

Christian Ecology Ethics and Ethical Behavior Residents Masehi Injili Minahasa Church (GMIM) in Ecosystem Management of Lake in Minahasa

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Abstract This study was conducted to analyze the reflection on the ethical values of management of the environment that is based on the behavior of the Christian religion in particular churches GMIM in coastal areas of Lake Tondano. This study uses a qualitative method. A qualitative approach rests on the paradigm interpretive and constructive, which is very different from the positivist approach as a pillar of quantitative research (Sugiyono, 2010; Creswell, 2010). Results of this study resulted in the following findings: (a). Proposition 1: The Church as a theological institute would be a role for institutional strengthening Lake Tondano. (B). Propositions 2: People or church less concerned with the norms of life or change the norms that should be the norms of creation and his own interests. Nature simply exploited and polluted without feeling guilty. The result is a drastic reduction in the quality of natural resources such as Lake Tondano. It would not be wrong if GMMIT church is seen as the key to preserving the environment. (C). Proposition 3: Conservation of Tondano Lake should not be understood as a total ban on the use of a wide range of its potential. The separation of the community from the utilization of the potential of this lake would likely have a negative impact on the sustainability of the ecosystem as a waiver of justice and the rights of peoples who have occupied space over the territory around Lake Tondano. Therefore, the church must be more sensitive to the aspect of justice, especially for those who are marginalized either by gender, socio-economic level, race, religion. (D). Proposition 4: Board of church and congregation GMMIT encourage local governments to take measurements and logging back on broad and land tenure in the region of Lake Tondano is a positive step and would provide legal certainty. In the end, the legal certainty of land around Lake Tondano will provide clarity in terms of utilization of space surrounding areas to the front and (e). Proposition 5: development paradigm with people centered development should be an option for achieving equitable and fair welfare. Therefore, increasing the ability of communities in the management of development in general or regional utilization of Lake Tondano especially need to be a serious concern for the government and the institutions Involved in the development of society. The point is the need for the strengthening of the position of the people in development (empowerment) area of Lake Tondano region.

Keywords Ethics Christian Ecology, Ecosystems and Sustainable Tondano Lake

1. Introduction

The lake is one of the most minor form of ecosystems on Earth's surface compared to the marine and terrestrial habitats. Lake ecosystems humans need both in the aspect of socio-ecological values and socio-economic. One form of designation around the lake area converted to accommodate various forms of human activity such as housing, road infrastructure, household sewage, agricultural land, recreation and so on (Collen & Miller, 1995). Therefore, it

often happens utilization and conservation lake unbalanced, which dominates the lake utilization of natural resources of the lake and the area of the watershed. This leads to a lake in a state of succession, which is changed from aquatic ecosystems to form terrestrial ecosystems. Silting by erosion, eutrophication is the cause of a succession of lake waters. The loss of the ecosystem of the lake resulted in shortage of ground water reserves in an area/region that would threaten the availability of clean water for human life and other living creatures. As a result, the sustainability of an environment in which there are human beings and nature can be threatened not continue.

Global attention to the problem of the lake is described by Jorgensen (2001) which states that the main problem of

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reservoirs and lakes around the world including: (a) the occurrence of high sedimentation in lakes and reservoirs caused by soil erosion due to land use changes or uncontrolled on DAS; (B) detecting the lake acidification due to acid rain that can disrupt fisheries and ecosystem degradation; (C) degradation of water quality of reservoirs and lakes as a result of sewage contamination, the organism with toxic pollutants or toxic substances derived from agricultural waste and industrial waste; (D) the emergence of eutrophication processes due to the inclusion compounds of nitrogen and/or phosphorus results from industrial activities, agriculture, domestic, surface runoff and other, and causing widespread or "bloom" on the phytoplankton, water pollution and loss of biodiversity; and (e) the change in total (completely collapse) on aquatic ecosystems in extreme cases, therefore, needed a good cooperation between stakeholders and a thorough review of the issues and the handling of eutrophication of lakes and reservoirs in the region as the implementation of the implementation of an integrated management of natural resources and then manifested into area management guidelines lake or reservoir. Thus, conservation of the environment in which there are human beings and nature is ensured.

International Lake Environment Committee or ILEC reaffirmed the principle of the lake's vision, namely: (1) the relationship of harmony between man and nature or environment; (2) The catchment area of the lake is the starting point of watershed management; (3) long-term approach to the prevention of damage to lakes; (4) the use of science and technology for development and policy-making; (5) the principles of sustainability to avoid conflict; (6) public participation and stakeholder; and (7) governance based on fairness, transparency and empowerment of all stakeholders to the vision seven suggests that the presence of lakes and reservoirs ecosystems provide welfare functions of human life, the occurrence of domestic activities, industry, and agriculture. Although, when compared with marine and terrestrial habitats, lakes and reservoirs is one form of the ecosystem that occupies a relatively small area on the surface of the earth.

Function in the ecosystem of the lake, as stated by Cornel and Miller (1995) are: (a) as a source of germplasm potential as a contributor to the genetic material; (B) as a venue for the life cycle of species of flora and fauna that are important; (C) as a source of water that can be used by surrounding communities (households, industry and agriculture); (D) as a place to accommodate the excess water from rain water, runoff, rivers or water sources underground; (E) as custodian microclimate, where the presence of the lake ecosystem may affect the humidity and the level of local rainfall; (F) as a means of transportation from one place to another place; (G) as an energy producer through Hydroelectric; and (h) as a means of recreation and tourism.

Indonesia has more than 500 lakes with a total area of over 5,000 km² or approximately 0.25% of the land area of Indonesia (Davies *et al.*, 1995), but the status of the condition of most of the lake lately has been very alarming. At this

moment the function and benefits of the lake is felt already on the wane. This is reinforced by the explanation of the Minister of the Environment in Lake National Conference of Indonesia II (KNDI II) 13 to 14 October 2011 in Semarang, that there are 15 lakes that require immediate action for recovery. The problem that occurs is a high level of sedimentation from upstream causing silting and narrowing of the lake, the effect of climate change and the need for government's commitment to monitoring and maintaining the sustainability of each lake. The lakes are included in the 15 priority lakes one of which is Lake Tondano.

Tondano Lake is the largest natural lake in North Sulawesi and is a sub-watershed Tondano. Tondano lake ecosystem is very critical at this time. The lake is 1923 still an average depth of 40 M over but in 2004 a maximum depth of just 18 M (which means an average depth of approximately 12 meters). From the vast 5622 hectares in 1934, is now live 4628 hectares extent, or reduce by 20%. The periphery of the lake is filled by pests hyacinth, and around each lake filled with fish farm cages (net) uncontrolled. Based S.K. Minister of Forestry No. 284/Kpts-II/1999, the Tondano watershed lakes are categorized as one of the first priorities in Indonesia. Lake Tondano critical ecosystem reinforced by the results of PPLH Unsrat cooperation with the UCE-CEPI. Results of the study explained that Lake Tondano already experiencing environmental degradation. It is caused by development activities in agriculture, forestry, fisheries, industry, tourism Tondano watershed that have changed land use. The activity despite the economic and social benefits but also have a negative impact on the function of ecological, economic and aesthetic ecosystem of Lake Tondano.

The area around the lake is already a hilly and barren mountain slopes. Regional changes caused by land use without thinking about the slope of the land and erosion hazards. The potential for erosion was measured from Erosion Danger Index is very high (above 10.00 IBE) so that the area around the lake experienced severe erosion, with the attrition rate between 28.86 tonnes / ha / year to 62.33 tonnes / ha / year. Mud sediment flowing from the slopes of hills and mountains as well as of agricultural land and paddy directly into the lake, as only 8 of the 12 rivers and 25 creeks that empty into the lake which has been equipped with reservoirs and check dams (flood control dams and mudguard).

This environmental degradation, is a mistake in the use of land around the lake. Unclear boundaries of spatial utilization (landuse) in the region, has resulted in deforestation and erosion are out of control again. Tondano watershed forest area in 1982 was 2,450 ha or 8.35% of the total area, in 1999 lived 2,182 hectares or 7.44% (far from the minimum requirement of 30% - Act 41 of 1999 on Forestry). At present, the remaining forest area in Tondano watershed of less than 7%, but specifically in the catchment area Tondano lake, forest remaining 905.4 hectares or 3.84% of the total area.

The implications of population growth around Lake Tondano change the environment around the lake for economic and social interests. Space and land around the

lake region overhauled to accommodate the various forms of human activity around such settlements, agriculture, household sewage, tourism and so on. The activities of the running and growing rapidly, giving rise to problems, among others, the declining quality of lake waters cause eutrophication potential, causing the growth of water hyacinth reaches approximately 20% of the lake area. Another problem is erosion and sedimentation upstream Watershed (DAS) Tondano. Silting and sedimentation resulting in a narrowing of the lake. Sedimentation causing environmental damage so do the management of Lake Tondano integrated and intensive. A typical characteristic of the dominant sediment transport carried by the flow of water from the catchment to the lake was suspended sediment transport (suspended load). These sediments are then deposited in the area around the mouth of the inlet. This condition occurs due to the decrease in flow velocity by the reduction of water level of the lake. Based on these characteristics, the silting of the lake more concentrated around the main inlet mouth of the river.

Tondano lake ecosystem degradation that occurs today is not merely a technical issue but also a moral issue, therefore it is necessary to regulate the ethics and morality. Causes damage to ecosystems of Lake Tondano rooted in human behavior in managing the environment as a 'non-ethical'. That is human nature manages almost without regard to the role of ethics. The ecological crisis is rooted in ethical or moral crisis. Indifference against the norms of life and face the natural realm as if without conscience again. Nature simply exploited Contaminated without guilt or uncomfortable. This attitude is a product of human rationalization rationally face everything alone.

Damage or rather the destruction of the ecosystem of Lake Tondano has made various parties to participate in the resolution of problems. In addition to academics as well as the role of the clergy is also important to be involved to control the process of destruction by humans for sustainability Tondano lake can be restored. Therefore the theological reflection on the nature or the environment becomes a very necessary thing. Relevance to empirical facts lead to the importance of religion as one of the strategic aspects for implementing ecological study based on the belief of faith.

Masehi Injili Church in Minahasa (GMIM) whose service area includes seven counties / cities in North Sulawesi Province (North Sulawesi), which includes; The city of Manado, Tomohon, Bitung, Minahasa, South Minahasa District, North Minahasa Regency, Southeast Minahasa district with a membership of 750,000 inhabitants of 2 million people in Sulut. In terms of roles and professions GMIM congregation consists of various groups, ranging from farmers, fishermen, workers, academics, security officials, legislators, bureaucrats, and so on. Stewardship system (coordination of structural) organization governed structurally with the Synod as a service center, 107 Regional and 887 fellowship of the church, 93 of which are in the fellowship of the church around the lake and the upper

reaches Tondano watershed. The existence of the congregation GMIM is certainly big enough to give effect to the whole community in the process of social, cultural, economic and political including how to deal with issues regarding management of the environment, particularly the Tondano lake ecosystems.

The attitude that separates humans from nature and conquer and dominate nature, is a theological and spiritual issues. Therefore it's necessary to have a model of the new spirituality (Christian perspective), namely spirituality air-ethic and love of the environment (sensitive to ecology) in controlling and managing development activities that affect the environment in order to remain within the limits of tolerance. Based on this reality, the application of ecological values of Christian ethics into one of the ingredients for the doctrinal congregation GMIM should really be directed at concrete relevance to the activities of the church. Thus, to examine how environmental ethics was implemented a Christian doctrine in the life of the congregation, how the level of understanding of leadership and the congregation of the doctrine in the management of the Tondano lake ecosystem will be studied churches in the coastal lake Tondano. This community consists of actors that activity ecosystem around the lake Tondano (place).

Based on the basic framework of the theory and empirical facts, it can be synthesized that problem of this research is a reflection of the values of ethical management of the environment that is based on the behavior of the Christian religion in particular churches GMIM in coastal areas of Lake Tondano and supportive policies. Therefore determination Formulated problems: What is the relationship between ethics Christian theology with church ethical behavior in managing the ecosystem of Lake Tondano everlasting and sustainability.

2. Research Methods

This research was conducted as a reflection on the ethical values of management of the environment that is based on the behavior of the Christian religion in particular churches GMIM in coastal areas of Lake Tondano. Social behavior of the basic structure of the church into problems in this study. Lake Tondano chosen as a test site on the grounds that the Tondano lake and river has an important role in supporting the lives of the city of Manado. In addition, as a source of public drinking water, the source of raw water taps and Tondano Manado City. Lake Tondano also as a source of electricity generation (hydropower) Tanggari and Tonsea Lama, sources of irrigation, inland fisheries and tourism. Tondano Lake is upstream Tondano located in Minahasa regency. Tondano lake ecosystem condition can not be separated from the influence of the condition of the river into the lake (inlet). The rivers that enter Lake Tondano reach 35 pieces and is largely a seasonal stream (ie there is intermittent flow only when the rainy season). Among the 35 river there are three rivers are a major contributor and contribute nutrients and organic matter to the lake Tondano

pesticide residues namely Mawalelong rivers, streams Panasen (from Soputan mountain) and the river Leleko (Mount Tampusu). Penelitian is performed on the entire area of Lake Tondano.

This study seeks to explain the relationship between ecological ethics of Christian doctrine with ethical behavior within the congregation GMIM processing Tondano lake ecosystems. This study uses a qualitative method. A qualitative approach rests on the paradigm interpretive and constructive, which is very different from the positivist approach as a pillar of quantitative research (Sugiyono, 2010; Creswell, 2010). Key considerations used a qualitative approach was noticed the problem and research objectives that have been set, so it can see reality and not merely to obtain a result, but also reveal the relationship between ecological ethics of Christian doctrine with ethical behavior within the congregation GMIM processing Tondano lake ecosystems.

Inductive logic as a foundation in conducting qualitative research tends to be used to construct a syllogism based on things that are special or data obtained in the study site and lead to general conclusions. This logic as a tool to explore the data in the sense of more frequent or likely to be used to analyze the social processes that occur and the significance of the facts that appear on the surface. Therefore, the analysis in this approach is an attempt to understand the process and the facts, and not just tell the facts found, the design (strategy or procedure) certain (Bungin, 2008), namely:

- a. Observe social phenomena that take place at the location of the study;
- b. Identify, confirm and revise the existing Data;
- c. Doing category of the information Obtained;
- d. Explore and explain Categorization;
- e. Interesting general Conclusions;
- f. Explain or construct theory.

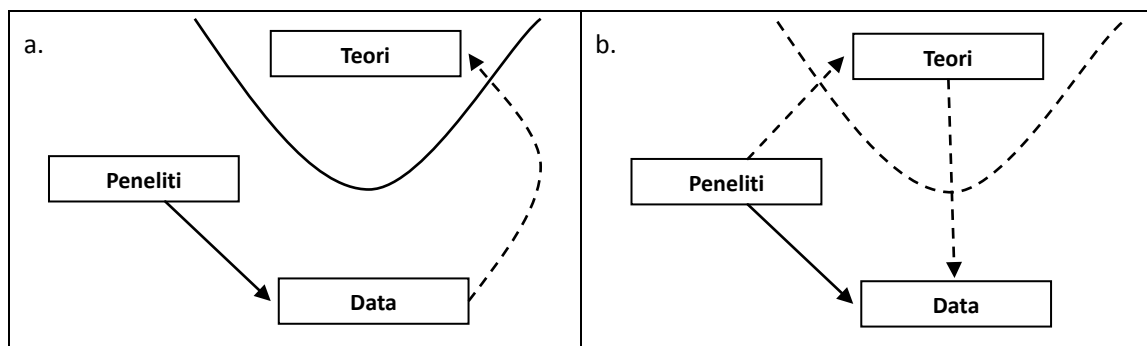
Qualitative research has a wide range of methods, one of which is the research methods of phenomenology. As part of a qualitative approach, research phenomenology was chosen by researchers to better identify the nature of the experience of the individual or the community about certain phenomena

(Creswell, 2010; Kuswarno, 2009). In addition, the use of methods of phenomenology more highlighted, given way to uncover the reality of the relationship between ecological ethics of Christian doctrine with ethical behavior within the congregation GMIM processing Tondano lake ecosystem needs to be preceded by a way of thinking to Determine the operational steps of research conducted through the process to Obtain the results naturally, reflective and authentic. In short, to better reveal the relationship between ecological ethics of Christian doctrine with ethical behavior within the congregation GMIM processing Tondano lake ecosystems, the researchers chose the method of phenomenology (phenomena / experience and noumena / conscious mind through noema or noesis) in this study.

In qualitative research methodology, there are two (2) very different opinions sharply the use or utilization of the theory in the research process (as Figure 1), with the explanation:

- (a). The opinion states that researchers should focus on the data in the field, so that all the theories related to research into insignificance. That is, they are more concerned with the data of the theory, so researchers do not need to know about the theory, and can be directly into the ground;
- (b). The opinion confirms that the understanding of the theory is not something that is 'haram'(forbidden), but researchers remain focused on data / facts on the ground and theoretical understanding of the object of study will help researchers when gathering data. This is the opinion shared by the researchers, because the theory perspective very assist researchers in unraveling the mystery of the data is unknown, although the focus remains on the data, and also given the understanding of the facts is a key answer to the problem of research.

This research is more concerned in terms of "process" rather than "results". This is due to the relationship studied parts will be much clearer if observed in the process (Moleong, 2005). Location of the study which is the coastal area of Lake Tondano can be seen on the map below.



Source: Bungin (2008), Muhadjir (2002); Kuswarno (2009); and Creswell (2010)

Figure 1. Utilization Theory in Qualitative Research



Figure 2. Research Location Map

3. Empirical Result

Lake Tondano as a resource can be accessed publicly (open access resources), as it is said Garet Hardin (1968) experienced The Tragedy of The Common. Many people who reap the benefits of the existence of Lake Tondano, but otherwise not a lot of people who want to care for its preservation that led to the degradation of quality and quantity. The findings which led to the degradation of the ecosystem of Lake Tondano, among other things, namely:

1. Institutional. Lake Tondano is common property resources (common pool resources) that are important for the surrounding community. In many cases, the management of CPR as this lake often experience problems in sustainability because every person has a beneficial interest in accessing openly, but not many people who care about sustainability. Tondano Lake area management experience in terms of institutional barriers that gave birth to various forms of unsynchronized and its integrated planning, programming and activities, monitoring and evaluation of development undertaken community, business and government. The condition eventually causes gaps and overlapping role of inter-agency resource management in the Lake Tondano.

Preposition 1:

The Church as a theological institute would be a role for institutional strengthening Lake Tondano. Church movement can be launched environmental awareness and preservation of Lake Tondano rescue through specific programs in schools established Christian, in hospitals Christian, through politicians and bureaucrats Christian community, media, multimedia, NGOs in and around the church, The Church can also be actively involved directly

perform emergency (emergency rescue), crisis response. Likewise, in the declaration of the rescue movement Tondano Lake GMMIT Church can play an active role through NGOs christian he initiated.

2. Society Empowerment. Problems that occur in the region of Lake Tondano is the impact of human activities which empties into the lake or the so-called anthropogenic symptoms. Therefore, the success of conservation programs rely heavily on the success in changing human behavior towards environmentally friendly behavior. Economic pressures resulting from population growth is usually a major cause of public behavior that deviates from the norm and disrupt an ecosystem sustainability of life. Handling problems waters thus can not be separated from the activities of empowering people who have an interest in accessing the resources of Lake Tondano. Lake Tondano handling various problems including eutrophication and sedimentation certainly can not be propped up as a government task alone.

Prepositions 2:

Race or church is less concerned with the norms of life or change the norms that should be the norms of creation and his own interests. Nature simply exploited and polluted without feeling guilty. The result is a drastic reduction in the quality of natural resources such as Lake Tondano. It would not be wrong if GMMIT church is seen as the key to preserving the environment. Perspectives and attitudes of the church towards the environment regarding mentality churches themselves have questioned its existence in modern times in terms of time, the purpose of life, the sense of material and material satisfaction. Thus the environmental problem of Lake Tondano none other than the matter of how to develop a philosophy of life that can organize and develop

the church's existence in relation to nature.

3. Conservation. The problems that exist in the Lake Tondano mostly associated with the sustainability of ecosystem functions, where pollution and damage to various aspects of the ecology of Lake Tondano will eventually reduce biodiversity and endemic species in the lake area. In such conditions. The conservation issues into something of vital importance for the management of Lake Tondano. Conservation should be applied here is Tondano lake management efforts by communities to generate economic benefits, ecological and socially sustainable for the current human generation, as well as maintain its potential to meet the needs and aspirations of generations to come. Positive aspects of the conservation of Lake Tondano which should be highlighted is the protection, preservation, sustainable use, restoration, and strengthening its ecosystem. Conservation efforts should not conflict with the use of a variety of varieties, species and ecosystems for the benefit of society as a maximum for such utilization is sustainable.

Preposition 3:

Tondano Lake Conservation should not be understood as a total ban on the use of various potential it contains. The separation of the community from the utilization of the potential of this lake would likely have a negative impact on the sustainability of the ecosystem as a waiver of justice and the rights of peoples who have occupied space over the territory around Lake Tondano. Therefore, the church must be more sensitive to the aspect of justice (justice), especially for those who are marginalized either by gender, socio-economic strata, race, religion etc, which the Church can initiate dialogue efforts to overcome inequality or social imbalances which exists. Bible describe the unity of man and nature in the story of man's creation: "The Lord God formed man of the dust of the ground" (Genesis 2: 7), as he also "formed from the ground all the beasts of the field and every bird of the air" (Gn. 2: 19).

4. Land Ownership. Tenure clarity around Lake Tondano is crucial in the effort to preserve the ecosystem of the area of Lake Tondano. Most of the land in the surrounding areas has been mastered by the surrounding community. This presents problems of its own in the effort to preserve the ecosystem of Lake Tondano. The land owners do agricultural cultivation pleases without considering the impact on utilization patterns. Various community activities in land use in the vicinity of Lake Tondano in agriculture is not environmentally friendly lasted very dangerous for the ecosystem of the lake.

Preposition 4:

GMMIT church sexton and encourage local governments to take measurements and logging back on broad and land tenure in the region of Lake Tondano is a positive step and would provide legal certainty. In the end, the legal certainty of land around Lake Tondano will provide clarity in terms of utilization of space surrounding region forward. Especially against a ground area of land which arise because of

sedimentation processes (silting), necessary data seriously enough. According to Government Regulation No. 16 of 2004 on Land Use, (Article 12) that the soil from the ground, namely mainland arise naturally occurring or artificial because the deposition process in the territorial waters of rivers, lakes, and beaches or islands arise, as well as control of land controlled directly by the state. The assertion tenure / land arises is very important in order to avoid conflicts over land between the community and between the community and the government / state.

5. Tondano Lake area development should be able to put a human community that has been living and dependent life for generations to Tondano Lake area as well as its object the subject (people centered development). This development should be able to provide behavioral changes, changes in the quality of living standards, and economic choices are more diverse to the public so that the future is not entirely dependent on the activity of fishing lakes. These economic choices may eventually provide an alternative for people to meet their needs as social beings.

Preposition 5:

People centered development paradigm with development should be an option for achieving equitable and fair welfare. Therefore, increasing the ability of communities in the management of development in general or in particular Tondano Lake area utilization need to be a serious concern for the government and the institutions involved in the development of society. The point is the need for the strengthening of the position of the people in development (empowerment) region Tondano Lake area. Development paradigm with people centered development in line with the teachings of the Book, namely that the human presence in the middle of other creations have a special role and tasks. When placing people in the world, God gave discretion or his authority to manage and exploit this natural (Gn. 1: 26-31). Not only that, man was assigned also to cultivate and keep (Gn. 2:15). Herein lies the main task of man in nature is to care for and maintain or sustain life are certainly expected always good for as at the beginning it was created. In the status and function like this, then not only the human being is the image of God but also God's partners. As a partner, or a man believed to be an extension of God in performing the task of safeguarding the survival of the universe.

Five preposition is an ethical reflection and answers related to the theology of Christianity degradation Tondano Lake ecosystems. The study also rests on the ethics of environmental management in general with the ethics of Christian theology. Comparison between the three main theories of environmental ethics: anthropocentrism, biosentrisme and Ecocentrism is a values and norms that are essential to be understood and internalized by every church GMMIT. The third main theory ethics environmental sustainability equally demanding duties and responsibilities of man against nature. Anthropocentrism, widely blamed as a source of environmental exploitation. But this theory still requires the willingness of people to maintain the

environment. Biosentrisme theory, focusing on the whole life that has value in itself, attention is not only directed to humans but also to other living beings other than humans. Ecocentrism theory offers a more adequate understanding of the environment. Moral concerns expanded, so that it covers the whole ecological communities, whether living or not. Ecocentrism increasingly expanded in deep ecology danecosophy, very evocative of human understanding of the interests of the entire ecological community. Deep ecology demands a new ethic that is not centered to humans, but the whole life centered in connection with efforts to tackle environmental problems. Which became the center of a moral world is not just another human being, but all species, including non-human species. Deep ecology is not just a philosophical understanding of the environment, but rather a concrete and practical action to save the environment. This is the view that we should be consistent. Related to the three main theories of environmental ethics that are used demanding duties and responsibilities of human beings towards nature is integrated with ethical Christian theology can be explained in the table below.

Confusion of society, especially churches GMMIT caused by the degradation of the ecosystem of Lake Tondano then pull back would accentuate the great figure of St. Francis of Assisi. Patron saint of the environment is to have a million spiritual experience with nature that inexhaustible human inspire thereafter. Francis' perspective and treatment of nature has a unique perspective. Francis was not afraid as if the hidden nature of the gods watchman. He also does not arbitrarily against natural or view nature as an object that is detached from the human self that can and must be controlled. Go beyond the awareness that humans are part of nature, Francis dive deeper to see nature as the footprints of the Creator.

The strong awareness that Francis called the sun, moon, wind, water, air, fire, and all creation as brothers and sisters. In the presence of the Creator, Francis saw all creation with the equivalent proper himself respected. Francis is a friend beings. He felt united and kinship with all creatures as fellow creations of God. He is known as the patron saint for animals and the environment, so that his image is often placed in the park in honor of his interest and unity with nature. St. Francis of Assisi can talk to birds and other animals. Francis attitude towards nature should be echoed back in our minds. Modern man is far from the realization that he is part of nature so that nature is "home" to be maintained. Solidarity with nature is not exceptional, but it is fitting. Because preserving nature means preserving human life itself. On the contrary, the destruction of nature is nothing other than the destruction of human history.

4. Conclusions

Research has explained that the damage to the ecosystem of Lake Tondano as a result of human activities and therefore calls acts damaging to the environment as a sin. Protect the environment is part of God's mission in bringing Shalom kingdom of God. As a religious doctrine or understanding of the Christian faith, concern for the environment is no longer unquestionable. Results of this study explained that there are various factors that led to the church GMMIT still a lack of awareness of the environmental crisis, especially the ecosystem of Lake Tondano, among others:

1. Faith has not been implemented in everyday life. Religion is still only at the stage ceremony or creed. Everyone knows and Believes that the environment is a gift of God that must be maintained, but daily life behavior is not in line with the knowledge and beliefs.

Table 1. Comparison of Environmental Ethics with theological views within Christianity

Anthropocentric/ materialistic	Nature or environment simply has a value of tools (instrumental value) for the benefit of man. Environment limited meaning for the welfare and prosperity of human beings. Only humans are subject, while the environment is a natural or objects. Then natural researched, explored and exploited. Then the anthropocentric ethics is not in line with Christian ethics that emphasizes the continuity between humans and nature (adam-adamah, homo-humus).	That the non-anthropocentric environmental ethics, but also not just be biocentric or ekosentris. Humans and all other living creatures, even the whole planet Earth, comes from God. God who created them and God willed entirely, prop-shoring, and mutual need. Then environmental ethics, from the perspective of Christian theology, it should be theocentric, God-centered means alone. We need to maintain and preserve the environment is not only because we need the resources in it and because the earth is our home (anthropocentric), not because living beings have rights as human rights (biocentric), nor because this earth is an ecosystem that has an intrinsic value (ekosentris); we need to protect and preserve the environment because the environment is God's creation, including human beings, who were created to honor and his glory.
Ekosentris,	Earth as a whole or part of the system can not be separated one from the other. Then the environment must be considered because the human is just one small part of the subsystem or the entire ecosystem. Man is a micro of the macro cosmos. According to this view, the Earth has intrinsic value (intrinsic value) which must be respected by humans. Then the nature or the environment should not be treated arbitrarily, because the earth has lofty values that must be preserved, respected, and considered sacred.	
Biosentris	Element in nature has inherent value. So all living beings have the internal value apart from its importance for humans. Humans and other living creatures has relationship continuities, then humans and the environment has its own ends. Hence every creature has the right to get treatment in accordance with the rights attached to it. This view is shared by Paul Taylor, for example, Peter Singer, and Albert Schweitzer.	

2. Effect of very strong from the spirit of Consumerism, material-alisme and hedonism, so they prefer the pleasures of life, and yet at the award stage of life as a whole
3. Knowledge GMMIT congregation that is still lacking on the issue of environmental damage, either because of the level of education or because of lack of education and information.
4. Lack of activator (leaders who care about the environment) in the field. Many leaders are not consistent so that people do not have a role model, while the religious leaders is limited in capability development (theory) and less on the ability of the field (practical).
5. Lack of good coordination between religious institutions, non-Governmental Organizations and governments so that the collective motion has not materialized as expected.

Look for the completion of the above factors when the environmental problems of the ecosystem of Lake Tondano will can be minimized even overcome. These five factors are relevant to be done by a church GMMIT.

Based on the findings and conclusions of the study, it can be proposed the following suggestions,

1. Man GMIT particular congregation is required to maintain and preserve the ecosystem of Lake Tondano, to be used to meet the needs of the church itself. This is Because the human interdependence on the environment, as well as any environmental or who do not live in dire need of human assistance. Treatments attention in humans should be the one taking the environmental compatibility and Utilize the environment should not only be exploitative Regardless of good environmental ethics in accordance with the rules and values that apply.
2. The church GMMIT also have to follow the footsteps of St. Francis of Assisi is a united and shared the fate of the environment. By being aware of the environment that is so useful for every aspect of life to the human environment ecosystem itself, nature conservation also should be seen as an expression of our love to others according to the teachings of Jesus Christ, in the which one of the explanations is to the whole creation of God as fellow creatures. In this connection, church or community need to sensitize people to know and Realize the interests of preserving the environment.

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