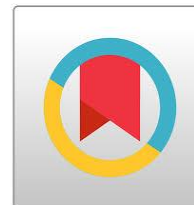


Livelihood Transformation through the Existence of Mining and Tourism Industries: Case of North Halmahera District, North Maluku, Indonesia



Transformasi Penghidupan melalui Industri Pariwisata dan Pertambangan: Studi Kasus di Kabupaten Halmahera Utara, Provinsi Maluku Utara, Indonesia


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ARTICLE INFORMATION	
<p>Keywords <i>Livelihood;</i> <i>Tourism;</i> <i>Mining;</i> <i>North Halmahera;</i> <i>Indonesia;</i></p>	<p>ABSTRACT <i>Development has changed indigenous people's cultural structure and function, which is identical to a traditional lifestyle to the modern one, encouraging livelihood diversification or transformation. The development approach is vulnerable to socio-cultural, economic, and environmental changes, including in the mining and tourism sector. This article aims to describe the development process that has caused changes in the structure and function of indigenous culture and rural livelihoods in Northern Maluku, Indonesia. This study was done qualitatively using a case study approach to describe the livelihood strategies of indigenous people to cope with the existence of the mining and tourism industry's activity in the North Halmahera Regency. The key informants involved in this research are traditional leaders, community leaders, and youth. Data collection is adjusted to the context of the research location, both around tourist destinations and mining areas. Data processing uses a triangulation approach. These findings indicate that the traditional community of Hibualamo had cultural structures and functions that mobilised access to social and natural capital. Furthermore, The challenges of globalisation cause a livelihood transformation and influence the capability of local communities to access financial capital, human capital, and physical capital.</i></p>
<p>Kata Kunci <i>Penghidupan;</i> <i>Pariwisata;</i> <i>Pertambangan;</i> <i>Halmahera Utara;</i> <i>Indonesia;</i></p>	<p>ABSTRAK <i>Pembangunan telah mengubah struktur dan fungsi budaya masyarakat adat yang identik dengan gaya hidup tradisional menjadi modern, kemudian mendorong diversifikasi atau transformasi mata pencaharian. Artikel ini bertujuan untuk menguraikan proses pembangunan yang menyebabkan perubahan struktur dan fungsi budaya asli serta mata pencaharian pedesaan di Maluku Utara, Indonesia. Metode penelitian yang digunakan ialah metode kualitatif dengan pendekatan studi kasus untuk mendeskripsikan strategi penghidupan masyarakat adat dalam menghadapi keberadaan aktivitas industri pertambangan dan pariwisata di Kabupaten Halmahera Utara. Informan yang kunci yang terlibat dalam penelitian ini ialah tokoh adat, tokoh masyarakat, dan pemuda. Pengambilan data disesuaikan dengan konteks lokasi penelitian baik di sekitar destinasi wisata maupun kawasan pertambangan. Pengolahan data menggunakan pendekatan triangulasi. Temuan penelitian ini menunjukkan bahwa masyarakat adat Hibualamo telah memiliki struktur dan fungsi budaya yang memobilisasi akses terhadap modal sosial dan alam. Disisi lain, tantangan globalisasi menyebabkan transformasi mata pencaharian dan mempengaruhi kemampuan masyarakat lokal untuk mengakses modal keuangan, modal manusia, dan modal fisik.</i></p>
<p>Article History Send 30th December 2021 Review 31th March 2022 Accepted 22th April 2022</p>	<p>Copyright ©2022 Jurnal Aristo (Social, Politic, Humaniora) This is an open access article under the CC-BY-NC-SA license. Akses artikel terbuka dengan model CC-BY-NC-SA sebagai lisensinya.</p> 

Introduction

Research on the transformation of livelihoods in developing countries needs to be reviewed based on the socio-cultural context and the development sector that drives changes in the structure of people's livelihoods (Zhan, 2019). There are few studies on people's livelihoods in Indonesia that examine the livelihood transformation stimulus carried out by the mining and tourism sectors. Several studies on the transformation of people's livelihoods are still partial, either due to the encouragement of the tourism sector (Chen, Xu, & Lew, 2020), the encouragement of the agricultural industry (Nguyen et al., 2019), the encouragement of the fisheries sector (Wanyonyi, Wamukota, Mwakha Alati, & Osuka, 2021), to the impetus of the mining sector (Buss & Rutherford, 2020). The development of only sustainable livelihood studies does not discuss based on the economic sector that is the stimulus for livelihood transformation and empirical findings in households and rural areas (Huang, Yang, Tuyền, Colmekcioglu, & Liu, 2022). It shows that the development of studies on sustainable livelihoods frameworks needs to be discussed comprehensively and contextually. Therefore, this study offers an idea to describe the transformation of indigenous peoples' livelihoods stimulated by the mining and tourism industries.

Indonesia has natural resources potential that can be developed as a regional and national income source. Mining investment in Indonesian exchange income for the country through increased employment and poverty alleviation (Sulaksono, 2015). However, mining companies' performance on the entreats of environmental damage hinders sustainable development (Tristianasari & Fachrurrozie, 2014). One of the programs to achieve sustainable development is developing the tourism sector, which has become one of the strategies to increase foreign exchange done by minimising the environmental and accommodation field in the tourism sector and synergises with environmentally friendly programs to achieve sustainability (Supriadi & Roedjinandari, 2016). It shows the mining and tourism industries in Indonesia are able to increase the foreign exchange from the economic aspects but is vulnerable to causing environmental damage. Further, it has become a stimulus for social segregation and stratification in Indonesia.

From the perspective of policies and institutions, decentralisation in regional autonomy gives flexibility to each provincial government to optimise the potential of natural resources and build supporting infrastructure and facilities in accordance and integrated with the society's needs. The decentralisation in Indonesia influences the economic aspect of growth and price stability at the province level. However, the challenges faced are ace development gaps due to differences in the potential of natural resources of each area (Sasana, 2016). Besides, the

flexibility in managing these natural resources is a stimulus for stakeholders to propose an enormous Regions. The decentralisation promotes development in areas at the province and regency level as an extension of the central government. At the same time opens opportunities for specific individual interests on a political authority basis, resulting in economic gaps and poverty, social segregation and stratification, and environmental damages due to the development that does not pay attention to the sustainability principles (Djati, 2015; Suharyanto, 2014). In the development context, the decentralisation strengthens the regional authority to make both the mining and tourism industry a priority.

In the context of the mining industry in Indonesia, the activities done in regions impact changes in rural communities' social and economic structure. The difference factors pronounced in their livelihoods, which were homogenous as farmers and then turned into other livelihoods (Suma & Hariyanto, 2018). The mining industry for the rural community tended to cause social conflicts in the Kao and the Malifut conflict in 1999-2000. It was started when there were land acquisitions by the companies, but it slowly weakened the local community's social and cultural values (Mutiara, 2018). The mining activities influence community behaviour due to the fusion of indigenous culture with the culture from outside (Mbawo, 2014). Besides, the conversion of agricultural land by the mining companies makes it difficult to access clean water (Rahmadian & Dharmawan, 2015). It shows that the mining industry context in Indonesia is more focused on the economic, social and cultural aspects.

Tourism development plays an essential role in the economic sector by creating employment opportunities and increasing the regional income from trade, hotels, and restaurant sectors. The obstacle in the development of the tourism sector also includes the condition of infrastructure and human resource management of the tourist objects that can provide a sense of security and comfort for the tourists. The tourism industry does not always offer benefits but also causes commodification of culture (Irianto, 2016). Commercialised shows degradation ion of authentic values which h, which has the culture itself (Kurniawan, 2015). On the other hand, Indonesia's tourism development emphasises sustainable development – focusing on environmental sustainability through the ecotourism development concept. It shows that the tourism development in Indonesia seems to be more profitable in the ecological aspect than in the socio-cultural part.

The mining and tourism industry in Indonesia are able to increase employment opportunities as a strategy to alleviate poverty. Unfortunately, qualified human resources in the sectors are due to varying quantity and education quality. The lack of quantity and quality of skilled human resources in the mining context causes the local workers to be unemployed (low

labour absorption). It has led to a policy of recruiting foreign workers to maintain the sustainability of the company's operations. In the tourism context, the labour absorption is contextual, depending on the local government policy to prioritize the tourism sector in the development. However, this sector can have higher local labour absorption in accommodation and tourist destination management fields and involves other entrepreneurs supporting tourism economic activities (Punarbawa, 2016). It shows that the development of the mining and tourism industry benefits from an increase in foreign exchange. Both drives also influence the social and environmental conditions of the household economy in terms of local community livelihoods.

Previous research has shown several compelling cases in Indonesia that link the mining and tourism industries. In Bangka Regency, they found directions and strategies to develop tin mining areas as tourism destinations (Meyana, Sudadi, & Tjahjono, 2015). In Banjarbaru City, the local government established local regulations related to designation changes of the former mining areas to residential areas and tourism destinations (Tyas, 2016). In Sawahlunto City, there were shifts in the policies of a mining city to a mining city of culture in the community's socio-economic life (Syafrini & Fernandes, 2018). The Public's Perception of post-mining reclamation as a tourist attraction was positive, which indicated that the transition from mining to the tourism industry offered more benefits to the sustainability of social and cultural values and the environment (Habibah, Agustina, & Yulia, 2019). Thus, the community would prefer environmentally friendly development and the distribution of economic benefits that directly impact their livelihood sustainability (Abdillah & Hamid, 2016). Further, this underlies that the existence of the tourism industry is considered more beneficial for the community livelihood sustainability from socio-cultural, economic and environmental aspects (Wahyuningsih, Citra, & Christiawan, 2017). For these reasons, the transformation of community livelihood through the mining and tourism industry is contextual, where each region shows different responses. Therefore, this present study aims to describe the change in the community livelihood in the North Halmahera Regency since the mining and tourism industry exists in the area. The North Halmahera Regency is the research location because this area has a history of inter-ethnic and religious conflicts due to mining issues and political instability from 1999-to 2000. In the dynamics of regional development in the North Halmahera Regency, the development of the tourism industry also encourages changes in people's livelihood patterns. Thus, the location of this research becomes very relevant to the formulation of this research problem.

This study offers insight into the contribution to sustainable livelihood in Indonesia. Consider the lack of comprehensive explanation of rural and urban community livelihood transformation, especially in the island's coastal and inland areas. Most of the contexts of study in Indonesia are still descriptive, explaining coping and survival strategies of local communities (Mardiyarningsih, Dharmawan, Kolopaking, Firdaus, & Nielsen, 2018; Tridakusumah, Elfina, Mardiyarningsih, Pioke, & Bumulo, 2015; Yulian, Dharmawan, Soetarto, & Pacheco, 2017). This article will discuss the transformation of rural and urban community livelihood based on the characteristics of the island, coastal, and inland areas.

Method

This research adopts a qualitative method through a case study approach in Kao Village, Talaga Paca Village, Meti Village, Kupa-Kupa Village and Pitu Village in North Halmahera Regency, North Maluku Province, Indonesia. Specifically, the residential area in the Kao area is an area that is relevant to the context of the livelihoods of the people around the mining area. Meanwhile, the Talaga Paca, Meti, Kupa-Kupa, and Pitu areas are relevant to the livelihoods of the people around the tourist destination area. By conducting research in the designated area, The transformation of local people's livelihoods due to the mining and tourism sectors in North Halmahera Regency can be discussed in-depth. This study describes various local community livelihood transformation cases in each village affected by mining and tourism industry activities. The data was analysed using the sustainable livelihood approach. The Sustainable Livelihood Approach is a framework that describes the accumulation of capital (human, social, financial, physical, natural) and the context of vulnerability (seasonal, trends, shocks) that determine the livelihood mechanisms of people in developing countries. This framework is very relevant to discuss the context of the research location related to the influence of the mining and tourism industry on changes in people's livelihood patterns in the North Halmahera Regency. The data was collected through in-depth interview techniques, observation and document study.

The key informants involved were community leaders and youth in each region, traditional stakeholders (*Hoana Towiliko*, *Hoana Boeng*, and *Hoana Lina*), village and regional governments at the sub-district and district levels, and stakeholders in the mining and the tourism industry. The documents studied in this study were the Regional Tourism Development Master Plan of North Halmahera Regency, Tourism Site Development Master Plan, Regional Regulation Number 3 of 2014 concerning Preservation and Institutionalization of Customs in North Halmahera Regency; Regional Regulation Number 8 of 2014 concerning Protection of

Indigenous Rights in Mining Areas; Regent Regulation No. 37 of 2016 concerning the Organizational Structure of the Main Duty and Function of the Tourism Office; Data from the Central Statistics Agency of North Halmahera Regency in Figures in 2014-2019.

The results of in-depth interviews with key informants are matched with field observations and document studies as a triangulation technique. The results of in-depth interviews were written in the form of transcripts and then coded based on themes under the sustainable livelihood framework. Interview transcripts were made to facilitate the identification and analysis of facts regarding changes in people's livelihood patterns in line with the development of the tourism and mining industry in North Halmahera. Creswell (2018) explains that using interview transcripts will make it easier for researchers to sort out personal opinions with factual statements that align with research objectives and use them to build valid research arguments.

Results and Discussion

The dynamics of community livelihoods in rural and urban areas were inseparable from vulnerability, which caused a transformation of local community livelihoods. This study illustrates the context of community livelihoods in the North Halmahera Regency since the mining and tourism industry's existence.

Community Livelihoods in North Halmahera Regency due to the Existence of Mining and Tourism Industry

Based on the results of previous research, North Halmahera Regency had a history of social conflict that peaked in 1999-2000 (Safi, 2017). The battle occurred because of the existence of the gold mining land in the customary area of Hoana Modole, Hoana Pagu, Hoana Towiliko (Kao Lake, West Kao, Kao Staad), which led to a war between tribes. The conflict continued to unclear administrative boundaries in West Halmahera Regency and North Halmahera Regency. In its development, strengthening cultural values became a conflict resolution in North Halmahera District (Djurubasa, 2018). After social conditions began conducive, mining companies started operating. Mining companies took a persuasive approach to the local community to improve the company's Corporate Social Responsibility (CSR) performance (Gumuru, 2014). However, the community began to realize the danger of mercury and cyanide in the area around the mine, which was part of the residential area (Sulitijo et al., 2018). The community has begun to be critical of the performance of mining companies that were considered to be not optimal in carrying out their CSR function to disadvantage the

indigenous communities around the mining area (Goleo, Matheosz, & Mawara, 2019; Laike, 2018, 2019).

The existence of the mining industry in the North Halmahera Regency had led to changes in the community livelihood that was initially dominant in the management of forest resources, plantations and horticultural crops (Simanjuntak, Zuhud, & Hikmat, 2016). Strengthening the community cultural values in North Halmahera Regency did not only serve as a social glue (conflict resolution) mobilizing the reconciliation among the community but also became an attraction for cultural tourism. Since 2011, the tourism sector has been strategic in providing alternative livelihoods for local communities. Through the Regional Tourism Development Master Plan and Tourism Object Development Master Plan in North Halmahera Regency, the regional government developed cultural and natural potential as a tourist attraction aimed to be the livelihoods of the community in North Halmahera (Yerik Afrianto Singgalen, 2020a, 2020b, 2020c, 2021, Yerik Afrianto Singgalen, Sasongko, & Wiloso, 2019c, 2019d; Yerik Afrianto Singgalen, Kusumawicitra, & Brito, 2021; Yerik Afrianto Singgalen, Sasongko, & Wiloso, 2018, 2019a, 2019b, 2017; Yerik Afrianto Singgalen & Simange, 2018; Yerik Afrianto Singgalen & Timisela, 2021; Yerik Afrianto Singgalen, Wiloso, & Sasongko, 2017). It indicates that the tourism sector provided employment opportunities that added to the people's preferences in choosing types of work (alternative livelihoods) besides the mining industry.

"In 1999-2000, the conflict in the Kao area began with the issue of customary land. One of the tribes defends the customary rights of indigenous peoples, causing debates that lead to physical violence and uncontrolled horizontal conflicts. After the conflict, we found out that the conflict occurred because of gold mines potential in the customary area of the Pagu tribe. Communities around mining areas depend not only on fishing, agriculture, and plantation products but also on mining products. The community's livelihoods underwent a significant change after the potential of the mining area was legally managed by the company. The existence of mining companies in the Kao area has absorbed local workers and implemented Corporate Social Responsibility (CSR) programs to improve community welfare through education, health, and the economy. Nevertheless, environmental issues have become the main focus of the community due to mining activities that have taken place until now (Indigenous Leaders)."

The complexity of community livelihood in rural and urban areas was fascinating to study scientifically from the perspective of sustainable livelihoods. In the context of the North Halmahera Regency, the existence of the mining and tourism industry has changed the socio-

cultural and economic conditions and the environment. Concerning the view by Robert John Haylock Chambers and Richard Gordon Conway on the sustainable livelihood approach. The changes in the community livelihoods in North Halmahera District had a relationship with the availability of resources in the form of capital, the capability of access to capital, and institutional and policy aspects that influenced the family's livelihood strategy in sustaining their livelihood. In addition, the context of community livelihoods in the North Halmahera Regency could be classified based on regional characteristics, including islands and coastal and inland areas. There were also similarities in the livelihood characteristics in several research locations, such as the dominance of agriculture and processing of coconut plantation products (copra) and the processing of traditional fishery products. It showed that the community livelihoods in North Halmahera Regency were primarily farmers, cultivators of plantation land and substantive fishers.

All administrative regions in North Halmahera had cultural groups known as *Hibualamo* (big houses for all tribes). Still, each tribe, including *Hoana Pagu*, *Hoana Modole*, *Hoana Towiliko*, *Hoana Boeng*, *Hoana Lina*, *Hoana Huboto*, *Hoana Gura*, *Hoana Mumulati*, *Hoana Morodai*, *Hoana Morodina* had different customary territories. This study provided boundaries for the context of traditional environments in *Hoana Towiliko* for Kao Village, *Hoana Lina* for Talaga Paca Village and Meti Village, and *Hoana Huboto* for Kupa-Kupa and Pitu Villages. In the context of community livelihoods in Kao Village, the main livelihoods of the local communities were farming and processing of coconut (copra) products and traditional fishery product processing businesses. It indicated that the availability of natural resources around the residential area managed to support sustainable livelihoods. Furthermore, the community in Kao Village had the capability of access and ownership of land resources (natural capital) because it was supported by the traditions and norms of each tribe (*Hoana*).

The land ownership in the context of local culture was based on the ability of each family (*Soa*) to work on the land intended for plantation purposes or settlement expansion in the locations that other families had not initiated in the same ethnic group tribal area. Culturally, the ownership of the land planted for plantation purposes or settlement was recognized by the customary leaders and community in the same ethnic group. In addition, the head of the family had a vital role in inheriting the land from their sons. He could also verbally give the land to other people (free), and local customs also recognize the landowner. A strong sense of kinship strengthened brotherhood between individuals and family groups. It formed a collective behaviour in every farming and fishing activity to survive. Meanwhile, the livelihood context

of the Kao Village community focused on the customary area of *Hoana Towiliko*, which bordered the traditional regions of *Hoana Pagu*, *Hoana Modole* and *Hoana Boeng*.

The Kao Village community settlement location was in a very strategic coastal area, enabling the community to support their livelihood as fishermen and farmers. In addition, there was also a mangrove forest and a customary place for the *Tagi Jere* ritual – a sacred tomb of Syeh Mansyur. The Kao village community's livelihood began to experience a shift since the gold mine existed. The community started mining the gold, resulting in a social conflict of tribal wars between indigenous people (*Kao*) and migrants (*Makeang*) in 1999-2000. The fights were also influenced by ethnicity, religion, race and intergroup relation issues due to political instability in Indonesia. After conciliation, cultural values became the conflict resolution that strengthened social ties. PT Nusa Halmahera Mineral professionally handled the public mining area and provided opportunities for people around the mining area to get a job.

However, qualified human resources which were in line with the company's standards were still limited. The company decides to employ professionals from outside the region as a strategy to maintain the mining industry's sustainability. This policy limited the members of the Kao Village community to work in the mining company. The mining activities were causing a debate among the community as they had the potential to damage the forest and pollute the water. Through the Corporate Social Responsibility (CSR) program, the company's Social Performance department assisted in constructing infrastructure and human resources for the community living around the mining area. It showed the community's capability to access human capital was still limited, but the collective values of local culture supported the access to social capital. On the other hand, people working in mining companies accumulated financial capital to increase human capital and strengthen social capital. The mining company's CSR program could facilitate the local community to access physical capital.

However, qualified human resources which were in line with the company's standards were still limited. The company decides to employ professionals from outside the region as a strategy to maintain the mining industry's sustainability. This policy limited the members of the Kao Village community to work in the mining company. The mining activities were causing a debate among the community as they had the potential to damage the forest and pollute the water. Nevertheless, the company's CSR program assisted in constructing infrastructure and human resources for the community living around the mining area. It showed the community's capability to access human capital was still limited, but the collective values of local culture supported the access to social capital. On the other hand, people working in mining companies accumulated financial capital to increase human capital and strengthen social capital. The

mining company's CSR program could facilitate the local community to access physical capital.

The potential of coastal natural resources, such as the Kupa-Kupa Bay area, had been developed as a tourist attraction based on cross-sectoral coordination and collaboration involving the tourism agency, village government, village youth, churches, and Kupa-Kupa Beach Cottage and Bar entrepreneurs. Cross-sectoral cooperation encouraged the acceleration of facilities and infrastructure development to support tourism activities. It showed that the Kupa-Kupa Village community could access natural and social capital based on the local cultural values that we're able to strengthen the fraternal relationship between individuals and the community. The existence of the coconut processing industry also encouraged the livelihoods that mobilized access to financial and human capital. Meanwhile, the collaborative development facilitated access to physical capital.

In the context of the Meti Village community, their main livelihoods were an agricultural business, processing of coconut plantations (copra), and traditional fishery products. Culturally, the capability of community access to land resources for plantations or settlements was supported by the traditions and cultural values of Hibualamo. The community's land ownership trajectory in Meti Village was not much different from the process in other areas. The community lives in the archipelago with resources of plantation land on the mainland of Halmahera Island to survive. During World War II (WWII), the Meti island became a military base and a runway fighter aircraft owned by the allies. The tourist can find various historical world war relics such as cannons, tanks, and wreckage. In the context of culture, the Meti Village community was part of *Hana Lina*, initially occupied the inland area and then moved to coastal areas and small islands. Some people who lived on Meti Island also had agricultural land and coconut plantations on the mainland of Halmahera. Meti Island had the potential for optimised fisheries and marine natural resources as a tourist attraction. However, the village government set priorities for developing fisheries potential compared to tourism.

In its development, the Meti Cottage entrepreneur invested in Meti Island to develop tourism potential. The community members who met the accommodation services qualifications were employed and given the training to increase their capacity in tourism. The local and village governments collaborated with various stakeholders to accelerate development programs in rural areas, especially the archipelago. Hence, the supporting infrastructures establish to support the development of village potential. It showed that the Meti Village community had access to natural and social capital based on the *Hibualamo* cultural

values. The existence of the tourism industry was able to mobilize the people's access to financial and human capital. At the same time, the entrance to physical capital was determined by the collaboration of various stakeholders in the development of Meti Village.

In the context of the Talaga Paca Village community, their main livelihoods were an agricultural business, processing of coconut plantations (copra), processing of forest resources, and freshwater fish farming to show differences in livelihood patterns with communities in coastal and island areas. Culturally, the capability of community access to land resources for plantations or settlements is supported by the traditions and cultural values of *Hibualamo*, so the trajectory of the community's land ownership in Talaga Paca Village was not much different from the process in other villages. The livelihoods of some families in Talaga Paca Village still depended on hunting and forest resources. Some families living in Talaga Paca village still used the Tobelo language and could not speak Indonesian. Through the Tourism Agency, the Regional Government collaborated with the Village Government and Ta'aga Paca Resort entrepreneurs to optimize the potential of local tourism by building tourism supporting facilities and infrastructure.

Nevertheless, the community participation in the tourism development was still not optimal, so the village government continued to organize programs to increase the capacity of human resources to manage the Talaga Paca attractions to increase the income of rural communities. Diversifying agricultural businesses led to changes in the processing of coconut plantation (copra) products, forest resource processing businesses, and freshwater fish farming were strategies to maintain their community livelihoods. The development of tourism and the existence of Ta'aga Paca Resort had become a stimulus for community participation in the tourism sector. It shows that the capability of community access to natural and social capital had been supported by local culture. Still, the tourism industry mobilized the ability of access to human and financial capital. Meanwhile, access to physical capital was supported by policies and institutions related to the development of disadvantaged areas.

"Tourism helps the livelihoods of the people around Talaga Paca village. The government's facilities can be used by tourists when visiting our village. The people who live are very enthusiastic and feel helped by the government, academics, and entrepreneurs who have invested in developing our tourism potential. Our community still needs to be trained to take advantage of economic opportunities to improve their welfare. In addition to farming activities, trading around the tourist area also increases the residents' income so that the community is delighted with the tourism development in this village (Village Head)."

In the context of the Pitu Village community, their main livelihoods were an agricultural business, processing of coconut (copra) and traditional fishery products. When entrepreneurship developed, there were intensification, extensification and diversification of livelihoods in trade and tourism. Culturally, the capability of community access to land resources for plantations or settlements was also supported by the traditions and cultural values of *Hibualamo*. The trajectory of the community's land ownership in Pitu Village was not much different from the process in other villages. The easy access of Pitu Village to Tobelo City in terms of distance and travel time positively supported entrepreneurship development. The village government proposed the development of the tourism sector in Pitu Village through the Village Owned Enterprises (*Badan Usaha Milik Desa* (BUMDes)) by utilizing the land on the coast of Pitu Village that was integrated with the development of the sea channel.

Through a program to develop the tourism potential, the village government provided land around the tourism attractions to the community to be involved as traders of groceries and food. The policy needs to achieve economic independence, alleviate poverty, and overcome the problems of social inequality. The community participated actively in the development of Pitu Beach tourism objects. They sold groceries and food to receive additional income for family members' education and health costs. It showed that cultural values supported community access to natural and social capital. At the same time, the development of attractions through Village-Owned Enterprises mobilized the access capabilities to the financial and human capital. Meanwhile, the Village Government's program in the village economic development program was able to muster the capacity of community access to physical capital.

The mining and tourism industry in North Halmahera Regency had become a stimulus for transforming local community livelihood based on sustainable livelihood. Each rural context showed different dynamics under its vulnerable context. In addition, the policies and institutions in each region also influenced the dynamics of the transformation of rural livelihood affected by the mining and tourism industry activities.

Livelihood Transformation Through the Existence of Mining and Tourism Industries

S A sustainable livelihood approach is developed based on the international development agencies such as the Overseas Development Institute (ODI) and the Department of International Development (DFID) to solve global development problems. The development agents construct social, economic and environmental aspects related to the context of vulnerability, resources, policies, and institutions to overcome various development problems

in developing countries. The approach is expected to solve poverty problems by implementing a sustainable livelihood. The following Figure 1 presents the sustainable livelihood approach:

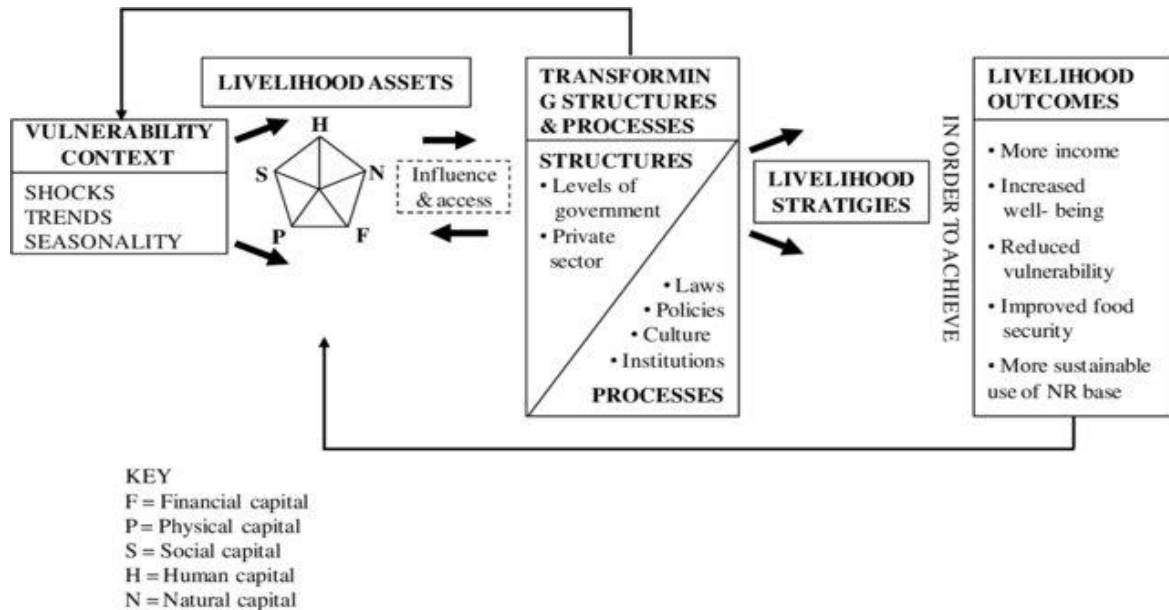


Figure 1. Sustainable Livelihood Approach (Source: Department of International Development)

Figure 1 shows that the community livelihood in developing countries is highly dependent on the capability of access to resources known as assets or capital (human, social, natural, physical and financial capital). It is influenced by positive contexts (vulnerability aspects) such as shocks, trends, and seasonality. Meanwhile, the vulnerability aspects can also be affected by structure (government level, tourism sector) and process (policy, culture, institution, law). Therefore, strategies to maintain a sustainable livelihood are done by increasing income, welfare and food security, reducing vulnerability, and utilising sustainable natural resources. It shows that the international development agencies strive to encourage the achievement of sustainable development in developing countries on the economic, social, and environmental aspects.

Robert John Haylock Chambers and Richard Gordon Conway reconstructed the sustainable livelihood approach through research in developing countries, specifically on the livelihood of farmer communities in rural areas. The emphasis of the idea of sustainable livelihoods lies in three essential aspects, including capability, equity, and sustainability. The community's livelihood sustainability depends on the community's ability to access resources. The efforts to manage the resources become such a capital to maintain the livelihood. This framework can be seen in Figure 2.

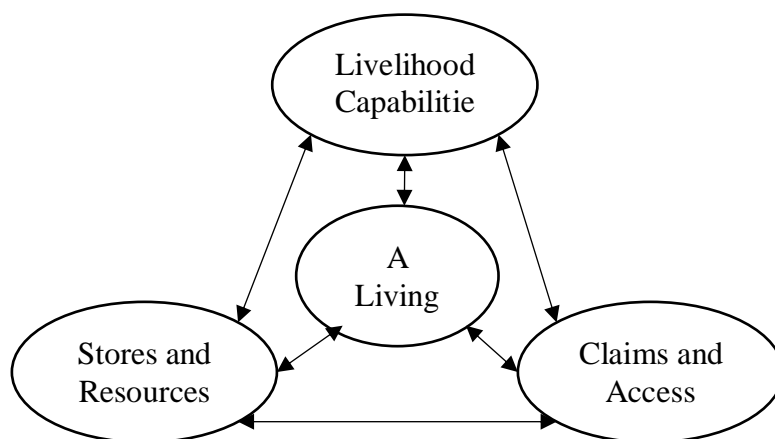


Figure 2. Components and Flow of Livelihood (Source: Chambers & Conway)

Figure 2 shows that livelihood (a living) is a significant component in the flow of livelihoods. People must have the capability to survive (livelihood capabilities) by utilizing (activities) resources (assets) to obtain a decent and sustainable livelihood (claims and access) or to achieve the expected goals (gains or outputs). Livelihood sustainability can be classified into economic, social, and environmental categories. Meanwhile, to achieve sustainability, the capital management process shows intensification, extensification, diversification, and transformation of livelihood. The livelihood stimulus can be in the form of vulnerability aspects divided into two parts based on institutions and policies and the environment. It shows that the construction of ideas by Robert John Haylock Chambers and Richard Gordon Conway and the sustainable livelihood approach by ODI and RFID are in line. Thus, views by Robert John Haylock Chambers and Richard Gordon Conway are contextually based on specific social, economic, and environmental conditions.

Previous researchers have different emphases. A view by Caroline Ashley and Diana Carney emphasized people and their livelihoods. Meanwhile, Ian Scoones emphasized the sustainable livelihood approach focusing on the role of institutions and policies in determining the capability of access to assets or resources in rural areas. On the other hand, Frank Ellis also emphasized family or household strategies to maintain livelihood sustainability. I show differences in previous researchers' views on rural development contexts in developing countries with different vulnerability and policy aspects, showing different patterns. Therefore, one of the experts' views which has consistently used the conceptual framework of livelihood sustainability, can be used to identify problems in developing countries.

In Indonesia, livelihood sustainability has been a popular topic to identify the achievement of sustainable development programs' goals in developing countries (Hidayat, Glasbergen, & Offermans, 2015). The sustainable livelihood approach developed by

researchers aims to identify the livelihood of farmers and fishers to maintain their livelihoods and achieve a better living standard. The livelihood strategy includes several aspects such as lifestyle, goals and values, and the activities are influenced by political, economic, social, cultural and psychological conditions. The sustainable livelihood approach constructed by ODI and DFID uses to identify the dynamics of community livelihood in Indonesia. Meanwhile, the view by Robert John Haylock Chambers and Richard Gordon Conway has been so popular and used by many experts in social and economic fields to describe the rural community livelihood in developing countries such as Indonesia. For these reasons, the view by Robert John Haylock Chambers and Richard Gordon Conway will be used as the basis of the research framework of this present study.

The mining industry was proven to improve the community's economy, but it damaged the environment. The existence of mining companies also affected the community's livelihood as traders and home rental service providers (Risal, Paranoan, & Djaja, 2017). It implied that the mining industry benefited the economic aspect but harmed the environment. On the other hand, the tourism industry also affects society's social and economic conditions and the environment (Abdillah & Hamid, 2016; Kurniawan, 2015). In specific contexts, the existence of the tourism industry could bring a negative impact on the social, economic and environmental conditions (Canavan, 2014). Therefore, optimizing natural resources through the mining and tourism sectors was a matter of development orientation from sustainable development. The local government should provide certainty in restrictions as a form of control over policy. The development orientation should improve the economy without damaging the environment and even increase North Halmahera Regency's social problems.

This research shows that the transformation of community livelihood in North Halmahera Regency, mobilized by the mining and tourism sectors, showed that it had not been able to increase and develop the rural community's economy equally, especially in alleviating poverty and social inequality. The mining sector added environmental damage, conflict, segregation, and social stratification issues. The policymakers were in a dilemma because of contradictory policies in favour of the economic growth (pro-growth), the environment (pro-environment) or the poor (pro-poor). The community livelihood might fail to be sustainable due to limited community access capabilities and the influence of a vulnerability context that was not supported by policies and institutions equally.

Table 1. Capability of Access to Capital and Vulnerability Context

Community Livelihood	Capability of Access to Capital					Vulnerable Context		
	1	2	3	4	5	Trend	Shock	Seasonality
Kao Village	Natural	Social	Financial	Human	Physical	v	v	
	Capital	Capital	Capital	Capital	Capital			
Kupa-Kupa Village	Natural	Social	Financial	Human	Physical	v		v
	Capital	Capital	Capital	Capital	Capital			
Talaga Paca Village	Natural	Social	Physical	Financial	Human	v		
	Capital	Capital	Capital	Capital	Capital			
Meti Village	Natural	Social	Financial	Human	Physical	v		v
	Capital	Capital	Capital	Capital	Capital			
Pitu Village	Natural	Social	Financial	Human	Physical	v		v
	Capital	Capital	Capital	Capital	Capital			

Source: Field Report 2021

Table 1. is a matrix of community livelihood in Kao Village, Kupa-Kupa Village, Meti Village and Pitu Village on their capability of access to capital and the influence of vulnerability context. In the context of community livelihood in the North Halmahera District, vulnerability influenced the ability of access to capital (Y A Singgalen, Sasongko, & Wiloso, 2019). It showed that the capital accumulation for the livelihood sustainability in each residential area was contextual (Tridakusumah et al., 2015). In the context of community livelihoods in North Halmahera Regency, especially in the research location, it showed that access to natural capital was supported by local traditions or culture known as *Hibualamo* (Handoko & Mujabuddawat, 2017). The collective values shared by the *Hibualamo* indigenous people influenced collective behaviour, thereby strengthening the social capital. By utilizing their local culture's natural and social capital, the community maintained their livelihood by working in agricultural business, processing coconut plantation (copra) and forest resources, freshwater fish farming, and processing traditional fishery products.

The mining and tourism industry is supported institutionally and by policy by regional policymakers. It has increased the community's ability to access various forms of capital and transformed the livelihoods to maintain community livelihoods. However, there was the potential for livelihood unsustainability due to the context of vulnerability. The sustainable livelihood approach could not be used as a benchmark to identify barriers to livelihood sustainability in rural areas with the geographical context of coastal, inland and the island area. It was due to the diverse availability of resources as a form of capital in each region. As a result, this study found that the accumulation of natural and social capital did not always increase the capability of access to financial capital but also physical and human capital. The utilization of natural and social capital could be used as a coping and survival strategy. The transformation also increases the capability of access to financial, human and physical capital. It showed

factual differences with previous researchers' views on the context of livelihoods in other countries. Therefore, this paradigm was limited to being used as a context comparison. Still, it could not be used as a benchmark for formulating the context of community livelihood in rural areas, especially in Indonesia.

In the research context in North Halmahera, aspects of vulnerability in the form of shocks, trends and seasonality tended to influence the sustainability of the mining and tourism industry. Therefore, the community's livelihood as workers in the mining and tourism industry was potentially unsustainable. The mining and tourism industry management had the authority to apply to continue or terminate employment (Garaga, 2017). It was caused by the vulnerability context that affected the mining industry's sustainability related to the availability of resource reserves and stock investment trends (Supadi & Sudana, 2018), while the sustainability of the tourism industry was highly dependent on the climatic conditions trend of tourist visits. In the context of this study, the mining industry was vulnerable to shocks caused by changes in the natural landscape around the mining area. The tourism industry was influenced by the trend of tourist visits and seasonality associated with climate change. The policies and institutions could help sustain the community's livelihood while the mining and tourism industry was threatened by unsustainability. Therefore, the role of policymakers (The local government) in determining the development orientation was crucial. In addition, there were significant differences in the existence of the mining and tourism industry for the community in the North Halmahera Regency. The tourism industry was still considered positive for environmental sustainability. However, the economic income obtained tended to be slow compared to the mining industry, deemed limited to the shareholders and might damage the environment. Therefore, the local government need to take policies that favour the community and environment.

Conclusion

This study indicated that the community livelihood mobilised by the mining and tourism industry also had the potential for not being sustainable. When the policy and institutional support in the development orientation could not muster the capability of community access to forms of capital, it also threatened the community's livelihood. On the other hand, the influence of the vulnerability context to access capabilities may lead to economic, social and environmental problems. In the context of community livelihood in the North Halmahera Regency, the ability of access to natural and social capital had been supported by the *Hibualamo* culture. The mining and tourism industry mobilises the local community's

livelihood transformation. Utilising the natural, social, financial, physical and human capital, the local community could face the vulnerability context as a coping and survival strategy. However, achieving a sustainable livelihood required firm direction of policies and institutions that were contextually oriented towards the sustainability of community livelihood in coastal, inland and island areas in North Halmahera Regency. These findings indicate that the traditional community of *Hibualamo* had cultural structures and functions that mobilised access to social and natural capital. Furthermore, the challenges of globalisation cause a livelihood transformation and influence the capability of local communities to access financial capital, human capital, and physical capital.

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