

Anthropocene

written by iasexam.com | 10/03/2024



Context

A committee of scientists voted down a proposal in order to declare the start of the **Anthropocene** (or the Human Epoch) in geologic time.

About

- It was coined in 2000 by scientists Paul Crutzen and Eugene Stoermer, and is proposed as a new geological epoch to reflect the significant changes to the planet because of human activities.
- The time period is derived from the Greek phrases '**anthropo**' that means 'human' and '**-cene**' used in names of geological epochs.
- The Proposed 'Human Epoch'
- The Holocene epoch commenced some 11,700 years in the past, at the end of the **Last Glacial Period (LGP)**.
- During the LGP, up to 25% of the Earth's land surface was covered through glaciers, the sea level was up to 400 feet lower, and the common temperature fell to 8°C.
- It saw the warming of the Earth, which closely corresponded with the rise and proliferation of people.
- While Homo sapiens as a species had advanced properly before the Holocene started, all of humanity's recorded history falls on this epoch.
- The effects of human activities on Earth can be seen in biodiversity loss, climate exchange, and other good sized modifications to Earth's geology, landscape, limnology, ecosystems, and weather.
- The recent proposal was aimed to establish the Anthropocene as a distinct epoch in

geologic time, marking a transformative length for Earth as a result of human activities.

- It is argued that evidence of human activities is unmissable and possibly indelible, from the peak of Mount Everest to the depths of the Mariana Trench.

The Debate Over the Start of the Anthropocene

- Various start dates for the Anthropocene have been proposed, ranging from the start of the Neolithic Revolution (12,000–15,000 years in the past), to as late as the 60s.
- Some proponents of naming a new epoch advocate the Industrial Revolution, whilst people commenced burning fossil fuels and emitting greenhouse gases including carbon dioxide, marking the Anthropocene's beginnings.
- Others argue it started in the Nineteen Fifties while humanity's impact on the earth began to surge.

What is the Controversy?

- The former head of the Anthropocene Working Group and current chair of the Subcommittee on Quaternary Stratigraphy, has demanded the result of the vote be not noted due to 'serious violations' of the statutes.
- The **Subcommission on Quaternary Stratigraphy (SQS)** voted 12 to four against the thought, with abstentions.
- The International Union of Geological Sciences (IUGS) committee decided that including an Anthropocene epoch — and terminating the Holocene — was no longer supported by the requirements used to outline epochs according to chronostratigraphy.

The Vote Against the Anthropocene

- Despite the significant use of the term, the IUGS has not officially identified the Anthropocene as a new geological epoch, and terminating the Holocene — was not supported with the aid of the standards used to define epochs consistent with chronostratigraphy.
- The committee decided that including an Anthropocene epoch — and terminating the Holocene — was no longer supported via the requirements used to outline epochs according to chronostratigraphy.

The Implications

- Despite the down vote, the concept of the Anthropocene as a transformative time for Earth as a result of human activities remains relevant.
- The Anthropocene concept has already been installed in popular tradition and is even being used as a caution flag by environmental corporations.

Conclusion

- The debate over the Anthropocene highlights the complexities involved in defining geological epochs.
- While the thought to claim the start of the Anthropocene was voted down, the concept

maintains relevance in discussions about human impact on earth.

Source: *The Indian express*

UPSC Mains Practice Question

Q.What do you understand about the Anthropocene epoch? Discuss its significance by elucidating some of the geological markers used in declaring Anthropocene epoch.(250 words)