Ecological politics towards the protection of Alas Purwo National Park based on local wisdom

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Abstract

Alas Purwo National Park is a nature conservation area with a natural ecosystem located in Banyuwangi Regency, developed for recreational, educational and conservation purposes. Conservation area management requires an ecological political approach to examine each actor's role in natural resource management. In reality, policy makers have not been optimal in managing conservation areas because they are unable to implement policies properly. This research used a case study approach to analyze cases about the role of policy makers in implementing policies related to forest conservation. Data and documents collected in case studies from the Alas Purwo National Park Office. Data collection in this study is direct observation to the field, in-depth interviews, documentation. Data analysis using interactive models consists of three lines of activities, data reduction, data presentation, conclusions. In qualitative research, the whole process goes together. Findings showed that the ecological political approach used by Alas Purwo National Park policymakers views humans in nature as the source of all values. Forest resource management based on local wisdom must be placed in a management mechanism through socio-cultural institutional policies that have been rooted for generations. This interest is inserted into the national policy of local governments in the form of conservation area management. As an analytical knife to dissect this using a political ecology approach, in mapping problems and how to overcome them. Minimizing the risk of disasters and climate change because so far the local government and the community around the buffer village of the conservation area have not had sensitivity to the sustainability of natural resources. They only see it from the perspective of economic benefits without understanding that forests are deposits that must be preserved.

Keywords: Alas Purwo National Park, ecological politics, local wisdom

Introduction

Indonesia is a mega biodiversity country because of the very high level of biodiversity that provides strategic benefits. The unity of ecosystems in the form of expanses of land containing plants with one another cannot be separated (Supriyadi, 2014). One of them is the forest, plays a key role in every aspect of life, because forests and humans have a close relationship supporting each other. Preserving forests is not only the duty and responsibility of the government, but must involve the participation and active role of communities around conservation areas. Government efforts to protect the sustainability of forest ecosystems by designating several forest areas in Indonesia as national parks. Serves to preserve biological natural resources and their ecosystems (Sarintan, 2019).

The rationale, through Law No. 5 of 1990 concerning the Conservation of Biological Natural Resources and their Ecosystems, concerning the management rules of national park areas. It has the ecological function of preserving biodiversity and its ecosystems, protecting life support systems (Suhendang, 2012). Whether we realize it or not, people depend on forests for food and health, socio-cultural needs (Cotton, 1996; Minnis, 2000; Anderson et al., 2011; Pei, 2013; Rai & Lalramnghinglova, 2010). Forests are biologically diverse ecosystems, consisting of 80% species of animals, plants, and insects. About 30% of the earth's surface consists of forests that are important for human life, in maintaining fertility and regulating water management (Ferdian & Soerjatisnanta, 2017). As a life support system that benefits mankind, it must be preserved (Madiong, 2012).

Before becoming a national park, it originally had the status of South Banyuwangi Wildlife Reserve based on the Decree of the Governor General of the Dutch East Indies Number 6 stbl 456 dated September 1, 1939 with an area of 62,000 ha. Then in 1992, it was changed to Alas Purwo National Park with an area of 43,420 ha. Through the Decree of the Minister of Forestry No. 283 / Kpts-II / 1992 dated February 26, 1992 and in 2014 it was determined with an area of 44,037 Ha through the Decree of the Minister of Forestry Number: SK.3629 / Menhut-VII / KUH / 2014 dated May 6, 2014. Geographically, the Alas Purwo National Park area is located at the eastern end of Java Island, the southern coastal area between 8.446456°-8.780444° S and 114.224625°-114.605157° E, and administratively included in the government area of Tegaldlimo District and Purwoharjo District, Banyuwangi Regency, East Java Province.

The determination of the status of the area to become a national park, aims to protect the ecosystem in the conservation area, in line with ecological values (Kang &; Gretzel, 2011). Various community-based management can save from the threat of extinction. This is because the pattern of relations between communities and forests prioritizes aspects of harmony and balance of nature rather than economic factors (Keraf, 2015). Various studies show that local communities are able to act as bulwarks in stemming the negative impacts of forest destruction (Mackinnon, 1993, Edmuns et al., 2003, Claridge et al., 1995). Local communities have the ability to manage natural resources with adaptive utilization through local wisdom (Korten, 1986). The principle of local wisdom, that humans must be friendly with nature paying attention to environmental conservation (Suryadarma, 2008). Maintaining soil fertility and water sources (Silas, 2015). Become a global challenge in ecologically vulnerable areas (Teng et al., 2022; An et al., 2021; Rohal et al., 2019).

The presence of local communities who have long lived around buffer villages should be a top priority in formulating the direction of conservation area management policies effectively and efficiently. Facts have shown that as many as 6,381 rural areas are within conservation areas (Wiratno, 2018). The majority of people in meeting their needs depend on the natural resources of conservation areas (Massiri et al., 2016; Ristianasari et al., 2016; Hamdan et al., 2017). The interaction that takes place is carried out for generations, both positive and negative towards the potential of natural resources (Narsuka et al., 2009, Lestari et al., 2014). Pressure due to human activities intensified (Gao et al., 2022; Peng et al., 2011; Zheng et al., 2019; Fang et al., 2018). One of them is the lack of accommodating policy makers to communities around conservation areas resulting in illegal logging and wildlife poaching. Only to meet needs without caring about the environment (Aryadi, 2000). In line with Becker and Ghimire (2003) and Berkes and Hunt (2004), that human activities ignore conservation principles. So that it becomes part of the ecosystem dynamics that have been going on for a long time. As well as being a challenge that must be faced in the management of conservation areas whose contents are indeed diverse.

Management of conservation areas should indeed involve the role and participation of local communities (Yanto, 2012; Sadono, 2013). Depending on the existence and socio-cultural

characteristics of the community (Ostrom, 1990; Jones et al., 2012; Barnes et al., 2014; Bisung et al., 2014; Roslinda, 2018). This scenario is carried out with various considerations, the existence of socioeconomic conditions of the community and collaboration (Sabir et al., 2018). It is necessary to consider the social aspects and potential of conservation areas in order to provide benefits while improving the quality of life of the community (Hakim &; Wibisono, 2017; Nugrahani et al., 2019). The management of national parks' natural resources, can be assessed as environmental performance in addition to physical and economic capital (Barnes-Mauthe et al., 2014; Szulecka & Secco, 2014) as well as social capital (Barnes-Mauthe et al., 2015). Demanding effective measures of ecological restoration and environmental protection have been (Yu et al., 2023; Lv et al., 2019; Zheng et al., 2019; Liu et al., 2018).

Several cases of failure in conservation area management were conveyed by Sitorus (2002), the occurrence of agrarian conflicts between the government and communities around Lore Lindu National Park that had an impact on forest encroachment. Gautam (2004), forest destruction in Nepal due to political intervention. Mackinnon (1993), destruction of forest areas in Uganda due to political instability. Febryanol et al. (2015), the private sector as mining entrepreneurs pay less attention to waste, resulting in degradation of forest ecosystems. Hakim (2018), natural resource management requires a political approach to examine each actor's role in natural resource management. Ramadhan et al. (2018) policy makers are not synchronized in the management of Batu Putih Nature Park because the community is not given space to participate in development policies. In reality, the government has not optimally managed conservation areas because it is unable to implement policies (Sinery, 2015). Furthermore, this study will fill the void about the study of ecological political policy. The novelty of this research is to find a way to protect biodiversity by involving the role and participation of the community around Alas Purwo National Park by combining local wisdom.

Literatur review

Ecological politics as an approach that examines the causes and effects of environmental change that are more complex than just the biophysical power distribution system in society. This approach is based on consideration of various interests, perceptions, and plans for the environment. Through the environmental policy approach, problems related to environmental management can be seen, especially in relation to the "right to the environment and environmental justice", where rights are related to individual needs for the right tourist destination. Such as, the right to life, the right to choose, the right to the environment as a political issue (Satria, 2009). Has cultural values that complement utilitarian values in caring for the preservation of forest resources (Colenbaugh & Hagan, 2023). Determine carrying capacity in social, economic, cultural ecological fields and also promote sustainable conservation benefits (Chen et al., 2022b; Swiąder et al., 2020; Xia et al., 2020a, 2020b; Zhu, 2020). Many studies focus on assessing the carrying capacity of environmental ecology (Bu et al., 2021a, 2021b).

Regarding justice, it emphasizes the allocation of ownership and control over rights objects, which refers to problems of relations between individuals and groups, survival (Manik, 2016). Ecological politics emphasizes the problem of natural resources as a socio-political problem. Ecological problems related to biophysics (Mahulae, 2020). In recent decades excessive consumption of natural resources led to a spike in environmental disasters (Chen et al., 2022a). Where it has involved several actors, both local, regional, global who have their respective interests in environmental change. Environmental management planning is not understood as concern for the environment, but rather a matter of control over power. To reduce the negative effects of ecological accumulation environment (Liu et al., 2020).

Methods

This study used qualitative methods with a case study approach (Yin, 2013; Moleong, 2017; Suryabrata, 2019). In simple terms, it can be interpreted as an in-depth detailed investigation of a particular event into the specific situation of a case (Mulyana, 2011). Systematically use steps that are logical to phenomena, events, individual behavior in real life (Satopo, 2013). Apply general principles to cases, to be used as a tool for finding evidence and information (Mulyana, 2011). The case study approach was chosen to analyze cases about the role of policymakers in implementing policies related to forest conservation. The choice of location of Alas Purwo National Park because it is a nature conservation area that has an original ecosystem, managed with a zoning system used for research, scientific purposes, supporting cultivation, tourism and recreation. Determination of units with respect to research events (Sukmadinata, 2017).

Data collection used in this studies were methods observation, in-depth interviews, documentation (Nazir, 1998; Suwartono, 2014; Hikmawati, 2017). Observation to understand the behavior of the community around the village of Alas Purwo National Park, so that researchers become part of the community naturally. The results of the observations are used as additional information data in the study. While interviews were conducted to obtain information by providing questions to the community and policy makers, forest police to obtain the data studied. The documentation method is a method of searching for things in the form of notes, transcripts, books, magazines, newspapers, agendas and photos of activities (Hajar, 2013). To complete the data from observations and interviews. Related to the conservation area of Alas Purwo National Park. Determination of informants using purposive techniques, based on certain criteria and considerations (Sugiyono, 2018). Intentionally have an understanding of natural resources and must be credible in answering research questions.

Data obtained from in-depth observations and interviews were then analyzed using inductive qualitative analysis (Miles & Huberman, 2012). So that it is easy to understand and the results of its findings can be informed to others. Data analysts use interactive models consisting of three lines of activity, data reduction, data presentation, conclusion drawing (Sitorus, 1998).

Results and discussion

Ecological political approach to understand the problem of nature and community relations through careful analysis of forms of access and control to natural resources (Watts, 2000). Or commonly known power relations between interactions and ideologies of various human traits (Thornton & Wanasuk, 2016). The advantage of ecological politics is because it focuses more on social relations that provide sympathy for marginalized people in facing environmental problems (Paulson et al., 2003). To understand environmental problems is influenced by neomarxian thinking, as a form of criticism of the cultural ecology approach. Because ecological politics focuses more on the study of environmental problems due to political pressure from outside.

The consequences of man's relationship with nature, both exploitation and using conservation methods, are influenced by labeling by certain groups, then legitimized as an ultimate truth. Of course, it is very different from the views of previous ecologists who viewed human relations with the environment as more due to internal factors in the relationship itself, such as population pressure (malthusian), and the problem of exploitation of natural resources. Lack of legal and political understanding, vulnerable to exploitation activities (Sembiring, 1999; Wiratno et al., 2004). According to the view of Malthusian school ecologists, if the

number of human populations is faster than food production, there will certainly be competition for food. So that it has the potential to cause famine because it does not match the availability of food with the population.

Another negative impact if humans are increasingly aggressive in efforts to meet food needs is the exploitation of the environment without paying attention to ecological balance. Therefore, the political view of ecology leads to environmental damage that is not only caused by internal factors but is more global. Pressure from the community causes a decrease in carrying capacity (Chomitz et al., 2007). In addition, low public knowledge has an impact on environmentally unfriendly actions (Nath et al., 2005). Resulting in limited ecological resilience (Lebel et al., 2006; Abel et al., 2006). The emergence of threats to the sustainability of conservation areas due to low human morale and damage to productive economic resources (Darusman, 2002). Economic pressure, weak social systems can threaten the sustainability of forest resources (Mardiyanto, 1999; Downs, 2000; Amilda, 2004).

According to a 51-year-old Navy Forest Police informant, one of them is illegal logging activities including forms of crime that cause material losses and damage to ecosystems. Even though forest criminals can be given criminal sanctions with a maximum prison sentence of 20 years. In the hope of reducing environmental damage. Weak law enforcement does not have a deterrent effect, thus exacerbating forest destruction. As a result of illegal logging activities cause large amounts of state losses.

The rise of illegal logging activities is massive due to weak supervision and law enforcement so that it does not provide a deterrent effect to perpetrators of crime. May threaten local institutions (Gonner, 2001). The emergence of forest destruction is caused by low morale of human social solidarity, not having legal understanding (Sembiring, 1999; Rositah, 2005).

Furthermore, according to the informant of the Head of Pancur Resort SM (42 years old), so far government policies in managing forests have not been effective and satisfactory to some circles. Due to lack of coordination and low human resources. Given the large operational costs in the management of Alas Purwo National Park, forestry planning is not effective. The management of conservation areas should be in accordance with the principles of sustainable ecology for the purposes of future generations, considering the threat of global warming.

Experience in various countries shows that successful national park management depends on the regulation of government political policies in providing local communities with broad access to sustainable forest resource management aimed at improving community welfare (Fraser, 2002; Lynch & Talbott, 2001). The ecological political approach used by Alas Purwo National Park policymakers views humans in nature as the source of all values. The natural environment is only instrumental, where concern for the sustainability of nature is not oriented to human interests alone but based on the awareness that humans are agents or destroyers of nature (Susilo, 2008). Ecological politics discusses the interrelation between the use of natural resources and communities regulated by the government as holders of state executive policies (Karlsson, 2015). Furthermore, Srinivasan and Kasturirangan (2016), revealed that ecological politics must pay attention to several aspects of the ecological impact of a development.

Strengthening local communities around buffer villages

Local communities around the buffer village should be given more access to be involved in the management of Alas Purwo National Park. It has become an integral part of the forest ecosystem and a source of life by utilizing forest products. Local communities living around forests have long interacted with forests and have conservation capabilities for the sustainability of ecosystem balance actualized in local wisdom (Anshari et al., 2005). Having local knowledge for generations has been proven to be able to preserve forests (Darusman, 2002). Teachings and admonitions passed down from generation to generation in supporting the management of biological natural resources and their ecosystems (Gonner, 2001). There are several reasons why forest management by considering community-based local wisdom is still relevant today.

First, the increase in the number of rural people continues to increase, while the narrower land area does not increase. So science and technology are needed in increasing forest productivity. Second, the unavailability of jobs around forest areas because the majority of forest resources are state-owned, causing poverty. Third, the demand for democracy opens up opportunities for communities to participate in forest management. Fourth, government policy in forest management from the New Order era to reform did not favor the communities around the buffer village.

There are three reasons for the importance of community-based forest resource management, namely: (1) local variety, that local communities have diverse environmental characteristics from biophysical, social and economic aspects that must be responded to appropriately and quickly, (2) local resources, that resources in the midst of the community are needed and interdependent, (3) local accountability, that communities that have dependence on resources must be accompanied by commitment and responsibility in managing resources wisely based on local wisdom.

For this reason, forest resource management based on local wisdom must be placed in a management mechanism through socio-cultural institutional policies that have been rooted for generations. Various literature shows that the role of institutions is very influential on the sustainability and sustainability of resources (Fraser, 2002; Adimihardja, 1992; Kartodiharjo, 2006; Claridge & O'Callaghan, 1995; Sembiring, 1999). This role is among others reflected in the implementation of values, norms, laws and sanctions in regulating social relations and behavior both individually and together in the sustainable use of resources.

According to the informant Head of Resort Rowobendo MS (54 years old), even though the real ecological benefits of forests can be felt as a provider of various environmental services, climate control, a place for wildlife habitat. In addition, forests have social, economic, cultural functions for communities around buffer villages who depend on forests for their lives.

Adaptive management is inseparable from the role of institutions in regulating forest resource management activities. The role of institutions is not only seen from forest growth, but social control of village community behavior (Roy, 1997). Aims to make it easier to monitor changes that occur and resolve horizontal conflicts. Both related to forest management and not. For this reason, in ensuring sustainable management, resource sustainability must be the main concern. The success of society in maintaining social and environmental sustainability is shown in readiness, social interaction, technology and ethical values that are in line with ecology (Downs, 2000). The pressure of population, technology and economy is something that cannot be separated from human life so that culture is needed as a human perspective (Odum, 1996). It was also stated that the purpose of environmental conservation is to ensure

the preservation of environmental quality with regard to aesthetics. Ensure the continuation of useful results by creating a balanced cycle on social and ecological principles (Lei, 2002).

Along with the increasing rate of growth and changes in the socio-economic conditions of the community around the buffer village, the community's demands in the use of natural resources in conservation areas are also getting bigger. On the other hand, the existence of conservation areas must be maintained because they play a strategic role as a buffer for life. To maintain the potential of conservation areas, policy makers apply the concept of prohibiting all community activities within conservation areas. The concept of prohibiting all community activities is considered to have a smaller impact on the destruction of forest ecosystems. However, the concept also has several weaknesses, namely the closed access of the surrounding community to forest areas that have been a source of fulfillment of needs. For this reason, a solution is needed to reduce community access to conservation areas, because people have lived around the Alas Purwo National Park area long before it was designated as a national park.

One form of the application of local wisdom, prohibits all forms of activities that cause disruption to environmental sustainability and damage the function of conservation areas as a source of water. It is not allowed to overexploit forest products, cut down trees, hunt wildlife, say bad while in conservation areas. Given how important the benefits of forests are for survival, as a place of life for flora and fauna which is a source of food and medicine in the future. A wide variety of plants can grow and multiply and become a source of biodiversity that is beneficial to human life. So it has a high absorption of carbon dioxide. In addition, forests as suppliers of oxygen on earth as the lungs of the world, of course, are very beneficial for humans and animals.

Conclusion

The ecology political approach used by Alas Purwo National Park policymakers views humans in nature as the source of all values. The success of national park management depends on government political policy regulations in providing broad access to local communities in sustainable forest resource management aimed at improving the welfare of communities around buffer villages by taking into account ecological aspects.

Local communities around buffer villages have become an integral part of the forest ecosystem and become a source of life by utilizing forest products. Local communities have long interacted with forests and have conservation capabilities for the sustainability of ecosystem balance actualized in local wisdom. There are several reasons why forest management by considering community-based local wisdom is still relevant today. First, the increase in the number of rural people continues to increase, while the narrower land area does not increase. So science and technology are needed in increasing forest productivity. Second, the unavailability of jobs around forest areas because the majority of forest resources are stateowned, causing poverty. Third, the demand for democracy opens up opportunities for communities to participate in forest management. Fourth, government policy in forest management from the New Order era to reform did not favor the communities around the buffer village. For this reason, forest resource management based on local wisdom must be placed in a management mechanism through socio-cultural institutional policies that have been rooted for generations.

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