



#### **Conference Paper**

# Strategies for Strengthening Ecological Citizenship in the Sendi Indigenous People of Mojokerto Regency

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#### Abstract.

Environmental degradation is currently causing many hydrometeorological disasters. Ecological Citizenship as part of the concept of civic education has the aim of forming smart citizens with environmental character. This study analyzes the form of strategies to strengthen ecological citizenship in Sendi indigenous peoples of Mojokerto Regency along with the obstacles and challenges they face in strengthening environmental awareness based on local wisdom. The study uses qualitative research methods with a case study design. Data were collected through direct observation in the environment where the joint indigenous community lives, interviews with kasepuhan, pamengku adat, and members of the Sendi indigenous people, and documentation. Data were analyzed using interactive data analysis methods. It was found that the Sendi indigenous people have a strategy to strengthen Ecological Citizenship based on local wisdom, namely sengkalaning sendi, which regulates relationships with nature and the environment, in collaboration with various stakeholders and NGOs such as Walhi and PPLH. The obstacles encountered by the Sendi indigenous people are mainly internal and external factors.

Keywords: ecological citizenship, Sendi indigenous people

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#### 1. Introduction

Globalization is currently the cause of economic competition between countries resulting in uncontrolled exploitation of natural resources [1]. As a result of uncontrolled development, various issues of environmental damage have emerged which are a very real threat to human life. Various environmental damage problems faced by humans include deforestation, climate change, extinction of flora and fauna diversity due to pesticide contamination, damage to aquatic and forest ecosystems [2].

The problem of environmental damage has become part of the reality of human life in the 21st century so that it requires awareness, concern and human participation in preserving the environment [3]. The cause of environmental damage is an error in

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managing the environment that is not oriented towards sustainability and the existence of an ecological crisis, namely the relationship between humans and nature that is bad so as to create environmental problems [4].

Environmental problems are currently one of the global citizenship issues. Syaifullah et al [5] revealed that there are five global citizenship issues that are problems and challenges faced by countries in the world, namely economic inequality, technological advances, access to information, conflicts of interest between developed and developing countries which resulted in damage to ecosystems, forest deforestation and uncontrolled population explosion.

Environmental damage has always been the impact of problems caused by human actions, at this time based on a study conducted by Shaw & Oikawa [6] states that humans are currently facing environmental crises such as pollution that occurs in water and air, depletion of the ozone layer, massive deforestation of tropical rainforests, global warming, a crisis in biodiversity, and socio-economic problems as a result of environmental problems.

Environmental destructive behavior is the main factor that causes the environmental crisis, Dermawan [7] categorizes environmental destructive behavior in three categories, namely (1) increasing population (2) exploitation of nature such as forests and seas, and (3) pollution contained in water, soil, and air.

The impact of the issue of environmental damage must be addressed immediately, at this time an effort is needed to control various issues of environmental damage for a better life in the future [8]. Controlling the issue of environmental damage is not only the burden and responsibility of the government but all citizens in it, it requires the participation of all citizens in managing the environment [9]. Efforts to preserve environmental management by citizens are not only limited to formal education, but can be through citizen communities or community civics that are engaged in environmental issues [10].

In civic education, it is known as the concept of ecological citizenship, which is an idea about emphasizing citizens' rights to a healthy and proper environment, which means that it requires participation between citizens, communities and governments to ensure a proper environment [11]. The emergence of the idea of the ecological citizenship movement is also a civic virtue that expects no strings attached, unlimited territory, and non-contractual, so it can be understood that ecological citizenship focuses on acting virtuously towards the environment for the common good [12].

Regarding the situation in Indonesia, efforts to deal with environmental damage through civic education are limited to school education only, even though in reality



environmental damage is done by adult citizens who are no longer in school, so it is necessary to handle it still well through the community in the socio-cultural domain, namely corporate civic engagement or which is understood as job creation based on handling public issues, and community civic education which can be understood as community civic education [12].

Environmental damage control in the community will be more successful if it is based on existing local wisdom, Sendi Indigenous People as part of indigenous communities in Indonesia Sendi Indigenous People have local wisdom in managing customary institutions have their own government structure and customary law system [13]. In the context of preserving the environment, the Sendi indigenous community has various regulations regarding the management and utilization of the environment such as the tradition of basuhan, cutting trees that are limited to a certain time, preserving and preserving springs called kucur tabut [14]. The existence of disasters that have occurred, the Sendi Indigenous Community seeks to carry out a better life with the principle of sustainability, this research seeks to reveal the existence of the Sendi Indigenous Community who seeks to care for their environment after the disaster.

#### 2. Method

The reason for choosing a case study strategy in this research is based on Yin's perspective [15]that case study research usually focuses on how and why questions, has limited time in controlling the phenomenon under study, and focuses on contemporary issues. Based on the literature and field observations, the issue of environmental damage is the main concern and the strategy of strengthening ecological citizenship carried out by joint indigenous peoples in controlling existing environmental damage is the focus of this research. The subjects of this research are kasepuhan, pamengku adat, and other customary officials who are needed as informants in this research. By taking the research location in Pacet Village, Pacet Subdistrict, Mojokerto Regency as the place where the Sendi Indigenous People live, the data collection techniques used are observation related to the daily behavior of the joint indigenous people, in-depth interviews with predetermined informants and documentation of various documents which are then also analyzed using the interactive analysis method.



## 3. Result and Discussion

The intensity of disasters due to the ecological crisis is caused by the lack of public awareness in protecting the environment, so there is a need for awareness in managing the environment with the concept of sustainability and the existence of local wisdom is one of the main factors in resolving the ecological crisis. The Sendi Indigenous Community lives in the area where two gurung slopes meet, namely Mount Welirang and Mount Arjuno and has a local identity called sengkalaning sendi. Environmental problems that currently occur based on a study conducted by USAID [16]found that the topography of Pacet Village, Pacet Sub-district, Mojokerto Regency as the place where the Sendi Indigenous Community lives is in a high disaster-prone location in landslides and flash floods as a result of climate change, the data obtained that during the period 2002-2016 hydrometerological disasters occurred.

Factors causing disasters such as landslides and flash floods in that period were due to the conversion of forest and agricultural land into various tourist attractions and restaurants that did not comply with the principles of life of the indigenous people of the joints, based on the unrest and concerns of the indigenous people of the joints against disasters that could recur, the idea emerged to form an ecological movement based on the local wisdom of the joints. Local wisdom in managing the environment is a direct application of civic ecology [17]. The Sendi Indigenous Community has various activities in preserving the environment in the context of preventing and overcoming hydrometeorological disasters that have occurred in the location where they live. The activities they carry out are guided by existing local wisdom, if further understood local wisdom in Indonesia is centered on food, drinks, natural resource management, literary works and sculptures [18].

Sengkalaning diri as the identity of the Sendi Indigenous People relating to relationships with nature and fellow humans and God [14]. In relation to nature, the indigenous people of Sendi have traditions such as basuhan, ngangsu banyu aras, and babakan kucur tabut according to an interview conducted with Ki Demang Supardi.

"The Sendi Indigenous People are very protective of nature, especially in relation to water availability and land use in the area where we live" interview dated May 12, 2023.

Tradition as part of community culture has a very important role as a behavior that has many meanings [19]. In relation to the results of the interview with Ki Demang, it can be understood that the role of the joint indigenous community in preserving nature centers on water availability and land use. When viewed from the ecology of citizenship, there are several indicators that indicate that the indigenous people of the joints have



awareness in environmental conservation such as the existence of traditions oriented towards water availability (basuhan, ngangsu banyu aras, and babakan kucur tabut), land use that applies the principle of sustainability, planting black bamu trees for steep slope areas to minimize landslides, and not cutting down trees in large quantities, as conveyed by Ki Demang Supardi.

"kami, memiliki berbagai tradisi yang diwariskan oleh para leluhur kami untuk menjaga kelestarian alam dan itu diajarkan turun temurun sejak awal berdirinya Desa Adat Sendi ini" wawancara tanggal 12 Mei 2023

Local wisdom cannot be transferred but can be inherited through exemplary methods and the adequacy of a conducive or safe environment [20]. The traditions carried out by the Sendi Indigenous People are a form of inheritance that is taught to their generation through the exemplary method, related to the inherited tradition it is the urgency of ecological awareness that is poured into real activities by citizens to foster loyalty to nature [21]. various traditions that have been carried out are one form of effort to strengthen ecological citizenship carried out by indigenous leaders in the form of traditions that have been mentioned.

The response obtained by strengthening environmental awareness has a positive value, and the enthusiasm of the Sendi Indigenous People in managing the environment is much better because of the encouragement and consultation of residents who feel the environment is much better than before, besides that there is cooperation carried out by the leaders of the Sendi Indigenous People who are related to environmental conservation activities through various traditions such as Walhi East Java and PPLH, this is done to provide an understanding of the importance of managing a good environment so that the relationship between humans and nature goes well and does not result in the emergence of various disasters that harm humans themselves.

In addition, the Sendi Indigenous Community formed a tourism manager as a result of the development and utilization of environmental potential that can be used to attract tourists and contribute to the economy of the Sendi Indigenous Community which is still in accordance with existing local wisdom. Activities carried out by Sendi Integrated Educational Tourism as an existing tourism manager provide strengthening of environmental awareness to visitors who come to do tourism activities in the destinations provided. The visitors are given education about what local wisdom exists in the Sendi Indigenous Community, especially those related to environmental management, such as when cutting down trees it must be replaced with a number of felled trees, the use of predetermined traditional clothing commonly referred to as ageman and building houses where residents live with the characteristic of having a sustainable



concept because development is very environmentally friendly, when related to the study conducted by Dash [22] states that ecological citizenship contains moral virtues that guide humans to do good to nature and the environment through a form of solidarity with the earth, When viewed from the perspective of ecological citizenship by Dash, what is done by the manager of Sendi Integrated Educational Tourism is part of one of the life choices of the Sendi Indigenous People to manage the environment for a decent life based on sustainability and local wisdom, this is also in line with Fahlevi's opinion [23], which states that in managing the environment, one must look at the conditions that surround humans in their activities, meaning that the environment around where people live in their activities is a top priority in protecting and managing the environment.

Tourism management efforts through Integrated Educational Tourism managed by the Sendi Indigenous Community have a very good impact on their lives, this is based on the results of interviews with Subari as Kasinoman and Chairman of the Sendi Integrated Educational Tourism Management.

"The joint indigenous community is very much helped by the existence of Integrated Educational Tourism which has a good impact on the economic sector and the environment, because in terms of the economy we initially only depended on agriculture and plantations but we realized that there was potential that we could develop into tourism but still in accordance with our wisdom in managing the environment" interview dated May 13, 2023.

The form of activities carried out by Sendi Integrated Educational Tourism based on local wisdom in the Sendi Indigenous Community contributes to environmental protection by involving all components as part of a strategy to strengthen ecological citizenship, and has a very good impact on community members and non-members. This can be seen from the increase in capability in managing the environment properly and participation which was initially lacking has increased due to the involvement of all components in the Sendi Indigenous Community.

However, this does not mean that there are no obstacles in implementing strengthening ecological citizenship through existing forms of activities in managing the environment based on local wisdom. There are obstacles in managing the environment including internal and external factors. From internal factors, there are problems in the form of lack of community compatibility in supporting new programs that do not have a direct economic impact, this is a challenge in itself that is very hampering for the strengthening of ecological citizenship carried out by its administrators to members of the Sendi Indigenous Community, besides that the impact of lack of compatibility



in social life requires the existence of socialization activities getuk tular to be able to arouse the solidarity of community members.

Another internal factor is the economic needs of the community, which mostly depends on agricultural products, plantations and trade in the tourism area developed by the Sendi Customary Society, because of economic pressure some people are forced to carry out cooperation activities that are not in accordance with existing local wisdom such as renting out their land to be used as a food stall which should not be allowed to carry out rental activities with parties outside the Sendi Customary Society, when viewed from Dobson's opinion [12] behavioral factors are dominant factors in internal obstacles. Deviant behavior due to economic pressure and selfishness has an impact on solidarity in managing the environment.

The obstacles from external factors are caused by land ownership issues that still have no meeting point between the Sendi Indigenous People and Perhutani, which began in 1999, this is based on the history of land ownership and forests in the area where they live until in 2007 there was an arrest of Mr. Toni as a customary uncle who was accused of carrying out unlicensed activities in the pine production forest owned by Perhutani. In addition, this conflict led to a conflict that was trying to be resolved through recognition of the existence of the Sendi Indigenous Community through the making of regional regulation no 4 of 2018 which was used to establish a preparatory customary village and was also finally revoked because it conflicted with the Village Law which must have a minimum of 6000 residents to form a new village government, the impact of land status issues and recognition has an influence in providing strengthening of ecological citizenship in the implementation of various traditions, one of which is the tradition of ngansgu banyu aras, which in its implementation was once disputed by Perhutani because it is located in a production forest area and a limited area where other people are not allowed to enter without special permission from Perhutani.

#### 4. Conclusion

As a community that has a residential location in a disaster-prone area, it is necessary to provide awareness in strengthening ecological citizenship by the Sendi Indigenous Community, namely implementing environmental management based on existing local wisdom in the form of its distinctive identity, namely sengkalaning sendi, which is practiced in the form of traditions and the development of tourist areas. The traditions carried out by the indigenous people of Sendi in the form of ngangsu banyu aras, planting black bamboo and developing Sendi integrated tourism are commitments

undertaken by them in protecting the environment by referring to existing local wisdom, besides that in carrying out the strengthening of ecological citizenship by the indigenous people of Sendi, they also collaborate with various stake holders in protecting the environment, one of which is Walhi East Java and PPLH Seloliman Trawas in providing guidance through socialization related to land use and plant species that can be developed by the indigenous people of Sendi. As for the impact obtained by the Sendi Indigenous Community in strengthening ecological citizenship, there are obstacles and challenges in carrying out strengthening ecological citizenship, namely the existence of internal and external factors, in internal factors the problem of lack of solidarity in implementing existing programs and strengthened by economic pressure factors that cause internal obstacles, besides that there are also external obstacles, namely the existence of a land ownership dispute with Perhutani in 1999 until now and the peak was when Pamengku Adat was imprisoned for carrying out unlicensed activities in the pine production forest area owned by Perhutani

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