

# Rhino and the global warming

By: Sectionov\*



Nature unexpectedly has threatened the life of humankind on this earth. Storms, high tidal wave, the instability of the seasons indicate some of the changes that have happened on Earth. According to the latest data, the earth's surface temperature has increased up to 3.5 degrees Celsius which has caused the polar caps to melt. Without reversal, it is estimated that in the next 15 years, thousands of small islands will be forced underwater by the rising sea levels.

In general the impact of global warming comes from the steady rise in the concentration of the green house gases that increase the temperature of the earth's surface. The earth is naturally protected by these green house gases, which consisted of carbon dioxides, sulphur oxides, nitrogen oxides, as well as organic compound like methane and CFC (chloro fluoro carbon). These gases cover the earth, without it the temperature of the earth would have been lower compared to now and life would not have been possible. The changes induced by global warming have reduced the earth's protection and have made the earth's climate warmer due to the trapping of sun energy as heat near the surface of the earth.

The earth has two poles, the North Pole and the South Pole, where each is covered by large areas of ice. The world's ice caps will melt with the increase of temperature and elevate sea water levels around the world. The danger lies when the high temperature increases the higher levels of the sea. This effect does not happen instantly but gradually. According to recent news, many small islands in Indonesia have already been covered by water with the rising of the sea water levels. This has been experienced by people that live close to the coast.

Global warming impact also affects the wild life. For example, the migrating birds from the North Pole to the South Pole have begun confusion with the recent condition that had changed their life habitat. Most of them can be seen "parking" on the north coast of the Java Sea in Rambut Island. Usually this area is used as a stopover place before they continue their journey. The polar bear also suffers a direct impact as their habitat become smaller as the ice continuous to melt they can no longer find dens to raise their young.

### **What is the relationship with Rhino?**

The drastic climate change has caused habitat change (mostly in the forest) which has a direct impact for the continuation of the fauna that live within. Changes in the duration of the dry season or rainy season disrupt the behavior of wild animals, causing stress as their natural habitat changes. The animals cannot overcome and adapt to these changes fast enough. Yet the animals cannot deal with environmental change quickly enough. Eventually only the law of natural selection remains and whoever can best adapt to changes will survive. Do you remember how the dinosaur that previously ruled over this world finally became extinct? Although today we still can find animals that resemble those alive during the dinosaur's time, they too are fragile, and may not be able to adapt to the upcoming changes in natural conditions.

The rhinoceros is a big animal that resulted from natural selection of its ancestors since the dinosaur time and has affected extraordinarily from this impact. Rhinos will be especially affected by global warming. The change in temperature and climate has changed its food plant's cycle and its habitat. During the long dry season, the rhinoceros likes to wallow in mud holes; this is now becoming difficult because there often is not enough water to make a mud hole. From this wallowing process the rhinoceros is very effective in spreading seeds on the forest ground. As they wander through the forest in search of food, rhinos also spread seeds on the

forest ground. Its ability to walk around many kilometers has been useful in spreading forest plants via seeds it excretes in its feces – many of these seed eventually germinate and grow into big strong trees with the roots grounded to the earth ready to serve as windbreaks, and to prevent floods and landslides.

This does not only happen to the rhinoceros, tigers, elephants, orangutans and the other faunas also experienced the similar situation. Even more, today endangered species both on land and sea are disappearing. The fauna losses are indicators for forest loss, both directly and indirectly. People need forests and the ecosystem services they provide – clean air, clean water, buffers from landslides, and other functions. Ultimately, what happens to the forest and its residents, like the rhino, will also be the fate of people. It is our responsibility to nature the earth for ourselves and for future generations.

Global warming is one of the signs that the world and within should be noticed in a wise manner, and we as humans will eventually be affected by its impact!!!!!!!!!

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