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La Cumbre Volcano

Why in News?

- A striking image of the La Cumbre volcano located on Fernandina Island – the third largest island in the Galápagos Islands – garnered a lot of attention when it first erupted last month. But as of late April, the lava is still flowing and making its way down the iguana-covered mountain which is affecting their habitat.



- La Cumbre currently erupts around once every four years and is located directly above the magma hotspot, known as a mantle plume, that birthed this uninhabited Pacific island and the rest of the Galápagos.
- La Cumbre has previously experienced much more violent eruptions.
- The most recent example was in 1968, when water from the volcano's crater lake mixed with submerged magma, creating a powerful explosion.
- However, this is unlikely to happen during the current eruption, according to Earth Observatory.

Humid Heatwaves in India

Why in the News?

- Odisha and Gangetic West Bengal have been experiencing heatwave conditions since April 15 and April 17, respectively, according to the India Meteorological Department (IMD). Interior Karnataka has been hit by heatwaves since April 23.

More About the News

- The La Cumbre volcano is located around 1,125 kilometres off mainland Ecuador and erupted for the first time since 2020.
- The images taken by NASA's Earth Observatory last month, showed the lava slowly making its way out of a fissure near the summit of the volcano and into the mountain's tree-covered slopes.
- Since then, lava has continually poured out of the volcano, and in early April, the river of molten rock reached the island's coastline around 6 miles (10 km) from La Cumbre.
- As the lava met the ocean, large plumes of steam rose from the waves as the water cooled the superheated rock.



More About the News

- Moisture levels in many parts of India are much higher than normal. States like Odisha and West Bengal are even experiencing

humid heatwaves, which have made living conditions unbearable for residents.

- This is happening because of moisture being pumped in by multiple weather systems over the country, which is being further fuelled by the general warming of the atmosphere and the oceans.
- The sub-Himalayan parts of West Bengal also started suffering from heatwaves since April 24, along with the Rayalaseema region of Andhra Pradesh. Rare heatwaves started affecting Kerala on April 26, along with Bihar.
- When the moisture levels in the atmosphere are high, the air becomes saturated and cannot hold more water vapour. This increases the felt ambient temperature of an area and also leads to less sweating in humans and animals.
- This increases the internal body temperatures as there is no way for heat to escape and increases discomfort. When such conditions prevail for a prolonged period of time, it impacts human health, especially the heart and brain, and can also be fatal.
- There are two huge anticyclones over the Arabian Sea and the Bay of Bengal currently, which are bringing winds on shore to Odisha and West Bengal and to the Konkan region of Maharashtra.
- Anticyclones are regions of high atmospheric pressure where the winds blow in a downward sinking motion, compress and heat up. They cause heatwaves by making winds move in a downward direction and blocking other weather systems that may dissipate heatwaves.

Supersonic Missile-Assisted Release of Torpedo (SMART) system

Why in the News?

- Supersonic Missile-Assisted Release of Torpedo (SMART) system was successfully flight-tested on May 01, 2024 from Dr APJ Abdul Kalam Island off the coast of Odisha.



More About the News

- SMART is a next-generation missile-based light-weight torpedo delivery system, designed and developed by the Defence Research and Development Organisation (DRDO) to enhance the anti-submarine warfare capability of the Indian Navy far beyond the conventional range of lightweight torpedo.
- This canister-based missile system consists of several advanced sub-systems, namely two-stage solid propulsion system, electromechanical actuator system, precision inertial navigation system etc.
- The system carries advanced light-weight torpedo as payload along with parachute-based release system.
- The missile was launched from the ground mobile launcher.
- Several state-of-the-art mechanisms such as symmetric separation, ejection and velocity control have been validated in this test.
- The development of the system will further enhance the strength of Indian Navy.

Kathmandu Tops List For 'Unhealthy Air' Worldwide

Why in the News?

- According to IQAir, an organization that measures the real-time pollution of 101 cities in the world, Kathmandu was found to be the most polluted city in the world.

More About the News

- The air quality in Kathmandu was at the top of the list of cities with 'unhealthy air' in the world.



- In terms of pollution, Kathmandu, New Delhi, Chiang Mai in Thailand, Hanoi in Vietnam, Bangkok in Thailand and Dhaka in Bangladesh are ranked first, second, third, fourth and fifth respectively.
- According to the 'World Air Quality Index-Ranking', which measures the level of air pollution around the world, Kathmandu's air is at the top of the world's unhealthy air list.
- Air pollution affects the heart and blood vessels, lungs, brain, eyes, nose, ears, and throat and also increases the risk of asthma, cancer and other diseases.
- According to the Ministry of Health and Population of Nepal, the number of patients in hospitals and health facilities across the country has increased with the growing summer heat and pollution.
- The Ministry of Health and Population has urged people to wear masks given the

increase in air pollution in Kathmandu valley.

Inheritance Tax

Why in the News?

- Inheritance tax, often dubbed the "death tax," has resurfaced as a topic of debate in India following recent comments by Indian Overseas Congress chairman, Sam Pitroda.

More About the News

- It was levied as per Estate Duty Act of 1953, but was subsequently repealed because of not achieving its objective of "curbing the social inequality".
- This tax is imposed on the property that a deceased person leaves to a lawful heir or successor.
- Despite India being one of the nations where the inheritance tax is not presently imposed, it is crucial to take into account that it was levied in the past as estate duty before it was scrapped in the year 1985 after the recommendation of the Economic Administration Commission.
- The primary and most compelling argument put up by researchers in favor of the inheritance tax is that it will enhance government revenue, further boost the Gross Domestic Product (GDP), and ultimately lead to the overall economic growth of the country.



- Nevertheless, inheritance tax is not without imperfections. The main argument against it is that it may slow down savings and investment process. People will reluctant to earn more because they will think a major



part of their wealth will be taxed after their death.

- This may have adverse effects on economic growth and innovation, which would be detrimental to a country or a region. Furthermore, despite the perception that inheritance tax is complex and administratively burdensome, it is actually
- lifts compliance costs to both taxpayers and the government.
- As the prominent economist and lawyer Nani Palkhivala stated, "the health of our economy won't improve unless we give our fiscal regulations the "S" factor and make them Sane, Simple, and Stable.



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