

## **Anthropocene**

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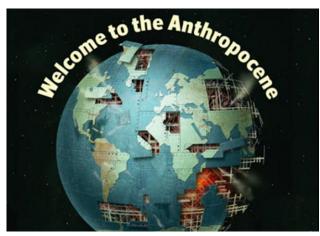


Dear Friends,

Wish you all a very happy 2018.

I feel honored to be invited by Sri Vasudeoji to write this monthly feature, and I pray to our beloved AMMA (Sri Mata Amritanandamayi Devi) to bless us all.

Today, we shall talk about our own Mother Earth, especially about our present age. We all know that some 4 to 5 billion years ago, our planet separated from the sun, and started moving around the sun in an elliptical orbit. The earth has gone through an essential cooling process, and the last one billion years, the Earth passed through different stages of the ice age, with a few intermittent periods when the ice melted and the sea levels rose higher.



Scientists estimate that we human beings

appeared on the face of the Earth approximately 200,000 years back, and we lived on Earth just like all other living beings for our survival. We all know that every living being has to eat something or other for survival, and we were no different from all other living beings. All of us were 'hunters and gatherers'. We spent almost 90% of our existence on this planet Earth in this manner, like all other animals, birds, fish etc.

About 10000 years back, our ancestors made a significant discovery that started a completely new course for mankind distinguishing ourselves from the rest of the living beings. You might have guessed by now, what I mean – it was agriculture. Our ancestors figured out that if we plant a seed on a fertile ground, and provide sufficient irrigation as required, we can grow enough food for the whole year, and we shall no longer be required to be on a 24 x 7 task of finding food.

Agriculture led to the formation of different river valley civilizations as we have studied in history, the social systems we are so familiar with, evolved in these civilizations, and slowly, we gained superiority over other stronger animals through our abilities to live together, and protect ourselves.

Let us come back to our Mother Earth. She came out of the ice ages around the same time about 10,000 years ago, and entered a period of very stable surface temperature. Scientists assign this stability to a particular tilt in the Earth's axis with respect to the Sun. This tilt changes very slightly, and at present the tilt favors this stability. This period is known as the Holocene. They predict that

the Holocene phase is likely to continue for another 10 to 20 thousand years, *provided we humans allow it to do so.* 



Paul Krutzen

This may sound surprising to most of us. How can human beings alter the course of Mother Earth? But this is precisely what the Nobel Laureate Paul Krutzen and his co-author suggested in an article in Nature in 2002. They coined the term 'Anthropocene' which means the age of the human beings. This was further proved by other scientists, led by Johan Rockstrom of the Stockholm Research Center, in an article published in 2009 and revised in 2015. In this article, they identified 9 planetary boundaries applicable to our Mother Earth. Crossing these boundaries may cause the Earth System to change irreversibly from one state to another state, known as tipping points.

We shall explain in more detail these ideas in the coming months, but for now, as we begin the New Year, suffice it to confidently say, that we human beings, through our scientific and technological abilities, have acquired enough capabilities to steer the future course of our Earth – we have entered the age of the human beings – the Anthropocene. How we live the next 30-32 years till 2050 would decide whether our Earth will continue in this present Holocene phase or enter into a completely unknown warming cycle.



Johan Rockstrom

Each one of us have a role to play in this regard, and we shall try to explain how we can help.

Wish you all a very and sustainable future – continuation of the Holocene!

