

Global Warming From Ethical View

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Abstract

This article contains a hot issue in the world's view, where global warming is a significant problem for all countries. Examines in detail the problem of global warming by using a descriptive approach to become a conceptual framework that then becomes simultaneous handling of ecological issues from the point of view of Christian ethics. It is hoped that humans can actively participate in caring for the environment and the Universe.

Keywords

Ecology; ethical view;
global warming



I. Introduction

Currently, the world is talking about global warming, including in Indonesia. Global warming has become a hot issue in Indonesian society.

United States President Joe Biden delivered a statement on August 03, 2021 (Coverage 6; Antasha Khairunisa Amani). Suppose Indonesia, especially the city of Jakarta, due to global warming is not taken seriously in the next ten years. In that case, the North Jakarta area will sink, due to global warming, so that the glaciers melt, namely the ice in the North and South poles, and the icebergs melt. These climate challenges have accelerated instability and impacted all countries.

The Governor of DKI Jakarta, Anies Baswedan, stated that land subsidence is not only in North Jakarta, but this incident also occurred in the South Jakarta area, and handling is not only building barriers, but it also is not the only effective way (virtual discussion, Tuesday, August 10, 2021).

According to Mr. Anis, Jakarta should reduce groundwater extraction because this impacts slowing down the land subsidence. Efforts to suppress groundwater use are by distributing water through PAM Jaya.

Jakarta reduces groundwater use by building water kiosks to build access for residents to get clean water.

Lecturer of Oceanography at the Bandung Institute of Technology (ITB), Hamzah Latif, said the Jakarta issue would be submerged in the next ten years. According to Hamzah, the predictions made by American President Joe Biden must know two social components and natural components.

On this issue, the first exciting thing is which ones sink permanently and which ones sink periodically. How high is the immersion, what frequency, and when does it occur.

The marine area in Indonesia has parameters. Parameters, where natural disasters such as tsunamis to earthquakes occur. Then there is tidal abrasion, and all are seen in one unit. If the sea rise is only 6-7 ml in Indonesia, it is not too worrying but what is very worrying is the momentary parameter (Novie Fauziah, Wednesday, August 11, 2021).

II. Research Method

This study tries to present a picture of a subject or object of a problem, which in this case is global warming. Researchers conducting this research use descriptive methods. Namely, researchers conduct research by examining all phenomena in detail or through comparisons with other sensations.

III. Results and Discussion

Global Warming in English, referred to as Global Warming, is the process of increasing the global average temperature on the Earth's surface by $0.74 \pm 0.18^{\circ}\text{C}$ ($1.33 \pm 0.32^{\circ}\text{F}$) over the last hundred years IPCC (Intergovernmental Panel on Climate Change).

Earth shows an increase in temperature from 1.5 to 40°C at the end of the 21st century. Global warming is a phenomenon of increasing global temperature from year to year due to the greenhouse effect due to gas emissions, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (NO_2), and chlorofluorocarbon (CFC), so that solar energy is trapped in the atmosphere. This causes the ozone layer to be thin, and the amount of ultraviolet hazard reaching the Earth increases, causing ecosystem changes. (Triana, 2008).

Yoga Nirwono's opinion can be yes or no if the government does not seriously improve Jakarta's urban planning, dubbed the seventh worst city globally. According to (Lately Nurhidayah, LIPI) and Niwrono Joga (urban planning observer) in an interview on social media, August 27, 2021, responding to the statement of the United States president Joe Biden, Jakarta will sink in the next ten years. It is projected that sea-level rise, estimated in 2100, will be a sea-level rise of 69 cm.

For sure, Jakarta is threatened with: Floods full of puddles even though they recede quickly. It was submerged in water because of the many basins. Sinking around the North coast is estimated in the next 30 years (± 2050).

According to Lately Nurhidayah, the most urgent problem to address is that improving the city planning of Jakarta is a top priority because of the complex issues currently facing; Jakarta is experiencing significant land subsidence this is due to excessive groundwater pumping, and DKI Jakarta meets the needs of clean water in more than 45% and lack of water, the residents take a lot of clean water, by using pumped water, groundwater extraction is limited in neighboring countries. Still, in Jakarta, it is tough to limit but monitor. Flood control by revamping rivers, building reservoirs, restoring, and improving urban planning is essential and needs serious attention.

The phenomena that occur due to global warming:

- a. The melting of ice at the North and South poles of the Earth and icebergs.
- b. Rising sea level
- c. The many plains and islands that are sinking
- d. The depletion of the ozone layer
- e. The occurrence of an erratic change of seasons
- f. Agricultural production is declining
- g. There has been a change in the lifestyle of animals and plants
- h. The emergence of various types of diseases, especially skin cancer
- i. Human behavior that causes global warming and humans should immediately be aware and turn around so as not to damage nature and the environment by cutting down wood in the forest because it is not yet cut down, reducing the use of fossil material energy (petroleum and coal), the need for tree planting and reforestation in crisis areas. Because

green plants act in photosynthesis, green plants need carbon dioxide and produce oxygen to reduce the simulation of carbon gas in the atmosphere.

Reducing the use of groundwater and the construction of malls, apartments, and high-rise buildings, all development permits are immediately addressed to minimize groundwater absorption due to reduced deforestation and land subsidence in Jakarta. Nature is not to be destroyed but to be preserved. Humans must be aware of all this and need to protect the environment.

Another trigger for global warming is acid rain, where this event is the drop of acid from the atmosphere to the Earth, which can be in the form of "wet" and "dry" conditions. This is a reaction of water, oxygen, and other acids in the atmosphere. The cause can be natural, such as the eruption of Mount Merapi and human behavior from industrial activities and motorized vehicles. (Triana, 2008).

3.1 An Environmental or Ecological Approach

Ecology is a way of investigating a geosphere phenomenon in a particular place or region by implementing an ecosystem, which emphasizes the relationship between certain geosphere phenomena and existing environmental variables. The ecological approach links the relationship between living things and the natural environment. It relates the wonders in it, including natural phenomena, to human actions, including developing geographical values of human awareness of their environment.

For example, the environmental approach to global warming in Indonesia, in addition to identifying the physical conditions in the location where global warming occurs, also recognizes the ideas and behavior of the community in managing nature in Indonesia.

Based on the ecological approach, it can be identified that Indonesia is the largest archipelagic country in the world, with 17,504 islands. Thirteen thousand four hundred sixty-six islands have been named and coordinated, registered with the United Nations, and recognized by the world, and 4,038 islands are not well known. According to the Central Statistics Agency, Indonesia's plains in 2015 were 1,913,578 KM² with an area of 6,315,222 KM² in Indonesian waters with a beach length of 99,093 KM².

According to UNCLOS (United Nations Convention On the Law of Sea) in 1982, the Exclusive Economic Zone has a length of 200 miles from the coastline and reaches 2,900,000 km². With the vast Indonesian waters, global warming also significantly influences Indonesian marine life. These changes are the destruction of coral reefs with the death of their habitat, which reaches 90-95% of changes in the surface temperature of Indonesian waters. (Informatics, n.d.)

From an astronomical point of view, Indonesia is an area or country based on the latitude and longitude of the astronomical location between 6° N - 11° South Latitude and 95° East Longitude - 141° East Longitude. With coordinates like this, then Indonesia is located on the Equator. Sumatra, Kalimantan, and Sulawesi islands are large islands situated at the Equator.

Due to the astronomical location of Indonesia, which is around the Equator, the temperature is always high (always > 18°C), making it a tropical country.

Indonesia is geographically located on two continents, namely the continent of Asia and the continent of Australia; it is also found in two oceans, namely the Indian Ocean and the Pacific Ocean. The geographical location of Indonesia affects the process of rain and heat in the dry season in Indonesia.

Geologically Indonesia, seen from the state of the rocks in the Earth's body and geological phenomena, is influenced by its location on tectonic plates, namely the upper part of the lithosphere, which consists of the crust and the upper part of the Earth's mantle.

Indonesia is located between the confluence of two continental plates and one oceanic plate. The Eurasian continental plate consists of the continents of Europe and Asia in the north-northwest. The Indo-Australian Plate, which consists of the Australian continent and the Indian Ocean, is in the South-West. The Pacific Ocean Plate is located in the northeast of Indonesia. The Pacific plate moves from east to west, pressing against the Eurasian plate. The Indo-Australian plate is moving northward, pressing the Eurasian plate. The movement of plates causes earthquakes and natural disasters.

Then in dealing with the problem of global warming, when referring to the policies of the Indonesian government, it can be understood that:

1. It should be acknowledged that the policies implemented by the Indonesian government have not been in favor of the lower classes. On the one hand, the government agrees on a global scheme to prevent deforestation from addressing the problem of global warming. On the other hand, it permits the conversion of large-scale plantation lands (especially oil palm). The government still provided it. In addition, in terms of law enforcement is still very weak. The evidence is that the number of perpetrators of illegal loggers who can be brought to justice is only a matter of numbers. It can even be said to be almost non-existent.
2. Several policies issued by the government discriminate against and endanger the Indonesian people. One of them is the threat of REDD, which has the rights of the Indonesian people.

Thus, to prevent the problem of global warming from becoming more complex, it is necessary to take preventive or countermeasures to global warming as follows:

- a. They are reducing the use of fossil fuels, such as petroleum. Fossil fuels are one of the leading causes of global warming. Reducing the use of fossil fuels will be able to suppress global warming. One example of reducing the use of fossil fuels is using public transportation and reducing the use of private vehicles.
- b. Using environmentally friendly energy and renewable energy. The use of solar panels can reduce electricity consumption in homes. This can reduce energy use that does not increase in size. Turning off electronic devices can be a solution to reducing energy use. Even in the latest discoveries regarding renewable energy, it can be a part of environmentally friendly energy such as biodiesel.
- c. They are taking firm action against illegal logging or forest logging. Forests are the lungs of the world, if the forest has begun to decrease, the air temperature will inevitably increase, and many other problems will be caused if the forest becomes denuded. The occurrence of erosion and flooding is the impact of deforestation. Replanting forests that have been deforested is one of the solutions to creating a healthy environment. Oxygen produced from forests can make humans have a long and healthier life.
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3.2 The Bible's View of Nature

The word "in the beginning" found in Genesis 1:1 refers to an event in creating the world. This word denotes all the beginnings of time where God started all things in the

masterpiece of design of the Universe. The emphasis here is on God as the trustworthy source in creating all things. (Rosang, 2019)

Genesis 1:31 God saw that all His creation was perfect.

Humans are said to be the best creation because they were created in the image of God (Genesis 1:27). The natural world is not only said to have a good nature but reflects the glory of God.

Psalms 19:2 The heavens tell of the glory of God, and the Firmament reveals the work of His hands. Romans 1:20 His power and divinity have been seen since the world's creation.

It is necessary to know about the Earth, which not only God created it, but that what it has created is supported by HIM.

Hebrews 1:3 Christ sustains by His powerful Word. Colossians 1:17 Everything exists because of Him. Psalm 104:10,14 God has created food for animals.

From these verses, it can be seen that God's extraordinary handiwork in creating and managing the Earth is orderly and orderly. What has been created is not to be destroyed by man but nurtured and preserved by him.

Psalms 77:17-18 The hand of God is seen in storms, thunder, and rain.

Proverbs 4:13 God created the world to live a human life. Thus it can be understood that God is in this world and does not leave humans alone. He is there watching over man and observing the Earth created.

Acts 17:28 in Him, we are active.

Everything that is created is never separated from the power of God; He regulates everything so that humans can carry out life according to the order that he has set from the start.

He is the God of the covenant where everything promised to man is fulfilled in HIS time. Genesis 9:16 makes a promise to every living thing.

God is very concerned about the sustainability of human life compared to having to destroy human life due to mistakes that humans have made. The God of all life promises not to destroy the Earth with a flood.

Humans have a divine message by being environmental stewards. God is the creator of the Earth, but humans must be caretakers of it. Genesis 1:28 to multiply and multiply. If humans have many descendants, but the nature in which they live has been damaged, how can the life of many humans survive? Therefore, this verse contains elements that require maintaining the Earth as a place or ecosystem where human descendants can live their lives.

Genesis 2:15 God placed humans in the garden of Eden to cultivate and care for it. It is obvious the command that God has given to humans so that they work to maintain the sustainability of the nature they inhabit. This existing world is a world that must be held with full awareness as God's grace to humans. (Options et al., n.d.)

3.3 The Christian view of Nature and the Environment

There are several elements of the Christian view of the environment and human responsibility in it:

1. The Christian view of nature and the environment appears in the doctrine of creation (Genesis 1)

Allah created the sky, and all that is in it is a genuinely extraordinary creation. Believing in God who created the Earth, atmosphere, and everything in it, Genesis 1:1 is the primary explanation that God created the Universe. Then Genesis 1:2-31

describes in detail the time sequence of creation from the creation of the Earth and the heavens to the creation of man.

2. Christianity believes that God is the owner of nature and humans are His servants. As stewards of natural resources, humans are given the power to rule over nature but are called to be faithful stewards of these natural resources. Humans are not only called to lead over nature but to protect and maintain it. Protecting and maintaining these are two words that must go hand in hand with mastering. When humans control or utilize nature for the necessities of life, humans are required to maintain, preserve and restore natural conditions that the fulfillment of human life has damaged. Human power over nature does not mean giving the right to pollute and destroy it; Christians are responsible for maintaining and protecting the natural environment.
3. Christian doctrine teaches that all this Universe and all that God created is a divine work, but the result (the Universe) does not make anything less in God or vice versa. This creation of the Universe does not add immortality, nor is it supernatural from within God. Pannenberg says that God's omnipotence and existence are beyond all things. (Teologi_Trinitas_dan_Teologi_Penciptaan, n.d.)

3.4 A wrong view of Allah's creation:

- a. Traditional material view
This view holds that the world is a continuous process of generation. Pantheists believe this world is an eternal result. For theists hold on to the creation of a temporary world. Atheists consider the world to arise from material ex materia (from God). This is different from the Christian view, where they believe that creation is Ex nihilo (from nothing).
- b. Steady State View
This view explains that the material lost from the galaxy's recession undergoes condensation and continuously alternates so that there is a universe. (Prasetya)
- c. Evolutionism View
This view believes that the Universe was formed from a big explosion. In the 1920s, Abbe Georges began to state the Big Bang theory. Farrell said that there was no matter in the beginning, meaning an emptiness, then a coagulation process occurred and then exploded to produce life. (Fanny, 2017)
The Big Bang theory will then provide various views on the progress of the theory of evolution by Charles Darwin.

IV. Conclusion

God has created this Universe and provided a good order so that the Earth and everything in it can run well; this has been stated in the Bible. Humans and the Universe live side-by-side by God's order; these humans should be aware of the existence and need for the Universe in their lives.

When looking at the fact that the world we live in is experiencing various problems, especially global warming, humans should be aware that they have over-exploited nature. Therefore, every human being is called to maintain and preserve the Universe for human survival and part of his responsibility to God, who has created the Universe as their home. With awareness of the dangers of global warming, humans can live more responsibly toward the Universe.

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