Affirmation of Traditional Rights and Indigenous Women's Knowledge on Post-Mining Livelihood in Dompak Island, Riau Islands

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ABSTRACT

This research aims to understand the indigenous women's knowledge of post-mining livelihoods in Pulau Dompak and how that knowledge is neglected in decision-making by the government and mining companies. The research uses a qualitative approach with data collection techniques through interviews, observations, and document studies. The results show that indigenous women have extensive and profound knowledge about post-mining livelihoods based on their experiences and traditional knowledge. However, their knowledge is often disregarded in decision-making related to post-mining reclamation by the government and mining companies. Women's involvement in decision-making is also limited due to patriarchal social structures in indigenous communities. This research recommends the need for recognition and protection of the traditional rights of indigenous women in decision-making related to post-mining reclamation, as well as efforts to reduce gender disparities in decision-making involvement.

INTRODUCTION

This research focuses on the traditional rights of coastal women. Traditional rights of women encompass indigenous knowledge exclusively held by women within a particular community or society, for instance, the indigenous knowledge of native communities (McGregor, 2005, 2012; Magni, 2017). Women's traditional rights refer to the original knowledge, customs, and cultural practices that have historically been passed down through generations by women within their tribal communities (Sunder, 2007; Argumedo & Pimbert, 2005). Indigenous knowledge may encompass an understanding of traditional healing, agricultural practices, natural resource management, arts and crafts, and much more. Examples of women's traditional knowledge practices can be observed in the Dayak Benawan community in West Kalimantan (Niko, 2020).

As an inherited body of knowledge, customary women's traditional rights play a crucial role in the cultural identity of women and their communities (Shawoo & Thornton, 2019). Customary women's traditional rights hold significance not only in the daily lives of women but also play a pivotal role in environmental sustainability and cultural preservation (Baskin, 2020). These customary women's traditional knowledge systems are inherited and perpetuated across generations. This serves as their way of safeguarding traditional knowledge from extinction.

In the context of human rights, women’s traditional rights must be acknowledged and respected, as they embody values and practices that recognize the significant roles of women in society and sustainable environmental management (Espinosa, 1997;). Both men and women should be equally entitled to the fulfillment of rights, such as political, economic, social, and cultural rights (Friedman, Metelerkamp & Posel, 2011).

Contemporary development often disregards or even destroys local knowledge, which is frequently deemed outdated or irrelevant in modern contexts (Fitzmaurice, 2008). Neglecting local knowledge can lead to the loss of valuable insights and jeopardize the sustainability of existing ecosystems and cultures. For instance, the local knowledge of Dayak Mali women in West Kalimantan correlates with their guardianship of nature preservation and forest conservation. Therefore, it is crucial to
preserve and strengthen local knowledge by recognizing and appreciating its contributions to sustainability and cultural diversity (Tobin, 2001).

Safeguarding the continuity of local knowledge can be achieved through educational and training programs, community participation in decision-making regarding natural resource management, and the development of policies and regulations that recognize and bolster local knowledge (Tobin, 2001; Turner, Ignace & Ignace, 2000). In the context of sustainable development, local knowledge can also contribute to the development of sustainable technologies and innovations that align with local conditions. The amalgamation of local knowledge with modern technology can yield enhanced solutions to environmental and economic challenges (Turner, Ignace & Ignace, 2000).

Unsustainable development can trigger the erosion of indigenous women's local knowledge and exacerbate marginalization. Indigenous women's local knowledge encompasses their understanding of land, plants, animals, water, and other resources acquired through experiential wisdom passed down through generations (Parisi & Cornassiel, 2007). However, much of modern development undertaken without regard for the sustainability of local knowledge can jeopardize the existence of indigenous women's local knowledge and overlook the role of women in preserving natural resources.

The disregard for the existence of these women's knowledge can lead to their loss of local knowledge as they no longer rely on traditional knowledge and shift towards modern technology. Subsequently, environmentally unfriendly development can destroy the habitats of indigenous women (Baskin, 2020). These environmental changes can devastate ecosystems and make it challenging for them to preserve their local knowledge.

Indigenous women also frequently experience discrimination and marginalization in accessing resources and development policies (Shiva, 1997). This situation can diminish their capacity to uphold and strengthen their local knowledge. Additionally, modern education may impart knowledge that diverges from local knowledge, potentially affecting the intergenerational transmission of traditional knowledge. Similarly, coastal indigenous women in the Kepulauan Riau manage to keep their local knowledge alive amidst modernity.

Empowering coastal women plays a pivotal role in facilitating their involvement in decision-making processes and resource access. Based on studies of coastal women, it is noted that women are key actors in coastal natural resource management (Paulus & Sobang, 2017). Hence, it is imperative to acknowledge and respect their knowledge of livelihood to ensure the sustainability of natural resources and the well-being of the community.

MATERIALS AND METHODS

This research employs a descriptive qualitative research approach. The qualitative approach is utilized to explore the experiences of the informants and understand their local knowledge of livelihoods. Furthermore, another stage involves gathering information from the community of Pulau Dompak which has directly experienced the post-mining impacts in this area. The research is conducted in Pulau Dompak, Tanjungpinang City, Kepulauan Riau. The data collection process includes preliminary observations and interviews with the informants.

The data collection method used in this research is interviews (Cresswell, 2014). The researcher asks questions to informants selected through purposive sampling to obtain accurate data regarding the local knowledge of women in Pulau Dompak. Additionally, indigenous community members serve as informants in this study to assess the extent of the impact of mining activities, exploring their experiences before and after the presence of the mine.

The object of this research is the traditional rights and indigenous women's knowledge regarding post-mining livelihoods. Data analysis is conducted simultaneously with the field data collection process. The procedures undertaken during data processing include categorizing data based on their types and exploring the relationships between these data.

RESULTS AND DISCUSSION

Local Knowledge of Indigenous Women

Local knowledge refers to the knowledge, wisdom, and traditional practices that are passed down from generation to generation within a specific community or culture. Local knowledge is
often related to daily life and the management of natural resources, including environmental governance, agriculture, livestock rearing, fishing, and traditional medicine.

Local knowledge is highly important in maintaining environmental sustainability and the management of natural resources, as well as serving as a valuable cultural asset for communities (Baskin, 2020; Argumedo & Pimbert, 2005). However, local knowledge is often threatened by modernization, globalization, and rapid social and economic changes.

The indigenous women's knowledge of post-mining livelihoods includes knowledge of farming, fishing, hunting, and gathering plants in areas affected by mining. They possess specialized knowledge of plant species that can grow in contaminated soil and be used to restore the fertility of land damaged by mining (Upe, et al., 2020). In the context of the community in Pulau Dompak, before the presence of the mine, women applied traditional fishing methods along the coastal areas. However, after mining activities in the Pulau Dompak region, these methods cannot be applied anymore due to the scarcity of fish, shrimp, crabs, and other marine animals along the coastline.

Furthermore, indigenous women's knowledge may also encompass the methods of processing and utilizing natural materials to improve soil health and the local ecosystem. They may also possess knowledge regarding the utilization of wood and other natural materials that can be used to create goods for sale or exchanged for other goods or services.

In addition to practical knowledge about livelihoods, indigenous women may also possess knowledge about their rights to land, natural resources, and the environment (Shawoo & Thornton, 2019). They may know customary laws and international conventions on human rights and the environment that can help them defend their rights and protect their environment. As indigenous women are often at the forefront of environmental defense and advocating for their rights, their knowledge of post-mining livelihoods is crucial in ensuring environmental sustainability and community livelihoods (Dubey, 2017; Holcombe & Kemp, 2020). Therefore, it is important to recognize and respect the knowledge and experiences of indigenous women in efforts to restore the environment and promote sustainable livelihoods after mining.

The traditional rights of indigenous women are often overlooked and violated due to factors such as gender inequality, racial discrimination, and their limited access to decision-making and power within society. As a result, women's access to resources becomes blocked, leading to women's poverty. Research conducted by Ahmed & Eklund (2021) revealed that coastal women who engage in fishing have the self-agency to maintain their existence in the economic, cultural, and political realms.

Indigenous women's traditional rights that are often overlooked are as follows (Gearhart-Serna, 2009; McGregor, 2021): a) Indigenous women often have more limited access to land and natural resources compared to men, even though they play a vital role in land and natural resource management within their communities, b) indigenous women often do not have the same rights as men to inherit or own property, even though they may have contributed to the creation of family or community wealth, c) indigenous women often face barriers in accessing formal education, which can limit their opportunities to enhance their skills and secure better employment, d) indigenous women often experience disparities in accessing healthcare and health services, including reproductive and maternal and child health services, e) indigenous women often do not have the same power as men in decision-making within the family, community, and public institutions.

Local knowledge of coastal women encompasses various aspects of life, such as traditions, culture, customs, ecological knowledge systems, and local wisdom related to the sustainability of coastal communities (Parisi & Corntassell, 2007). Coastal women in Pulau Dompak possess specialized knowledge about the marine environment, such as their sensitivity in identifying fish and marine species, as well as their knowledge about seasons, currents, and marine weather. They also know the use of traditional medicinal plants, traditional remedies, and safe and beneficial seafood. For example, the women in Pulau Dompak know the sensitivity to seasons in the sea. There are two sea seasons they are aware of: the northern season and the southern season. These two seasons hold significant meaning in their
activities at sea because they determine the amount of their catch in the sea.

In addition, coastal women in Pulau Dompak also possess knowledge about proper and sustainable management of marine resources, such as fishing techniques, fish capture methods, and small-scale fisheries management. They also know about maintaining environmental balance and avoiding environmental damage. They utilize simple fishing tools, such as small spears and fishing nets, to generate their marine catches.

The local knowledge of coastal women in Dompak is often disregarded by a more patriarchal society that values knowledge predominantly dominated by men. However, the local knowledge of coastal women holds significant value in ensuring the sustainability of coastal communities, particularly in the face of climate change and rampant environmental degradation.

It is important to recognize and respect the traditional rights of indigenous women as part of efforts to promote gender equality and ensure environmental sustainability and community resilience. This includes empowering indigenous women to play a significant role in decision-making, accessing resources and services, and upholding their rights to land, natural resources, and the environment. Horowitz (2017) states that the empowerment of coastal women is closely tied to their access to livelihood resources.

Coastal women often face layered marginalization in their community and economic life, experiencing gender inequality and limitations in economic and social rights (Holcombe & Kemp, 2020). However, coastal women also possess specialized knowledge about livelihoods that are crucial for ensuring the sustainability of natural resources and the survival of coastal communities (Dubey, 2017).

Based on our field data, some of the rights of coastal women's knowledge about livelihood include: a) knowledge of marine resource management: women in Pulau Dompak have specialized knowledge about the management of marine resources and the use of sustainable fishing techniques. They also know about fish habitats, migration patterns, and other marine biodiversity, b) knowledge of coastal resource management: women in Pulau Dompak also possess knowledge about coastal resource management and how to maintain a balance between resource utilization and the preservation of coastal ecosystems, c) knowledge of seafood production: women in Pulau Dompak are skilled in seafood production, such as fish and shellfish processing, as well as knowledge of how to make other seafood products such as salt, shrimp paste, and fish sauce, d) knowledge of fisheries and maritime business: women in Pulau Dompak also know market value, trading networks, and other maritime businesses related to the production and trade of seafood, e) knowledge of traditional medicine: women in Pulau Dompak also possess knowledge of traditional medicine using natural ingredients such as seaweed, algae, and other marine plants.

Based on our field data shows that the rights to local knowledge of local women in Dompak still exist. This was stated by women figures on Dompak who expressed that their local knowledge has never been affirmed in local government policies, thus risking its potential loss in the future.

The Livelihood of Coastal Women on Pulau Dompak

Livelihood refers to the activities undertaken by individuals or groups to earn a living and meet their needs (Siegel & Veiga, 2010). Livelihoods can vary and depend on the social, economic, and environmental conditions in which individuals or groups are situated. Some common livelihoods in various regions include agriculture, fishing, livestock rearing, trade, and the creative industry. Additionally, certain community groups such as women, children, and people with disabilities may choose different livelihoods based on their abilities and needs. The sources of livelihood for the community on Pulau Dompak are diverse. This is because the island not only produces marine products but also agricultural and family plantation products.

Livelihood can play a crucial role in improving the social and economic conditions of an area, especially for underserved or marginalized communities. However, in practice, unfair access to resources and economic markets can limit the livelihood potential for certain groups, such as women and minorities. Therefore, it is important to strengthen access and opportunities for sustainable and equitable livelihoods for all community groups. This can be achieved through capacity-building efforts, economic empowerment, sustainable
infrastructure development, as well as through policies and regulations that support economic equality and sustainability.

The livelihoods of indigenous women can vary depending on the social, economic, and environmental conditions and contexts they face. However, in many cases, indigenous women are often engaged in economic activities related to natural resource management, such as agriculture, fisheries, fuelwood collection, and handicraft production.

Coastal women in Pulau Dompak are involved in various livelihood sectors, including agriculture, fisheries, capture fisheries, handicrafts, and tourism. For example, in the agricultural sector, coastal women are responsible for managing vegetable and fruit gardens and collecting harvests. They are also involved in the processing of traditional food and selling it in the local market (Paulus & Sobang, 2017). These activities not only provide income for them but also contribute to meeting the local community's food needs.

In the fisheries sector, coastal women play roles as capture fishermen and fish farmers. They are involved in fishing activities, repairing nets, and managing fish processing businesses. Additionally, they also engage in the cultivation of seaweed, clams, and shrimp in the waters surrounding the island. In this regard, coastal women not only serve as providers of livelihood but also contribute to maintaining the sustainability of marine ecosystems and fisheries resources.

In addition to the agriculture and fisheries sectors, coastal women in Pulau Dompak are also involved in traditional handicrafts. They produce craft products such as pandan weaving, batik crafts, and accessories made from natural materials. These products are then sold as souvenirs to tourists visiting the island. Through these handicrafts, coastal women can generate additional income and promote local cultural heritage.

Coastal women also play a crucial role in the tourism sector. Pulau Dompak possesses natural beauty and potential for marine tourism that attracts tourists. Coastal women act as local tour guides, provide homestay accommodations, and sell local products to tourists. In this regard, coastal women serve as agents of sustainable tourism development and ensure that tourism delivers equitable social and economic benefits to the local community.

Women also often serve as stewards of natural resources such as forests, rivers, and agricultural land, and possess local knowledge and wisdom in resource management (Niko, 2020). Moreover, indigenous women frequently assume the role of local stakeholders in decision-making regarding natural resource management. Natural resource management is a complex and vital process in ensuring environmental sustainability. In this context, women often play a significant role as local stakeholders in decision-making related to natural resource management. This essay will elucidate the important role of women in this decision-making process.

Women often possess deep knowledge and understanding of the local environment and natural resources (Gibson & Klinck, 2005). They are frequently directly involved in daily activities related to natural resources, such as agriculture, fisheries, forestry, and fishing. This firsthand experience provides them with a rich understanding of environmental sustainability and the impacts of decisions concerning natural resource management. Their knowledge and perspectives make women valuable contributors to decision-making processes involving natural resources.

Furthermore, women serve as custodians of daily life in the local community. They are responsible for ensuring the sustainability and availability of natural resources that are essential for livelihoods, such as clean water, food, and fuel. This role provides women with a profound understanding of the importance of sustainable natural resource management (Horowitz et al., 2018). They have a direct stake in the sustainability of natural resources and a vested interest in decision-making processes that affect their living environment.

Moreover, women in Pulau Dompak act as agents of social change within the community. They actively participate in community organizations, fishermen groups, and local women’s groups that play a role in the development and management of natural resources. Through this active participation, they can advocate for their interests as well as those of the local community in decision-making processes related to natural resources. They serve as advocates for sustainability, gender equality, and community empowerment within the context of natural resource management.
However, women in Pulau Dompak often face challenges in accessing fair resources and economic markets, and they frequently experience gender discrimination and marginalization. Therefore, it is crucial to strengthen women's access to sustainable economic opportunities and develop their skills and capacities in managing and utilizing natural resources sustainably (Tobin, 2001; McGregor, 2005).

Several measures can be implemented to enhance the livelihood of indigenous women in Pulau Dompak such as; firstly, it is crucial to acknowledge the significant roles and valuable contributions made by indigenous women in the management of natural resources and decision-making processes about development. Secondly, efforts should be made to improve the accessibility of indigenous women to education and training opportunities, with a specific focus on sustainable natural resource management and technological advancements. Moreover, the active participation of indigenous women in organizations involved in natural resource management and decision-making processes related to development should be encouraged.

Furthermore, steps should be taken to enhance the access of indigenous women to fair and sustainable economic markets, while also strengthening their skills and competencies in marketing and business management. The promotion of sustainable and environmentally friendly technologies in the management of natural resources and economic production is another important aspect. Finally, there is a need to reinforce the protection of the rights of indigenous women through the enactment and implementation of laws and policies that safeguard their land and natural resource rights.

Based on field studies, we discovered that the disempowerment of women in Dompak affects their ability to sustain their livelihood due to the presence of diversified income systems. This implies that there are numerous alternative options for economic enhancement aside from marine-based endeavors. As a result, post-mining livelihoods have not significantly altered the economic situation of women in Dompak.

**Marginalization of Coastal Women**

Marginalization of women refers to the neglect or exclusion of women from equitable participation and access to resources and opportunities across various sectors, including the economic, social, political, and cultural domains (Kuokkanen, 2008; Gabriel, 2017; Croce, 2020). Marginalization can occur due to systemic gender discrimination and the pervasive influence of patriarchal norms in various aspects of life.

The marginalization of women can result in deeper and detrimental gender inequalities, affecting not only women themselves but also society as a whole (Sinha et al., 2019). The marginalization of women can have negative impacts on their health, education, and economic well-being, exacerbating poverty and social disparities (Dodgson & Struthers, 2005).

Women's knowledge often experiences marginalization in various social, economic, and political contexts. Based on research findings in Pulau Dompak, this situation also occurs, where women's knowledge is often disregarded or deemed insignificant in decision-making and natural resource management. This essay will elaborate on the marginalization of women's knowledge in Pulau Dompak and its impacts on sustainability and community well-being.

Women in Pulau Dompak possess rich and significant local knowledge related to the environment and natural resources. This knowledge is acquired through direct experience and intergenerational transmission in various sectors such as agriculture, fisheries, and forestry. However, this knowledge is often disregarded or deemed less valuable than knowledge dominated by men. In decision-making processes concerning natural resource management, women's knowledge is frequently considered irrelevant or unrecognized.

As a result, the marginalization of women's knowledge leads to gender inequality and reduced women's participation in decision-making. Women in Pulau Dompak often lack equal access to information, resources, and opportunities to participate in decision-making forums related to natural resource management compared to men. The absence of women's knowledge in decision-making processes diminishes the diversity of perspectives and ideas and hampers the achievement of inclusive sustainability and well-being.

Furthermore, the marginalization of women's knowledge also impacts environmental
sustainability on Pulau Dompak. Women's knowledge related to sustainable practices in natural resource management is often overlooked. Traditional knowledge such as selecting drought-resistant crop varieties, employing organic pest control techniques, or practicing sustainable fishing methods are frequently undervalued or forgotten. As a result, unsustainable and environmentally damaging resource management practices often prevail, posing a threat to the sustainability of ecosystems and the livelihoods of the community on Pulau Dompak.

To address the marginalization of women, efforts are needed to strengthen gender equality and eliminate gender discrimination in various sectors. This can be achieved through empowering women in various fields, including education, health, and economics. It is also important to strengthen policies and regulations that support gender equality and respect women's human rights, as well as transform norms and cultures that restrict women's participation in community life.

Efforts to address the marginalization of women also need to consider gender differences and cultural diversity within societies. It is important to note that the marginalization of women can occur differently in various cultural and geographical contexts, and efforts to address this issue should take into account the local context and needs, while actively involving women in the decision-making process. The marginalization of coastal women can contribute to economic inequality as they often experience gender discrimination, which leads to limited opportunities and unequal access to resources and economic prospects compared to men.

The impact of marginalizing coastal women on economic inequality is evident in their limited access to resources such as land, water, and marine resources, compared to men (Shiva, 1997; Espinosa, 1997). This limitation can restrict their ability to generate income and improve their livelihoods. Furthermore, coastal women often face constraints in accessing economic opportunities such as training, credit, and markets. These limitations hinder their capacity to expand their businesses and increase their income. The marginalization of coastal women can lead to poverty and economic disparities among them, exacerbating the living conditions of both themselves and their families.

Reducing the marginalization of coastal women and enhancing gender equality in economic access is crucial for achieving sustainable and inclusive development (Nancy, 2022). This can be accomplished through efforts to address gender discrimination, raise awareness about the role of coastal women in the economy, and provide greater access for coastal women to resources and economic opportunities.

**Conclusion**

The traditional rights and knowledge of indigenous women are essential in developing post-mining livelihoods on Dompak Island. Local knowledge can aid in identifying plants and animals that can be utilized for daily living. Additionally, recognized and respected traditional rights provide legal certainty and facilitate access to natural resources. Indigenous women on Dompak Island play a crucial role in natural resource management and post-mining livelihoods. They possess extensive knowledge in land cultivation, fisheries, and processing agricultural and fisheries products into valuable commodities. Therefore, indigenous women must be actively involved in the post-mining development process.

Sustainable natural resource management must be implemented on Dompak Island to ensure the livelihood sustainability of the local community. This can be achieved through the development of organic farming, sustainable fisheries, and responsible forest management. In the development of post-mining livelihoods, it is crucial to consider environmental and social aspects to ensure the sustainability of natural resources and the well-being of the community.

In conclusion, local knowledge and traditional rights need to be promoted and respected in the development of post-mining livelihoods on Dompak Island. In this regard, indigenous women should be actively involved in the post-mining development process. Sustainable natural resource management should be a priority to ensure the sustainability of the local community's livelihoods and guarantee their well-being in the future.
References


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