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Claude 3.5 Sonnet

Anthropic, U.S.-based artificial intelligence start-up has recently launched its latest AI model, Claude 3.5 Sonnet.

| Feature | Claude 3.5 Sonnet | GPT-4 | Gemini-1.5 Pro |
|--------------------------------|--|--|--|
| About | Claude 3.5 Sonnet can independently write, edit, and execute code with sophisticated reasoning and troubleshooting capabilities. | GPT-4 is a type of deep learning model used for natural language processing and text generation. | Gemini 1.5 Pro can process text, images, audio and video. |
| Developer | Anthropic AI | OpenAI | Google |
| Core Model | Claude | GPT-4 | Gemini-1.5 |
| Text Generation Quality | High | High | High |
| Unique Strengths | Leading in creative content, superior performance in benchmarks, advanced conversational skills | Renowned for accuracy, reliability, and technical capabilities | Strong in integration, context understanding, and balanced performance across tasks. |

References

1. [Indian Express | Claude 3.5 Sonnet](#)
2. [Anthropic | Claude 3.5 Sonnet](#)

Burp Tax

Recently, New Zealand government announced scrapping the 'burp tax'.

Burp tax is a scheme to tax greenhouse gas emissions from livestock. Livestock is the source of nearly half of New Zealand's greenhouse gas emissions. New Zealand has around 10 million cattle and 25 million sheep.

- **Aim-** It aims to **curtail methane emissions from ruminant species** they are hoofed

grazing or browsing herbivores that chew cud.

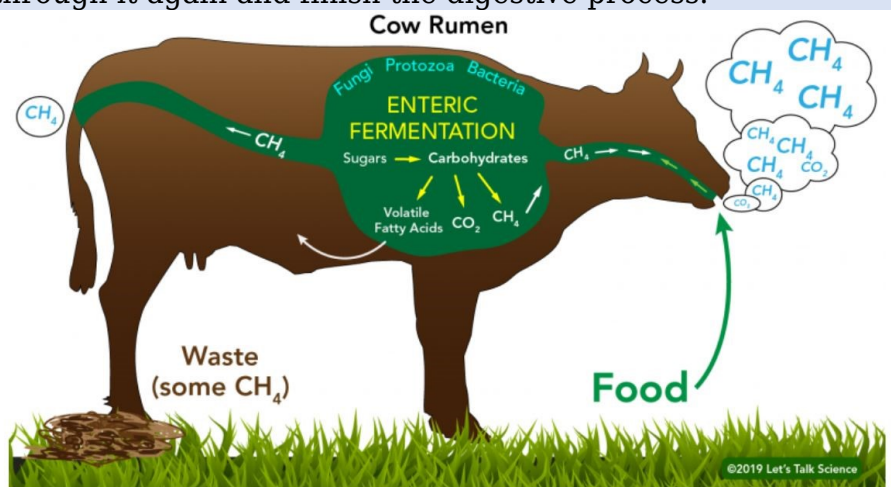
- **Introduced**- October 2022.
- **Reason for introduction of Burp Tax**- Ruminant animals release **methane** mainly through burping.

Methane is a potent greenhouse gas responsible for 30% of warming since preindustrial times, second only to carbon dioxide.

- Animals like *cows, sheep, goats, and buffaloes* produce methane during food digestion in their rumen.
- **Protest of farmers** - Farmers protested against the tax, claiming it would greatly affect their livelihoods.
- The farmers argued that the scheme coupled with other agriculture emission regulations would severely impact their livelihood.

Digestive System of Ruminants

- Ruminants such as cows, sheep, goats, and buffaloes have a special type of digestive system that allows them to break down and digest food that non-ruminant species would be unable to digest.
- Stomachs of ruminant animals have four compartments, one of which, the rumen, helps them to store partially digested food and let it ferment.
- This partially digested and fermented food is regurgitated by the animals who chew through it again and finish the digestive process.



References

1. [The India Express | Burp tax](#)
2. [Aljazeera| Burp tax](#)

International Yoga Day

The 10th annual International Yoga Day, 2024 celebrated in Srinagar, Jammu and Kashmir on June 21.

- **Origin** - The International Day of Yoga established by the United Nations on **21st June**, emphasises the importance of Yoga.

June 21st (Summer solstice) is chosen as the International Yoga Day as it is the longest day of the year in the Northern Hemisphere.

- **Aim**- It aims to spread awareness of the many advantages of yoga practice and to inspire people everywhere to include yoga into their daily routines.
- **Observed Since** - 2015.
- **United Nations recognition**- The draft resolution establishing the International Day of Yoga was proposed by India.
- The UN passed a resolution during the **69th session** of the General Assembly to proclaim June 21 as International Day of Yoga (IDY).
- It is endorsed by **175 member states**.

International Yoga Day, 2024

- **Theme, 2024** - Yoga for Self and Society.
- **Initiatives**
 - Ministry of AYUSH launched a 'Common Yoga Protocol Book in Braille' script to support visually impaired people to learn and practice yoga with convenience.
 - The Indian Space Research Organisation (ISRO) is organising a unique initiative, 'Yoga for Space', all scientists and officials of ISRO will perform Yoga together.

The 9th International Yoga Day created a Guinness World Record for participation of people of most nationalities in a yoga event.

Yoga

- Yoga is an ancient practice that originated in India, has grown into a global phenomenon.
- Yoga is a holistic practice that combines physical postures (asanas), breathing techniques (pranayama), and meditation to promote overall well-being.
- It helps to heal the mind and body by enhancing flexibility, strength, and balance, while reducing stress and anxiety through mindful breathing and meditation.
- Its philosophical roots lie in the 6 Doctrines of Salvation in Hinduism, in which Yoga forms a related and complementary pair with Sankhya, the other two pairs being Nyaya and Vaishesika, and Mimosa and Vedanta.

Reference

1. [Indian Express | International Yoga Day](#)
2. [Vikaspedia | International Yoga Day](#)

International Hydrographic Organisation (IHO)

The International Hydrographic Organisation (IHO) celebrates the World Hydrography Day recently.

Hydrography is the science that measures and describes the physical features of the navigable portion of the Earth's surface and adjoining coastal areas.

- It is an ***Intergovernmental technical consultative organisation*** established under the Convention on the IHO.
- **Aim** - It ensures that all the world's seas, oceans and navigable waters are surveyed and charted.
- **Headquarters** - Monaco, Europe.
- **Established in-** 1921.
- **Objective**
 - To ensure the accuracy and uniformity of *hydrographic* charts and publications worldwide.
 - It coordinates the activities of national hydrographic offices and promotes uniformity in nautical charts and documents.
 - It adopts the reliable and efficient methods of carrying out and exploiting hydrographic surveys
 - The development of the sciences in the field of hydrography and the techniques employed in descriptive oceanography.
- **Members-** It has ***100 member states*** as of 2024, including both coastal and landlocked nations.
- **India** is a member of the International Hydrographic Organization (IHO) since 1955.
- The member states collaborate to standardize nautical charts, publications, and hydrographic surveys.

World Hydrography Day

- It is celebrated every year on **21st of June** every year.
- **Aim-** To raise awareness about hydrography and how it plays a vital role in improved knowledge of the seas and oceans.
- **Theme, 2024-** Hydrographic Information - Enhancing Safety, Efficiency and Sustainability in Marine Activities.

Reference

1. [PIB | International Hydrographic Organisation](#)
2. [IHO | ABOUT IHO](#)

Human African Trypanosomiasis (HAT)

Recently, Chad became the 51st country to eliminate the gambiense form of human African trypanosomiasis (HAT) globally.

- **About-** Human African trypanosomiasis, also known as sleeping sickness, is a **vector-borne parasitic disease**.
- It is also known as sleeping sickness.
- **Caused by** - Protozoans of the genus Trypanosoma, transmitted to humans by bites of tsetse flies (glossina), acquired the parasites from infected humans or animals.
- Only certain species of tsetse flies transmit the disease.
- **Variants of HAT-** There are **2 forms** of HAT, determined by the subspecies of the parasite involved
 - Trypanosoma brucei gambiense - It accounts for 92% of reported cases.
 - Trypanosoma brucei rhodesiense - It is responsible for the remaining 8%.
- **Endemic to** - It is endemic in sub-Saharan Africa.
- **Symptoms** - A swollen, discolored (red, purple or brown) bump that may be painful, recurrent fever, Chills, Headache, Muscle pain, Joint pain and Skin rash.
- **Treatment-** Treatment depends on what type of protozoa caused the infection and whether the infection has spread to other areas of the body.
- Early diagnosis and treatment can cure this disease.
- **Fatal** - It is potentially a fatal disease if left untreated.

Reference

1. [DTE| Human African trypanosomiasis](#)
2. [WHO | Trypanosomiasis](#)