

## Prelim Bits 08-11-2021 | UPSC Daily Current Affairs

### South Asian Descent Gene & Covid Risk

*Researchers have identified that the South Asian ancestry gene LZTFL1 is responsible for doubling the risk of respiratory failures from COVID-19.*

- LZTFL1 gene found in 60% of people with South Asian ancestry may explain the excess deaths seen in some of the UK communities and the impact of pandemic during the second wave in India.
- Even so, the gene is possibly just one factor that could have led to these outcomes, since socio-economic factors also partly explain why some communities were more severely impacted by the disease.
- While 60% of people with South Asian ancestry carry this gene, 15% of those with European ancestry carry it and 2% of people with Afro-Caribbean ancestry also carry it.
- So, this gene does not explain the higher death rates that were reported for black people and some minority ethnic communities.
- **Vulnerability** - The study found that the higher risk version of the gene prevents the cells lining the airways and lungs from responding to the virus properly.
- This means that the presence of this gene changes how an individual's lungs respond to the virus, thereby increasing risk of developing respiratory failure from COVID-19.
- But while the gene impacts the response of the lungs, it does not impact the immune system, therefore, researchers believe that people carrying this version of the gene should respond normally to the vaccines.

### Causes of Earth's First Mass Extinction

*A recent paper has come up with a new reason behind the first mass extinction, also known as the Late Ordovician mass extinction.*

- For decades, the prevailing school of thought in our field is that global warming causes the oceans to lose oxygen and thus impact marine habitability, potentially destabilising the entire ecosystem.
- But the new paper notes that the **cooling climate likely changed the ocean circulation pattern.**
- This disrupted the flow of oxygen-rich water from the shallow seas to deeper oceans, leading to a mass extinction of marine creatures.
- Upper-ocean oxygenation in response to cooling was anticipated because atmospheric oxygen preferentially dissolves in cold waters.
- However, a lack of oxygen or anoxia in the lower ocean expanded to the deep oceans during the period.
- [Generally, anoxia in Earth's history is associated with volcanism-induced global warming.]
- This deep-sea anoxia affected ocean circulation, which is an important component of the climatic system.
- The paper concludes that climate cooling may have led to changes in nutrient cycling, primary

producer communities which ultimately drove the Late Ordovician mass extinction.

Mass Extinction	Period	Specialty
Devonian mass extinction	375 million years ago	Wiped out about 75% of the world's species
Permian mass extinction or Great Dying	250 million years ago	Wiped out about 95% of all species
Triassic mass extinction	200 million years ago	Wiped out about 80% of Earth's species, including some dinosaurs
Ordovician mass extinction	445 million years ago	Wiped out about 85% of all species
Cretaceous-Paleogene mass extinction (K-T or K-Pg extinction)	66 million years ago	Wiped out non-avian dinosaurs

Some researchers have pointed out that we are currently experiencing a sixth mass extinction as the result of human-induced climate change.

## Kadar Tribe

*Some families of Kadar tribe has got pattas for homestead inside the Anaimalai Tiger Reserve (ATR).*

- Kadar is a small tribe of southern India residing along the hilly border between Cochin in Kerala and Coimbatore in Tamil Nādu.
- Kadars are one of the five primitive tribal groups in Kerala, where they constitute nearly 5% of the State's total tribal population.
- **Economy** - The Kadar live in the forests and do not practice agriculture.
- They build shelters thatched with leaves and shifting location as their employment requires.
- They have long served as specialized collectors of honey, wax, sago, cardamom, ginger, and umbrella sticks for trade with merchants from the plains. Many Kadar men work as labourers.
- **Language** - They speak the Dravidian languages of Tamil and Kannaḍa.
- **Religion** - Modern kadars like to known as Hindus. Their favourite deities are Ayappan, Kali and Malavazhi.
- Primitive polytheism and the worship of invisible gods have considerably disappeared. But a few elders still worship the rising sun.
- Their customs and conventions indicate that they had been strong animists not long ago.
- **Status** - The Kadar tribe has been listed as a Particularly Vulnerable Tribal Groups (PVTG) in Kerala, but not in Tamil Nadu.
- A tribe listed in the PVTG allows the tribe to have habitat rights under the Forest Rights Act 2006.

## Decline in the Edible Oil prices

*In a bid to reign in continuous rise in the cooking oil prices since past one year, the Government has taken some active measures.*

- The Government has cut the basic duty on Crude Palm Oil, Crude Soyabean Oil and Crude Sunflower Oil from 2.5% to nil.
- The Agri-cess on these Oils has been brought down.

- To control prices of edible oils, the government has
  1. Rationalised import duties on palm, sunflower and soyabean oils,
  2. Futures trading in mustard oil on NCDEX has been suspended and
  3. Stock limits have been imposed.
- Major edible Oils players have cut wholesale prices in order to give relief to consumers during festival season.
- Despite international commodity prices being high, interventions have been taken by Central Government along with State Governments' proactive involvement have led to reduction in prices of edible oils.
- Also, the government is taking steps to improve the production of secondary edible oils, especially rice bran oil to reduce the import dependence.

## Coast Guard Ship 'Sarthak'

*In a significant boost to the maritime safety and security of the nation, the indigenously built Indian Coast Guard Ship 'Sarthak' was commissioned and dedicated to the nation.*

- ICGS Sarthak will be based at Porbandar in Gujarat and operate on India's Western Seaboard under the Operational and Administrative Control of the Commander, Coast Guard Region (Northwest).
- ICGS Sarthak is commanded by a Deputy Inspector General and has complement of 11 Officers and 110 men.
- ICGS Sarthak is 4th in the series of 5 OPVs being built by Goa Shipyard Limited for the ICG.
- These OPVs are multi-mission platforms capable of undertaking concurrent operations.
- The 105-meter-long ship displacing 2,450 tons is propelled by two 9,100 kilowatt diesel engines designed to attain a maximum speed of 26 knots.
- The ship is fitted with state-of-the-art equipment, machinery, sensors and weapons which enables it,
  1. To function as a command platform and
  2. To undertake mandated Coast Guard charter of duties including search & rescue, combating maritime crimes and preserving & protecting the marine environment.

## Reference

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