

## Prelim Bits 20-11-2023 | UPSC Daily Current Affairs

### Halal

*Recently, Uttar Pradesh government has ordered a state-wide ban on products being sold with halal certificates.*

- An Arabic word meaning '**permissible**' in **English**.
- In India, it mostly refers to the **slaughtering technique of Muslims**.
- As per Islamic dietary laws, it refers to food that is procured, processed, and traded in compliance with Islamic belief.

*Kashrut dietary rules are followed by orthodox Jews.*

- **Coverage** - Consumables (meat, fish, shellfish and vegetarian food) including medicines, personal care products, packaging materials, animal feed, etc

*In the Quran, 'halal' refers to lawful (and allowed) and the term '**haram** refers to unlawful (and forbidden). Anything that are associated with pig and intoxicants (alcohol) are considered as non-halal (haram).*

- **Criteria** - In case of meats, it must satisfy requirements relating to their **source, the way of animal killing and processing**.
  - For example, animals must be alive and healthy at the time of slaughter and it must be done through a single cut to the jugular vein, carotid artery and the windpipe.

**Carotid artery** carries blood from the brain to the heart and vice versa.

- **Halal certificates** - It assures the legitimacy of product and doesn't have anything to do with meat.
- **India does not have an official regulator for the certification** but various halal certifying agencies provides companies, products, or food establishment's halal certifications.
- Their legitimacy lies in their name-recognition among Muslim consumers and from regulators in Islamic countries.

***Halal India's certification*** is recognised by Qatar's Ministry of Public Health, the UAE's Ministry of Industry and Advanced Technology, and Malaysia's

Department of Islamic Development, among others.

- **Significance** – International accreditations are particularly important for products meant for export to Islamic countries.

## Reference

[Indian Express| Halal certification](#)

## Chhath Puja

Recently, the 4 day celebration of Chhath Puja started off in many parts of Northern India.

- **Chhath** – It means ***Shashthi in Sanskrit meaning the 6<sup>th</sup>***.
- **Celebration** - It honours 'the Sun' which is celebrated ***6 days after Diwali or on the 6<sup>th</sup> day of Kartik month*** while some celebrate in Chaitra month (Chaiti Chhath).

Chhath Puja involves a fast without water, offerings to **Usha** and **Pratyusha**, the light of the rising and the setting Sun, while standing in a water body. **Chhathi maiyya** or Mother Chhathi, Sun's sister, is considered an exacting but generous deity.

- **Location** – In ***Bihar, parts of eastern Uttar Pradesh and Nepal*** and it has become a lot more visible across the country.
- **Activities** – Fasting, cleaning river banks and the roads leading up to those banks and preparing thekuas (the prasad for the festival).
  - The 1<sup>st</sup> day is called *naha (sea) kha (meal)*.
  - The 2<sup>nd</sup> day is called kharna,
  - The 3<sup>rd</sup> day is called Sanjh ka Arghya, or the evening offering.
- **Uniqueness** – It is a **coming together of the Bihari migrants** who immerse in their culture and homeland once more.
- **No priests** are involved and people of any caste can participate.
- Both ***women and men observe the fast for God***, and not for husband or children (like in Karwa Chauth or Jitiya).
- The offerings are of seasonal, locally produced and thus easily accessible fruit.

### Origin theories of Chhath Puja

- A carryover from the time that man worshipped nature.
- ***In Ramayana***, Lord Ram and Goddess Sita were said to have fasted for the Sun god after returning victorious to Ayodhya.
- ***In Mahabharata***, when the Pandavas were in exile, Draupadi observed a fast and prayed to the Sun and Karna also organised an elaborate ceremony in honour of Surya (the Sun), his father.

## Reference

## Kadalundi Mudflats

*Sand sedimentation is causing the mudflats of Kadalundi to vanish.*

- **Kadalundi** - A village on the southwest coast in Kozhikode, Kerala that had about **8 hectares of nutrient rich intertidal mudflats** in the early 2000s.

***Kadalundi River** is the 6<sup>th</sup> longest River of Kerala. It originates from the Western Ghats and has 2 tributaries Olipuzha and Veliyar. The Kadalundi River and the Chaliyar River merges with the Arabian Sea at Kadalundi.*

- **Threat** - Today, it has *reduced to about 1 hectare*.
  - **Sedimentation of sand** deprives prey to migrant birds.
  - **Mangrove proliferation** is aggressively invasive and they never attracts migratory birds because of predator's presence.
  - **Kerala floods of 2018 and 2019** hastened the process of degradation in Kadalundi.

*The **Kadalundi Bird Sanctuary** is home to over a 100 species of native birds and about 60 species of migratory birds.*

***Kadalundi-Vallikunnu Community Reserve (KVCR)** is India's 1<sup>st</sup> river front community reserve. It spread across the 1.5km<sup>2</sup> and endowed with good patches of Mangrove forest.*

## Mudflats

- They are also known as *tidal flats which are coastal wetlands* that form when mud is left behind by tides or rivers.
- They're found in sheltered regions such as bayous, lagoons, estuaries, and bays.
- The majority of the sediment in a mudflat is *within the intertidal zone*, therefore the flat is submerged and exposed about twice per day and is *usually barren (without any vegetation)*.
- **Importance** - It is vital in *preventing coastal erosion* and act as habitat for birds.

*Soil contains nearly twice the amount of carbon compared to the combination of the atmosphere, vegetation, and animals.*

## Reference

[The Hindu| Kadalundi Mudflats](#)

## Maritime Continent (MC)

According to a new study, deforestation in the Maritime Continent (MC) can strengthen subtropical El Nino-Southern Oscillation (ENSO) dynamics, causing more Central Pacific and multi-year ENSOs.

ENSO is an important climate phenomenon on Earth due to its ability to change the global atmospheric circulation, which in turn influences temperature and precipitation across the globe.

- **Geography** - A region **around Southeast Asia between the Indian and Pacific oceans** (Indonesia, Philippines, Papua New Guinea and 1000's of islands and many seas).
- **Climate** - It is the warmest large span of ocean in the world, with an average temperature of about 82 degrees Fahrenheit.
- A lot of water evaporates and carried by tropical breezes, it drifts over the islands.
- **Importance** - It **drives air currents** circling around the planet, and also helps **drive El Niño and La Niña** thereby influencing the climate and weather in much of the world.



- **Impact of deforestation** - It reduces evapotranspiration and surface albedo which **impacts land-atmosphere-ocean interactions** such as the land-sea breeze.
- It might lead to **13.8% increase in La Nina events** and **44.7% increases in multi-year El Nino events**.

According to **State of the World's Forests 2022 by FAO (UN)**, forests absorbed more carbon than they emitted in 2011-2020 due to conservation efforts and it contain 662 billion tonnes of carbon which is more than half the

*global carbon stock in soils and vegetation.*

*FAO also estimated that around 420 million hectares (ha) of forest were lost between 1990 and 2020 and it was at 10 million ha per year in 2015–2020.*

## Reference

[Down To Earth| Impact of deforestation on Maritime Continent](#)

## Global Warming Potential (GWP)

*Some large industrialised meat and dairy companies promotes a new metric for measuring methane emissions, called GWP\* as a more accurate way to calculate emissions from the greenhouse gas (GHG).*

- **GWP** – It tells us how much heat a greenhouse gas (GHG) traps in the atmosphere.

Greenhouse gas	Average lifetime in the atmosphere	Global warming potential of one molecule of the gas over 100 years (Relative to carbon dioxide=1)
Carbon dioxide	50-200 years*	1
Methane	12 years	21
Nitrous oxide	120 years	310
CFC-12	100 years	10,600
CFC-11	45 years	4,600
HFC-134a	14.6 years	1,300
Sulfur hexafluoride	3,200 years	23,900

- It measures the energy absorbed by 1 ton of an atmospheric gas over a specific period relative to energy absorbed by 1 ton of Carbon di-oxide (CO<sub>2</sub>) over the same time.
  - **For example**, the GWP of methane (CH<sub>4</sub>) is around 21 times greater than that of CO<sub>2</sub>.
- Gases with a higher GWP absorb more energy, per pound, than gases with a lower GWP, and thus contribute more to warming Earth
- **Factors determining GWP** – Atmospheric lifetime, absorption spectrum, and concentration of the GHG in the atmosphere.

	GWP 100	GWP*
<b>Establishment</b>	Devised under the 2015 Paris Agreement of UNFCCC	In 2016 by Oxford University and introduced in COP24 of UNFCCC in 2018
<b>Baseline gas</b>	Carbon di-oxide (CO <sub>2</sub> )	Methane (CH <sub>4</sub> )
<b>Focus</b>	On the absolute level of emissions.	On relative changes in emissions.
<b>Timescales</b>	Over a 100-year period	Over 10-year period

*The **order of most abundant GHGs** in the Earth's atmosphere is Water vapor,*

*Carbon dioxide, Methane, Nitrous oxide, Ozone, Chlorofluorocarbons.*

## **Reference**

[Down To Earth| GWP 100 and GWP\\*](#)

