

## **Agriculture Infrastructure Fund**

### **Why in the news?**

- **Prime Minister of India** has recently launched the **financing facility of 1 lakh crore rupees** under the **Agriculture Infrastructure Fund**.

### **About the Agriculture Infrastructure Fund**

- The **Union Cabinet** had given the approval to this **new pan India Central Sector Scheme-Agriculture Infrastructure Fund in July 2020**.



### 3RD TRANCHE OF ECONOMIC STIMULUS: KEY MEASURES

- Setting up of Rs 1 lakh cr agriculture fund for farm-gate infrastructure
- Rs 4,000cr for herbal cultivation in India
- Rs 10,000cr scheme for formalisation of micro food enterprises (MFE)
- Rs 20,000cr for fishermen through Pradhan Mantri Matsya Sampada Yojana
- Animal Husbandry Infrastructure Development fund worth Rs 15,000cr
- Rs 500 crore scheme for infrastructure development related to bee-keeping
- Amendments to Essential Commodities Act to enable better price realisation for farmers
- Agriculture marketing reforms to provide marketing choices to farmers
- Extension of 'Operation Greens' to all fruits and vegetables
- Legal framework to help farmers fix their own price for products
- Launch of National Animal Disease Control Programme for foot and mouth disease with outlay of Rs 13,343cr

### **Objective**

- The scheme shall **provide a medium - long term debt financing facility for investment in viable projects for post-harvest management Infrastructure and community farming assets through interest subvention and financial support.**
- Under the scheme, **Rs. One Lakh Crore** will be provided by **banks and financial institutions** as loans to:
  - a. Primary Agricultural Credit Societies (PACS)
  - b. Marketing Cooperative Societies
  - c. Farmer Producers Organizations (FPOs)
  - d. Self Help Group (SHG)
  - e. Farmers, Joint Liability Groups (JLG)
  - f. Multipurpose Cooperative Societies
  - g. Agri-entrepreneurs, Startups
  - h. Aggregation Infrastructure Providers

- i. Central/State agency or Local Body sponsored Public Private Partnership Project
- **All loans** under this **financing facility** will have **interest subvention** of **3% per annum** up to a **limit of Rs. 2 crores**.
  - This **subvention** will be **available for a maximum period of seven years**.
  - Further, **credit guarantee coverage** will be **available for eligible borrowers from this financing facility** under **Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE)** scheme for a loan up to **Rs. 2 crore**.
  - **The Fund** will be **managed and monitored through an online Management Information System (MIS) platform**.
  - The **National, State and District level Monitoring Committees** will be set up to **ensure real-time monitoring and effective feed-back**.
  - **The duration of the Scheme shall be from FY2020 to FY2029 (10 years)**.

#### Significance

- The **Project** by way of **facilitating formal credit to farm and farm processing-based activities** is expected to **create numerous job opportunities in rural areas**.
- It will enable **all the qualified entities to apply for loan** under the fund.
- The **online platform** will also **provide benefits** such as **transparency of interest rates offered by multiple banks**.
- It will also help in **faster approval process** as also **integration with other scheme benefits**.

#### Note

##### About Central Sector Scheme

- Under **Central sector schemes**, it is **100% funded by the Union government** and implemented by the **Central Government machinery**.
- **Central sector schemes** are mainly formulated on **subjects from the Union List**.
- The **Central Ministries** also implement some schemes **directly in States/UTs** which are called **Central Sector Schemes** but resources under these **Schemes are not generally transferred to States**.

Topic- GS Paper III–Agriculture

Source- The Hindu

#### Tabletop airport

##### Why in the news?

- Recently a **Boeing 737 of Air India Express** on a special **‘Vande Bharat’** repatriation flight from **Dubai to Kozhikode** overshot the runway while **landing at Calicut International Airport**.
- The accident has once again turned the **spotlight on operations** to what are called **‘tabletop airports’ in India**.



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### About tabletop airport

- It is an **airport located** and built on top of a **plateau or hilly surface**, with **one or both ends** of the **runway overlooking a drop**.
- The **airports in the country** which would count as “**tabletops**”, are namely **Lengpui (Mizoram), Shimla and Kullu (Himachal Pradesh), Pakyong (Sikkim), Mangaluru (Karnataka), Kozhikode and Kannur (both Kerala)**.
- There is no such term as a ‘**tabletop airport**’ in any **International Civil Aviation Organisation (ICAO) technical document**.
- The **Directorate General of Civil Aviation (DGCA)** refers to these airports in this manner by way of **highlighting safety measures** during **operations to these runways**.



### Related Information

#### About Directorate General of Civil Aviation

- The **Directorate General of Civil Aviation (DGCA)** is the **statutory body formed under the Aircraft (Amendment) Bill, 2020**.
- This **directorate investigates aviation accidents and incidents**.
- It is **headquartered in New Delhi**.

#### Note:

- The **Government of India** is planning to replace the **organisation with a Civil Aviation Authority (CAA)**, modelled on the lines of the **American Federal Aviation Administration (FAA)**.

Topic- GS Paper I– Geography

Source- The Hindu

### K. V. Kamath Committee

#### Why in the news?

- The **Reserve Bank of India** has recently **constituted an expert committee** under the **chairmanship of veteran banker K.V. Kamath** to make recommendations on norms for the **resolution of COVID-19 related stressed loans**.



### About the K. V. Kamath Committee

- The committee will submit its recommendations on the financial parameters to the RBI, which in turn, will notify the same along with modifications, if any, in 30 days.
- The other members of the committee include Diwakar Gupta, T.N. Manoharan, Ashvin Parekh, and Sunil Mehta, CEO of Indian Banks' Association, as the member-secretary.
- The Indian Banks' Association (IBA) will function as the secretariat to the committee and the committee will be fully empowered to consult or invite any person it deems fit.

### Related Information

#### About Indian Banks' Association

- It has been formed on 26 September 1946 as a representative body of management of banking in India operating in India - an association of Indian banks and financial institutions based in Mumbai.
- With an initial membership representing 22 banks in India in 1946, IBA currently represents 237 banking companies operating in India.
- IBA was formed for development, coordination and strengthening of Indian banking, and assist the member banks in various ways including implementation of new systems and adoption of standards among the members.

#### Composition

- Indian Banks' Association is managed by a managing committee, and the current managing committee consists of one chairman, 3 deputy chairmen, 1 honorary secretary and 26 members.

Topic- GS Paper III–Economics

Source- The Hindu

### Kavkaz 2020 exercise

#### Why in the news?

- India will take part in the Russian Kavkaz 2020 strategic command-post exercise next month.
- From India a small tri-service contingent will take part in the exercise to be held in Astrakhan in southern Russia.



#### About Kavkaz 2020 exercise

- The Kavkaz 2020 is also referred to as **Caucasus-2020**.
- It is an exercise aimed at assessing the ability of the armed forces to ensure military security in Russia's southwest.

- The invitees also include **China and Pakistan**, apart from **other member-states of the Shanghai Cooperation Organisation**.

#### Related Information

- Recently in **June 2020**, **India and Chinese military contingents** marched at the **Victory Day Parade at Red Square in Moscow** to mark the **75th anniversary of World War II**.
- **Defence Minister Rajnath Singh** represented **India at the Parade** also attended by his **Chinese counterpart** though there were no **bilateral engagements between them**.

Topic: GS Paper III- Defense

Source: The Hindu

### Mauritius declares environmental emergency

Why in the news?

- The **island country of Mauritius** has declared an **environmental emergency** after a ship that **ran aground** on a reef in the **Indian Ocean** started **leaking fuel**.



#### About Environmental Emergency

- It is defined as a **sudden-onset disaster** or **accident resulting from natural, technological, or human-induced factors**, or a **combination of these** that **causes or threatens to cause severe environmental damage** as well as **loss of human lives and property**.

#### Related Information

About Mauritius



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The advertisement features a green background with a white border. On the left, there is a small image of a person sitting at a desk with a laptop. The text is in white and red, and there is a red button with white text that says 'CHECK HERE'.

- It is **officially known as the Republic of Mauritius**, is an **island nation** in the **Indian Ocean** off the **south-east coast of the African continent**.
- It includes the **eponymous main island of Mauritius and Rodrigues, Agaléga and St. Brandon**.
- The **islands of Mauritius and Rodrigues** form part of the **Mascarene Islands**, along with **nearby Réunion, a French overseas department**.
- **The capital and largest city, Port Louis, is located on Mauritius.**

Topic- GS Paper III–Environment

Source- The Hindu

### **New Guinea has the world's richest island flora: Study**

**Why in the news?**

- Recently According to a recent study by the **University of Zurich in Switzerland** has found that the **island of New Guinea** has the **world's second largest in area** and the **largest tropical island**.



**Other finding of the study**

- It has the **globe's richest collection** of plants.
- The **number of plant species that the list enumerates — 13,634 — is 20 per cent more species than Madagascar or Borneo**.
- The **plant family with the maximum number of species** is orchids while a **third of the species** are trees.
- Some **68 per cent of the plants in the list** are **endemic and not found anywhere else in the world**.

**Related Information**

**About New Guinea**



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- **New Guinea** is the **world's second-largest island** and the **largest island wholly or partly** within the **Southern Hemisphere and Oceania**.
- It is located in **Melanesia in the southwestern Pacific Ocean** which is separated by the shallow **150-kilometre wide Torres Strait** from the **Australian continent**.
- It is **neighboured by a large number of smaller islands** to the **west and east**.
- The **eastern half of the island** is the **major land mass of the independent state of Papua New Guinea**.
- The **western half**, known as **Western New Guinea or West Papua**, forms a **part of Indonesia and comprises** the provinces of **Papua and West Papua**.

**Topic- GS Paper III–Environment**

**Source- Down to Earth**

### **Himalayan Geothermal Springs major source of CO<sub>2</sub>**

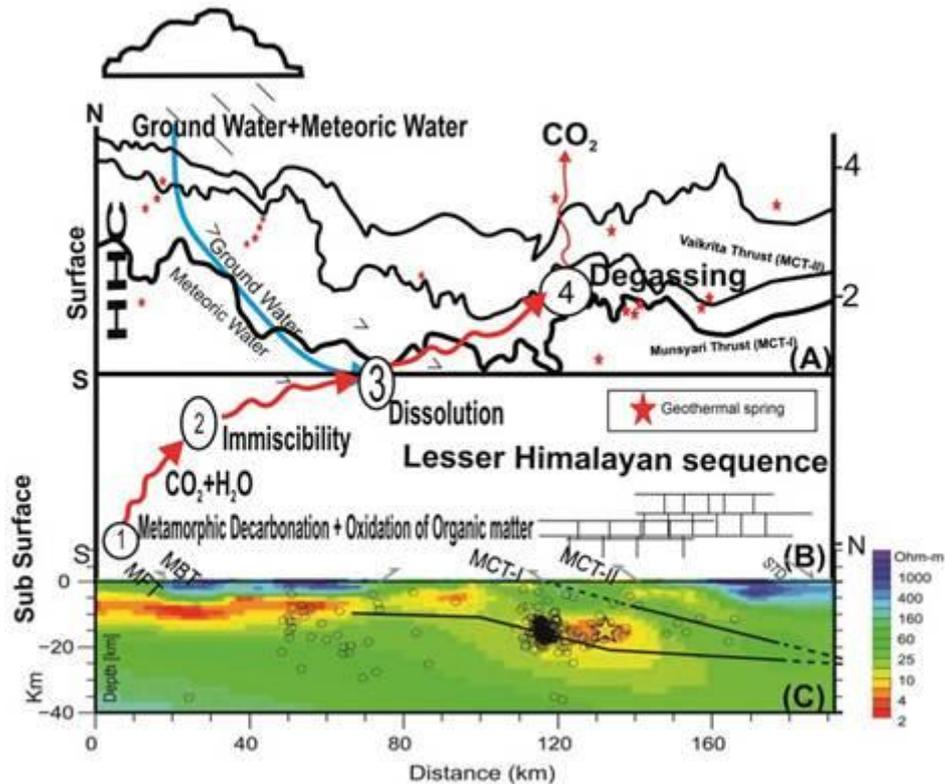
**Why in the news?**

- Recently the **study published in the scientific journal *Environmental Science and Pollution Research*** has found that **Himalayan Geothermal Springs** release **huge amount of carbon dioxide in the atmosphere**.



**About Himalayan geothermal springs**

- The Himalayan geothermal springs which **cover about 10,000 square km** in the **Garhwal region of Himalaya**, show a **significant discharge of Carbon dioxide (CO<sub>2</sub>) rich water**.
- **Carbon outflux** from **Earth's interior** to the **exosphere through volcanic eruptions, fault zones, and geothermal systems** contribute to the **global carbon cycle** that effects **short- and long-term climate of the Earth**.
- **Himalaya** hosts about **600 geothermal springs** having **varied temperature and chemical conditions**.
- Their **role in regional and global climate**, as well as the **process of tectonic driven gas emission**, needs to be **considered while estimating emissions** to the **carbon cycle and thereby to global warming**.
- The **estimated carbon dioxide degassing** (removal of dissolved gases from liquids, especially water or aqueous solutions) **flux is nearly  $7.2 \times 10^6$  mol/year** to the atmosphere.



### Related Information

#### Step Taken by the government to address climate changes

- **India ratified** the United Nations Framework Convention on Climate Change (UNFCCC) in **1993** and the **Kyoto Protocol** in **2002**.

#### National Action Plan on Climate Change (NAPCC)

- The **Action Plan** effectively pulls together a **number of the government's existing national plans** on **water, renewable energy, energy efficiency, agriculture** and others – bundled with additional ones – into a **set of eight missions**.
- The **Prime Minister's Council on Climate Change** is in charge of the **overall implementation of the plan**.
- The plan document **elaborates on a unique approach** to reduce the **stress of climate change** and uses the **poverty-growth linkage** to make its point.

#### Paris Agreement

- Under the **2015 Paris Agreement**, **India** set **three major goals** to be achieved for the **period between 2020 and 2030**—increase the **share of non-fossil fuels to 40%** of the total electricity generation capacity, to reduce the emission intensity of the economy by **33 to 35%** by **2030** from **2005** levels.
- It will help to **create additional carbon sink of 2.5 -3 billion tonnes of CO2** equivalent through additional forest and tree cover.
- **India** has emerged as a **global leader in renewable energy**, where investments top those into fossil fuel.
- After **adopting its National Electricity Plan (NEP) in 2018**, India remains on track to **overachieve its "2°C compatible" rated Paris Agreement climate action targets**.
- **Since 2010**, the **Indian Government** has **doubled the coal tax three times**, reaching **400 rupees per tonne** (around **USD 3.2 per tonne**) of coal produced and imported in the **2016–2017** budgets.

#### Rural Electrification Policy, 2006



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- The **policy promotes renewable energy technologies** where grid connectivity is **not possible or cost-effective**.

#### **Energy Conservation Building Code, 2006**

- This **regulatory code is designed to ensure energy efficiency** in all **buildings with above 500 kVA connected load** or **air-conditioned floor area over 1000 square metres**.

#### **Topic- GS Paper III–Environment**

**Source- PIB**

### **Submarine Optical Fibre Cable (OFC)**

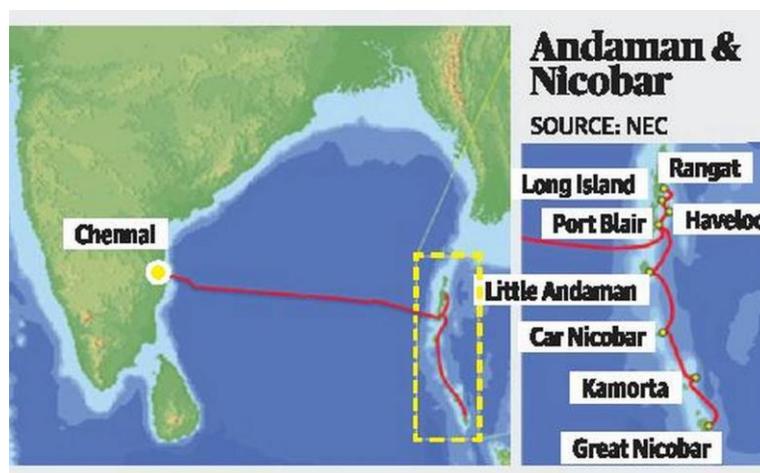
#### **Why in the news?**

- Recently **Prime Minister** has **launched and dedicated to the nation**, the **submarine Optical Fibre Cable (OFC)** connecting **Andaman & Nicobar Islands** to the mainland through video conferencing.
- The **foundation stone** for this project was laid by the **PM on 30th December 2018 at Port Blair**.



#### **About Submarine Optical Fibre Cable**

- It will **ensure high-speed broadband connectivity, fast mobile and landline telecom services** and will give a **big boost to the local economy**.
- The **submarine OFC link will deliver bandwidth of 2 x 200 Gigabits per second (Gbps) between Chennai and Port Blair**, and **2 x 100 Gbps between Port Blair and the other islands**.
- **4G mobile services**, which were constrained due to limited backhaul bandwidth provided via satellite will also see a major improvement.



### Benefits

- It will help to **establish Andaman and Nicobar** on the **world tourist map** in a major way.
- It will help to **Ease of Living to every Citizen.**
- **Increase Opportunities** through **Digital India** especially in **improving online education, tele-medicine, banking system, online trading.**
- It also helps in the **Act-East policy, the role of Andaman and Nicobar in India's strong relations with East Asian countries** and other countries connected to the sea is very high and is going to increase.
- **High Impact Projects & Better Land, Air and Water Ways**
- It will help to **boost International Maritime Trade.**

<b>100 GIGABIT PER SEC SPEED</b>	
<p>➤ The CANI cable system will have speed of 100 gigabit per second</p> <p>➤ The eight islands to be connected with Chennai include Port Blair, Little Andaman (Hut bay), Car Nicobar, Kamorta, Great Nicobar (Campbell bay), Havelock, Long and Rangat Islands</p> <p>➤ It will provide secure, reliable, robust, affordable</p>	<p>Representative Image</p>  <p>telecom facility to these islands</p> <p>➤ The total route length of the project is estimated to be 2,200 km</p> <p>➤ NEC Corporation, a Japanese company, will handle the project</p>

Topic- GS Paper III–Science and Technology  
Source- PIB

### Hindu Women's Inheritance Rights

Why in the news?

- Recently **Supreme Court** expanded on a **Hindu woman's right to be a joint legal heir** and **inherit ancestral property** on terms **equal to male heirs.**



What is the ruling?

- A **three-judge Bench** headed by **Justice Arun Mishra** ruled that a **Hindu woman's right to be a joint heir** to the **ancestral property is by birth** and **does not depend on whether her father was alive or not** when the law was enacted in 2005.

- The Hindu **Succession (Amendment) Act, 2005** gave **Hindu women the right to be coparceners or joint legal heirs** in the same way a **male heir** does.
- Since the **coparcenary is by birth**, it is not **necessary that the father coparcener should be living as on 9.9.2005**.

#### **What is the 2005 law?**

- The **Mitakshara school of Hindu law** codified as the **Hindu Succession Act, 1956** governed **succession and inheritance of property** but only recognised males as legal heirs.
- The law applied to everyone **who is not a Muslim, Christian, Parsi or Jew by religion. Buddhists, Sikhs, Jains and followers of Arya Samaj, Brahma Samaj are also considered Hindus for the purposes of this law.**
- In a **Hindu Undivided Family**, several **legal heirs through generations can exist jointly**.
- Traditionally, only **male descendants of a common ancestor** along with their **mothers, wives and unmarried daughters** are considered a joint Hindu family.
- The **legal heirs** hold the **family property jointly**.
- **Women were recognised as coparceners or joint legal heirs for partition arising from 2005.**
- **Section 6 of the Act** was amended that year to make a **daughter of a coparcener** also a coparcener by birth **“in her own right in the same manner as the son”**.
- The law also gave the **daughter the same rights and liabilities “in the coparcenary property** as she would have had if she had been a son”.
- The law applies to **ancestral property and to intestate succession in personal property** – where succession happens as per law and not through a will.

#### **Law Commission Recommendation**

- The **174th Law Commission Report** had also recommended this **reform in Hindu succession law**.
- Even before the **2005 amendment**, **Andhra Pradesh, Karnataka, Maharashtra, and Tamil Nadu** had made this change in the law, and **Kerala had abolished the Hindu Joint Family System in 1975**.

**Topic- GS Paper II–Women Empowerment**

**Source- Indian Express**

### **Volcanic eruption in Indonesia’s Mount Sinabung**

#### **Why in the news?**

- Recently **Indonesia’s Mount Sinabung volcano** erupted, sending a **column of ash and smoke** more than **16,000 feet into the air**.
- The **volcano became active in 2010**, erupting after **nearly 400 years of inactivity**.



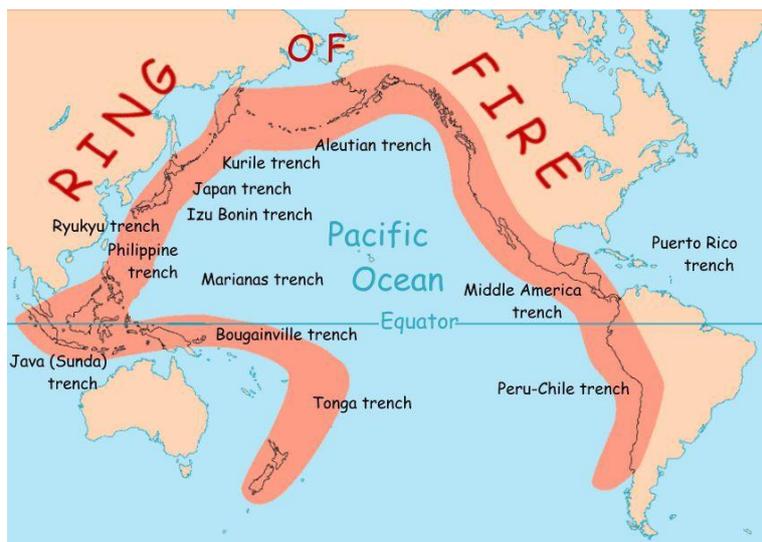
### Related Information

- **Indonesia** is home to **many active volcanoes**, due to its position on the “**Ring of Fire**”, or the **Circum-Pacific Belt**, which is an area along the **Pacific Ocean** characterised by **active volcanoes and frequent earthquakes**.
- The Ring of Fire is home to **about 75 per cent of the world’s volcanoes** and about **90 per cent of its earthquakes**.

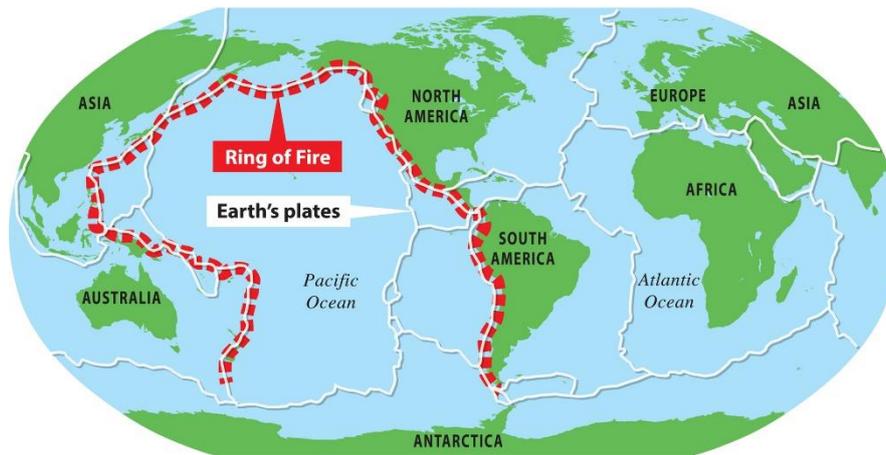


### What is the Ring of Fire?

- The **Ring of Fire** is a **Pacific region** home to **over 450 volcanoes**, including three of the **world’s four most active volcanoes** – **Mount St. Helens in the USA, Mount Fuji in Japan, and Mount Pinatubo in the Philippines**.
- The Ring of Fire is sometimes called the **circum-Pacific belt**.



- **Around 90% of the world’s earthquakes** occur in the **Ring of Fire**, and **80% of the world’s largest earthquakes**.



### Location

- It stretches along the **Pacific Ocean coastlines**, where the **Pacific Plate grinds against other, smaller tectonic plates** that form the Earth's crust – such as the **Philippine Sea plate** and the **Cocos and Nazca Plates** that line the edge of the Pacific Ocean.
- The **40, 000 kilometre horse-shoe-shaped ring loops** from **New Zealand to Chile**, passing through the coasts of **Asia and the Americas** on the way.

### How was the Ring of Fire formed?

- The **Ring of Fire** is the result from subduction of **oceanic tectonic plates** beneath lighter **continental plates**.
- The area where these **tectonic plates** meet is called a **subduction zone**.

### Why do volcanoes erupt?

- A **volcano** can be **active, dormant, or extinct**.
- An **eruption** takes place when **magma (a thick flowing substance)**, formed when the **earth's mantle melts**, rises to the surface.
- Because magma is **lighter than solid rock**, it can rise through **vents and fissures** on the **surface of the earth**.
- After it has erupted, **it is called lava**.
- Not all **volcanic eruptions** are **explosive**, since **explosivity depends on the composition** of the magma.
- When the **magma is runny and thin**, **gases can easily escape it**, in which case, the **magma will flow out** towards the surface.
- On the other hand, if the **magma is thick and dense**, **gases cannot escape it**, which builds up **pressure inside until the gases escape** in an explosion.

**Topic- GS Paper III–Disaster management**

**Source- Indian Express**

### Five eco-tourism zones in Addu atoll of island

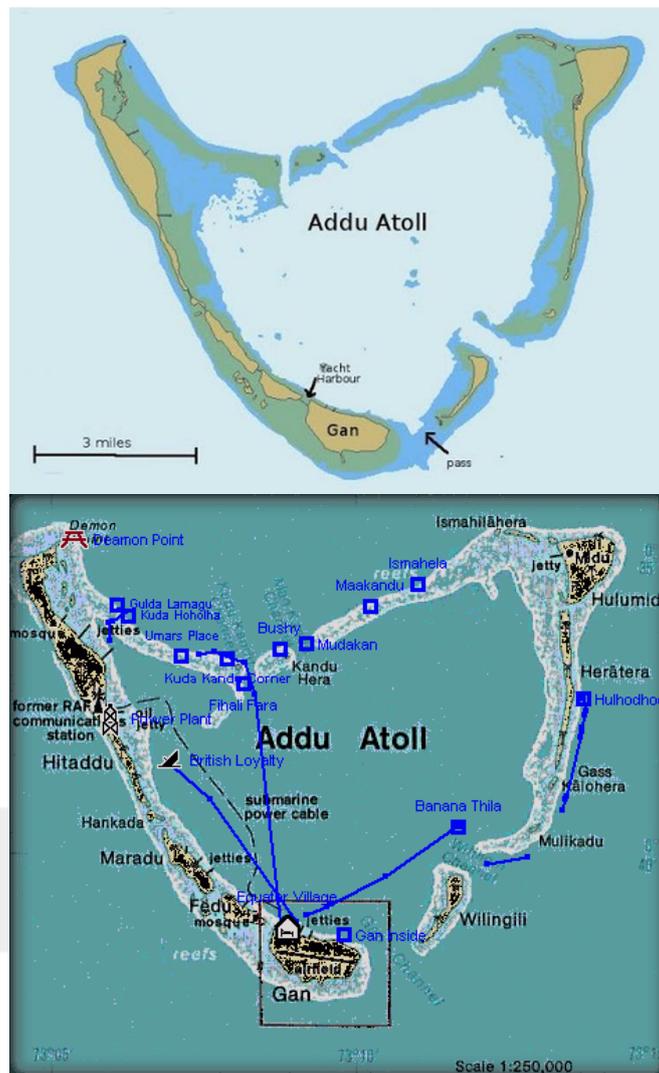
#### Why in the news?

- Recently **India, Maldives ink contract** for development of **five eco-tourism zones** in **Addu atoll of island nation**
- These **eco-tourism zones** are part of **grant projects being implemented** under the **High-Impact Community Development project (HICDP) scheme**.

#### Related Information

##### About Addu atoll

- **Addu Atoll**, also known as **Seenu Atoll**, is the **southernmost atoll of the Maldives**.
- Addu Atoll is the **location of Addu City**, one of the **three cities of the Maldives**.



- Addu City consists of the **inhabited areas of Addu Atoll**, namely the **natural islands of Hulhudhoo, Meedhoo, Maradhoo, Feydhoo, and Hithadhoo**.
- Addu Atoll has several other **inhabited and uninhabited islands**, including the **island of Gan**, where **Gan International Airport** is located.

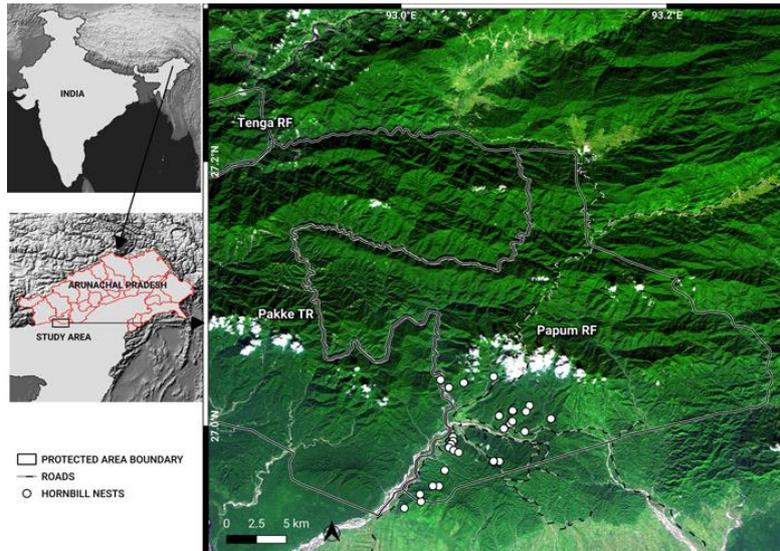
**Topic- GS Paper 1–Geography**

**Source- The Hindu**

### **Papum Reserve Forest**

**Why in the news?**

- A study based on **satellite data** has **flagged a high rate of deforestation** in **Papum Reserve Forest** which is a **major hornbill habitat** in **Arunachal Pradesh**.



### About Papum Reserve Forest

- It is an **Important Bird and Biodiversity Areas (IBAs)** in **Arunachal Pradesh**.
- It is **located between Itanagar Wildlife Sanctuary to the east and Pakke Wildlife Sanctuary to the west**.
- **Papum Reserve Forest** forms part of the **Eastern Himalayas Endemic Bird Area**.
- A large part of the site is covered by **Sub-tropical Dry Evergreen and Semi-evergreen Forests**, while the higher areas are **under Subtropical Broadleaf Hill Forest cover**.

### Related Information

#### About Great Hornbill (*Buceros bicornis*)

- The **great hornbill** also known as the **concave-casqued hornbill**, **great Indian hornbill**, or **great pied hornbill**.
- It is one of the **larger members of the hornbill family**.



### Conservation Status and Threats

- It is evaluated as **Vulnerable (VU)** on the **IUCN Red List of Threatened Species**.
- It is listed in **Appendix I of CITES**.
- The bird is state bird of **Kerala and Arunachal Pradesh**.

### Distribution

- These birds found in the **Indian subcontinent and Southeast Asia**

### About Hornbill Festival

- It is **one of the largest indigenous festivals** organised by the **state government of Nagaland** to **promote tourism** in the state.
- The **festival is celebrated annually** in the **first week of December** to **preserve, protect and revive the uniqueness and richness of the Naga heritage.**
- The **festival** is considered the “**Festival of Festivals**” in Nagaland.

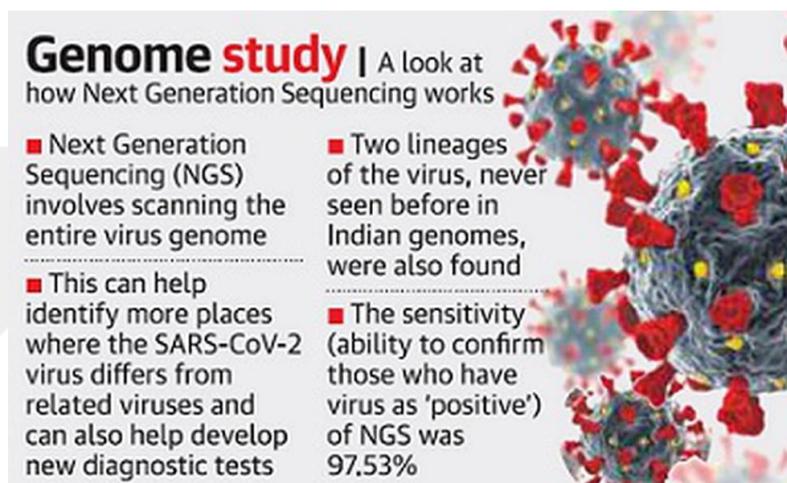
Topic- GS Paper III–Environment

Source- The Hindu

### Mega labs to boost COVID-19 testing

#### Why in the news?

- The **Council of Scientific and Industrial Research (CSIR)** is working on developing “**mega labs**” to ramp up **testing for COVID-19** as well as **improve the accuracy rate.**
- The labs will be repurposing large machines, called **Next Generation Sequencing machines (NGS).**



**Genome study |** A look at how Next Generation Sequencing works

- Next Generation Sequencing (NGS) involves scanning the entire virus genome
- This can help identify more places where the SARS-CoV-2 virus differs from related viruses and can also help develop new diagnostic tests
- Two lineages of the virus, never seen before in Indian genomes, were also found
- The sensitivity (ability to confirm those who have virus as 'positive') of NGS was 97.53%

#### About Next Generation Sequencing machines (NGS)

- NGS are normally **used for sequencing human genomes**, to **sequence 1,500 to 3,000 viral genomes** at a go to **detect the SARS-CoV-2 virus.**
- The **CSIR** has partnered with the **U.S.-based Illumina**, a company that **specialises in the manufacture of NGS machines.**

#### What can be detected through these machines?

- These **machines can substantially** detect the **presence of the virus** even in **several instances** where the **traditional RT-PCR** (reverse transcription polymerase chain reaction) tests fail. It helps in identifying:
  - **SARS-CoV-2 virus** by **exploring only specific sections**
  - **Trace the evolutionary history of the virus**
  - **Track mutations** more reliably

#### How NGS is advantageous over RT-PCR?

- **Unlike the RT-PCR** that needs **primers and probes** - a **key hurdle in operationalizing** such tests on a mass scale early in the pandemic - the **NGS only needs custom reagents.**

Note:



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- **India** has now **five such sequencers**, costing **₹4 crore** each, are currently available in India.

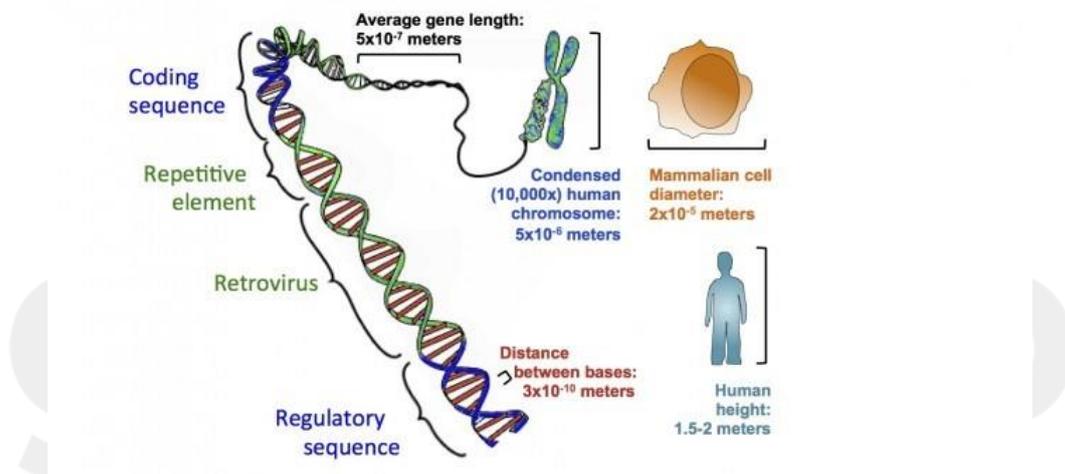
### Related Information

#### About Genome Sequencing

- **Genome sequencing** is figuring out the **order of DNA nucleotides**, or **bases, in a genome** – the order of Adenine, Cytosine, Guanine, and Thymine that make up an organism's DNA.
- The **genome method** can read a **bigger chunk of virus genome** and thereby **provide more certainty** that the **virus in question** is indeed the **coronavirus of interest**.

#### Genome Sequencing in India

- **CSIR** (Council of Scientific and Industrial Research) **plans to undertake genome sequencing** of a sample of nearly **1000 Indian rural youth to determine unique genetic traits**, susceptibility (and resilience) to disease.
- This is the first time that such a large sample of Indians will be recruited for a detailed study.



#### About Genome India Project

- The **Genome India Project**, a **collaboration of 20 institutions** including the **Indian Institute of Science** and **some IITs**, will enable new efficiencies in medicine, agriculture, and the life sciences.
- Its **aim is to ultimately build a grid of the Indian “reference genome”**, to fully understand the **type and nature of diseases** and traits that comprise the **diverse Indian population**.

#### Significance of Genome India Project

- The **Genome India Project** is inspired by the **Human Genome Project (HGP 1990-2003)** - an **international programme** that led to the decoding of the entire human genome.
- **HGP has a major diversity problem as most genomes (over 95%) mapped under HGP have been sourced from urban middle-class white people.**
- In this context, the **GIP aims to vastly add to the available information on the human species**. It will **help in having authentic data** at a scale of the Indian population and the diversity here. This diversity can be depicted by **Horizontal and Vertical Diversity**

**Topic- GS Paper III–Science and Technology**

**Source- The Hindu**

## **Krishi Megh**

### **Why in the news?**

- Recently **Union Agriculture Minister** has launched **ICAR's data recovery centre - Krishi Megh**.



### **About Krishi Megh**

- Krishi Megh has been set up under the **National Agricultural Higher Education Project (NAHEP)**, funded by both the **government and World Bank**.
- It is a **data recovery centre** setup to **protect the data of the Indian Council of Agricultural Research (ICAR)**.
- The centre has been set up at **National Academy of Agricultural Research Management (NAARM), Hyderabad**.

### **Objective**

- The **objective of Krishi megh** is to provide **more relevant and high-quality education** to the **agricultural university students** that are in tune with the **New Education Policy - 2020**.

### **Significance**

- The centre was set up under the **National Agricultural Higher Education Project (NAHEP)**.
- It plays a **key step forward** towards **digital agriculture of New India**.

### **Key Features of Krishi Megh**

- For **meeting the services and infrastructure needs of Digital Agriculture of National Agricultural Research and Education System (NARES)**.
- The existing **Data Centre (ICAR-DC)** built during 2012 shall be strengthened with **cloud computing infrastructure**.
- **ICAR-Krishi Megh at NAARM Hyderabad** is synchronized with **ICAR-Data Center at ICAR-IASRI, New Delhi** has been built to mitigate the risk, enhance the quality, **availability and accessibility of e-governance, research, extension and education in the field of agriculture in India**.
- **NAARM, Hyderabad** has been chosen as it lies in **different seismic zone w.r.t. ICAR-Data Center at ICAR-IASRI, New Delhi**.
- **Hyderabad** is also **suitable as skilled IT manpower** is available along with other **suitable climatic conditions** such as **low humidity level** which is **controllable in the data center environment**.

**Topic- GS Paper III–Agriculture**

**Source- PIB**