The Sixth Mass Extinction (Holocene Extinction)

The Sixth Mass Extinction, also known as the Holocene Extinction and Anthropocene Extinction, is an ongoing extinction event of species during the present era (known as the Holocene Epoch) due to human activity.

Scientists have observed that this extinction event is the serious environmental threat to human civilization.

This article will give you details about the Sixth Mass Extinction within the context of the Civil Service Examination.

Overview of Sixth Mass Extinction Event

The Sixth Mass Extinction event includes the disappearance of land animals beginning from the last glacial period. The land animals that did not evolve at the same pace as humans proved to be sensitive to their new environment and many of them died when the human population rose and learnt to hunt.

Five mass extinctions had taken place before which saw the destruction of about 70-90% of plants and animal species. These were caused by environmental changes, natural disasters like volcanic eruptions etc. Following each extinction event, it took millions of years for the surviving species to regain their previous population

The following table will give brief descriptions of the five previous extinction events

Details of 5 Extinction Events	
Timeline	Result
End Ordovician, 444 million years ago	86% of species lost
Late Devonian, 383-359 million years ago	75% of species lost
End Permian, 252 million years ago	96% of species lost
End Triassic, 201 million years ago	80% of species lost
End Cretaceous, 66 million years ago	76% of all species lost

There are several species featured in the IUCN Red List, which shows the species vulnerable to an extinct level event. Visit the linked article to know more.

Reasons for the Holocene Extinction

The prevailing theory for the factors behind the Holocene Extinction is that human activity like overhunting is adding stress to the animal species. These conditions began with the emergence of the first humans apparently. Although it is debatable how much animal population decline has a direct relation with the first appearance of humans.

In ecological terms humans are noted as "global superpredators" beyond precedence that prey on other apex predators as well, affecting the global food chain. Across continents, animal species have already gone extinct and it continues into the 21s century. Increased meat consumption overfishing are just a few examples of decline in biodiversity. Human population growth that increases consumption is also a factor.

Recent findings about hunter-gatherer landscape burning has started a debate on how humans have played a role in production of greenhouse gas before the industrial revolution era.

While a number of human-derived factors have been recognised to the rise in methane and carbon dioxide in the atmosphere, addition human activities such as agricultural development is also an allied factor that is leading to terminal decline in the animal species

Steps for Mitigation of the Sixth Mass Extinction

Scientists have proposed that the global community designate at least 30% of the planet as protected areas by 2030, which is to increase by 50% by 2050. These suggestions have been made as the human population is to grow by 10 million at the middle of the century.

In January 2021 the UN Convention on Biological Diversity drafted a Paris-Agreement style plan to prevent ecological collapse and reduce pollution by 50% with the goal of allowing for restoration of damaged ecosystems by 2050. However it should be noted that similar targets set by the convention during a meet in Japan were not met. Out of 20 targets only six were partially achieved.

It has been proposed by scientists that the extinction levels be kept below 20 % per year for the next century in order to mitigate biodiversity loss. But far more concrete steps are needed to implement to prevent the worse outcome of the Holocene extinction coming to pass.