

“Deforestation brings about more harm than benefits to humans.” Using the studies you have made, to what extent do you agree with the statement?

Deforestation is the permanent clearing in area covered by forest due to human expansion in infrastructures and activities. There are many harms and benefits that deforestations and we would explore the different harms and benefits using Kalimantan. It has been experiencing a rapid deforestation for the last 25 years thus it would be an excellent case study. Thus, I agree to a large an extent that deforestation leads to change in quality of water and changes in the quality of air. However, it also increases the increase the land use for plantations or agricultural practices .

Deforestation is harmful to humans as it causes the change in quantity of water. When trees and plants are removed, less transpiration takes place thus it would lead to a lower humidity level in the atmosphere which in turn leads to the reduction of cloud formation hence resulting in lower rain fall. The lack of rainfall would mean that there would be shortage of water or a lower quantity of water. For example, the deforestation in Kalimantan has a direct impact on the lack of rainfall received during the years of 1997 -1998. This caused the drought or prolonged dry season. In addition, deforestation can trigger floods. Forests prevents flood by reducing the likelihood of rivers from overflowing thus the lack of forest would cause the rivers flood. In the recent decade in the areas of deforestation in Kalimantan, many floods have occurred in areas such as the Tunman Nasional Kutur forest reserve which have been affected by logging activities. It would have harmful effects on humans as the shortage of water for important uses such as portable water affects humans. Also, droughts can case crop failure which would lead to the shortage of food supplies thus it would lead to starvation. Furthermore, flooding in human populated areas such as plantation or cities would cause great damages to human property and huge losses would be sustained by humans. Therefore, deforestation would cause the change in quantity of water which has harmful effects on humans.

In addition, Deforestation is also harmful to humans as it causes harmful changes in air quality. When trees and plants are removed by burning, dust and smoke are released into the air, causing air pollution. Huge forest fires can actually cause dust and smoke to be suspended in the air for some time and accompanied by strong winds which blows the smoke and dust to other parts of the world. This results in the haze that may be experienced in many other parts. In the last two decades, haze has been a recurring problem in the South East Asian region due to the huge forest burning of rainforest in Indonesia, mainly from Sumatra and Kalimantan. Humans have been affected by the haze as they suffered from health problems such as eyes, nose and throat irritation and lung infections from breathing in the smoke. It also cause the everyday outdoor activities to stop and it has even adversely affect the tourism industry in the Southeast Asian region as flights were cancelled due to the poor visibility and tourists avoided visiting the region in 1997 -1998 thus affecting businesses that relies on tourism as well.

However, deforestation also brings some benefits to humans as parts of the rainforest have been cleared to support industrial activities. Forests are rich in natural resources such as wood and minerals, and the demand for such resources had led to the destruction of the forests. Trees are also cut down and sold as timber and over 1656 square kilometers of forest has been estimated to be lost annually through logging. In addition, a number of minerals such as gold, silver and lead are found in the ground underneath the Kalimantan rainforests. These minerals are extracted through mining. After all, when the mining company discovers minerals in the ground, it will have to clear the vegetation to expose the ground underneath. Machinery is then used to dig up the ground and mounds of loose soil. Mining companies would stand to benefit the most as they gain a large profit in being able to mine an untouched precious metal deposits and giving the company's capital. Excess capital would sometimes go to the needy as the companies would donate a portion of their

earning to help develop surrounding cities and improve living conditions for the citizens thus they also stand to benefit from mining.

In conclusion, deforestation actually brings more harm or benefits. Judging the different effects in order to rank them, I would actually use the scale of impact as my criteria. Looking at the next factor, which would be the harmful effects of air quality. The huge forests burning of rainforest in Indonesia, mainly from Sumatra and Kalimantan have cause huge amounts of haze and the effects can be felt or in this case seen, in countries of far away from the forest. Humans have been affected by the haze as with inconveniences cause by it such as the inability to perform outdoor activities and tourism is also affected. The additional factor which would indirectly affect humans would be global warming as the burning of the forest contributes to nearly 15% of the carbon dioxide emissions. It would cause global warming to worsens and the disasters cause by them such as stronger hurricanes would continue to affect our lives thus, thus it would have the greatest impact. Let us look at the next factor the change in quantity of water. The change of the quantity of water could be either a great increase in water from the usual average water supply or a great decrease of volume of water. In this case, the lack of water would lead to droughts that can cause crop failure which would lead to the shortage of food supplies thus it would lead to not only starvation but inflation as when the supply goes down and the demand continues to increase would lead to a spike of food prices. Furthermore, too much water would lead to flooding in human populated areas such as plantation or cities would cause great damages to human property, huge losses would be sustained by humans and lives could be lost. Therefore, deforestation causes not only economic impact on society, it also brings starvation and great damages to humans thus the scale of impact would be the second-greatest. Finally, the last and only factor of benefit to humans as deforestation allows humans to support industrial activities. Even though the forest allows us to extract precious resources and minerals, they are non-renewable resource as precious metal would in the future run out. If the current rates of deforestation continue on, the benefits of the forest providing important substances such as cures would be lost and cannot be recovered. Thus, the support that deforestation would give for the development would quickly end due to the high rates of deforestation. Thus, this benefit is only short term and it would give way to harm due to the lack of forests thus it benefits humans the least as compared to the other two harms of deforestation.

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