

## STRENGTHENING COMMUNITY SOCIAL CAPITAL IN PEATLAND MANAGEMENT

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**ABSTRACT.** People who live on peatlands are very dependent on the values and functions contained by the surrounding ecosystem. They certainly need empowerment to strengthen their social capital in meeting their needs. This study aims to analyze the importance of strengthening community social capital on peatlands. The research method used is qualitative research to describe and explain the observed conditions. The results showed that the pattern of ecosystem management on peatlands did not involve all parties, so that people living on peatlands did not really feel the benefits. Whereas the existence of the community can be relied on in maintaining the ecosystem even though they have reasons to use existing resources to fulfill their daily needs. It is just a matter of how all stakeholders involved can make efforts to empower them so that they have strong social capital to protect the environment. With this, the community will feel they have an interest in using all available resources on peatlands in a responsible and sustainable manner.

**Key words:** management policies; peatlands; sustainable aspects; social capital

## PENGUATAN MODAL SOSIAL MASYARAKAT DALAM PENGELOLAAN LAHAN GAMBUT

**ABSTRAK.** Masyarakat yang tinggal di lahan gambut sangat bergantung kepada nilai dan fungsi yang dikandung oleh ekosistem disekitarnya. Mereka tentunya butuh pemberdayaan untuk memperkuat modal sosial dalam memenuhi kebutuhan hidupnya. Penelitian ini bertujuan untuk menganalisis pentingnya penguatan modal sosial masyarakat di lahan gambut. Metode penelitian yang digunakan adalah penelitian kualitatif untuk menggambarkan dan menjelaskan kondisi yang diamati. Hasil penelitian menunjukkan bahwa pola pengelolaan ekosistem di lahan gambut belum melibatkan semua pihak, sehingga masyarakat yang hidup di lahan gambut kurang merasakan manfaatnya secara nyata. Padahal keberadaan masyarakat bisa diandalkan dalam menjaga ekosistem walaupun mereka punya alasan memanfaatkan sumberdaya yang ada untuk pemenuhan kebutuhan hidup sehari-hari. Tinggal bagaimana semua stakeholder yang terlibat dapat melakukan upaya pemberdayaan sehingga mereka memiliki modal sosial yang kuat untuk menjaga lingkungan. Dengan hal itu, masyarakat akan merasa memiliki kepentingan untuk menggunakan segala sumberdaya yang tersedia di lahan gambut secara bertanggung jawab dan berkelanjutan.

**Kata kunci:** kebijakan pengelolaan; lahan gambut; aspek berkelanjutan; modal sosial

### INTRODUCTION

Communities living in peatland areas are in a fragile ecosystem (Najiyati, 2005). That is why their existence is like two sides of a coin, between poverty and a damaged eco-system. Peatland management policies in Indonesia are often carried out partially and incidentally. Policy makers do not seem to realize that the properties of peat soils are very different from other mineral soils, so that management is often generalized (Noor, 2016). Peatland management also pays less attention to its specific characteristics, both in vertical and horizontal dimensions, in a cross-sectoral coordinated institution.

As a consequence, it was found that the facts on the ground turned out that many parties were too imposing their concepts and policies, without paying attention to local wisdom that had been passed down from generation to generation in the community. This condition is further exacerbated by policies and laws and regulations that are not firm and complete, the

use of peatlands that do not use specific technologies that can be applied in accordance with the carrying capacity of peatlands, and the lack of attention to conservation aspects and the selection of adaptive commodities (Qodriyatun, 2019).

What is mentioned above is almost evenly distributed in all regions in Indonesia that have peatlands. These facts confirm that peatland management is far from being sustainable. In Riau Province, data show that resource utilization activities in several peatland areas are quite concerning, because they are often carried out in an exploitative and destructive manner. The result is that from the total distribution of peatland in Riau which reaches an area of 3.89 million hectares, it is estimated that 2.31 million hectares or 59.54% have been degraded (Wahyunto, *et al.* 2015).

The extent of peatland that has been degraded and other problems that arise as a follow-up impact, should receive serious attention from various parties. The considerations used by decision makers in terms

of peatland management should begin by prioritizing participatory and sustainable peatland management, related to conservation, rehabilitation, and efforts to improve (restoration). The comprehensive approach to participatory and sustainable peatland management requires a management that ensures the continuity of the coordination process between related institutions.

Social capital as an aspect of the structure of social relations that allows people to create new values. This concept was then elaborated by a number of experts in relation to issues of economic and political development. McGinnis & Ostrom. (2012). states that social capital is a prerequisite for the success of a development program. The existence of social capital can be seen from the ability of a community to knit institutions or institutions that become a reference for their actions. Institutions are defined as a set of rules or agreements created by the community and become a reference for action. Furthermore, Pranadji (2006) argues, the growth of community organizations is an indication for the formation of social capital. Stating that social capital refers to the main aspects of the organization, namely trust, norms, and networks that can increase socio-cultural integration.

Community empowerment on peatlands requires the right strategy, because the wrong approach can have fatal consequences (Herlan & Elyta (2020). Likewise, errors in catching problems, resulting in errors in determining how to solve them (Faisal, 2020). If this happens, then the empowerment program will not work effectively, will be redundant, and what is even worse will be the creation of a begging community, but also people whose lives depend on helping hands. In practice, when empowerment programs are implemented, there is usually a phenomenon of "as if" there has been an increase in the standard of living (Rohmah, 2014). Then, after being discontinued, the program was neglected and the community's independence was getting worse. If this happens, then it is not an improvement in living conditions that occurs, but an increasingly widespread marginalization and impoverishment.

## METHOD

This study uses a qualitative method used to describe and explain. The qualitative approach is rooted in data, and the theories related to the approach are defined as rules and rules to explain propositions or sets of propositions that can be formulated descriptively or proportionally. The technique used

in obtaining the informants of this research is the snowball sampling technique, which is a technique for determining the source of information such as a rolling snowball to find the most appropriate source of information in providing responses. This study uses a cross-sectional analysis approach. Two models of community empowerment in peatland management are observed simultaneously and using the same indicators. The analysis of the two models of community empowerment, by comparing one model to another, is intended to sharpen the explanation of the advantages and disadvantages of each model. The analysis was carried out using a descriptive method (among other things by means of a two-way cross tabulation). The analytical framework used is to compare a number of indicators or variables related to the management of peatland, symptoms of underdevelopment, income allocation (for social capital and non-social capital), and certain elements of social capital.

## RESULTS AND DISCUSSION

Communities living around peatlands, especially the Riau Province area, generally have limited economic standards. They have a relatively low capital stock, either in the form of production, goods, or money. Their education is also below the average for residents in the sub-district capital, due to its location far from the center of education and the lack of financial support to continue schooling. All of this happened because of their lack of knowledge about the function and role of peatlands for human life.

Management of peatlands that are not managed properly has a very big impact, not only from the ecological aspect, but also even worse from the economic and social aspects of the surrounding community (Darmawan, 2015). Public health is at stake, especially the elderly, pregnant women and children who breathe toxic air from the burning land. Plus, apart from fires, local people also face flooding during the rainy season. The flood occurred due to the digging of peat canals by plantation and forestry companies.

Improper management of peatlands will result in various bad impacts. The haze that has occurred since the 1990s until now is the worst example of a disaster triggered by peatland fires. It is undeniable that this haze disaster occurred because peatlands had undergone severe degradation (Agus, *et al*, 2014). Scientifically, peatland degradation is interpreted as a change in natural characteristics that causes it to lose the ability to carry out various fundamental functions, such as absorbing and storing water and

storing carbon (Sutikno, *et al*, 2018). Loss of this ability results in flooding or inundation during the rainy season and vice versa drought and fires during the dry season.

In the context of community empowerment on peatlands, the goal of empowerment is not only to improve people's welfare. The basic idea of empowering peat communities is to create a balance between community empowerment and environmental conservation. Environmental conservation, in this case, is not only intended to fulfill the interests of the community in general but is also intended for the survival and life of the people in peatland areas. Without an environment that can guarantee a decent life and livelihood, community empowerment on peatlands is difficult to realize. In other words, empowerment must be achieved through capacity building and community and environmental sustainability.

### Community Lifestyle on Peatland

The existence of peatlands and their ecosystems have a good impact on the socio-economic conditions of local communities (Radachowsky, *et al*, 2012). It is just that its use is often done in a destructive way. Peatland clearing here is done through logging, burning, eviction, and pollution of rivers and lakes. This condition results in forest fires, loss of people's livelihoods, the destruction of protected flora and fauna. Illegal logging of forest logs is rampant because the project's access to peat forest stands is very easy and followed by the community, especially for economic reasons.

Community empowerment on peatlands is very important in supporting the success of peatland conservation. There are at least three considerations that can be put forward. First, the empowerment of peat communities is a form of responsibility and contribution of the world community to the preservation of the peat ecosystem. Second, because of the poverty and powerlessness experienced by most people on peatlands, it is often the cause of their indifference to environmental quality. Third, efforts to raise awareness and increase motivation to participate in land conservation prove difficulty if the basic needs of the community are still not met.

Communities living around peatlands generally depend on agriculture. They do business still in a subsystem and have not developed a culture of cultivating capital (Najiyati, 2005). During harvest seasons, they often experience a production surplus. However, most of it is still spent on buying unproductive assets and partying (found in several locations). This habit makes them almost always

have capital difficulties every time they start the production process (Sujianto *et al*, 2016). Only 5-10% of income is reallocated for business capital, while the rest is for consumption and buying non-productive assets. They also rarely sell their products to the market. Not only because it is far from the market, but also because of the habit of storing the produce for their own consumption. As a result, capital turnover is limited.

The low level of production and the level of the economy is one indicator of the low competence of human resources in this region. This condition is supported by the lack of access to information, the difficulty of accessing knowledge or skills from experts or other practitioners, which make them only depend on the trial and error process. This process not only results in the slow development of their capacities, but also the inability to anticipate the vulnerable environmental conditions of peatlands. In addition, in subsistence conditions, farmers do not have "safety", so they are vulnerable to the turmoil that occurs in their lives. When they are seriously ill, they do not have enough savings for treatment. When mass harvests fail, villages become food insecure.

If this happens again and again, society will become more powerless and poverty will deepen. In fact, the level of public awareness to set aside some income for productive activities is still very low. They do not realize that such a pattern of spending is one of the factors that causes their condition to continue to decline and be trapped in the shackles of poverty. An error that often occurs in the empowerment process is that the assistant or the executor of the activity positions himself as an all-knowing teacher. On the other hand, the community is positioned as students who must be filled with various knowledge by listening to what is conveyed and carrying out what is ordered. This often happens because the facilitator wants to transfer the knowledge, he has quickly referring to his abilities without understanding the abilities and needs of the community. In many cases, the community actually has quite a lot of knowledge about their area, because they have been living, recognizing, and feeling the problems that occur in their village. This is commonly referred to as "local wisdom."

When the demand for agricultural commodities increases due to increasing economic and population growth, there is a rapid expansion of agricultural area. Unfortunately, this area expansion often does not pay attention to the carrying capacity and characteristics of peatlands. Along with less mature planning, land use is not in accordance with its designation, lack of implementation of land conservation rules, and the

use of technology that tends to be less precise. As a result, there is damage everywhere and agricultural development often fails. On the other hand, the use of peatlands for agriculture with due observance of conservation principles and appropriate technology has proven to be able to produce adequate productivity and improve the welfare of farmers.

Empowering people on peatlands is not an easy thing. Problems that are generally faced include locations that are generally difficult to reach, limited public access to government services, capital services, information services, and market development. Practitioners are often pessimistic about the marginalization of natural resources in peatland areas. This condition often creates an apathetic society who believes that poverty is written, so they only need to survive to live or surrender. This kind of society requires an approach that can grow and inspire enthusiasm for a better life by developing self-capacity and competence. The diversity of cultures, capacities, and levels of community awareness requires a variety of effective empowerment strategies.

### Adaptation of Local Wisdom in Peatlands

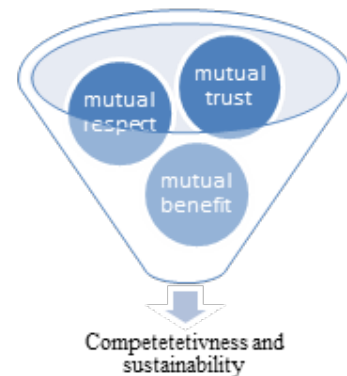
The development of communities living on peatlands requires effective change management in the long term that must be carried out comprehensively. Therefore, the strategy requires a cross-sectoral approach at the national, regional and local levels. Local initiatives in natural resource management (SDA) have been carried out by the community from generation to generation through a system that is still traditional. This wisdom is able to make local communities living on peatlands able to survive to meet their daily needs.

Management and conservation of peatlands are an important issue because these issues threaten the survival of humans and other living things (Mungmachon, 2012). Efforts have been made at all levels from central to local government for this. Communities have the same and broadest rights and opportunities to play an active role in peatland protection and management activities. One of the roles of the community is to develop and maintain local culture and wisdom in the context of preserving the function of peat.

Various practices of local wisdom and ancestral culture that are still maintained by the community can be one of the strategies for protecting and managing peatlands (Safitri, 2020). Preservation of local wisdom values and religious teachings related to the protection of natural resources and the environment is one form of traditional conservation carried out

by the community. The values of local wisdom are important to be planted and disseminated, so that people feel that protecting peatlands can provide wealth for the prosperity of mankind itself.

Here in lies the difference between the policies planned by formal institutions and local communities and their wisdom in the use of peatlands. The current debate is how to restore the ability and authority of the community with local wisdom to plan, regulate, monitor and manage natural resources on peatlands in a democratic manner so as to be able to prosper the people themselves (Wagiran, 2011).



Source: abstraction of research result

**Figure 1. Values of people living on peatlands as a form of social capital**

The fulfillment of food needs is essential for the life of rural communities. However, in the four sample villages, there were almost no violent conflicts caused by insufficient food needs. There are also almost no signs of “destruction of social solidarity” due to the difficulty of the community in meeting their basic needs. Cultural values and local social capital can not only become the core of strength that is able to accommodate the problem of food shortages and other factors of life difficulties, but can also be directed to overcome food shortages collectively.

The aspect of trust is the main component of forming social capital in rural areas. Other aspects, such as cooperation and network, according to the author will not be formed steadily if it is not based on the formation of a relationship of mutual trust between members of the community (Pranadji, 2006). There are still many researchers and social capital experts who do not clearly show that there is a strong relationship between trust and the formation of cooperation and community networks. It is necessary to emphasize that the strength of cooperation and networks formed in the community is operational development.

From the relationship of mutual trust between members of society in the fields of socio-cultural, economic and government (politics). In social life



in rural areas, the notion of trust should not only be seen as a matter of personality (psychological) or intrapersonal, but also includes extrapersonal and intersubjective aspects. The case of the hamlet community in Kedungpoh, Katongan, and Gondanglegi villages shows that the meaning of the formation of mutual trust is the result of interactions involving (at least three) community members in a neighboring group, hamlet level associations, village level organizations, and the development of a social network system across village boundaries. In a neighboring community or hamlet that contains relatively high social contradictions, the network of trust formed is generally relatively narrow to the level of personal and brotherly relationships which are more colored by primordial or ascriptive values. On the other hand, communities that have the potential to develop quickly are generally able to develop a relatively large network of mutual trust.

### Strengthening Community Social Capital in Peatlands

Peatlands have social and economic functions that cannot be avoided. Within this area of land, there are people who have to continue living and find a decent living with all the norms they have done. With its marginal nature and management techniques developed by the community, peat is often unable to provide adequate economic support. In such situations, the threat of environmental damage is often overlooked. As a result, some people consciously or are forced to exploit a wider area of land to meet their daily needs. They can easily go with the flow to penetrate the forest, cut logs, and other activities that quickly generate income but have the potential to damage the peat ecosystem.

Forbidding people to cut wood in the forest or recommending environmentally friendly cultivation will not be effective as long as they still think that is the only way to stay alive. Peatland conservation efforts are often faced with situations and conditions of people who are powerless, forced, or even aware of their contribution to the destruction of peatlands. In fact, the community actually has a large enough potential to be a guardian of environmental sustainability. After all, they are the first to reap the impacts if the peatlands on which they depend for life are damaged. The key is that they must be empowered, so that they are able to meet their needs and are able to be independent from the influence of external parties who have a potential role in environmental damage.

Public awareness to preserve the environment, especially people who live in peat eco-systems,

can be grown effectively, one of which is through a cultural approach (Herutomo, 2021). If this awareness can be increased, then it will be a very big force in environmental management. On this side, the mainstreaming of local wisdom in peatland management is considered important because it is the embodiment of the noble values of the community and the recognition by the surrounding community (social acceptance) (Safitri, 2020).

It must be understood that local wisdom is contextual, meaning that its existence depends not only subjectively as the right of the community to express culture, but also objectively as a form of responsible environmental adaptation. Responsibility itself is a key element of social cohesion which is a basic condition for the emergence of a participatory community (Rushayati, *et al*, 2014).

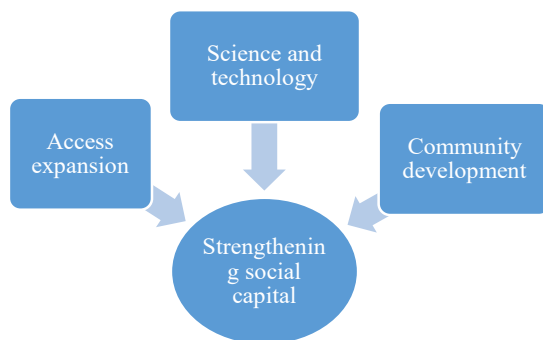
Social cohesion as expressed by Colletta *et al*. (2001) is as the glue that unites the community, builds harmony and community spirit, and is committed to achieving common goals. On the other hand, the development of social cohesion can help develop trust, inter-group associations, and communication networks between groups separated by violence, group interests and other social ills. Developing social cohesion also aims to bridge cooperation, mutual understanding, and the creation of common interests in order to maintain mutual peace.

If the strengthening of social capital is only considered as the development of a network of relationships (physical) between the components of trust, a network of working relationships, and cooperation, as many experts (economics) have argued in developed countries. This is considered to be relatively superficial and has not directly touched the roots or core of strengthening social capital itself. The core of social capital is cultural values. Strengthening social capital needs to start with strengthening local cultural values. In addition to cultural values, elements of social capital that are considered important to be developed in empowering rural communities are the competence of human resources or human resources, strong social management and civil society organizations, an unbalanced social structure, strong local leadership, a strong moral and legal system, and good governance.

To strengthen the social cohesion of communities in peatlands, based on the joint document of France and Canada (OECD), there are at least five main dimensions that are important to note, namely (a) togetherness-isolation (shared values, identity, feelings and commitments), (b) inclusion-exclusion (equal opportunity to gain access), (c) participation-

exclusion (in terms of political, economic, social and cultural life), (d) acceptance-rejection (respect and tolerate differences in a plural society) and (e) legitimacy (of institutions that act as mediators in conflicts in a pluralistic society).

Referring to this review, Qomar (2017) concludes that there are two main dimensions of social goals of social cohesion, namely firstly reducing differences, injustice and social exclusion and secondly emphasizing on strengthening relationships, interactions and social bonds, covering more or less the same conceptual basis. such as social capital. If these two dimensions can be applied and accepted as a reality, then society can develop as expected.



*Source: abstraction of research result*

**Figure 2. Mechanisms for strengthening community social capital on peatlands**

The world must give rewards to the people who have taken care of the peatland ecosystem through empowerment activities. Empowerment of farmers on peatlands must be financed by everyone who enjoys optimal development due to the non-destruction of the land. Empowerment of peatland farmers needs to be started by a common understanding that the prosperity of peatland farmers is for the survival and prosperity of the entire earth (Oktoriana & Hazriani, 2020). This great work must also be built from a larger perspective, namely to make the wider community and the world aware to care about the sustainability of the peatland ecosystem, just like the responsibilities given to peatland farmers themselves. Thus, community empowerment on peatlands is a form of global community responsibility for the sustainability of peatland eco-systems.

Community empowerment on peatlands is aimed at building community awareness, motivation, competence, and independence in terms of meeting the needs of life and preserving the environment. The activity must be a systematic and planned action which is intended to develop the capacity and competence of the community so that they are able to help themselves so that they are able to independently meet their needs while being able to protect their environment with full awareness (Wahyuni, 2021).

The main principle that must be adhered to in the community empowerment process is the existence of equality or equal position between the community and the institutions that carry out community empowerment programs as well as between men and women. There is no dominant position between the parties. The dynamic that is built is an equality relationship by developing a mechanism for sharing knowledge, experience, and expertise with each other. Each recognizes each other's strengths and weaknesses, so there is a mutual learning process. There are no directions or instructions, there are no superiors or subordinates, there are no teachers or students, there are no coaches or those who are fostered, and there are no rulers or being controlled.

The government and community empowerment practitioners are not yet willing to fully provide opportunities and freedom for the community to choose and formulate their needs (Najiyati, 2005). They are stuck in the desire to see the results of physical empowerment as soon as possible. Meanwhile, the community is burdened with targets to achieve very fast progress regardless of their abilities. Facilitators who carry out empowerment activities see it as an institutional task full of targets and tight controls.

Various aids came in succession and felt burdensome, because they had to be responsible for it, even though the community did not really need the project. They want to accept the project because they feel that they are being lured by a favor without having to struggle to get it. As a result, there are no challenges or opportunities for the community to develop their initiatives and self-reliance.

With such an approach, it seems as if the improvement of conditions and the improvement of people's living standards is carried out efficiently, but in fact the independence of the community cannot grow in a healthy manner. That is why it is often found that projects financed by the government are poorly maintained and not used optimally (Jalil, *et al*, 2021). On the other hand, purely self-help projects that are planned, financed, and implemented by the community are rarely neglected. Community independence will grow in an environment that offers many choices as well as challenges in achieving personality perfection. Furthermore, people will get used to thinking creatively to make choices that they think are the best and are accustomed to taking responsibility for the consequences that arise because of their choices.

## CONCLUSION

The lack of economic prospects and sustainable lives is the most significant issue facing impoverished and

undeveloped populations living on peatlands. As a result, community empowerment on peatlands must improve the group's ability to maximize the use of economic potential and natural resources while minimizing environmental damage. The low economic carrying capacity of peatlands in terms of agriculture should be a challenge in identifying other possibilities so that the community has a variety of respectable and environmentally sustainable livelihood options. As a result, growing economic capacity must be complemented by enhanced environmental sustainability consciousness. Peatland management rules that aren't properly implemented will harm the surrounding environment, including the resources it contains. This situation will have a negative influence on the well-being of individuals who rely on the ecology. The major goal is to improve the community's quality of life, thus efforts to create community potential with local wisdom based on social cohesiveness are required. Because it is considered that paying attention to local wisdom and social cohesiveness can drive people to make positive changes in order to improve their family's socio-economic situation, establish a work culture, and foster a spirit of cooperation in development.

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