partnership by expanding security cooperation in a range of areas including defence industries
  and technology sharing.
- India conveyed satisfaction on the military to military interactions and indicated that the defence cooperation between both nations has witnessed an upswing in recent years, in consonance with the **Comprehensive Strategic Partnership** between the two sides.
- The issue of **possible export of <u>BrahMos cruise missile</u> to Indonesia** by India and ways to **further deepen maritime security cooperation** figured prominently in the talks.
- Even though both countries acknowledge **China's aggressive posturing in eastern Ladakh** and the **South China Sea**, there was **no official statement** on it.



India-Indonesia

• Both of them have agreed to **work together for peace**, **security**, **and prosperity** in order to achieve their shared vision on maritime cooperation in the **Indo-Pacific region**.

The **Strait of Malacca** - waterway connecting the Andaman Sea (Indian Ocean) and the South China Sea (Pacific Ocean) - runs between the Indonesian island of Sumatra to the West and peninsular (west) Malaysia and extreme southern Thailand to the east.

- Both of them recognise the **threat of extremism and <u>terrorism</u>** and have agreed to work closely bilaterally and globally to tackle them.
- India is working with Indonesia to strengthen the ties in the areas of defence, security, connectivity, trade and investment and people-to-people exchanges.
- Trade and Commerce:
  - Bilateral trade has increased from USD 4.3 billion in 2005-06 to USD 21 billion in 2018-19.
  - Indonesia has emerged as the **second largest trading partner of India in the <u>ASEAN</u> region.**
  - India is the **second largest buyer of coal and crude palm oil** from Indonesia and **imports minerals**, **rubber**, **pulp and paper and hydrocarbons reserves**.
  - However, there is a **need for greater market access for Indian commodities in Indonesia** including, pharmaceutical, automotive and agricultural products.
- Both countries are members of **G20**, the **Non-Aligned Movement** (NAM), **East Asia Summit** and the **United Nations**.
- Comprehensive Strategic Partnership:

The two countries inked a **defence cooperation agreement in 2018** which aimed at reflecting the elevation of the relationship between the two countries to a comprehensive strategic partnership.

• 2019 marked the 70<sup>th</sup> anniversary of the establishment of diplomatic relations between India and Indonesia.

In **September 2019**, Indonesia announced that the <u>country's capital would be relocated</u> to **East Kalimantan province** on Borneo island from **Jakarta**.

#### • Bilateral Exercises:

- Exercise Samudra Shakti the bilateral maritime exercise.
- Garuda Shakti is the joint military exercise between India and Indonesia.

# **Way Forward**

- India has always acknowledged the long history of mutually beneficial interactions between the two countries with a tradition of close political dialogue, economic and trade linkages as well as cultural and people to people interactions.
- However, to overcome the national and regional challenges, there is a need for a commitment to further strengthen and widen the scope of the bilateral cooperation between the two countries.

#### **Source: PIB**

## **BIS-Care**

## Why in News

Recently, the **Union Minister for Consumer Affairs, Food and Public Distribution** has launched the **Bureau of Indian Standard** (BIS) Mobile App **'BIS-Care'** and three portals namely the **Standardization, Conformity Assessment and Training Portals of e-BIS** for consumers.

BIS is the **National Standard Body of India** for the harmonious development of the activities of **standardization**, **marking and quality certification** of goods.

## **Key Points**

#### • BIS-Care App:

- The app can be operated on any Android phone and is operational in **Hindi and English** language.
- Consumers can check the authenticity of the ISI-marked and hallmarked products and lodge complaints using this app.
- It is important to ensure that consumers are aware of the standards and quality products and help in eliminating the supply of sub-standard products.

#### • e-BIS:

- e-BIS is an integrated portal covering all functions of BIS, enlisting the services of outside agencies for factory and market surveillance and development of mobile app-based and Artificial Intelligence (AI) enabled surveillance methods.
- Certification and surveillance to enforce the implementation of standards is an important aspect
  of BIS functioning which is also strengthening its capacity of enforcement by the
  implementation of e-BIS.

### • Other Steps Taken:

- BIS has been playing an important role in the **formulation of Quality Control Orders** (QCO) to make the standards mandatory.
  - It has actively collaborated with various Ministries and Departments to help them issue QCOs for various products.
  - After standards become mandatory, manufacturers, both domestic and foreign, have to comply with them.
- BIS is developing a **portal on Consumer Engagement**, which will facilitate the online registration of Consumer Groups, submission of proposals and approval thereof and complaint management.
- BIS plans to implement **One Nation**, **One Standard** which is under examination and will be launched soon.

For that purpose, it has formulated a scheme for the recognition of other **Standard Development Organizations** in the country with the objective of harmonization of the standard formulation.

- The **Standard National Action Plan** has been approved and important sectors of the economy for the development of standards have been identified.
- BIS developed Covid-19 standards for Cover-all and Ventilators and issued norms for grant of licence for N95 Masks, surgical masks and eye protectors which has resulted in an increased production of ISI-marked Personal Protection Equipment (PPE) items.
- BIS has expanded and modernised its labs and has been creating testing facilities for drinking water and assaying of gold jewellery.
- It has formulated a **comprehensive Training Policy** and has been **imparting training to various stakeholders** through its **National Institute of Standardization** at Noida.
- There have been efforts to integrate the standards into the curriculum of professional education in the country and for that, an Approach Paper has been developed and shared with the Ministry of Human Resource Development, <u>All India Council for Technical</u> <u>Education</u> (AICTE) and other stakeholders.

## Way Forward

To achieve the objectives of <u>Atmanirbhar Bharat Abhiyan</u> and protect the interests of consumers, BIS had to further strengthen its efforts to formulate standards in the areas important for boosting India's exports and regulating the import of cheap and sub-standard products.

#### **Source: PIB**

# **Segregation of Covid-19 Waste**

#### Why in News

Recently, the <u>National Green Tribunal</u> (NGT) has observed that the **segregation of <u>Covid-19</u>** biomedical waste from general garbage is a must to avoid further contamination adversely affecting public health.

## **Key Points**

• The directions came on a **suo motu matter** pertaining to scientific disposal of Covid-19 waste.

- It observed that segregation of Covid-19 from general waste is a must to avoid additional load on **Common Biomedical Waste Treatment and Disposal Facilities** (CBWTFs) incinerators and also to avoid further contamination.
- In India, **Biomedical Waste Management Rules**, **2016** deal with waste generated in infectious diseases like Covid-19.

## • Data Analysis:

- Around 2,907 hospitals, 20,707 quarantine centres, 1,539 sample collection centres and 264 testing laboratories, are involved in the generation of Covid-19 waste.
- Generation of Covid-19 related biomedical waste in the country is about 101 Metric Tonnes (MT) per day.
- This quantity is in addition to the normal biomedical waste generation of about 609 MT per day.
- About **195 CBWTFs** are providing the services of collection, transportation and disposal of Covid-19 biomedical waste from hospitals, sample collection centres, testing laboratories, etc.

#### • Concerns:

- The <u>pandemic</u> has presented a <u>challenge</u> in terms of capacity to scientifically dispose
  of generated waste and a <u>challenge</u> for civic authorities in charge of its collection and
  disposal.
- States are not following the CPCB guidelines on Covid-19 related waste.
- In some states, **improper segregation** of waste has been reported from **Covid-19 facilities** and quarantine homes.

The non- segregation of waste results in the incineration of contaminated plastics producing toxic gases and adding to air pollution.

- The rise in residential biomedical waste and its collection without adhering to safety protocols could also **trigger a surge in caseload**.
- Without proper scientific management of such waste, it can **potentially affect patients and can affect the concerned workers and professionals**.
- Discarded masks and gloves risk the lives of thousands of **sanitation workers** who work often **without any protection or training to handle** such hazardous material.

#### • Suggestions:

- Left-over food, disposable plates, glasses, used masks, tissues, toiletries, etc used by Covid-19
  patients should be put in **yellow-coloured bags**, while used gloves should be put in **red bags**and sent **for sterilisation and recycling** at the CBWTFs.
- Where waste is not going to CBWTF incinerators, **deep burial systems** should be properly maintained as per protocols taking all due precautions to prevent harm to the environment.

A **deep burial system** involves burying biomedical waste in 2-meter-deep ditches and covering them with a layer of lime and soil.

- CPCB should take further **initiatives like conducting an appropriate programme** on Doordarshan, All India Radio and other media platforms to create mass awareness about the correct disposal of Covid-19 biomedical waste.
- The government should set up recycling plants across the country (as envisaged under the **Smart cities project**) under the **Public-Private Partnership (PPP) Model**.
- The Centre should form a national protocol combining the Biomedical Waste Management Rules, 2016 with the guidelines on <u>Extended Producer Responsibility</u> (EPR) for producers of plastic.
- The Centre should **incentivise start-ups** and **Small and Medium Enterprises** (SMEs) offering solutions for Covid-19 waste segregation and treatment.
- There should be **constant and regular monitoring** by the central and state PCBs, Health
  Departments in the states/UTs and by the high-level task team at Central level with further
  coordination by CPCB.

# **Risk of Interplanetary Contamination on Mars**

### Why in News

Recently, astrobiologists have **expressed concerns** about possible **'interplanetary contamination'** on Mars as ambitious space missions are proliferating the space along with advances in commercial flight.

Interplanetary contamination refers to **biological contamination of a planetary body** by a space probe or spacecraft, either deliberate or unintentional.

## **Key Points**

- **Context:** In the past several missions have launched to Mars e.g. **China's Tianwen-1** which aims to land on the Red Planet's surface, and the **UAE's Al Amal (Hope)** which does not involve a landing, but an orbital mission that will study the Martian atmosphere.
  - The USA will soon launch its Perseverance mission, which would be the <u>National</u>
     <u>Aeronautics and Space Administration's (NASA)</u> 10<sup>th</sup> successful Mars landing since
     1975.
    - The Perseverance is a **rover name for NASA's Mars 2020 mission**.
    - It will seek signs of ancient life and collect rock and soil samples from the planet.
  - In the past, **space missions have established physical contact** with astronomical bodies such as **comets and asteroids**, and crewed missions have landed on the Moon.
  - However, since these **bodies are known to be hostile to life**, the possibility of their contamination has not been a pressing issue.
- **Type of Contamination:** There are two types of contamination i.e. forward and backward contamination.
  - Forward Contamination: It means the transport of Earth-based microbes to other celestial bodies.
    - Since, presence of liquid water was already discovered on Mars there is a <u>chance that</u> <u>Mars has life</u> and it is an ethical obligation on humanity to ensure that microbes from Earth do not disturb a possible Martian biosphere, allowing it to evolve in its own way.
    - Secondly, Earth-based organisms could spoil the integrity of the Red Planet's samples that rovers want to study – a highly disruptive concept for scientists who are looking for signs of native Martian life.
  - **Back Contamination:** It is the **transfer of extraterrestrial organisms** (if they exist) into the Earth's biosphere.

The scientists rule out back contamination with respect to Mars sample-return mission as their biochemistry would be markedly different from that on Earth.

• Planetary Protection:

**United Nations Outer Space Treaty of 1967:** It <u>serves as a defence mechanism</u> against the militarisation of space and also requires nations to worry about contamination risks.

- Its 110 state parties include the USA, Russia, China, and India.
- To ensure compliance with the **Treaty**, **the Committee on Space Research** (COSPAR) lays down a **'planetary protection policy'** that aims to limit the number of microbes sent to other planets, as well as ensuring that alien life does not cause havoc on Earth.

• **Impact of the Policy:** The guidelines have had far-reaching implications on human spacecraft design, operational procedures, and overall mission structure.

Both NASA and the **European Space Agency** (ESA) have also appointed Planetary Protection Officers.

#### • Solutions:

**Spacecraft Sterilisation:** To prevent forward contamination, space missions take care to ensure that spacecraft are sterilised.

- Previous Mars missions, such as NASA's Viking landers of the 1970s, were all sterilised before being launched into space.
- NASA's Perseverance mission was also postponed for a second time to resolve a potential contamination issue.
- **Containment:** In the case of back contamination, sterilisation would not be an option—as this would ruin the extraterrestrial samples.

**Containment** would be the only option to break the **chain of contact between possible alien microbes** and life on Earth.

## **Way Forward**

- In the present times nations have been fighting a race to get a strategic edge and **compromising the ethical aspects** of space technology. Therefore, it is important to acknowledge that space may not become **purely a military domain** due to weaponisation of the space.
- Space must be used only for peaceful purposes and any violation of Outer Space must not be tolerated.
- The natural biosphere of earth and other planetary bodies must be ensured through international cooperation.

#### **Source: IE**

# **New Research on Smallpox About its Origins**

### Why in News

Recently, a new study carried out by an international team of researchers provides fresh insight into the origins of the **Smallpox disease**.

- It suggested that the smallpox was in existence as early as during the Viking age in the 8<sup>th</sup> century
   CE
- The Viking Age was the period during the Middle Ages when the Norsemen (name given to the Scandinavian Vikings) undertook colonizing, conquest and trading throughout Europe, and reached North America in the 9<sup>th</sup> and 10<sup>th</sup> century.

## **Smallpox**

- **About:** Smallpox is a contagious disease, caused by the Variola Virus (VARV).
- **Transmission:** It transmits through the droplets released from coughing, sneezing, and face to face contact with an infected person.
- **Eradication:** One of the deadliest diseases known to mankind, it is also the **only one to have been** eradicated by vaccination.

In 1980, this was declared as completely eradicated after the global immunization campaign led by the **World Health Organization** (WHO) with the help of the smallpox vaccine.

• Vaccine: The first effective vaccine was discovered by Edward Jenner in 1796.

## **Key Points**

• **Origin:** The **origins of smallpox** have always been unclear.

Until now, the earliest confirmed case of the **disease** was found in the **mummified remains** of a 17<sup>th</sup> century Lithuanian child, even though written records suggest that it is much older.

- Major Findings:
  - Finding Virus Sequence: The Variola virus sequence was recovered from 13
     Northern European individuals including 11 dated to 600–1050 CE, overlapping the Viking Age.
  - Pan European Presence: These sequences, combined with early written records of VARV epidemics in southern and western Europe, suggest a pan-European presence of smallpox from the late 6<sup>th</sup> century.

According to the study, the virus was **circulating among people even earlier**, about 1700 years back at the time when the Western Roman empire declined and people were migrating across Eurasia.

- Genetic Makeup: It also suggests that the genetic makeup of the viral strain recovered from the 11 individuals is different from the modern version which was eradicated in 1979-80.
  - The Viking variant of the virus is part of a previously unknown, and now extinct virus group, or clade.
  - Both the modern smallpox and the ancient variant descended from a common ancestor but diverged 1700 years ago.
- **Course of Evolution:** It was suggested as a benign disease (less dangerous) considering that smallpox may have in the past been a mild.
  - In the course of evolution, the active gene count of the virus is shown to have reduced due to mutation.
  - Therefore, the researchers speculated that **smallpox became more deadly over time**.
- Implications of the New Research:
  - **Information about the Viruses:** The results of the study does not have any impact on the current spread of the **Covid-19 pandemic**. However, it does provide important information on **how a virus may become deadlier over time**.
  - Trace of History: Nonetheless, it is important to note that smallpox is the latest among several other diseases whose history in recent years have been rewritten by ancient DNA analysis.
    - Earlier, In 2015, a study noted that the **plague** that killed millions in medieval Europe can be traced as far back as the Bronze age between 3000 and 1000 BCE.
    - In 2018, on the other hand, **Hepatitis B** was seen to have origins in the Bronze age as well.
  - **Ways of Spread:** These findings would help to understand the ways in which diseases have affected human populations in the past.
    - The DNA evidence suggests that diseases such as **plague and hepatitis B** are associated with **major prehistoric migrations** something that seems now to be true of variola too
    - It would also help to seek answers of whether <u>migrations</u> brought the diseases to new areas or the <u>emergence of disease triggered</u> people to move.

## **Source: IE**

## Dare to Dream 2.0

## Why in News

The <u>Defence Research and Development Organisation (DRDO)</u> has launched an innovation contest 'Dare to Dream 2.0' on the 5<sup>th</sup> death anniversary of former President <u>Dr. APJ Abdul Kalam</u>.

## **Key Points**

- The 'Dare to Dream 2.0' is an open challenge **to promote the innovators and startups** of the country, for **innovation in defence and aerospace technologies** in the country after the call of **Atmanirbhar Bharat**.
- Award money, up to Rs.10 lakh for startup and Rs. 5 lakh to individual category, will be given to the winners
- Dr. APJ Abdul Kalam is known as the **missile man** as he was part of many successful projects for development of ballistic missiles and satellite launch vehicle technologies during his lifetime.

  He was the 11<sup>th</sup> President of India (from 2002-2007).

# **Source: PIB**