

# 1. The second part of the IPCC's Sixth Assessment Report

## Topic: Environment and Ecology

**In News:** The second part of the IPCC's (Intergovernmental Panel on Climate Change) Sixth Assessment Report has warned of multiple climate changes even if steps are taken to reduce greenhouse gas emissions.

### More on the Topic:

- The following are the findings of the report:
- The ability of human beings, and natural systems, to cope with the changing climate was already being tested, and further rise in global warming would make it even more difficult to adapt.
- **over 3.5 billion people, over 45% of the global population,** were living in areas highly vulnerable to climate change.
- **India is one of the vulnerable hotspots,** with several regions and important cities facing very high risk of climate disasters such as flooding, sea-level rise and heat-waves.
- While strong actions to reduce greenhouse gas emissions in the near term, in the next 20 years, would substantially reduce the threats, and the projected damages, they would not eliminate them all.
- If the temperature rise crossed **the threshold of 1.5°C from pre-industrial times,** then many changes could be irreversible.
- There were **"feasible and effective" adaptation options** which could reduce the risks to people and nature. But the **effectiveness of these options decreases sharply with further increases in temperature.**
- Adaptation measures are therefore very important but in most places, it was nowhere close to what is required to be done.
- The gaps in adaptation was a result of **lack of funds and political commitment,** and also **the absence of reliable information and a sense of urgency.**

### What's new in the Report?

- The latest report has, for the first time, made **an assessment of regional and sectoral impacts of climate change.**
- It has included risks to, and vulnerabilities of, mega-cities around the world. For example, it has said Mumbai is at high risk of sea-level rise and flooding, while Ahmedabad faces serious danger of heat-waves.
- Such granular information was not available in previous assessment reports. Flooding in Mumbai and heat-waves in Ahmedabad are common occurrences.
- What this report has done is **to look at granular data affecting these events, and quantified these risks,** so that there is a much clearer understanding of the threats posed to these cities.





- For the first time, the IPCC report has looked at **the health impacts of climate change**. It has found that climate change is increasing **vector-borne and water-borne diseases** such as malaria or dengue, particularly in sub-tropical regions of Asia.
- It has also said **deaths related to circulatory, respiratory, diabetic and infectious diseases, as well as infant mortality**, are likely to increase with a rise in temperature.
- Increasing frequency of extreme weather events like heatwaves, flooding and drought, and even air pollution was **contributing to under-nutrition, allergic diseases and even mental disorders**.

#### Significance of the Report:

- IPCC reports **form the scientific basis on which countries across the world build their policy responses** to climate change.
- These reports, on their own, are not policy prescriptive: **They do not tell countries or governments what to do**.
- They are only meant to present factual situations with as much **scientific evidence as is possible**.
- The report can be of immense help **in formulating the action plans to deal with climate change, particularly for countries that lack the resources** or the capacity to make their own impact assessments.
- These reports also form the basis for **international climate change negotiations** that decide on the responses at the global level. It is these negotiations that have produced the Paris Agreement, and previously the Kyoto Protocol.

#### About Paris Agreement:

- The Paris Agreement, negotiated on the basis of the Fifth Assessment Report, seeks to keep the rise in global temperatures **“well below” 2°C from pre-industrial times, while “pursuing efforts” to limit it to 1.5°C**.
- The Sixth Assessment Report, however, has presented lots of evidence to suggest that **pursuing a 2°C target could be disastrous**, and more ambitious actions need to be taken to keep the temperature rise within 1.5°C.

Source: Indian Express

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## 2. Cheetah Action Plan

### Topic: Environment and Ecology

**In News:** A five-member delegation from India visited Namibia to hold discussions on translocating Cheetah to India.



### More on the Topic:

- The Centre government has approached the government of Namibia, known as the world's cheetah capital, for support in sending a few cheetahs for re-introduction into the wild in a scientific and carefully-monitored manner.
- Indian delegation is hopeful of introduction of Cheetah by mid-2022.
- The cheetah is the only large carnivore to have gone extinct in India in the 1950s due to hunting and loss of habitat.
- With help from the Wildlife Institute of India and the Wildlife Trust of India, the ministry will be translocating around 8-12 cheetahs from South Africa, Namibia and Botswana – which have the world's largest populations of the animal. The big cats will live at Kuno Palpur National Park in Madhya Pradesh.
- This could be the world's first inter-continental cheetah translocation project.
- **Importance of Reintroduction of a Specie:**
- Reintroductions of large carnivores have increasingly been recognised as a strategy to conserve threatened species and restore ecosystem functions.
- **About Cheetah:**
- The cheetah is **one of the oldest of the big cat species**, with ancestors that can be traced back more than five million years to the Miocene era.
- The cheetah is also the world's fastest land mammal that lives in Africa and Asia.
- **IUCN status:** African Cheetah- Vulnerable; Asiatic Cheetah - Critically Endangered.
- Asian Cheetah only have 40-50 species remaining. They are found only in Iran.
- Around 6,500-7,000 African cheetahs present in the wild.

**Source: Indian Express**

### 3. Easy Credit Scheme for FPOs

#### Topic: Agriculture

**In News:** The government may help Farmer Producer Organisations (FPOs) access easy credit at subsidised interest rates currently available to farmers.

#### More on the Topic:

- FPOs are **voluntary organizations controlled by their farmer-members** who actively participate in setting their policies and making decisions.
- FPOs operatives **provide education and training** for their farmer-members, elected representatives, managers, and employees so that they can contribute effectively to the development of their FPOs.



#### Significance of FPOs:

- **Economy of Scale:** The size of land holding is meagre in India. Nearly 86% of farmers are small and marginal with average land holdings in the country being less than 1.1 hectares. Economies of scale can be achieved only through better land holding size. FPOs help to pool lands together and achieve economy of scale.
- **Economics of Aggregation:** The FPO can provide low-cost and quality inputs to member farmers. For example, loans for crops, purchase of machinery, input agri-inputs (fertilizers, pesticides, etc.) and direct marketing after procurement of agricultural produce.
- **Better Negotiation:** FPO can help farmers compete with large corporate enterprises in bargaining, as it allows members to negotiate as a group and can help small farmers in both input and output markets.
- **Better Marketing:** Challenges in marketing their products due to lack of economic strength could be overcome by FPOs.

Source: Indian Express

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## 4. Montreux Convention

### Topic: International Relations

**In News:** Turkey's foreign minister said that the situation in Ukraine had become a war, a declaration that authorises Ankara to activate the Montreux Convention and ban Russian war vessels from entering the Black Sea through the Bosphorus and Dardanelles straits.



### More on the Topic:

- According to the 1936 Montreux Convention Regarding the Regime of the Straits, often referred to simply as the Montreux Convention, **Turkey has control over both the Bosphorus and Dardanelles straits.**
- In the event of a war, the pact gives Ankara the right to regulate the transit of naval warships and to block the straits to warships belonging to the countries involved in the conflict.
- Russia's location on the Black Sea complicates the situation.
- **Article 19 of the treaty contains an exception for the countries on the Black Sea** that can effectively undermine Turkey's power in blocking the Russian warships entering or exiting the Black Sea.
- According to the treaty, vessels that Russia decides to bring into the Black Sea or take out, will have to remain there until the end of the war.
- Invoking the treaty will make it more complicated for Russia to balance its military presence in the Black Sea and the East Mediterranean.

### About Bosphorus and Dardanelles straits:

- The Bosphorus and Dardanelles straits, also known as the Turkish Straits or the Black Sea Straits, **connect the Aegean Sea and the Black Sea** via the Sea of Marmara. It is the only passage through which the Black Sea ports can access the Mediterranean and beyond.
- Over three million barrels of oil, about three per cent of the daily global supply, mostly produced in Russia, Azerbaijan, and Kazakhstan, pass through this waterway every day.
- The route also ships large amounts of iron, steel, and agricultural products from the Black Sea coast to Europe and the rest of the world.

Source: The Hindu

## 5. Bhasha Certificate Selfie campaign

### Topic: Government Schemes

**In News:** The Education Ministry has launched Bhasha Certificate Selfie to encourage cultural diversity.

#### More on the Topic:

- The 'Bhasha Certificate Selfie' initiative is encouraging people to upload their selfie with the certificate from their social media accounts using the hashtag #BhashaCertificateSelfie.
- The campaign aims to promote **Bhasha Sangam mobile app**, developed by Ministry of Education and MyGov India.
- Using the app, people can learn 100+ sentences of daily use in as many as 22 scheduled Indian languages.
- The initiative, under the aegis of Ek Bharat Shreshtha Bharat will aim to ensure that people acquire basic conversational skills in Indian languages. To achieve this, a target of 75 lakh people acquiring basic conversational skills has been set.
- It will also **promote multilingualism** and to foster the spirit of Ek Bharat Shreshtha Bharat.

Source: PIB



## 6. Minimum Assured Return Scheme (MARS)

### Topic: Government Programmes

**In News:** The National Pension System (NPS), is preparing to launch a guaranteed return scheme, Minimum Assured Return Scheme (MARS), which will provide savers and people from the salaried class an option for their investments.



### More on the Topic:

- This will be the first scheme from the pension regulator that will offer a guaranteed return to investors.
- The actual returns will depend on the market conditions. Any shortfall will be made good by the sponsor, and the surplus will be credited to the subscribers' account.
- Two options are likely to be on offer. Under the fixed guarantee option, the guaranteed return is fixed along the accumulation phase. Under the floating guarantee option, the guaranteed rate of return is not fixed along the savings phase.

### About National Pension Scheme:

- National Pension System (NPS) is a pension cum investment scheme launched by Government of India to provide old age security to Citizens of India.
- It brings an attractive long term saving avenue to effectively plan your retirement through safe and regulated market-based return.
- NPS was made available to all Citizens of India from May 2009.
- Any individual citizen of India (both resident and Non-resident) in the age group of 18-65 years can join NPS.
- However, OCI (Overseas Citizens of India) and PIO (Person of Indian Origin) card holders and Hindu Undivided Family (HUFs) are not eligible for opening of NPS accounts.

**Source: Indian Express**

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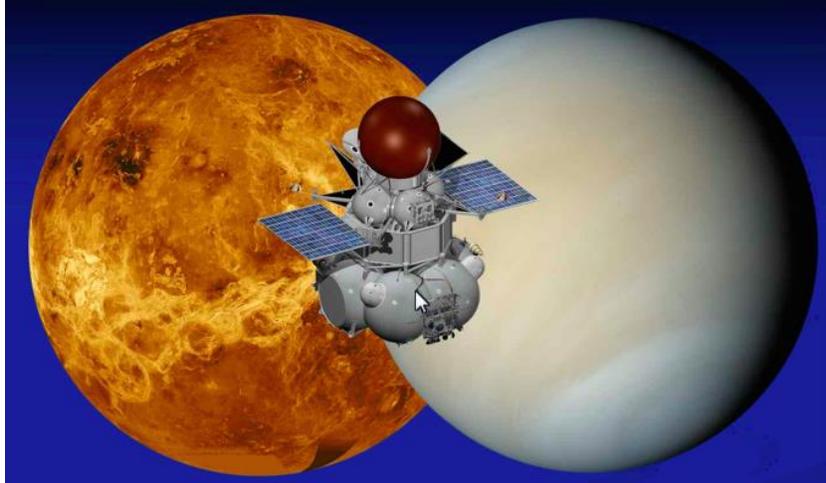
## 7. Venera-D Venus Exploration Mission

### Topic: Science and Technology

**In News:** Russia Suspended Pact With NASA On Venera-D Venus Exploration Mission Amid New US Sanctions.

#### More on the Topic:

- Russia plans to send the **Venera-D probe to Venus in November 2029**. The spacecraft with orbital, landing, demonstration and atmospheric modules was initially planned as a Russia-US venture.
- In 2020, however, Roscosmos said that the Venera-D mission was going to be an independent national project and was not expected to attract significant international cooperation.
- Russia is also aiming to send a Venus exploration mission in June 2031, and another one in June 2034, to study the planet's atmosphere and, possibly, collect soil samples.
- According to NASA, the US is planning two missions to Venus with launches expected in the 2028-2030 timeframe.
- **Deep Atmosphere Venus Investigation of Noble gases, Chemistry and Imaging (DAVINCI+)** consists of a probe that will descend into the Venus' shrouded atmosphere.
- A second mission dubbed **Venus Emissivity, Radio Science, InSAR, Topography, and Spectroscopy (VERITAS)** will orbit the planet with a synthetic aperture radar able to penetrate clouds that hide the planet's surface from astronomers on Earth.



**Source: Indian Express**

#### MCQs:

1. Which of the following statement/s is/are true?

1.Amarasimha is associated with Harshavardhana.

2.Kalidasa is associated with Chandra Gupta-II.

(a) 1 only

(b) 2 only



- (c) Both 1 and 2
- (d) Neither 1 nor 2

**Ans b**

**2 Lokottaravadin sect is related to?**

- (a) Jainism
- (b) Buddhism
- (c) Shaivism
- (d) Vaishnavism

**Ans: b**

**3. Which of the following phrases defines the nature of the 'Hundi' generally referred to in the sources of the post-Harsha period?**

- (a) An advisory issued by the king to his subordinates
- (b) A diary -to be maintained for daily accounts
- (c) A bill of exchange
- (d) Ancient Mapping technology

**Ans: c**

**4. Which of the following statement/s are true?**

- 1. The Strait of Malacca connects Indian Ocean to the South China Sea**
- 2. It is a prominent trade route between East Asia and West Asia-Europe.**

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

**Ans c**



**5. If a particular plant species is placed under Schedule VI of The Wildlife Protection Act, 1972, what is the implication?**

- (a) A licence is required to cultivate that plant
- (b) Such a plant cannot be cultivated under any circumstances.
- (c) It is a Genetically Modified crop plant.
- (d) Such a plant is invasive and harmful to the ecosystem

**Ans: a**