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Research Paper

Toll Road Construction: The Concept of Justice and Community Peace Against Environmental Change

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Abstract

The Ministry of Public Works and Public Housing (PUPR) always encourages the completion of toll roads in every region in Indonesia in accelerating barrier-free connectivity for the community, one of which is the Trans Sumatra toll road at the Indralaya - Muara Enim intersection along 119 km. The purpose of this study is to find the right and appropriate pattern for the community around the toll road construction so that justice and peace can be realized over the environmental changes. This study uses a qualitative approach with inductive data analysis. Data collection is done repeatedly and continuously with triangulation techniques to produce a concept. Types and strategies in research are case studies. The analysis tools used are NVivo 12 Plus. The results of the study found a concept that creates justice and peace in the community due to the construction of toll roads. Environmental changes that occur must be based on the principle of benefit and benefit. The construction of toll roads must involve the local community to create conducive conditions in the pre, process, and post-implementation processes. Negative impacts on the environment in the development process must be minimized through dialogue and contributions from the surrounding community. This study concludes that the construction of the Indaralaya – Muara Enim toll road as a whole is classified as meeting the requirements of the needs of the benefit, but there is still a lack of anticipation from this implementation project because there are still community complaints that can be read from respondents' responses. Environmental changes related to toll road construction must use a structured and orderly concept. In this case, the concept of environmental change must be bound by rules and regulations to anticipate and provide solutions for the negative impacts that occur and will occur, in the form of minimal compensation for land or land and buildings affected by the project. at a reasonable price, dealing with contaminated or polluted air and noise quickly and responsively.

Keywords *toll road, impact, society*

INTRODUCTION

At the opening of the 1945 Constitution of the Republic of Indonesia, the 4th paragraph explains the achievement of the goals of the Indonesian nation through development. The context is as follows: "Protecting the entire nation and the entire homeland of Indonesia, promoting public welfare, educating the nation's life and participating in carrying out world order based on freedom, eternal peace and social justice" (Hidayat, 2013). To achieve these national goals, there must be solid cooperation between the government and the people.

Indonesia must be more active in making developments to catch up with other countries that have developed. Physical infrastructure development is an integral part of the institutional and economic development of a country that is based on increasing productivity. The development of physical facilities needs to be done to achieve a better quality of life for the nation. Development must be carried out on aspects of community empowerment and infrastructure aspects (Atmaja HMahalli K, 2015). The emphasis on the infrastructure aspect of the road construction site requires more land or land while taking into account the environmental ecosystem. The implementation of development does not damage the environment of living things and inanimate objects. Humans as a living or biotic environment will be affected by development (Komarudin et al., 1999). The concept of

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environmental change for long-term development is very much needed by always paying attention to environmental sustainability and human ecology. The construction of toll roads has a big impact on environmental change. Policymakers must focus on addressing the changes that occur around development. In research presentation (Collins et al., 2019) using Systematic reviews (SRs). The first challenge of using SRs in environmental policy is that the time and resources required for their completion can prohibit their use. The use of the SR method in the policy-making cycle includes identifying factors affecting, identifying the benefits or risks of interventions, evaluating evidence on outcomes, scope options that may be available, identifying interactions that define and help to understand the situation, scope what has been researched on a topic, compare and evaluate, ensure transparency in, provide an evidence base to commit to. To get good results, there needs to be an outcome focus that includes defining the issue, evaluating and adapting, understanding the situation, developing and appraising options, preparing for delivery, committing to responsibilities, implementing, and monitoring.

Research (Haddaway & Crowe, 2018) explained experiences and lessons in stakeholder engagement in environmental evidence synthesis. Stakeholder activities and involvement are needed in a systematic review of the field of environmental conservation and management. This seeks to minimize and avoid negative environmental impacts. The construction of toll roads has far-reaching impacts as described in the article of (Bird & Straub, 2020). This article explains the impact of the rapid expansion of the Brazilian road network, which occurred from the 1960s to the 2000s, on the growth and spatial allocation of population and economic activity across the country's municipalities. It addresses the problem of endogeneity in infrastructure location by using an original empirical strategy.

One of the infrastructure developments that require large areas of land is the construction of toll roads. The construction of toll roads aims to realize sustainable socio-economic progress and does not neglect equal rights and upholds the principle of justice for the community (Badan Pengatur Jalan Tol, 2019). The implementation of development must take into account the rights of the community (Sumaryoto, 2010).

Toll roads are part of the public road network system and are part of the national road network system where users are required to pay tolls with a certain nominal amount following Law no. 38/2004 (INDONESIA, 2004). The benefits of implementing the construction of toll roads are, among others, to facilitate traffic, increase the usability and efficiency of goods and services distribution services, ease the burden of government funds and increase the distribution of development results and justice. The difference with the highway is that can be used for free and freely by the public. In Indonesia, the first toll road existed in the 70s and started operating in 1978, namely the Jagorawi Toll Road (connecting Jakarta, Bogor, and Ciawi). The authority to operate and operate toll roads lies with the Toll Road Regulatory Agency (BPJT), which includes the regulation, development, management, and supervision of toll roads operated by state-owned enterprises, regionally-owned enterprises, and private companies.

Deputy Minister of Finance (Wamenkeu) Suahasil Nazara explained the importance of the construction of the Trans Sumatra Toll Road (JTTS) to provide a life for the benefit of the local community and the people of Sumatra. The acceleration of infrastructure development encourages an even rate of economic growth, especially in the Sumatra region.

As a reference regarding the scope of road construction in the journal Road Material dan Pavement Design, with several articles including:(Budziński et al., 2023); (Jaskula et al., 2023); (Roja et al., 2023); (Kuittinen et al., 2021).

Currently, the construction of the Indralaya - Muara Enim toll road is divided into 2 sections, namely section I at the Indralaya - Prabumulih intersection along 65 km and section II is the Prabumulih - Muara Enim area along 54 km. This toll road is the trans-Sumatra toll road which consists of 3 (three)

corridors, namely Medan – Tebing Tinggi – Sibolga, Padang – Pekanbaru – Dumai, and Palembang – Simpang Indralaya – Bengkulu with a total length of 890 km. With the presence of the Simpang Indralaya – Muara Enim toll road, it is hoped that it will be able to shorten the travel time from 4 hours to around 1.5 – 2 hours.

The construction of the Simpang Indralaya – Muara Enim toll road is targeted to be completed by the end of 2022. The Toll Road Regulatory Agency has scheduled all roads to be operational in 2024. Section I has progressed by 53.09%. As of September 2021, the progress of section II reached 8.69% with a negative deviation of 65.21%. The completion of section II construction will be postponed to 2024. The construction of the toll road will provide great benefits in improving the community's economy and opening more potential in the plantation, agriculture, mining, and tourism sectors in the South Sumatra region.

Toll roads are public roads and part of the national road network system whose use is required to pay tolls. The construction of toll roads aims to increase the accessibility and capacity of the road network to serve traffic. The construction of toll roads cannot be separated from the physical and non-physical aspects of the community. The physical aspect is related to the environment, while the non-physical aspect is related to the social problems of the community. The surrounding community directly experienced these two aspects and was affected by the construction of the toll road.

Many studies have been conducted regarding the construction of toll roads on regional development from the economic aspect and the impact on society. The beauty and layout of the city must be in line with the preservation of natural conditions and the surrounding environment, as explained in Q.s. Ar-Ruum [30]:41 as follows:

ظَهَرَ ٱلۡفَسَادُ فِي ٱلۡبَ ِّ وَٱلۡبَحۡرِ بِمَا كَسَبَتۡ أَيۡدِي ٱلنَّاسِ لِيُذِيقَهُم بَعۡضَ ٱلَّذِي عَمِلُواْ لَعَلَّهُمۡ يَرۡجِعُونَ ٤١

Meaning: ***"Corruption has appeared on land and at sea due to the actions of human hands, so that Allah may feel for them some of the (results of) their actions, so that they will return (to the right path)".***

The verse above has the meaning that humans as caliphs on this earth always do good and forbid damaging the environment and invites to maintaining, and preserving the natural environment. Human carelessness towards the environment will result in humans themselves. The concept of preserving the environment in Islamic law is doing reforestation by farming and farming.

Rasulullah SAW classified people who plant and provide benefits to living things as alms, as explained in the translation of his hadith as follows:
"The Messenger of Allah (SAW) said that there is no Muslim who grows a plant or sows a seed, and birds or livestock eat the plant, except for him who gets the reward of alms". (Narrated by Bukhari, Muslim, and Tirmidhi from Anas).

Phenomena and polemics that often occur due to the construction of toll roads are the many bad or negative impacts felt by the community and the surrounding environment. This motivates researchers to study more deeply and seek to find and formulate the concept of justice and peace for the community due to environmental changes from the construction of the Indralaya - Muara Enim toll road. The concept of environmental change in the context of fiqh is closely related to the concept of maslahah.

The concept of environmental change must be formed in the corridor to meet the public interest in the conditions of implementation and construction of toll roads along with the impacts that occur to find out:
a. How far the preservation of nature is maintained.

b. How humans should behave and behave in the context of a polluted environment.
c. How humans should continue to live happily and prosperously in the world and the hereafter with the environmental changes that occur.

LITERATURE REVIEW

This research refers to several previous studies originating from within and outside the country, including researchers (Broadhead, 2019), with the title: ***"Environmental Insecurity: Another Case for Concept Change",*** discussing insecurity and environmental degradation due to environmental changes due to human actions need to be handled and followed up. It is recommended that further research be conducted on the economic integrity of the natural environment, which will discuss more deeply the synergy of human and natural forces to maintain good ecosystems so that harmony and environmental comfort occur.; Collaborative research between (Silitonga et al., 2022), article title: ***"The Application of Value Engineering Concept in the Construction of Toll Road Section 3, Cileles-Panimbang".*** This research examines and determines several efficient costs in the construction of a toll road so that it is necessary to cut it without reducing the quality of road construction. Cost evaluation and analysis are carried out in various stages, namely the information, creative, analysis, and recommendation stages using the Paired Comparison Method Research is need to be conducted on planning using the appropriate budget scheme before conducting development implementation by finding comparisons of similar development implementation and doing top up budget estimation from previous budget calculations. This is to anticipate costs that will arise beyond the project planner's estimate. ; (FU Shi, 2021), this scientific paper is entitled: ***"Technical Application Analysis of Green Environmental Protection Concept in Road and Bridge Construction".*** In this paper, it is stated that the construction of roads and bridges is a project that is very helpful and facilitates the community to earn a living in their daily lives. These development projects can promote welfare and improve people's living standards, thereby spurring living standards. Development causes environmental changes to be in line with the protection of the surrounding nature. The next research that needs to be done is about the implementation of strategies for several possible changes in the environment due to increased infrastructure development..; Research from (Harley & Scandrett, 2019), entitled: ***"One Community, development and popular struggles for environmental justice".*** This article explores the environment as the main battleground and arena of struggle because economic decision-making for the sake of capital accumulation results in a shift in costs toward the economic and political environment. Further research is suggested regarding the common perception between development, and people's struggles in realizing harmonious and sustainable environmental justice.; (Nesmith et al., 2020), with the title Chapter: ***"Environmental Injustice: Transformative Change Toward Justice***". This Book of Chapters discusses environmental injustice that occurs at the intersection of local and global and is related to the existence of deeply rooted structural oppression. Inequities in question are related to racial, gender, and socio-economic forces resulting in exacerbating conflicts between populations at large that are affected by ecological degradation, natural disasters, and other impacts of climate change and human-induced degradation. This paper emphasizes protecting the green environment and realizing harmonious development. There is a need for policy or strategic research in the form of regulations related to standards and road design planning based on the local context; Research titled: ***"Assesment of The Water Quality of The Bouregreg Estuary After The Depollution Project"*** by (Harim et al., 2021). Research conducted on the Atlantic coast discusses the serious pollution problem in the waters due to human actions themselves. This study highlights the impact of the depollution project (which is part of the Bouregreg Valley development project) on the water quality of this estuary. The results obtained during this study revealed a significant improvement in the physicochemistry of the water quality of the Bouregreg estuary. However, from a bacteriological point of view, the water of these estuaries remains polluted and therefore unsuitable for swimming. Based on a report (FC/ FS), the source of faecal contamination really comes from humans. The waters of the Bouregreg estuary are currently classified as bad and do not meet the water standard for bathing purposes. The bacteriological quality of the Bouregreg estuary waters did not show any improvement after eight years of depollution and decontamination of wadis and coastlines. Further research is needed to

improve the bacteriological quality so that it meets the standards for bathing needs and routine needs.

Previous research from within the country, among others, such as: (Khasanah et al., 2017) with the title: ***"The Impact of the Development of the Solo-Kertosono Toll Road on the Economic Rights of the Kasreman Village Community, Geneng District, Ngawi Regency"***. This study aims to determine the impact of the construction of the Solo-Kertosono toll road on the economic rights of the people of Kasreman Village, Geneng District, Ngawi Regency. The conclusion of this study shows that the construction of the Solo-Kertosono toll road has a positive impact, namely opening up opportunities for business actors to open businesses around toll road construction, while the negative impact is that farmers' incomes decrease because agricultural land is reduced, unable to reduce the number of unemployed in Kasreman Village. because of the absence of community involvement in the development. The construction of the Solo-Kertosono toll road is not environmentally sound because it results in a reduction of about 12 hectares of productive land, the disappearance of irrigation channels for rice fields and road access to the opposite rice fields as well as increased air pollution due to the large number of large vehicles loaded with materials. Further research that needs to be done includes diverting alternative sources of community income due to the construction of toll roads, such as preparing locations for food courts, fish ponds, or the like as a means of replacing land used for road construction. In this case, the surrounding community must be directed and involved in these alternative businesses, especially those affected by the toll road development project. The purpose of worshiping this type of business is to avoid unemployment and criminal acts.; Further research (Prasetyo & Djunaedi, 2019) entitled: ***"Changes in Regional Development Before and After Toll Road Construction".*** The results show that the construction of toll roads is mostly enjoyed by areas that are the destination of movement, while areas that are not the destination of movement tend to be less profitable due to a decline in economic activity after the operation of the toll road. This study also found that toll roads affect increasing local tax revenues and the number of trucks that do not use toll roads because of the high toll rates. Factors that influence regional development after the operation of toll roads include (1) completeness of regional facilities; (2) tourist sites; (3) geographic location. Research on regional development after the operation of the toll road still has opportunities to continue to be developed. Some suggestions for further research include further research with other areas traversed by toll roads as research locations, further research on factors that can influence the development of areas that are traversed by toll roads, research on the benefits of toll road development for the transportation of goods and its relationship with reduced logistics costs.; In a study (Isnaeni, 2020) entitled: ***"Legal Concepts of Land Acquisition for Toll Road Development in the Perspective of State Controlling Rights",*** revealed the results that the problem faced by the government in the implementation of toll road construction is land acquisition. The construction of toll roads requires adequate land and must free up people's land around the construction. The government often encounters problems in acquiring land for the construction of toll roads from a juridical and empirical perspective. The legal concept of land acquisition for the construction of toll roads must be returned to the interests of the benefit and still pay attention to personal rights which are the constitutional rights of the people. Further research needs to be studied regarding the implementation of legal harmonization of regulations relating to land acquisition for toll road construction to improve the legal concept of land acquisition so that there are no norm conflicts.; The research entitled: ***"The Effect of Medan-Tebing Tinggi Toll Road Development on Micro, Small and Medium Enterprises",*** by (Januardin Manullang dan Hottua Samosir, 2019). This study discusses the benefits of toll road construction on the interests of the community and regional development. The construction of toll roads encourages the acceleration of the distribution and delivery of goods and people. The impact that occurs from the construction of toll roads is also very large for the surrounding community, especially for SMEs in the workshop sector. The results of this study indicate and describe some of the impacts that occur on workshop SMEs in terms of personal and regional income and labor. Further research that must be carried out is the policy of the central and regional governments regarding the people's economy that will occur after the implementation of toll road construction. The research material includes handling the economic impacts arising from toll road construction by involving the community in the development project.

The suggested research is more focused on preparation and economic development in the surrounding communities.; (Sandhyavitri & Zulfiqar, 2005) conducted a study entitled: ***"Risk Analysis of Toll Road Development in the Construction Phase (Case Study of Pekanbaru-Dumai Toll Road)".*** This study conducts a project risk analysis during the construction phase, which in detail measures the risk probability value and risk impact which is analyzed and simulated using software. Furthermore, the results of the analysis are compared with several risk parameters published by the Research and Development Center. The data obtained have identified 4 (four) main risks that are affected during the project construction phase, namely project financing, project development, equipment, and force majeure. The risks that may occur are classified as moderate risks that require special handling. To carry out further research into the risk analysis of the post-construction phase of the Pekanbaru-Dumai toll road construction, to complete the 2 risk analyses of the Pekanbaru-Dumai toll road construction.

There is a clear difference between this research and some of the previous studies described above, namely the focus of concept discovery on environmental change due to the construction of toll roads. The concepts found are concentrated on the justice and peace side of the community, especially around the construction of toll roads. The involvement of the government, related parties in the construction of toll roads and the surrounding community must be solid and mutually support each other to get a win-win solution for the negative impacts.

METHODOLOGY

Judging from the place, this research is classified as field research, which is scientifically supported by using literature or literature in the form of books, articles, and various relevant sources. Based on the level of explanation including descriptive. The research uses a qualitative approach. Data was collected from various sources, natural settings, primary data sources, and techniques using participant observation, in-depth interviews, and documentation. Data analysis is inductive and is repeated until the data is saturated and credible. The analysis of the findings is strengthened by using a pie chart, which illustrates the findings in the field.

The research in this article is more about finding the concept of justice for the interests of the community around development and fulfilling peace in taking action and implementing project implementation decisions. This research is a case study type and strategy. The number of respondents as many as 41 people was obtained by using the Slovin formula. Collection and analysis of data from respondents and relevant references. Some studies use analysis tools using the NVIVO 12 Plus.

FINDING AND DISCUSSION

Infrastructure development is the driving force for national development. The existence of adequate infrastructure will contribute to the smooth production and distribution of goods and services as well as increase the country's economic growth. Infrastructure also encourages foreign and domestic investors to invest in Indonesia. Well-managed infrastructure development will have a double effect in the long term, one of which is by controlling risk management correctly and accurately.

The activities of implementing infrastructure development have both positive and negative impacts. The negative impacts that are often caused include polluting the environment, namely producing waste and damaging the environment. The integration of Islamic law in regulating the business sphere is very much needed so that business people are better able to introspect themselves. The concept of environmental change from the perspective of maqashid sharia will direct business people to pay attention to the benefit of society and the environment.

One example of infrastructure development is the construction of toll roads. The impacts that are often felt by the surrounding community are related to the replacement of land affected by road construction, the potential for displacing residents to other areas, and noise and air pollution due

to project implementation. The construction of toll roads must pay attention to the condition of productive land and the livelihoods of the surrounding community.

Environmental changes and pollution. What has happened in Indonesia has reached an alarming stage. The environment is changing and polluted due to human activities, including infrastructure development. The essence of an infrastructure development such as the construction of a toll road is the reciprocal relationship of the community to the implementation of the development. Companies that carry out work on toll road construction projects must have a form of concern for environmental problems by paying attention and being able to solve various problems that occur. The important thing to do is support environmental change. Every activity to increase the efficiency of infrastructure development must be in line with the consistency of maintaining environmental quality, including water, air, and noise pollution which has a very bad impact on the environment and society.

2 (two) Factors cause changes and damage to the environment and nature, namely due to natural events and human actions. Factors caused by natural events are floods, droughts for a long time, volcanic eruptions, landslides, and earthquakes. While factors resulting from human actions include natural degradation, changes, and environmental pollution due to development.

Changes and environmental damage can be minimized by avoiding environmental degradation and pollution by humans. The human community does not carry out activities that change and damage the environment causing the preservation of the universe. The impact of toll road construction can increase carbon levels in the air and other environmental pollution, as explained in the article: (Chen et al., 2022); (Leal Filho et al., 2023); (Dimayuga et al., 2023).

Humans on the surface of this earth are located as caliphs of Allah SWT who carry out the duties and obligations to maintain, preserve nature, take advantage of, and manage natural resources to realize peace and prosperity. Humans are always required to maintain the safety of themselves, the environment, and society in every activity. The relationship that is closely related to each other is between nature, the environment, and humans. With the development of infrastructure, environmental sustainability must always be maintained because it affects the future. Some of the possible risks of environmental change are stated in several articles, including: (Priest, 2023); (Zhen et al., 2023); (Ding et al., 2023).

Preservation of the environment by maintaining or caring for it (hifzh al-bi'ah) or in another sense mashlahah mu'tabarah is included in the category of the concept of mashlahah mursalah. The verses in the Qur'an do not explain in detail operational techniques, namely in the form of attitudes or actions for prohibiting and protecting the environment but only explain the principles of environmental conservation and restoration. The mujtahids play a very important role in deciding how to deal with changes or pollution or environmental damage in the form of targeted and efficient solutions. The living environment in this universe is the breath of all living things, so there must be serious care and maintenance on an ongoing basis.

The problem of maslahah, Al-Syathibi classifies it into 3 (three) criteria, namely maslahah dharurriyah, classified as the main need (the strongest maslahah or aqwa al maratib). This need must be met because it is urgent or emergency. If this need is not met, it will threaten human life. All problems must have a solution or the correct solution so as not to cause chaos and damage. This applies to problems arising from the impact of the construction of the Indralaya – Muara Enim toll road, which must have anticipated solutions before and after project implementation. Protection of 5 (five) basic needs (ushul al-Khamsah) namely protection of religion, soul, mind, lineage, and property. The second maslahah is maslahah hajiyyah, which is a secondary need. This need is created not to endanger human life but will cause difficulties. Islamic law will play a role in dealing with and overcoming these difficulties. In Islamic law, the term rukhsah or relief is known. Rukhsah is to lighten the burden with conditions set by the scholars. This form of maslahah must be implemented because if it is not carried out it will cause difficulties (masyaqqah). Difficulties or

masyaqqah do not lead to damage and destruction (mafsadah). The third maslahah is tahsiniyyah. These needs are flexible and complementary. In other words, if the needs are not met, it will not threaten the existence of ushul al-khamsah. (basic needs) .

The three maslahahs mentioned above have a significant correlation with the sharia formulation. The first formulation is that sharia is realized based on rejecting harm and bringing benefit. Allah SWT has sent down orders to be obeyed and imposed prohibitions so that His servants are shunned. The second formulation, namely sharia is always closely related to benefit. Islam teaches the Muslim community to do good and stay away from evil. The third sharia formulation is that there is no conflict between sharia and benefit. The final formulation is that Islamic law always shows benefit in every condition or situation. Allah SWT guarantees that the benefits that lie in sharia will not cause damage and harm. The conclusion of maslahah is an act or legal treatment that has benefits for all humans as a standard for interpreting universal Islamic law in order to be able to provide freedom of movement for Islamic legal thought in answering various environmental problems and some contemporary issues.

Humans as servants of God must maintain the environment because it is an obligation and part of faith. There are 2 (two) rules that underlie the maintenance of this environment, namely the first rule, everything that can determine the perfection of the implementation of an obligation will be obligatory, and the second rule describes every means that have the same legal status as the action or treatment that is the goal. The principle that underlies the maintenance of the universe is the benefit of humans, while the maintenance of nature itself is a universal moral message conveyed by Allah SWT.

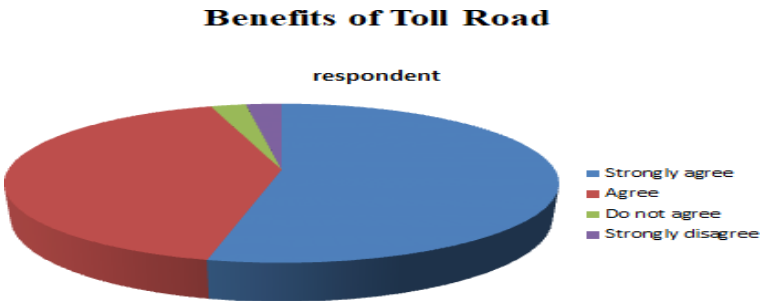
The Maliki school explains that the law is obligatory and highly recommended for everything that is not explicitly stated in the texts but has the right benefits and objectives (al-muhdathat al-maheasy fi alma'na).

The results of the study show the description and condition of residents towards the construction of the Indralaya - Muara Enim toll road. The number of respondents as many as 41 people, does not represent the total population of Indralaya and is only limited to residents around the development. In the interview, the researcher divided into 5 (five) groups representing the community. The information provided is a description of the researcher's observations and structured interviews. The question material has been processed so that it can represent the various impacts and influences of the construction of this toll road. In the study, there are notes of researchers' observations for other reasons so that air contamination occurs, noise contamination becomes pollution for the surrounding community and damage to houses.



The words “lack” and “anticipate” are the most frequently used words for reasons of pollution and damage related to the construction of the Indralaya-Muara Enim toll road. Lack of anticipation from the implementation of this toll road project resulted in the dissatisfaction of the surrounding community with the development. This requires a serious handling of pre-toll road construction in the form of anticipating a very mature plan so that it is optimal after its implementation.

The presentation of the research results is as follows:



The pie chart shows that respondents with an assessment of strongly agree with 54% of the 4 (four) questions asked. This indicates that the community of residents represented by the respondents gave an evaluation of the construction of toll roads that have many benefits for the community. The following is the statement of the respondent.

No.	Statement: Benefits of Toll Road Construction
1	Easy access to travel without obstacles
2	Shorten the travel time
3	Reduce the number of accidents because the roads are good
4	The environment around the toll road becomes neat

The construction of toll roads has the following benefits:

a. Toll roads have an effect on regional development and economic development
b. Improve mobility and accessibility of people and goods
c. Toll road users will benefit from savings in Vehicle Operating Costs (BOK) and time compared to passing through non-toll roads.
d. Business entities get a return on investment through toll revenues, which depend on the certainty of toll rates.

The construction of toll roads has benefits in environmental change. Based on Law no. 32 of 2009 explains the notion of the environment as a unitary space with all objects that affect nature, the continuity of life and human welfare.In the initial process of implementing the toll road, it harmed the air around the environment due to the activities of the development project vehicles. The carbon reduction effect is described in the article of (Han et al., 2022); (Ye et al., 2022).

The number of respondents who strongly agree with 54% of the benefits of the construction of the Indralaya - Muara Enim toll road indicates that it is sufficient to achieve ushul al khamsah or basic needs in maqashid sharia. The use of human reason or mind in this toll road construction project can still maintain and maintain a fairly high response from the surrounding community (including religion, life, and property) and their natural environment in the present and the future (including descendants).

Respondents stated that they disagreed with 5% of the benefits of toll road construction, indicating that the benefits felt by the community were not optimal. This is usually related to compensation and environmental pollution that are still felt by the community around the toll road construction.

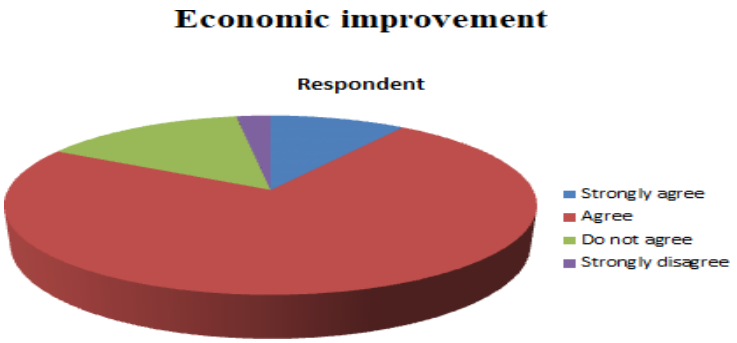
The increase in the economy will be directly proportional to the construction of toll roads. This is clarified in the graph which is the result of interviews with respondents reaching 73% agreeing.

The following are statements from respondents:

No.	Statement: Economic Improvement
1	Opportunity to open a small traditional culinary on the edge of

	the toll road
2	Rent a house and rent for toll officers to be full
3	Shops, small stalls, Indomart, and Alfamart have increased buyers

The following is explained by the illustration on the graph:



The response was quite high from the surrounding community, 73% said they strongly agreed and 15% agreed that economic improvement meant that the toll road project was beneficial and had benefits. The circulation of money in the community before the project was started was normal and only enough for daily needs. However, with the implementation of this toll road construction, the enthusiasm of the community to open shops and increase the products sold has increased because the number of employees working on the project is quite large and almost all of them buy daily necessities around the project area.

Communities around toll road construction feel a more positive impact on the economy. This is due to the replacement of land affected by development that exceeds the fair market value so that livelihoods are transferred to other areas by opening shops or the like that are wider and more complete. The impact felt by other communities is opening a small shop or a temporary grocery to meet the needs of the workers. Another opportunity is to open a house rental service for the residents of the workers or employees related to the construction of toll roads. The existence of existing shops has increased turnover compared to before the construction of the road due to the fulfillment of the needs of workers and employees who work or are on duty.

The number of respondents stated that they strongly disagreed only 2% and disagreed 10% on the economic improvement due to the construction of this toll road because the pre- and post-toll road construction had a fairly positive effect on improving the community's economy. In other words, the community is helped by the construction of toll roads from an economic perspective. The total disagreement of 12% indicates that there are still a small number of people who have not felt an increase in the family economy. This means that the economic improvement felt by the surrounding community has not been evenly distributed. Directing construction project workers to conduct transactions in shops, stalls or stalls around the toll road environment and optimizing residents' houses for rent as a place to live.

The conventional economic paradigm has 2 (two) main objectives of economic improvement and development, namely increasing real income per capita and enforcing equitable distribution of income. The biggest problem in the modern economy, especially in developing countries, is the low income of the people and there is a widening gap between rich and poor communities. The main problem is inequality in the distribution of wealth income.

Islam defines an increase in economic development and does not deny the aspect of individual income as one of the indicators. The goal of Islamic economics is to create a prosperous society by

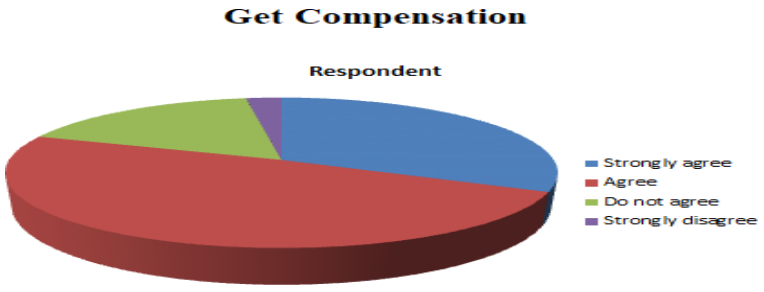
carrying out religious obligations perfectly. Islam emphasizes the importance of distributing wealth equally and fairly. Islam creates specific instruments to achieve distribution through the mechanism of zakat, infaq and alms.

Economic improvement and development must remain oriented towards increasing individual commitment to religion. In other words, there must be a correlation between economic growth and development and increased fulfillment of religious obligations. The slogan of improvement in economic development must have an Islamic nuance by prioritizing the guidance of Islamic teachings.

The objectives of the improvement policy in Islamic economic development are as follows:

a. Human resource development, which makes humans the main object of the policy of increasing and developing the Islamic economy. Development of a relationship structure based on cooperation.
b. Beneficial expenses. Prioritizing the expenditure of necessities (darruriyat) rather than complementary goods (kamaliyat) and luxury (tahsiniyat).
c. Improving the quality of life by creating jobs.
d. Balanced development. In this case, the construction of toll roads must be in line with the increase in the community's economy
e. Development of new facilities, infrastructure and technology.
f. Reducing foreign debt and dependence on other countries in terms of loans, especially in infrastructure development.

The concept of environmental change that has occurred has fulfilled the elements of ushul al khamsah of maqashid sharia. The maintenance of religion, soul, mind, lineage and property is sufficiently realized and felt by the community around the construction of the Indralaya – Muara Enim toll road. However, the respondent's statement on this economic improvement is not optimal because it is quite high in terms of disagreement, namely 15% responding to disagree and 2% strongly disagree. In this case, the government and contractors as the executor of the toll road construction project must be more cooperative and mingle with the surrounding community to get the right solution to overcome the dissatisfaction of the surrounding community.



The basic and very important thing from the implementation of toll roads is that there must be appropriate and at least commensurate compensation for the land or land or buildings affected by the development.

The results of the study make it clear that 49% of respondents agree and 32% strongly agree on the existence of land compensation. This indicates that the community is quite appreciative of the implementation of land compensation in the construction of the Indralaya – Muara Enim toll road.

No.	Statement: Land Compensation
1	Receive compensation for land and building prices greater than the usual market price
2	Can build a bigger and more luxurious house

3	Can donate to the construction of worship facilities
4	Can build a shop bigger than the shop before
5	Slightly affected by land, but the entire existing land area is replaced

In the compensation process, the community gets an unexpected benefit because the replacement of land or land or buildings exceeds the fair market value. The number of responses stating strongly disagree is only 2% because it is indicated that they do not have land affected by toll road construction. Indications of dissatisfaction with a small part of the community for land replacement can be seen in the responses of respondents reaching 17% stating that they do not agree. The approach and cooperative method should be carried out between the local government, contractors and the community around the toll road construction.

The large amount of compensation makes the community able and able to donate more, which is channeled to the construction of houses of worship and complete facilities of worship. Another positive impact, the community can build shops or the like with a wider size. This land replacement is on average large. In a sense, the area of land that is slightly affected by development is compensated for all the land owned.

A prosperous society in the view of Islamic law is assessed from material and non-material measures, including the fulfillment of spiritual needs, maintaining moral values and creating social harmony. Two criteria for a prosperous society are the fulfillment of basic needs, the preservation and protection of religion, soul, mind, lineage and property.

The correlation between toll road construction and a good Islamic economic system is at the point where there is an increase in welfare after the implementation of development projects. Islamic economics requires that all economic activities be carried out with the principle of benefit (welfare) while still balancing aspects of the world and the hereafter. Respondents' responses to compensation were not optimal because there were still disagreements of 17% stating that they did not agree and 2% strongly disagreed. This indicates that there is still community dissatisfaction in the case of land compensation or other words it is not evenly distributed regarding the nominal received by the surrounding community for the land affected by the construction of the Indralaya - Muara Enim toll road. The local or local government and contractors as project implementers must be sensitive to community complaints by conducting blusukan against communities that are lacking or dissatisfied with the compensation for the land. The next action must be responsive and quickly respond to the dissatisfaction by fulfilling the wishes of the surrounding community.

The existence of land is an important natural resource for the Indonesian state. Land issues have not been resolved in Indonesian law. Taking ownership of land is a problem that is often encountered in the community and is not following the nominal replacement.

Land plays a central role in toll road or other infrastructure development projects and the life of the Indonesian economy. This turmoil caused an increase in public respect for land. The community gives an inflated price for land along with the increasing number of residents.

Land is an important factor supporting the life and welfare of the community so that the concept of property rights determines the structure of the life of the state and nation. Most countries recognize the absolute right of individuals to land ownership which is called material rights. The most important material right is ownership. Violation of the right to ownership can occur because of the rights of others in writing or unwritten. Land issues under development are quite sensitive. Increased development makes land a most important need.

Land contains economic, social, political and legal aspects. The need for land for development is a serious problem if it does not have the right solution because it will disrupt the stability of the

community. Land tenure rights are legal relations that give the authority to do something against legal subjects, while the legal object is the land they control.

Judging from the authority, according to the UUPA concerning land tenure rights which have special authority, namely the authority of public and civil nature, including the rights of the Indonesian nation (article 1 of the LoGA). This shows that the relationship is permanent between the Indonesian people and the land located in the Indonesian state as a whole, with the subject being the Indonesian nation. The rights of the Indonesian people are the highest rights to control over land in Indonesia. The right to control the state (article 2 UUPA). The state is an organization that has the highest power for all the people to carry out the task of leading and regulating the authority of the Indonesian nation (public authority). The right to control this state will always be able to control or direct the functions of the earth, water and air according to government policy. The state has primary control as the governing body for:

a. Regulate and organize the allotment of use and maintenance.
b. Determine and regulate the rights of the subject of land law.
c. Regulate legal relations between individuals and legal actions regarding land ownership.

The environment always has serious, complex and global problems. Ecological imbalances, erosion and the erosion of the ozone layer are very dangerous for survival. Environmental damage due to changes in almost all parts of Indonesia. One of the triggers for environmental change and pollution is the construction of toll roads. Human behavior that is lacking or irresponsible causes environmental problems that require very serious attention.

Islam is a comprehensive and complete religion that pays attention to all human needs in life and has rules for all life issues, including environmental problems. Many verses in the Qur'an and Hadith explain the problems and rules of the relationship between humans and the natural environment.

Pollution and air pollution related to the construction of toll roads can cause legal problems. Air pollution control has not been carried out optimally and has not been effective because it is related to the legal structure that has a bureaucratic mindset that tends to be long and quite convoluted. Contractors are still taking advantage of existing legal substance loopholes.

The impact that occurs in schools, campuses and the community environment causes a lot of dust that enters the room to interfere with teaching and learning activities or processes. Scattered dust and thick smoke cause unpleasant odors, coughing and shortness of breath. This is a health hazard, especially for small children and must be anticipated and minimized immediately.

Pollution of environmental ecology that occurs in various parts of the world with several different case models but remains in the same context, which moves researchers to find and formulate provisions and regulations on the environment from the impacts it causes. Ecology is a system formed by the reciprocal relationship between living things and their environment. The gap between living things and the environment is indispensable for human well-being. Ecosystems are formed from living and non-living components in a place that interact with each other to form an orderly unit.

The basis of environmental law in Indonesia has been formed with several referendums and has been refined in the form of the constitution of the Republic of Indonesia. The core of the material lies in the effort to advance the welfare of the Indonesian people. Law Number 32 of 2009 is the basis for the environment and its management in Indonesia.

The legal basis is a strong and intact system for managing the environment in Indonesia. Indonesia's national law on the environment provides several subsystems listed in it consisting of:

a. Environmental Management Law
b. Environmental Procedural Law
c. Environmental Civil Law

d. Environmental Criminal Law
e. International Environmental Law



Environmental pollution is a real problem that must be responsive in handling it. From the results of the study, the dominant respondents stated that they strongly agree with the presence of contaminated air, which is 59%, the responses agree as much as 32% while strongly disagree only 2% and 7% disagree because the respondents are quite far from the toll road construction area. Reducing air pollution by, among other things, spraying or sprinkling water around locations and roads that trucks or cars pass and covering soil cargo with tarpaulins.

Protecting the environment is a human obligation, especially in this case the local government and project implementers must be very serious about paying attention to the life of living things. Carelessness in protecting the environment will have fatal consequences for public health. Preventive actions and appropriate and correct solutions must be carried out quickly and responsively.

Presentation of questions asked to respondents:

No.	Statement: Air Contamination
1	Polluted with scattered dust
2	The floor of the house around the toll road is always covered with dust
3	There is a thick smell of dust in the respiratory cavity
4	The smell of smoke is near
5	The air around the highway area is black



Another impact of environmental pollution is noise pollution caused by cars and trucks transporting goods or materials such as transporting excavated soil. Air pollution can be found in everyday life, especially in urban areas and can cause health problems, including hearing problems, heart problems, sleep disorders. The loud and noisy sound generated from vehicle engines, toll road construction projects is very disturbing to residents.

Here are some statements about noise contamination due to toll road construction:

No.	Statement: Sound Contamination

1	Noisy noise from an empty cargo car moving fast
2	Noise when welding
3	Noise spilling things from the car

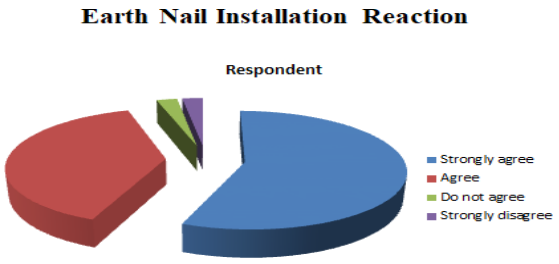
The results of the study illustrated in the graph show that respondents more strongly agree with the presence of noise contamination in the form of noise related to toll road construction, reaching 59% and agreeing by 23%. Statements strongly disagree by 9% and up to 10% respond to disagree. because they think that noise pollution is a normal and natural thing from an infrastructure development. Respondents' responses stated that they disagreed with a total of 19% indicating that there were serious public complaints about this noise contamination, especially among the elderly and toddlers.

The bad effects of noise pollution include:

1. Hearing problems
   Noise pollution has a high risk of hearing loss, especially at sound intensity that exceeds 75-85 decibels (dB) for a long time. The noise of goods cars with fast lanes and spilling goods has an intensity of 80 dB, while the sound of welding can reach 110 dB. Sounds with an intensity above normal can cause ringing in the ears or tinnitus (still temporary), but if it lasts a long time it becomes permanent. Hearing loss due to noise pollution results in less able to understand speech and difficulty concentrating.
2. Sleep Disorders
   Sleep becomes quality by taking 7-9 hours per day for adults. The ability to sleep quality affects the body and mental health. Sound intensity above 33 dB at night can trigger the body's natural reactions and disrupt sleep quality. Sleep quality can also affect mood. Adequate sleep will reduce and eliminate stress and a better quality of life.
3. Cognitive disorders
   Noise that is heard permanently and in the long term greatly affects cognitive abilities, learning and thinking in all age groups. The habit of hearing whispers and noisy voices has a higher risk of having difficulty remembering, concentrating and managing emotions, especially in children. In infants and toddlers it can cause speech delays.

In a study explained that air pollution in the long term can affect learning abilities.

1. Cardiovascular disease
   Noise pollution can cause cardiovascular disorders, which are diseases related to the heart and blood vessels. Sleep makes the body rest and repair damaged tissue and gather energy again. Disrupted sleep quality will cause a decrease in the function of the body's organs, including the heart and blood vessels. Noisy sound with an intensity above 65 dB for a long period will activate the body's response to stress in the form of the production of the hormone cortisol (stress hormone) and increase blood pressure, blood viscosity and heart rate.
2. Mental disorders
   Mental disorders can occur due to noise pollution. Mental disorders that occur in the form of unstable emotional anxiety, stress, aggressive behavior and other psychiatric problems. Mental disorders are prone to occur in pregnant women and newborns. Prevention is done by protecting the ears during activities, such as using earplugs.



The results of the study indicate that the respondents' statements are more dominant and strongly agree with the perceived impact of the installation of earth nails in the construction of toll roads. The assessment reached 56% .. Responses of respondents agreed by 39%. This data indicates that the community agrees with the construction of the Indralaya – Muara Enim toll road because they are aware of and understand the benefits, but the disturbance caused by the installation of earth nails in the project is still felt by the surrounding community with a statement of disapproval reaching 5%. The disturbance in the installation of earth nails was felt, especially the vibrations and cracks in the walls of houses and other facilities owned by residents. The process of installing earth nails related to the construction of toll roads is very much felt by the surrounding community, especially there is damage to the houses of residents.

The parts of the house that were damaged were the walls, floors and doors. People also feel the vibrations and feel swinging during the process of installing the earth nails. Severe conditions occur when the soil sinks, causing the tiled floor to collapse.

In this case, the contractor should before carrying out the process of installing the earth nails to anticipate these conditions, by documenting the houses of residents so that when the process of installing earth nails occurs, the house is damaged, the contractor must be responsive and quickly find solutions to repair people's houses or replace them.

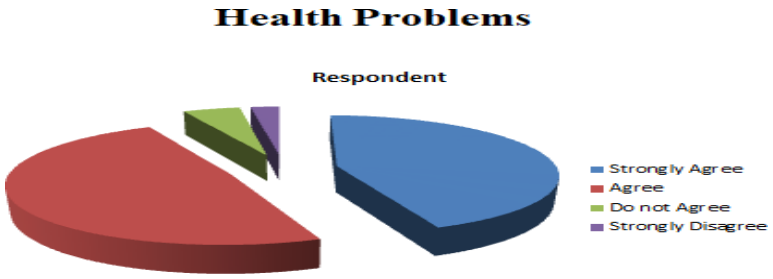
Some of the questions asked to the respondents were as follows:

No.	Statement: Earth Nail Mounting Reaction
1	Cracks in the walls of the house
2	Split the wall of the house
3	Doors and glass vibrate like an earthquake
4	The sinking of the ceramics is due to the sinking of the soil
5	Feels on a ship when you are on the toilet/toilet

In this case, the contractor should before carrying out the process of installing the earth nails to anticipate these conditions, by documenting the houses of residents so that when the process of installing earth nails occurs, the house is damaged, the contractor must be responsive and quickly find solutions to repair people's houses or replace them.

Respondents stated that 49% agreed, a total of 44 responded strongly agreeing to the health problems caused by the installation of earth nails, while only 2% strongly disagreed and 5% gave an agree response because the respondents' activities in the toll road construction area were not currently in the implementation process and their domicile was far away. from the project site. The concept of environmental change from the construction of this toll road must be taken very seriously because it is closely related to public health. The goal of sharia to save living beings due to infrastructure development must be put forward. When the safety of human life is threatened, the protection of religion, reason, lineage and property will be neglected so that the objectives of sharia are not achieved perfectly. The community around the development must act quickly and report the current conditions regarding the negative impacts of the implementation of development

projects so that local governments can act quickly and appropriately. The project implementer or contactor must be responsible and provide the most appropriate solution to the negative impacts felt by the community and the environment.



To find out more in detail about the questions asked to respondents, the following is the explanation:

No.	Statement: Health Problem
1	Very deafening sound
2	Feels in the chest vibrate
3	Feet on the earth feels an earthquake
4	A gripping fear
5	Want to move house
6	Baby crying and restless

The authorities (government, ministry of PUPR, contractors) who carry out toll road construction projects must anticipate the negative effects of implementation projects because they have an impact on the community and the environment. In this case, the government must create a concept of environmental change in the form of binding rules and provisions.

With the toll road construction project, it is necessary to maintain the environment. The environment and society are maintained means the same as maintaining religion, soul, mind, lineage and property, following the concept of environmental fiqh, namely maslahah and maqashid sharia. The concept of justice and community peace for the construction of toll roads must prioritize the principles of benefit and maslahah. In general, the interests of the community must be prioritized and upheld above meeting the needs of groups and individuals. In more detail, it can be explained that the government and authorities involved in infrastructure development must be more observant in reading the situation and conditions that will occur in the surrounding community, namely from calculating land compensation (land acquisition) according to market prices and agreements, all impacts bad or negative impacts from the implementation of development such as pollution, damage to buildings, inconvenience to residents and psychological or psychological factors that may occur.

The trial and error of the concept of justice and community peace were also obtained from various previous experiences of infrastructure development. This concept applies a win-win solution or in other words, the government, who is concerned with development, and the community, find a common ground for the right solution without harming each other. An important anticipation that must be prepared in advance before the implementation of development is the various possibilities of handling water, air, and noise pollution, and the stages of land replacement and building damage. Good communication in establishing agreements between residents and related parties must run well and be conducive. Any problems that arise along the implementation process must get a quick and responsive solution. The local government and experts related to toll road construction always involve community representatives and customary leaders in making decisions regarding the rights of residents. There is no unilateral termination. Standards for handling solutions and price

guidelines for land replacement and damage must be approved by community representatives and customary leaders.

The documentation for the construction of the Indralaya-Muara Enim toll road is as follows:









CONCLUSIONS

The limitations of this study discuss good and appropriate strategies for environmental changes that occur in the Indralaya-Muara Enim toll road development area. The scope of the observation was carried out on communities in the toll road construction project area.

The results of the research conclude that there must be a concept of justice and peace for the community against environmental changes due to the construction of toll roads, namely by supporting each other and working hand in hand to find appropriate, correct, and accurate solutions to various problems that arise. This concept applies a win-win solution to find a common ground for a solution without any loss to either party, in this case, the community and parties related to the implementation of development. The first steps to be prepared are the handling of water, air, noise pollution and land replacement, and building damage. Good communication in establishing agreements between residents and related parties must run well and be conducive. Any problems that arise along the implementation process must get a quick and responsive solution. The local government and experts related to toll road construction always involve community representatives and customary leaders in making decisions regarding the rights of residents.

The recapitulation of the percentage of the surrounding community's responses to the construction of the Indralaya-Muara Enim toll road is that the benefits of the toll road construction show that the majority strongly agree; the agree category is more dominant towards improving the community's economy; land replacement occupies the agreed category; there are public complaints (with the

dominant category being strongly agreed) on contamination or air pollution, noise, installation of concrete nails that cause health problems (dominant category: agree).

LIMITATIONS & FURTHER RESEARCH

The researcher recommends conducting further research regarding the problem of compensation for land, buildings, and damage caused by the construction of toll roads. The scope of the discussion is limited to the construction of toll roads or similar infrastructure development involving the government, authorities, and the surrounding community. Sustainable development must continue to be carried out and pursued as intensively as possible, but without leaving losses that will be experienced by the community and the environment.

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