

# The Two-Edged Sword of Indonesian IKN Development (An Environmental Communication Study in Penajam Paser Utara)

Teguh Hidayatul Rachmad<sup>1</sup>; Yohanes Probo Dwi Sasongko<sup>2</sup>; Kho Gerson Ralph Manuel<sup>3\*</sup>

{ teguhhidayatul@apps.ipb.ac.id<sup>1</sup>, sakasasongko@gmail.com<sup>2</sup>, khogerson21@gmail.com<sup>3</sup>}

<sup>1</sup>IPB University and Kampus IPB, Jl. Raya Dramaga, Babakan, Kec. Dramaga, Kabupaten Bogor, Jawa Barat 16680, <sup>2</sup>Bunda Mulia University and Jl.Lodan Raya No. 2 Ancol Kota Jakarta Utara 14430 DKI Jakarta.

**Abstract.** A Study on Environmental Communication to Minimize Risks in the Development of Indonesia's National Capital (IKN Nusantara) in Penajam Paser Utara, East Kalimantan. Any development project will have an impact on economic, political, social, and cultural growth, especially in the case of the planned relocation of Indonesia's capital city to Penajam Paser Utara. This relocation will affect both the environment and the local community. This land will directly or indirectly impact the existing forests in Penajam Paser Utara. How can the risks associated with the IKN Nusantara development be minimized through environmental communication studies? The methodology used will be qualitative, employing in-depth interviews. The research's findings highlight key environmental communication aspects that should be prioritized and form the basis for policy recommendations to the Indonesian government. These aspects include: Environmental Information and Awareness, Public Consultation, Environmental Impact Assessment, Environmental Impact Mitigation, Environmental Monitoring, Community Participation, and Corporate Social Responsibility.

**Keywords:** Environmental Communication, Archipelago IKN Development, Environmental Mitigation

## 1 Introduction

The government has governed the development of the IKN Nusantara in Penajam Paser Utara, East Kalimantan by the enactment of law number 3 of 2022 on February 15, 2022. Article 2 of the statute outlines three fundamental principles that serve as the guiding principles for the establishment of IKN. These goals include transforming into a globally recognised sustainable city, serving as a catalyst for Indonesia's future economy, and embodying the diverse Indonesian nation's national character, rooted in Pancasila and the 1945 Constitution of the Republic of Indonesia [7].

In the diverse backdrop of Indonesia, characterised by a multitude of races, faiths, and traditions, the capital city assumes a significant role as a symbol of cultural consolidation. The IKN Law (2022) states that Indonesia has a population of 237 million people residing in

37 provinces. The country is home to around 1,100 ethnic groups, 300 dance arts, 700 language styles, 400 regional melodies, and 23 traditional environments. In order to enhance social cohesion and mitigate the possibility of conflict arising from disparities, it is imperative to establish a shared identity that encompasses all aspects.

The objective of development should be to promote prosperity within the community and its environs, while ensuring the preservation of the environment and the habitat of the local flora and wildlife. The implemented development has the potential to enhance the overall quality of life. Welfare is a fundamental component of the concept of sustainable development. In addition to this notion, there are additional concepts being advocated, such as the implementation of initiatives to augment the quantity of renewable natural resources, as well as to preserve or enhance the quality of human existence in the present and future. The subsequent notion entails optimising the utilisation of natural resources in order to minimise waste and mitigate environmental harm. The ultimate notion effectively governs the utilisation of natural resources and holds potential for future application.

Indeed, numerous issues arise from the relocation of the capital city through the construction of buildings that indiscriminately encroach upon forests, so diminishing the environment's capacity to provide sustenance, serve as a venue for activities, and serve as a habitat for all forms of life. The notion of sustainable development, as described by Fritz and Schiefer [31], encompasses three key variables: environmental, social, and economic. These factors are often referred to as the sustainability triangle or the 3P concept, which stands for Profit, People, and Planet.

Undoubtedly, the growth of the Archipelago's National Capital faced significant friction, particularly in agricultural affairs. Similar to prior instances in Indonesia resulting from the consequences of industrialization. The 2020 edition of the Agrarian Reform Consortium (KPA) witnessed 17 instances of conflict arising from infrastructure construction. There are seven instances of toll road projects, four instances of infrastructure development in National Tourism Strategic Areas, four instances of power plant construction, and three instances of dam, irrigation, and reservoir projects. Additionally, there were reported instances of 2 cases in sports arenas, 2 cases in tourism, 1 case in an airport, and 1 case in the Milan refinery [10].

In order to gain a comprehensive understanding of the overall progress of the Indonesian IKN development, it is crucial to promptly address the underlying issues. In relation to this matter, it is imperative that we deliberately examine and give heed to the aspects that require primary attention in addressing the fundamental challenges of urban growth. Two intriguing topics for discussion are the alterations in environmental functions within community groups in the East Kalimantan region and the advancements in industrialization. When there is a shift in the way the environment operates in a particular location, it becomes a defining feature of that area. The environmental function assumes an intrinsic worth that mirrors the distinctiveness of a society's physical surroundings. The area is characterised by the presence and growth of cultural, economic, political, social, moral, and other values.

Hence, the repercussions of adapting to alterations in environmental conditions for the organisms in the vicinity are inevitable. Both adverse and favourable aspects are evident, and can be further scrutinised to comprehend these alterations. The government's initiative to relocate the administrative capital from DKI Jakarta province to East Kalimantan has

engendered several predicaments. This topic specifically refers to the decrease or complete elimination of environmental conditions that were initially utilised as habitats or ecosystems for plant and animal life, resulting in their disappearance or destruction. How can the National Capital of the Archipelago ensure the preservation of essential environmental functions necessary for all living organisms, while promoting sustainable development?

## **2 Methodology**

In this section, in describing the problems used. The method used is qualitative with a descriptive approach through literature studies, collecting data obtained periodically and gradually [26]. The process of elaboration and follow-up in finding comprehensive results is carried out through continuous analysis [26].

The method utilised in this article is qualitative, utilising a qualitative descriptive approach. Primary and secondary data were gathered for the purpose of producing this paper [24]. In-depth interviews were conducted with a number of parties, including the IKN Authority, Aman (Indigenous Communities Alliance of the Archipelago), the Dayak Traditional Council, the Paser Community Traditional Institution, and Forcepat IKN (Indonesian Community Empowerment Forum, National Capital). Secondary data is gathered from numerous sources of literature or literary studies. Books and scientific journal articles, both printed and electronic, are among the sources consulted. The analysis is carried out utilising applicable theories, interpreted descriptively, and linked to community cases [15].

The qualitative approach is expected to produce an in-depth description of the speech, writing, or behavior that can be observed from individuals, groups, communities and certain organizations. The use of descriptive qualitative research design in this study is intended to describe and analyze the development of social systems and learning systems in the East Jakarta area [23].

This research uses descriptive qualitative methods. According to Sugiono, qualitative research is research where the researcher is placed as a key instrument, data collection techniques are combined and data analysis is inductive [26]. According to Poerwandari [25], qualitative research produces and processes descriptive data, such as transcriptions of interviews and observations. Kirk and Miller [15] define qualitative research as a way to make direct observations on individuals and relate to these people to get the data they dig [15].

## **3 Result**

From data findings in Penajam Paser Utara, there are several agents who are in conflict due to interest factors. These agents contextualize and contest in the arena of development of the National Capital of the Archipelago. These agents include: IKN Authority, Aman (Indigenous Community Alliance of the Archipelago), Dayak Traditional Council, Paser Community Traditional Institution, and Forcepat IKN (Indonesian Community Empowerment Forum, National Capital). The five agents mentioned have different duties and authorities according to the purpose of the agent's existence.

One of the agents that is an extension of the government of the Republic of Indonesia is the IKN authority. Based on Article 1 of the IKN Law, the Head of the IKN Authority is the head of the Special Capital Regional Government of the Archipelago. The Head of the IKN Authority has a ministerial level position, is appointed, appointed and dismissed by the President after consultation with the DPR. The Head of the IKN Authority, assisted by the Deputy Head of the IKN Authority, carries out government duties and functions in the Special Capital Region of the Archipelago (IKN). According to Article 10 of the IKN Law, the term of office of the Head of the IKN Authority and Deputy Head of the IKN Authority is 5 years from the date of inauguration and thereafter they can be appointed and reappointed within the same term of office. Regarding the salaries and allowances of the Head of the IKN Authority and Deputy Head of the IKN Authority, it has been regulated in Presidential Decree No. 13 of 2023 concerning Financial Rights and Other Facilities for the Head and Deputy Head of the Archipelago Capital Authority (IKN) (detik.com).

The second agent is AMAN, namely the Indigenous Peoples Alliance of the Archipelago (AMAN) which is an independent social organization (ORMAS) whose members consist of Indigenous Peoples communities from various corners of the archipelago. AMAN is officially registered with the Ministry of Justice and Human Rights

As an Allied Organization through Notarial Deed No.26, H. Abu Yusuf, SH and Deed of Establishment dated April 24 2001. Furthermore, it was then updated through Decree of the Minister of Law and Human Rights Number: AHU-0000340.AH.01.08. 2017 through Notarial Deed & PPAT No. 2, Ellyza, SH., M.Kn with NPWP number 02.072.633.7-015.000.

AMAN was declared based on the long history of Indigenous Peoples movements in Indonesia. Since the mid-1980s, a new awareness has emerged among non-governmental organizations (NGOs) and social scientists about the very broad negative impacts of development on various groups of society in Indonesia. Indigenous Peoples are one of the main and largest groups that have been most disadvantaged by (and have become victims of) development politics over the last three decades. This oppression of Indigenous Peoples occurs both in the economic, political, legal and other social and cultural fields (aman.or.id).

The Dayak Customary Council is the third agent, an institution that prioritizes traditional principles which are still very relevant to the current context. These principles include a culture of deliberation which is used to make joint decisions and build public opinion. Deliberations in the Dayak community are often held to resolve various problems. that arise in society, starting from conflict, improvement and so on.

In accordance with the Draft Regional Regulations for Penajam Paser Utara, East Kalimantan, the Paser Traditional Institution is a social institution either deliberately formed or which has naturally grown and developed in the history of the community or within a customary law community with legal territory and rights to property in customary law. and has the right and authority to regulate, manage and resolve various life problems related to and referring to applicable customs and customary laws.

Forcepat IKN was created as a strategic partner for the government to mitigate all potential obstacles that hinder the IKN development process and become an organization that reduces unemployment rates, handles social problems, also becomes a catalyst for community

economic growth, empowers communities and becomes a bridge between communities and economic actors.

The five agents above have interests and contestations in the Penajam Paser Utara community, East Kalimantan. Each agent carries a vision and mission which is a representation of the community members. There are many obstacles and obstacles to the negation of the five agents. Starting from communication, message delivery media, communicators and at the same time communicators which ultimately have a direct impact on policy. Sustainable development factors that can have a negative impact on the environment are influenced by interests and contestation. The following is a table of interests and contestations between the five agents in Penajam Paser Utara, East Kalimantan.

**Table 1.** Interests and contestation between agents in Penajam Paser Utara

Change Agent	Concern	Contestation
IKN authorization	<p>The Authority does not have the authority to build. Instead, it is mostly controlled by BUMN for IKN development projects.</p> <p>There is no involvement of local communities in physical development in IKN.</p> <p>Until now, the Authority has not functioned only as an extinguisher of social friction in the community.</p> <p>The Authority is only a ceremonial welcome, there is no handover of legality in the development of IKN.</p>	<p>There is a communication deadlock between the authority as an extension of the government and as a damper of potential conflict at the grassroots level in society.</p>
AMAN	<p>Resistance to defend the right to living space of indigenous peoples whose land has been seized by the state.</p> <p>Conflict attributes are agrarian claims between the state and indigenous peoples.</p> <p>AMAN has legitimacy as an organization that fights for the rights of indigenous peoples.</p> <p>The Paser Balik community who are fighting in Pemaluan village in Sepaku sub-district. Feeling exclusive as a separate tribe, not a Paser tribe.</p>	<p>Defending the rights of indigenous peoples' living space.</p> <p>The struggle for customary rights that are considered to have been seized by the state, including the ancestral lands of people who have lived and reproduced for generations on the land built by IKN.</p>

		Good intentions to fight for the rights of indigenous peoples.
Dayak Traditional Council	<p>Becoming a mediator to reduce the ripples of conflict in indigenous communities.</p> <p>Controlling the masses and supporting IKN development efforts.</p> <p>Communication channel between the Dayak indigenous people and the IKN Authority.</p> <p>A party that always provides constructive input in responding to issues related to IKN (social conflict, labor, and relocation of indigenous peoples).</p>	<p>It is concerned with the struggle for customary rights for the people whose land is used as the center for the physical development of IKN.</p> <p>The customary council is actually a place to convey demands that are not related to culture, many issues such as employment (not native people) are accommodated by the Dayak customary council.</p>
Paser Customary Institution	<p>Giving legality through a decree in the appointment of the customary head.</p> <p>The appointment of the customary chief is also culturally carried out by traditional ceremonies.</p> <p>Has an interest in fighting for the rights and obligations of the Paser tribe in Penajam Paser Utara.</p>	<p>Has an interest in fighting for the rights and obligations of the Paser tribe in Penajam Paser Utara.</p>
Fordamai IKN	<p>The relationship between the Authority and Fordamai is equally tenuous in the eyes of the state.</p> <p>Indigenous peoples are not considered by the government, they are tired of speaking out.</p> <p>Indigenous lands have been claimed by the Land Bank with certificates.</p> <p>Even though there is already a document</p>	<p>Fordamai is only a sweeper and "firefighter" when there are conflicts in indigenous communities.</p> <p>Political policy is not in favor of indigenous peoples, even though it is already clear in the PPU District</p>

	<p>recognizing land as customary rights. Communication is only in government circles (Dandim, Polres, Prosecutors, and Babinsa), there is no community involvement. Corporations through concessions unilaterally claim customary land. There is a struggle for the living space of indigenous peoples who are deprived by the state through corporations. Conditions like this are maintaining the conflict. At several points in Penajam there were riots. In a position of fatigue and not being accommodated, the interests of indigenous peoples seem to want to shout for independence. We only want the involvement of local children in the affirmation policy for banua children in the IKN development process. Asking the government to provide space for local children to be prepared to be equal in IKN. We are surrounded by big corporate giants so we have no power to fight them. Even houses of worship and village offices have entered the company's certificate in Penajam. The presence of IKN is a perpetuation of conflicts that started with corporations. Corporate conflicts with indigenous peoples are now transferred to the state. Training is only as laborers</p>	<p>regulation. The IKN issue is inseparable from the political interests of oligarchs and so on. Communication is only at an elitist level in the government, indigenous peoples do not have a strong voice and bargaining position in front of the state. We saw that those involved were only concerned with the interests of a few people. Sepaku Bukit Tengkorak suddenly appeared from Central Kalimantan and South Kalimantan, unilaterally pegging our customary territory, many people came from outside Paser to claim our land. This has hurt our struggle as Paser tribesmen.</p>
--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

	<p>so far by the state. No training is given on how to be a good contractor and partner.</p> <p>There is still land that has not been acquired.</p> <p>Pemaluan areas, community gardens were seized by the state for the construction of IKN.</p> <p>Paser people actually don't like our Bugis brothers, economically, educationally and politically they control them.</p>	
--	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--

#### 4 Discussion

In Penajam Paser Utara, conflicts among agent of changes can be resolved by ensuring that the interests and requirements of all parties are adequately reflected in every policy implemented by the central government. The predominant policy preferences of the residents of Penajam Paser Utara pertain to environmental aspects that are crucial for safeguarding the cultural and ancestral legacy of the inhabitants of East Kalimantan. The conservation of endemic flora and fauna, as well as the sustainable preservation of forests, is crucial for maintaining the natural habitats and job prospects at the construction site of the National Capital of the Archipelago. The Penajam Paser Utara community's needs are the main focus.

Environmental communication refers to the exchange of information, messages, or ideas concerning environmental issues among individuals, groups, organisations, or society, with the goal of enhancing comprehension, consciousness, and engagement with environmental matters. The objective of environmental communication is to instruct, inspire, and involve individuals in significant environmental matters, enabling them to actively contribute to environmental preservation and adopt sustainable practises.

Environmental communications encompass a diverse range of media and techniques, which may include:

1. Dissemination of Information: Environmental organizations and governments frequently employ information campaigns via mass media platforms including television, radio, newspapers, and social media to spread awareness about significant environmental concerns.

Within a larger framework, integrated and systematic campaigns are designed to inform the wider community about a person or entity, with the goal of generating public interest and support for their election or promotion. This can apply to various candidates (such as those running for head of state, regional head, legislative member, or organizational leader) as well as to products, programs, movements, ideas, and so on. In this scenario, it is necessary to conduct an information



campaign aimed at educating residents about crucial aspects of IKN development, which should be effectively communicated to the public. In order to gain clarity and comprehension of the current state of affairs in our nation [14].

Valid and credible information is essential for effective campaign operations. In order for the public to make accurate decisions, the information provided about a person or cause being promoted must align with the actual circumstances. Transparency is an essential element that must be applied in nation building, particularly in the ongoing IKN development [14].

2. Environmental Education: Environmental education initiatives implemented in schools and other educational institutions have the objective of enhancing students' comprehension of environmental issues and strategies for safeguarding the natural world while also protecting cultural heritage [3].

Education is implemented as a means of comprehending the environment, specifically nature. Conducting actions in a coordinated manner can assist pupils in comprehending the interconnection between living organisms and the natural surroundings in a manner that can be maintained over time [3].

From a larger perspective, this education also aims to enhance students' understanding of the significance of safeguarding and preserving environmental equilibrium. Environmental education is a means of promoting and assisting in the preservation and protection of the natural environment, including its habitats and ecosystems, in order to foster a healthy and harmonious existence. Environmental education not only imparts knowledge, but also enhances individuals' understanding and concern over their environment [5].

3. Advocacy and Empowerment: Environmental groups and NGOs frequently employ communication strategies to rally support for environmental protection campaigns, shape government policies, and enable communities to actively engage in environmental conservation endeavors.

The advocacy and community empowerment activities play a crucial role in controlling and organizing the development of IKN. These activities have economic value and offer business prospects for community empowerment. Government collaboration with other institutions in coordinating sustainable development initiatives can enhance state revenue, benefiting not just the government but also social institutions and the wider community. Undoubtedly, this activity is dependent on integration, collaboration with Regional Apparatus Organizations and related stakeholders, and help from community engagement [16]. Advocacy, along with the involvement of other organizations and the utilization of technology, can effectively offer suitable assistance and engagement, including the dissemination of accurate information.

4. Interpersonal Communication: The exchange of information and values on the environment is crucial within the context of family, workplace, or local community interactions. Setiawan [22] suggests that this can impact how individuals behave in

terms of their utilization of natural resources and their specific consumption choices.

Interpersonal communication involves the exchange of significant information between individuals. This communication occurs during interactions between two individuals, such as parents and children, spouses, colleagues, close friends, or teacher-student relationships. It allows for the prompt recognition of stimuli, meanings, and feedback, enabling the acquisition of appropriate messages or information [8].

By closely attending to it, this type of interpersonal communication can serve as a valuable means of interaction among all sectors of society and government, enabling them to exchange feedback. Interpersonal communication can contribute to the reciprocal transformation and advancement of a message within a wider framework. This transformation occurs through the process of interacting in communication, wherein individuals inspire, motivate, and support one another, thereby influencing a person's thoughts, emotions, and attitudes in relation to the subject being studied collectively. Interpersonal communication has a crucial role in the development of IKN, serving as a valuable asset that facilitates progress [19].

Engaging in purposeful communication, specifically the transmission of knowledge between individuals, can promptly elicit a consequential response. Hence, interpersonal communication assumes a crucial role since it facilitates dialogic interaction. Dialogic communication refers to a form of communication that facilitates mutual comprehension and empathy, ultimately resulting in endeavors to influence one another [4].

5. Scientific research published in academic journals and shared through conferences serves as a crucial means of environmental communication. This scientific data facilitates the cultivation of a more profound comprehension of environmental concerns.

Within the realm of scientific publications, this serves as evidence that disseminated scientific papers provide a tangible contribution towards enhancing the educational experience in schools and fostering advancements in the field of education at large. Ultimately, it can serve as a means of acquiring knowledge and enhancing the progress of sustainable development, a concept that is rapidly gaining momentum and evolving substantially [26].

Environmental communication has a crucial role in preserving ecosystem equilibrium, mitigating climate change, safeguarding endangered species, and ensuring environmental quality for future generations. Efficient environmental communication can enhance individuals' concern for the environment and promote sustainable measures to safeguard the Earth as a habitable home for future generations..

The national capital development project in Penajam Paser Utara, Indonesia, is a substantial undertaking that has a profound influence on the environment and local inhabitants. Within the framework of this project, environmental communication holds various significant connections and functions. There are seven crucial relationships that play a vital role in ensuring the precision and efficiency of environmental communication with change agents' interests. These ties include:

1. Environmental Information and Awareness:

By cultivating heightened attentiveness and consciousness, the environment assumes a pivotal role in molding human behaviors and routines. Discussing the environment is a topic of both interest and significance that deserves careful consideration [9]. Hence, the prominent subject matter pertaining to the environment holds utmost significance, as a considerable number of individuals appear indifferent towards environmental concerns. Through diligent attention, we may effectively prolong the duration of existence and safeguard the environment to ensure the long-term viability of human existence.

The consequences of environmental deterioration can have a highly harmful impact on human life. Oftentimes, individuals disregard environmental issues due to their persistent bad behaviors, such as thoughtlessly discarding waste and leaving it strewn about. We acknowledge that the absence of a favorable atmosphere will lead to an increasing number of illness outbreaks, thereby impeding all our endeavors. Avoid allowing it to cause subsequent remorse. As long as we possess the determination and perseverance to prioritize environmental care, we may successfully address any concerns with the environment.

Environmental communication serves as a means to provide information to the public and stakeholders regarding the potential environmental consequences associated with new capital development projects. This can enhance the dissemination of environmental concerns associated with the project to the general population.

When discussing environmental sustainability measures, it is essential to consider the sustainability of current natural resources. The spatial distribution of natural resources within the human habitat is crucial for maintaining the long-term viability of both the ecological and economic systems within the environment.

Environmental ecology plays a crucial role in promoting the growth of living organisms. Ensuring the proper functioning and cleanliness of environmental infrastructure, such as unclogged and well-maintained water catchments, can serve as a means of mitigating natural disasters.

Moreover, constructing a sustainable living environment helps mitigate the occurrence of floods, droughts, and landslides. Furthermore, the economic role of the environment can be effectively upheld through the existence of various forest resources, including both timber and non-timber products, which contribute to enhancing the well-being of local communities.

The preservation of the current ecological system necessitates the active involvement of the community, which can be facilitated by environmental communication [11].

Cox emphasized that environmental communication can serve as a practical and fundamental means to enhance people's understanding of the environment and the interplay between humans and nature. It is expected to guide the development of people's lives. Within this particular framework, this serves as a symbolic platform for fostering communal comprehension about environmental challenges that can be collectively addressed through development communication initiatives [11].

## 2. Public Consultation:

As part of the commitment to promote environmental progress and development, particularly in the context of structuring development in IKN, the presence of environmental communication facilitates transparent and inclusive public consultations. Local communities and other stakeholders can engage in the planning and decision-making processes of this project by attending meetings, participating in forums, or utilizing other communication platforms.

Public consultation fosters sociological harmony by addressing the existing needs in society [9]. Hence, to guarantee that the public consultation mechanism aligns with the principles of social justice, which are fundamental values of the Indonesian state, it is crucial to have an engaged and participatory community actively seeking the establishment of effective communication.

Thus, it is anticipated that this consultation mechanism will enhance community engagement in the process of policy formulation. According to Santosa, community participation is described as an ongoing process of two-way communication aimed at enhancing the community's comprehension of issues and requirements that require attention. The purpose of this activity is to foster a robust and beneficial exchange of ideas and information among participants.

## 3. Environmental Impact Assessment:

For extensive development endeavors such as this, conducting an environmental impact assessment (EIA) is crucial to evaluate the project's effects on several environmental factors, including ecosystems, water, air, land, and social issues.

From a broader perspective, our engagement in activities reflects our attentiveness to the surroundings and our assessment of the potential outcomes that may arise within our living environment [20]. In order to effectively implement and evaluate the impact of projects or programs on community groups and their living conditions, it is crucial to consider the changes occurring in nature. This entails taking a comprehensive approach that encompasses the assessment of project or program activities and their outcomes. It is important to recognize the significance of natural resources in meeting human survival and daily needs. Similarly, when it comes to the government's response to IKN Development in terms of environmental preservation, it is crucial to carefully consider the potential impacts and associated issues that arise when implementing the government's agenda, specifically in the context of IKN Development, for the advancement of the nation, particularly in achieving the vision of a prosperous Indonesia by 2045 [11].

Impact evaluation activities are designed to analyze the changes in the living situations of target groups resulting from a project or program. These activities help determine the

effectiveness of the initiative. Environmental communication is involved in the gathering of data, transmission of conclusions, and dissemination of information to stakeholders [9].

The impact evaluation results allow for the assessment of the environmental viability of a project, the effects of the project on the affected communities (both negative and positive outcomes), and serve as a foundation for identifying and addressing negative impacts that require management, as well as positive impacts that can be enhanced. The evaluation results are subsequently utilized as input by the competent authority to determine the environmental viability of a project plan. The evaluation of important impacts is conducted through a comprehensive methodology that considers the cause and effect of these impacts, their nature and features, and the patterns of their distribution [29].

#### 4. Environmental Impact Mitigation:

The results of periodic environmental impact evaluations will identify environmental impacts that need to be addressed or reduced.



Fig. 1. Environmental pollution

Source: (Temukanpengertian.com, 2019)

It is crucial to thoroughly examine the method of environmental communication employed to inform the community and other stakeholders about the impact mitigation plan. This will ensure that the actions taken align with the plans outlined in the current development legislation. Yes, there is.

Prabang Setyono, a lecturer in the Environmental Study Program at the Faculty of Mathematics and Science, UNS in Solo, expressed the objectives of sustainable development as a means to thoroughly examine and address environmental problems. During a seminar, Syarif [27] highlighted the significant role of mitigating environmental pollution in the attainment of the sustainable development goals (SDGs). He emphasized that this effort is crucial for advancing the nation's civilization towards a sustainable development pattern.

Moreover, during this scientific activity, Setyono presented a clear argument stating that the environmental issues in Indonesia are highly intricate due to their multidimensional nature. Therefore, the approach to finding solutions must be contextual and aligned with the concept of Sustainable Development Goals (SDGs), which have a more prominent focus on achieving specific objectives. In his fundamental thesis, he stated that Indonesia is

classified as very susceptible to environmental issues at many levels. The issues encompassed in this list are waste accumulation, inundation, contaminated waterways, climate change, atmospheric pollution, degradation of marine ecosystems, scarcity of potable water, deforestation, erosion, and soil contamination. These are just a few examples of the challenges we face [27].

According to him, environmental contamination is a consequence that arises from the extraction and manufacturing processes, imposing a strain on the environment. Environmental pollution mitigation can be effectively implemented through the utilization of SMART GOALS. SMART stands for specified, measurable, achievable, relevant, and timely goals that can be further developed.

a). Specificity refers to the requirement for the analysis of pollutant content to be precise and detailed, enabling targeted mitigation strategies based on the unique characteristics of each pollutant. Measurability entails the ability to quantitatively and qualitatively assess the pollutants, adhering to predetermined standards [27].

b). Achievable, it can be stated that the objective of reducing pollutants from an ecological perspective can be quantified using factors such as spatial dimensions, budgetary considerations, and methodological approaches. In addition, "relevant" implies that the mitigation of pollutants must align with the most current and appropriate scientific and technology-driven methods of identification and analysis.

c). Timely refers to the necessity of establishing a well-defined and quantifiable timeframe for addressing the intricacies of environmental pollution instances. This ensures that the objectives of reducing environmental pollution, as viewed through the lens of Sustainable Development Goals (SDGs), may be accomplished within a predetermined schedule that aligns with the program's agenda [27].

Ecological justice acts serve as a novel platform for attaining sustainable development goals and are instrumental in shaping a nation's new culture.

The development of a nation's civilization was historically shaped by the dominance of human well-being rooted in economic and socio-cultural principles. Therefore, the prospect of a new civilization in a nation will only materialize if a country successfully achieves a more fair and advanced ecological justice system in Indonesia.

#### 5. Environmental Monitoring:

To guarantee that effect mitigation plans are carried out correctly, ongoing environmental monitoring will be necessary during the development and operation of the new capital city. The public must also be informed of the monitoring's findings.

The Environmental Monitoring System (EMS), as defined in this section's explanation, is a device intended to monitor the environment, describe its quality, and set parameters that enable precise measurement of an activity's environmental impact. In addition, data that is gathered, analysed statistically, and published in risk assessment and environmental monitoring reports as well as evaluating the environmental impact of an activity can be seen in an organised manner when discussing achievement [13].

The primary goal of developing an environmental monitoring system is to control and minimise an activity's environmental impact in order to safeguard human health, ensure that laws and regulations are followed, and reduce hazards or negative effects on the environment.

The development of sophisticated automated monitoring applications and devices is crucial to improving the accuracy of environmental monitoring reports and the cost-effectiveness of environmental monitoring processes that are ultimately focused on the presence of a good environmental climate and progress, given the continued growth of the human population, industrial activity, and energy consumption [2].

#### 6. Community Participation:

Active community involvement in project monitoring and decision-making is made possible by environmental communication. Increasing public understanding and involvement in environmental management is the goal of creating an environmentally conscious society. Education, raising awareness, and community involvement in environmental initiatives can all help achieve this [9].

Education about the environment has a significant impact on how people feel and behave about the environment. In this instance, educational establishments have an obligation to provide knowledge about the value of the environment and environmental protection techniques. Environmental education incorporates hands-on learning in the field in addition to classroom theory. River cleaning in the neighbourhood or other environmental cleanup projects are two examples of this type of action.

Sustainability must be taken into consideration while implementing environmental education as a step towards organising the environment. Enhancements made in an attempt to raise awareness of environmental issues can also be made in the field of environmental education. For example, children can be invited to learn about planting and caring for plants, or proper waste management can be demonstrated by segregating organic and inorganic waste. In this instance, implementing programmes linked to environmental education will require collaboration between the government, schools, and society.

Broadly speaking, there are a number of activities that can be used to educate people about the effects of the environment, all requiring the involvement of numerous parties. As a result, regular environmental awareness initiatives can be carried out through conferences, conversations, or online forums where members of the public can post queries, express concerns, and offer feedback [21].

#### 7. Corporate Social Responsibility (CSR):

Companies or organisations overseeing these projects can utilise environmental communication as a means to educate the public about their corporate social responsibility (CSR) endeavours, which seek to enhance social and environmental circumstances in the vicinity of effective environmental management projects.

Companies have a range of obligations towards their stakeholders, such as consumers, employees, shareholders, and communities. These responsibilities encompass all areas of firm operations, including economic, social, and environmental dimensions. Upon closer examination, Krisnandi posits that corporate social responsibility encompasses the actions

undertaken by a firm to exert an impact on the surrounding society, such as offering volunteer aid. Social responsibility refers to the duty of a firm to fulfil societal objectives beyond legal and economic requirements, with the aim of achieving long-term societal progress [30].

If we focus our attention in a comprehensive manner. Orientation concerning One CSR strategy is the company's commitment to sustainable development goals through the implementation of environmental impact management [30]. Environmental management encompasses regular and organised activities. Therefore. Impact management refers to the technique of minimising adverse effects and maximising beneficial effects on all stakeholders. The focus of corporate social responsibility should be centred around the concept of triple bottom lines. Organisational goals should not solely revolve around the single bottom line, such as earnings or dividends. They should also encompass social, environmental, and economic factors [12].

Hence, environmental communication assumes a crucial role in facilitating the implementation of the development project for the nation's capital in Penajam Paser Utara with greater transparency, inclusivity, and sustainability. Additionally, it ensures effective management of any adverse effects on the environment and local communities.

In the process of IKN development, the presence of the environmental quality index (IKLH) is consistently associated with the changes that arise. IKLH can be utilized as a tool or methodology to assess environmental quality and the sustainability of development, ultimately gauging the success of the development plan [1]. The relationship between environmental communication and IKN development can be elucidated as follows:

1. **Data and Information Collection:** To compute all strategies pertaining to IKN. Precise and reliable data and information regarding environmental conditions are necessary, encompassing elements such as air, water, soil quality, energy sustainability, and ecosystem sustainability, among others. This data serves as a performance indicator and provides information that may be utilized to convey environmental management measures. It can also be used to support the policy-making process concerning environmental protection and management [1].

Hence, environmental communication is crucial in gathering, analyzing, and distributing data and information to many stakeholders, including governments, corporations, civil society, and the general public. Efficient communication guarantees the involvement of all parties in gathering the necessary data for calculating the IKN development.

Environmental communication draws information not only from the environment, but also from several domains. Environmental communication encompasses four distinct areas that generate information: society, economics, politics, and interests. These four realms facilitate our subconscious awareness of alternative perceptions or perspectives on the surroundings. In addition to that, other factors impact the interaction between humans and the environment, including intercultural communication, mass media, interpersonal communication, and others [18].

2. **Awareness and Education:** In order to optimize the development initiatives



implemented in Kalimantan for the establishment of the national capital. Engaging in environmental communication can effectively raise awareness among the public, companies, and governments regarding the significance of measuring and monitoring environmental quality within the framework of sustainable development. Studying the effects of growth on the environment and the significance of preserving existing nature can enhance our comprehension and promote the sustainability of the IKN.

The execution of comprehensive education on the significance of formal education for individuals, as a guiding principle in development, must be executed with appropriate educational direction. It is crucial to establish a high-quality education system in underdeveloped regions, such as Kalimantan, as it is greatly needed. In order to foster societal consciousness on the significance of education for the well-being of the nation and state. Education plays a crucial role in transforming a country into a developed nation by equipping its citizens with the necessary skills to effectively utilize and responsibly manage their natural resources [17].

The inadequate degree of education supplied might adversely affect the quality of development, resulting in suboptimal outcomes. To prevent unpleasant occurrences, it is imperative to make concerted efforts in organizing education and proactively address potential concerns. A significant number of individuals exhibit suboptimal performance due to the presence of corrupt educational policies that exhibit bias towards specific demographics. Instances of this nature are not limited to border or isolated regions, but are prevalent in numerous major cities as well. In these urban locations, citizens often abandon their education owing to economic circumstances, opting to prioritize employment in order to fulfill their daily necessities [17].

3. Development Evaluation: IKN is utilized to assess the degree to which the progress of a region or undertaking contributes to the preservation and enhancement of environmental quality. Environmental communication is instrumental in engaging multiple stakeholders in this assessment process. The outcomes of the IKN assessment can be utilized to pinpoint areas that require enhancements, and proficient communication can aid in conveying discoveries and suggestions to pertinent stakeholders for the advancement of the development program [28].

Within a wider framework, the inclusion of a comprehensive environmental impact assessment entails a continuous assessment that is regularly presented, and this constitutes a crucial component of a business plan or overall development endeavor. The impact evaluation results enable the assessment of the project's environmental viability, its effects on the affected communities (including both losses and benefits), and serve as a foundation for identifying negative impacts that require management and positive impacts that should be enhanced, improved, and empowered. The term "sustainably" is defined as per [Temukanpengertian.com](http://Temukanpengertian.com) [29].

The evaluation results are subsequently utilized as input by the competent authority to determine the environmental viability of a project proposal. The evaluation of

significant impacts is conducted through a comprehensive approach that considers the causes and effects of these impacts, the nature and characteristics of the impacts, and the distribution patterns of the impacts. This evaluation is further utilized to optimize the development of IKN.

4. **Decision Making:** Environmental communication facilitates the utilization of information acquired from IKN to enhance the process of decision making. IKN outcomes can be utilized by governments, organizations, and society to formulate policies, corporate strategies, and individual activities that promote greater sustainability in their respective domains.

The culmination of a collaborative decision-making process is the outcome or output of a cognitive thinking process that involves selecting a course of action from multiple available choices. Decision making is a cognitive process that involves considering various alternatives or possibilities in order to achieve desired outcomes based on individual values or goals. It is an integral part of the thought process and is aimed at finding solutions and predicting future developments, as stated by an Education Lecturer in 2023.

It is important to recognize that decision making involves ongoing processes due to the ever-changing components and expectations of individuals inside the company. These judgments frequently result in modifications in one domain that will impact other domains. In this instance, a choice to ascertain the government-funded budget for IKN development will have an impact on rental expenses and the cooperation among private entities, including the provision of skilled personnel and the leasing of heavy machinery [6].

5. **Community Participation:** Environmental communication enables the engagement of the community in the development and evaluation process of the IKN. By employing efficient communication strategies, communities can actively participate in the planning and decision-making processes concerning development projects that have an influence on their environment.

Full engagement of the entire community, including both local residents at the development site and those who are consistently participating in the project's activities. The active participation of the community, who assumes the role of vigilant observers and influential stakeholders, is vital in all aspects, including the preservation of environmental hygiene. Not only does organizing it, but also developing it for progress, will eventually become an asset for the future prosperity of the nation [32].

The cleanliness and tidiness of an area will mirror the state of its inhabitants. Environmental empowerment is a collective aspiration that necessitates collaborative efforts and maximum teamwork. Optimal empowerment in relation to environmental living conditions is marked by the presence of environmental conditions that facilitate community activities, ensuring that community activities are not disrupted as a result of environmental factors. For instance, due to the presence of a contaminated environment in a certain location. This illness can lead to many health issues that impede individuals' daily functioning [32].

By prioritizing sustainable living, particularly in relation to environmental degradation, all challenges can be effectively addressed provided all stakeholders demonstrate a willingness to be conscientious and accountable. By actively engaging the community, it is expected that they would directly contribute and have significant influence, resulting in optimum collective benefits.

The establishment of an empowered environment necessitates the active involvement of the entire community, which cannot be achieved without active engagement. Community engagement can commence with the community's awareness of environmental information, encompassing both the advantages and consequences. Subsequently, the preexisting information is fortified to transform into comprehensive understanding pertaining to the surroundings. Moreover, the environment can be deliberately designed to meet the needs and aspirations of the community, enabling it to facilitate all endeavors aimed at advancing and enhancing the overall well-being of our country and its people [32].

Environmental communication plays a crucial role in properly utilizing IKN as a method for assessing environmental quality within the framework of sustainable development. It ensures that the obtained results are utilized to take actions that promote environmental conservation.

## **5 Conclusion**

Comprehensive development necessitates a thorough understanding and earnest consideration of several factors. More generally, including environmental considerations into development has become an integral aspect of attempts to improve the quality of human existence. Therefore, it is imperative for the nation to transcend limited perspectives and mental frameworks.

One approach to foster this progress is by discarding destructive attitudes towards environment and prioritizing the collective well-being of society over individual interests. These two factors pose as hindrances to progress. On a larger scope, these two factors have the capacity to impede personal growth and progress in life.

It is imperative for our country to construct a scientific society and pursue sustainable growth. The presence of a progressive society that values and preserves natural ecosystems is a beneficial advancement rooted in rationality, scientific knowledge, technological advancements, and a discerning mindset. Engaging in development while considering the natural environment and prioritizing sustainable parts of existence is a civilized endeavor that fosters self-discovery for humans. The paramount concern lies in comprehending the essence of universal human nature. We all coexist and are interconnected with nature prior to any social constructs such as religion, nationality, or culture. This entails the construction of a nation that places utmost importance on the principles of Pancasila and the 1945 Constitution, with the aim of achieving a prosperous Indonesia by 2045.

## References

- [1]. Admin. (2021). *Sekilas tentang IKLH (Indeks Kualitas Lingkungan Hidup)*. <https://Dlh.Magetan.Go.Id/>.  
<https://dlh.magetan.go.id/2021/07/27/sekilas-tentang-iklh-indeks-kualitas-lingkungan-hidup/>
- [2]. Admin. (2022). *Menelisik Dampak Pemindahan IKN Terhadap Performa Lingkungan*. <https://Impinews.Com>.  
<https://impinews.com/pembangunan-berkelanjutan/menelisik-dampak-pemindahan-ikn-terhadap-performa-lingkungan/>
- [3]. Artisdianti, R. O. (2023). *Pendidikan Lingkungan Hidup: Tujuan dan Prinsipnya*. Kompas.Com.  
<https://www.kompas.com/skola/read/2023/07/04/090000869/pendidikan-lingkungan-hidup--tujuan-dan-prinsipnya>
- [4]. Astuti, N. F. (2020). *Tujuan Komunikasi Interpersonal, Berikut Definisi dan Klasifikasinya*. Merdeka.Com.  
<https://www.merdeka.com/jabar/tujuan-komunikasi-interpersonal-berikut-definisi-dan-klasifikasinya-kl.html>
- [5]. Berpendidikan. (2019). *Masalah Pendidikan di Indonesia dan Solusinya*. Berpendidikan.Com.  
<https://www.berpendidikan.com/2019/10/masalah-pendidikan-di-indonesia-dan-solusinya.html>
- [6]. Dosen Pendidikan. (2023). *Proses Pengambilan Keputusan*. <https://www.dosenpendidikan.co.id/>. <https://www.dosenpendidikan.co.id/pengambilan-keputusan/>
- [7]. Epriyadi, Z. (2022, Januari 22). Diambil kembali dari tempo.co:  
<https://video.tempo.co/read/27693/sah-ruu-ikn-diresmikan-dpr-jadi-undang-undang-ibu-kota>
- [8]. Fadhlán. (2019). Keterkaitan islam dan komunikasi interpersonal. *Jurnal Pascasarjana Universitas Islam Negeri Ar-Raniry Banda Aceh*, 3. [//media.neliti.com/media/publications/308789-keterkaitan-islam-dan-komunikasi-interpe-42a3f55f.pdf](https://media.neliti.com/media/publications/308789-keterkaitan-islam-dan-komunikasi-interpe-42a3f55f.pdf)
- [9]. Fajri, N. (2022). *Pentingnya Kesadaran Masyarakat Terhadap Lingkungan*. Kompasiana.Com.  
<https://www.kompasiana.com/naufalfajri/6212eb22bb44860bd5593e52/pentingnya-kesadaran-masyarakat-terhadap-lingkungan>
- [10]. Fitria, F. (2022, Januari 21). Diambil kembali dari Kompas.com:  
<https://nasional.kompas.com/read/2022/01/21/13075921/usai-dikritik-karena-pembahasannyasingkat-kini-naskah-akademik-ruu-ikn-jadi>
- [11]. Herutomo, C. (2021). Komunikasi Lingkungan Dalam Mengembangkan Kelestarian Hutan. *WACANA: Jurnal Ilmiah Ilmu Komunikasi*, 20. file:///C:/Users/HP/Downloads/1165-4202-1-PB.pdf
- [12]. <https://sib3pop.menlhk.go.id/>. (2019). *Mengenal Fungsional Penyuluh Lingkungan Hidup*. <https://Sib3pop.Menlhk.Go.Id>.  
<https://sib3pop.menlhk.go.id/index.php/articles/view?slug=mengenal-fungsional-penyuluh-lingkungan-hidup>
- [13]. Kosuzu. (2021). *Mengenal Definisi Environmental Monitoring System (EMS) atau Sistem Pemantauan Lingkungan*. <https://www.tanahpengetahuan.com/>.  
<https://www.tanahpengetahuan.com/2021/12/mengenal-definisi-environmental-monitoring-system-ems-atau-sistem-pemantauan-lingkungan/>
- [14]. Krisnawati, A. (2019). *Kampanye dan Asimetri Informasi*. <https://News.Detik.Com/>.  
<https://news.detik.com/kolom/d-4424608/kampanye-dan-asimetri-informasi>

- [15]. Moleong, J. L. (2017). *Metodologi Penelitian Kualitatif*. PT Remaja Rosdakarya.
- [16]. Nugraha, S. (2018). *Advokasi Peran Masyarakat dalam Pengelolaan Lingkungan Melalui Pelatihan Daur Ulang Sampah Kota Malang*. Kompasiana.Com. <https://www.kompasiana.com/satriya1998/5beeb0ff43322f57826a0a66/advokasi-peran-masyarakat-dalam-pengelolaan-lingkungan-melalui-pelatihan-daur-ulang-sampah-kota-malang>
- [17]. Prastika, W. (2021). *Kurangnya Kesadaran Masyarakat Akan Pentingnya Pendidikan*. Kompasiana.Com. <https://www.kompasiana.com/wieke262003/60efd8d6804b9416597a9652/kurangnya-kesadaran-masyarakat-akan-pentingnya-pendidikan>
- [18]. Prilia, N. N. (2019). *Analisis tentang Komunikasi Lingkungan Konten ini telah tayang di Kompasiana.com dengan judul "Analisis tentang Komunikasi Lingkungan", Klik untuk baca: https://www.kompasiana.com/nadiaprilial4/58a0aeec2ab0bd490b8f5bbd/analisis-tentang-komunikasi-lingkung*. Kompasiana.Com. <https://www.kompasiana.com/nadiaprilial4/58a0aeec2ab0bd490b8f5bbd/analisis-tentang-komunikasi-lingkung>
- [19]. Putri, V. K. M. (2021). *"Komunikasi Organisasi: Pengertian dan Cirinya*. Kompas.Com. <https://www.kompas.com/skola/read/2021/12/13/080000569/komunikasi-organisasi--pengertian-dan-cirinya>.
- [20]. Raji, S. (2022). *Sanitasi Lingkungan Indonesia Peringkat Ke-3 Dunia Terburuk*. Kompasiana.Com. [https://www.kompasiana.com/s\\_rachmawan/61ed545f4b660d74992bc4c2/sanitasi-lingkungan-indonesia-peirngkat-ke-3-dunia-terburuk?page=1&page\\_images=1](https://www.kompasiana.com/s_rachmawan/61ed545f4b660d74992bc4c2/sanitasi-lingkungan-indonesia-peirngkat-ke-3-dunia-terburuk?page=1&page_images=1)
- [21]. Ridho, rahmat. (2023). *Membangun Masyarakat Peduli Lingkungan: Pentingnya Partisipasi dan Sinergi Antara Masyarakat, Pemerintah dan LSM*. Kompasiana.Com. <https://www.kompasiana.com/rahmatridho/63f6d6d708a8b51d9f1f8933/membangun-masyarakat-peduli-lingkungan-pentingnya-partisipasi-dan-sinergi-antara-masyarakat-pemerintah-dan-lsm>
- [22]. Setiawan, P. (2020). *Pengertian Komunikasi Interpersonal – Klasifikasi, Tujuan, Efektivitas, Ciri, Masalah, Para Ahli*. Gurupendidikan.Com. <https://www.gurupendidikan.co.id/pengertian-komunikasi-interpersonal/>
- [23]. Sindhunata. (2000). *Membuka Masa Depan Anak-Anak Kita: Mencari Kurikulum Pendidikan Abad XXI*. Penerbit Kanisius.
- [24]. Sofyan, M. R. (2021). *Jurnal SEMIOTIKA Vol.15 (No.2) : no. 119 - 132. Th. 2021 p - ISSN: 1978 - 7413 e - ISSN: 2579 - 8146 Versi Online: http://journal.ubm.ac.id/ Hasil Penelitian 119 MAKNA SOLIDARITAS DALAM FILM IT CHAPTER TWO. Jurnal Semiotika, 15, 119. https://journal.ubm.ac.id/index.php/semiotika/article/view/2881/2190*
- [25]. Strauss, A. (2015). *Dasar- Dasar Penelitian Kualitatif- Tata langkah dan Teknik- Teknik Teorisasi Data*. Pustaka Belajar.
- [26]. Sugiyono. (2020). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Alfabeta CV.
- [27]. Syarif, M. (2022). *Pentingnya Mitigasi Pencemaran Lingkungan*. <https://www.neraca.co.id/>. <https://www.neraca.co.id/article/160100/pentingnya-mitigasi-pencemaran-lingkungan>
- [28]. Temukanpengertian.com. (2018). *Pengertian Evaluasi Dampak Tujuan dan Fungsi Evaluasi Dampak*. <https://www.temukanpengertian.com/>. <https://www.temukanpengertian.com/2016/01/pengertian-evaluasi-dampak.html>
- [29]. Temukanpengertian.com. (2019). *Pengertian Evaluasi Dampak Tujuan dan Fungsi Evaluasi Dampak*. <https://www.temukanpengertian.com/>. <https://www.temukanpengertian.com/2016/01/pengertian-evaluasi-dampak.html>

- [30]. Thabroni, G. (2022). *Tanggung Jawab Sosial Perusahaan (CSR): Definisi, Dasar, Tujuan, dsb.* [Https://Serupa.Id/](https://Serupa.Id/)  
<https://serupa.id/tanggung-jawab-sosial-perusahaan-csr-definisi-dasar-tujuan-dsb/>
- [31]. Wisena BA, Daryanto A, Arifin B. dan Oktavi-ana, R. 2014. Sustainable development strategy and the competitiveness of Indo-nesian palm oil industry. *International Journal of Managerial Studies and Re-search*. Vol 2 (10) 102-115.
- [32]. Yazid, Y. (2018). Partisipasi Masyarakat Dalam Pemberdayaan Lingkungan. *Jurnal RISALAH*, 28(Lingkungan), 1.  
<https://www.neliti.com/publications/484032/partisipasi-masyarakat-dalam-pemberdayaan-lingkungan>
- [33]. <https://news.detik.com/berita/d-6548266/tentang-kepala-otorita-ikn-tugas-wewenang-dan-sosoknya> diakses tanggal 07 Oktober 2023
- [34]. <https://www.aman.or.id/profile> diakses tanggal 10 oktober 2023
- [35]. <https://jdih.penajamkab.go.id/assets/2.%20Raperda%20lembaga%20Adat%20Paser.pdf> diakses tanggal 15 Oktober 2023