

# The Culture of the Moi Kelim Indigenous People in Malaumkarta: Development theory and Energy Self-Reliance

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#### **Abstrak**

Energi menjadi sektor penting dalam pembangunan karena dapat menjadi alat pendorong utama pada transformasi peradaban agraris ke peradaban industri. Energi juga memainkan peran yang signifikan dalam pembangunan masyarakat adat Moi Kelim di Malaumkarta dan memberikan dampak positif pada pencapaian kemandirian energi masyarakat adat Moi Kelim. Artikel ini mengkaji relasi antara teori pembangunan dengan kemandirian energi pada masyarakat adat Moi Kelim di Malaumkarta, dimana masyarakat adat Moi Kelim melestarikan budaya dan nilai kearifan lokal untuk mencapai kemandirian energi. Egek merupakan suatu kearifan lokal masyarakat adat Moi Kelim yang mengakibatkan pemanfaatan sumber daya di Malaumkarta menjadi dibatasi. Sehingga, masyarakat adat Moi Kelim dapat memanfaatkan sumber daya dengan tetap menjaga lingkungan di Malaumkarta. Pun, dalam praktik kesehariannya masyarakat Moi Kelim masih dapat menerima perkembangan teknologi. Oleh karena itu, kajian perlu dilakukan untuk menganalisis pembangunan di Malaumkarta oleh masyarakat adat Moi Kelim dalam mencapai kemandirian energi dari perspektif teori pembangunan. Kajian ini menggunakan metode kualitatif dengan menggunakan teori pembangunan dari Todaro & Smith (2015). Hasil kajian ini adalah masyarakat adat Moi Kelim telah memenuhi tujuan teori pembangunan. Dengan demikian, masyarakat adat Moi Kelim dapat menjadi teladan bagi masyarakat adat lainnya dalam mencapai kemandirian energi.

Kata kunci: Moi Kelim; Pembangunan; Kemandirian Energi, Malaumkarta

## **Abstract**

Energy is an important sector in development because it can be the main driving tool in the transformation of an agrarian civilization to an industrial civilization. Energy also plays a significant role in the development of the Moi Kelim indigenous people in Malaumkarta and has a positive impact on achieving energy independence for the Moi Kelim indigenous people. This



article examines the relationship between development theory and energy independence in the Moi Kelim indigenous people in Malaumkarta, where the Moi Kelim indigenous people preserve culture and local wisdom values to achieve energy independence. Egek is a local wisdom of the Moi Kelim indigenous people which results in limited resource utilization in Malaumkarta. Thus, the Moi Kelim indigenous people can utilize resources while maintaining the environment in Malaumkarta. Also, in their daily practice the Moi Kelim people are still able to accept technological developments. Therefore, a study needs to be conducted to analyze development in Malaumkarta by the Moi Kelim indigenous people in achieving energy independence from a development theory perspective. This study uses a qualitative method using development theory from Todaro & Smith (2015). The results of this study are that the Moi Kelim indigenous people have fulfilled the objectives of development theory. Thus, the indigenous people of Moi Kelim can become an example for other indigenous peoples in achieving energy independence.

Keywords: Moi Kelim; Development; Energy Independence; Malaumkarta

## Introduction

Society in English is the society rooted in the word socius in Latin, which means friend. In addition, the term community in Arabic means participating and participating. The society also has a meaning: an interconnected group of people (Koentjaraningrat, 2009). This meaning can be interpreted that society is the needs of human life that are interconnected in a sustainable system of customs and connected by a sense of shared identity. Based on Koentjaraningrat (2009), continuity or continuity is a form of community unity that has four characteristics, namely: 1) Relations between its citizens; 2) Customs; 3) Continuous-time; 4) Identity that binds strongly in every citizen.

Every community member who lives side by side strives to fulfill their daily needs. In order to meet their needs, people will take advantage of what is around them. Therefore, every society requires adaptation to create balance and order (Matuankotta, 2018). One way is the application of norms or laws as a result of social life. According to Matuankotta (2018), these norms or laws also apply in the life of indigenous peoples, where these norms or laws are known as customary law. In Zakaria (2014), the National Indigenous Peoples Alliance defines indigenous peoples as groups of people who have inhabited certain areas for generations and are bound to ancestral origins, land, territories, and natural resources, as well as a value system in determining habits in various fields. In general, indigenous peoples have sovereign rights over their territories, natural resources, and a social life that already exist and are governed by customary law. Furthermore, customary law becomes an institution that regulates life and maintains the existence of the indigenous people themselves (Kristiani, 2020). According to Humaeni et al. (2021), several factors distinguish one group of indigenous peoples from other groups, namely: 1) Their shared cultural identity, which includes language, values, behavior, and religion; 2) Knowledge related to traditional medicine and traditional



games; 3) Customary territories which include forests, natural resources, and land related to spiritual areas; 4) Customary law that regulates and manages various fields such as social, economic, political, cultural within a group. The existence of these indigenous peoples builds a new culture that comes from local knowledge and wisdom that has been owned for centuries (Anna, 2018). Indonesia is a country that has a diverse culture built by indigenous peoples in their respective territories (Humaeni et al., 2021).

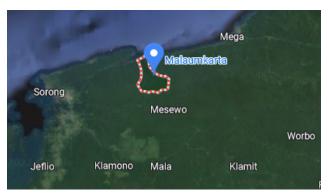


Figure 1. Map of Malaumkarta Village

Because they have inhabited coastal areas for centuries, coastal indigenous peoples are considered able to manage and conserve natural resources and the environment sustainably (Anna, 2018). Resources such as water, air, and fish are essential for human life (Purba et al., 2020). Utilization of this resource is crucial and positively impacts various fields, such as the economy and energy. This utilization is essential because resource use can create community welfare and energy security (Magalhaes & Hartanto, 2020). In this case, the development will go hand in hand if resources are utilized optimally. Thus, it is unavoidable that development provides progress in science and technology, economic growth, as well as the development of communication facilities (Matuankotta, 2018). In development, energy is a vital sector because energy is the main driving force in the transformation process from an agrarian civilization to an industrial civilization (National Energy Council, 2022).

Also, the energy sector is vital because it drives the economy through industrial activities. More than that, it becomes necessary for a country to ensure that it can achieve energy independence through the availability, quantity, and capacity sufficient for its people to access. In addition, Ross (2012) also said that energy security indicators are further reviewed in 4A, namely Acceptability (many people can accept energy by looking at the quality of energy), Accessibility (energy produced and produced by the state can be easily accessed), Affordability (energy security that focuses on affordable energy sources because it determines stable and affordable prices), and Availability (the availability of reserves of energy resources that can be explored more). Recognizing that the energy sector is essential for human life, ensuring the availability of this energy has become a challenge. The importance of the energy sector also creates conditions where



countries struggle for energy through energy supply and management (National Energy Council, 2022).

Before 2018, the Moi Kelim indigenous people who lived in Malaumkarta Village still needed to fulfill the 4A indicator in energy security. Reporting from Mongabay (2020), the Moi Kelim indigenous people have used diesel-fueled power plants since the 1970s. With this power plant, the Moi Kelim indigenous people have to set aside around IDR 100,000-200,000 to buy kerosene or IDR 500,000 per month to buy gum resin. Such a high cost is burdensome for the economy of the Moi Kelim indigenous people. Not all residents can afford to save money to prove these costs are burdensome. Thus, electricity cannot flow to all buildings and public facilities in Kampung Malaumkarta.

In addition, using diesel-fueled power plants shows that using the economic value of natural resources is less than optimal. Kampung Malaumkarta itself has an economic value of natural resources of IDR 3.4 million/head of household/month. Not only that, as reported by Mongabay (2020), energy independence cannot be realized because the Moi Kelim indigenous people must wait for the presence of the state electricity company (PLN) first. Therefore, the researchers used development theory in this study. This theory can explain how an area can improve welfare. Nonetheless, development has a wide variety of definitions.

#### Method

Based on Todaro & Smith (2015), *development* is defined as a process that impacts making significant changes to social structures and values, accelerating the economy and reducing poverty. On the other hand, in understanding the meaning of development, it is necessary to explore the three core values in development: food, maintaining local culture, and being free from slavery. In addition, researchers can review the extent of the development of a region with development goals covering various aspects, such as social, economic, and institutional. According to Todaro and Smith (2015), there are three development goals, namely: 1) to increase the availability and expand the distribution of life, such as how to meet the needs for food, energy, and others; 2) to improve the quality of life by obtaining higher income, education, employment, and better human values; 3) to broaden the scope of choices in the economic and social fields to be free from misery. Thus, the researcher compiled a research framework with the theory used.

This research used qualitative methods to analyze and describe the main issues. A qualitative discussion is also intended to explore the meanings contained in social phenomena (Creswell, 2003). This study's qualitative research method focuses on interpreting non-numeric facts (Lamont, 2015). In addition, the research procedure using this method is flexible. Thus, researchers have greater discretion in studying social phenomena in depth. Thus, researchers must be more involved to obtain detailed and indepth analysis results (Creswell, 2003). Through this qualitative research, researchers will examine how the culture of the Moi Kelim indigenous people in building energy independence based on development theory.



Therefore, this research uses the perspective of International Relations studies and security studies. Not only that, researchers used descriptive analysis techniques in this study to specifically illustrate situations, mechanisms, and processes based on facts and data that go through the analysis process (Moleong, 2007). Furthermore, researchers also use literature studies by collecting data to strengthen the analysis in the discussion. Thus, official documents published by credible institutions, such as books, journals, and audiovisual documents, can be utilized by researchers (Creswell, 2014).

#### **Result and Discussion**

A. Development Theory of Increasing Availability of Energy Needs

Human activity gradually over time increases the use of energy. In this case, energy use will increase along with the increase in activities carried out by the community. This increase in energy use is because energy plays a vital role in developing human civilization in various fields, including economic, technological, social, and human culture (Mangera, 2018). So, if there is a disruption to the energy supply, it will disrupt the community's economic activities. Therefore, a reliable energy supply is vital in a society that increasingly needs energy yearly. Meanwhile, according to Agung et al. (2017), increased energy consumption was triggered by urban population growth and developments in the industrial and household sectors. This increase in energy consumption also occurred in Malaumkarta Village.

In Malaumkarta Village, many factors influence the increase in energy consumption, including economic growth in the region. In these conditions, energy supply is needed in sufficient quantities to meet people's needs for energy. Based on Anna (2018), the Moi Kelim indigenous people are in a development process that meets energy needs in Malaumkarta Village, utilizing the natural resources available in their fertile environment and can provide energy when the community consumes it. Apart from that, the Moi Kelim indigenous people also derive their livelihood from their area's natural resources and environmental services. This resource has common property characteristics for each clan in Malaumkarta Village (Anna, 2018).

In Malaumkarta Village, the Moi Kelim indigenous people depend on natural resources on land and waters such as seas and rivers (Anna, 2018). The abundant availability of natural resources in Malaumkarta Village supports the dependence of the Moi Kelim indigenous people on natural resources. Based on Siburian & Imron (2021), abundant resources are related closely to the geographical location of the area passed by the equator. Thus, this geographical location causes Kampung Malaumkarta to have high rainfall. With such conditions and positions, the Moi Kelim indigenous people have become indigenous peoples who have achieved one of the development goals: increasing availability and expanding the distribution of life. In this case, the Moi Kelim indigenous people can meet their energy needs and create energy independence.

Every human being has their daily needs and tries to fulfill them, and one of their needs is energy. Fulfillment of this energy need can lead to prosperity in society. In Indonesia, people's welfare is taken seriously in Indonesia's development. This attention



is seen in the National Medium-Term Development Plan (Hidayat & Sidik, 2019). The plan places indigenous peoples as a priority subject of development. To make this happen, the Indonesian government created a solid legal basis regarding social protection for indigenous peoples (Hidayat & Sidik, 2019).

Article 18B paragraph (2) of the 1945 Constitution is one of the legal bases for the Indonesian government in providing social protection for indigenous peoples. Through this article in the Constitution, the Indonesian government will guarantee social protection for indigenous peoples throughout Indonesia (Hidayat & Sidik, 2019). In this case, article 18B paragraph (2) reads, "The state recognizes and respects customary law community units along with their traditional rights as long as they are still alive and following the development of society and the principles of the Unitary State of the Republic of Indonesia, which are regulated in law". Nonetheless, efforts to improve the welfare of society and create energy independence face many challenges. These challenges cover sectoral fields such as political will from local governments, overlapping familiar territories, to tenure access which is still experiencing inequality (Hidayat & Sidik, 2019).

However, since 2018 the Moi Kelim indigenous people have created conditions where energy can be fulfilled independently. Quoted from Mongabay (2020), the microhydro power plant has started. The power plant is located upstream of the Kalawangan River, Makbon District, Sorong Regency, West Papua. The community welcomes this micro hydro power plant. That is because clean energy can be produced, so it does not have a destructive impact on environmental sustainability. Not only that, but the power plant can also provide energy at a low cost to the Moi Kelim indigenous people for 24 hours (Mongabay, 2020).

In addition, a micro-hydro power plant amid the Moi Kelim indigenous people can illuminate houses and many public facilities in Malaumkarta Village. Based on data from Mongabay (2020), the electricity generated from the micro-hydro power plant supplies around 80 houses with a power of 6 volt-amperes (VA) and several public facilities such as churches (20 VA), schools (12 VA), and roads. In this case, the electricity that can be accommodated from this micro-hydro power plant is 48 kilovolt amperes (kVA). This micro-hydro power plant began in early 2016 when many Moi Kelim indigenous youths began constructing a micro-hydro power plant. At first, some youths sought information about water energy sources via the internet. These youths then invited traditional elders to discuss the construction of a micro-hydro power plant in Malaumkarta Village (Mongabay, 2020).

Before the presence of a micro-hydro power plant in Malaumkarta Village, the Moi Kelim indigenous people fulfilled their energy needs by utilizing a diesel-fueled power plant. Reporting from Mongabay (2020), the Moi Kelim indigenous people have known this diesel-fueled power plant since 1970. Even so, the presence of this power plant is seen as burdensome for the community. This view is because indigenous peoples must set aside much money. In one month, indigenous peoples spend an average of IDR 100,000-200,000 to buy kerosene or IDR 500,000 to buy gum resin (Mongabay, 2020).



Therefore, the Moi Kelim indigenous people support the construction of a microhydro power plant in Malaumkarta Village. This support from the community can be seen in the approval of the merging of village funds in 2016 and 2017. According to Mongabay (2020), the total money collected from merging village funds was IDR 1.2 billion. The total money is needed after a mapping of the potential resources is carried out. This mapping later revealed that Malaumkarta Village had an economic value of IDR 3.4 billion/head of household/month from natural resources. In addition, microhydropower plants require more affordable maintenance costs, which are IDR 25,000/month/house (Mongabay, 2020). Thus, the construction of a micro-hydro power plant was accepted by the Moi Kelim indigenous people.

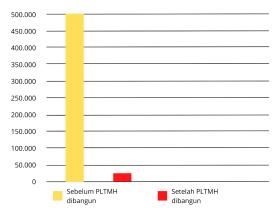


Figure 2. Moi Kelim Indigenous People's Expenditures for Energy Needs per month (Mongabay, 2020)

Based on the diagram above, the existence of a micro-hydro power plant can have a positive impact on the Moi Kelim indigenous people. Before the micro-hydro power plant was built, the indigenous people of Moi Kelim needed more money to meet their energy needs. Meanwhile, after the micro-hydro power plant was built, the Moi Kelim indigenous people only spent a small amount of money on the maintenance costs of the micro-hydro power plant. Thus, the construction of a micro-hydro power plant in Kampung Malaumkarta can save the finances of the Moi Kelim indigenous people by 12 times. However, not all people are subject to these fees, whereas widows, in this case, are not subject to these fees (Mongabay, 2020).

The Moi Kelim indigenous people built a micro-hydro power plant cooperating in Malaumkarta Village. In constructing this micro-hydro power plant, young people and Moi Kelim traditional elders worked together. In this case, men do physical labor in constructing a micro-hydro power plant. Meanwhile, the women prepare food for the men (Mongabay, 2020). This cooperation attitude is carried out so that the Moi Kelim indigenous people can be electrified both during the day and at night.

# B. Development Theory of Improving the Quality of Life

Moi Kelim is among many indigenous peoples living in Malaumkarta Village in Sorong Regency. The Moi tribe comes from Malamoi, where Mala means broad land and



Moi means smooth. Therefore, the Moi people have a friendly and gentle character in speech, prioritize togetherness, adhere to a religion, and handle conflicts with customs and kinship that are highly based on clans. Meanwhile, Kampung Malaumkarta is a coastal area in the Makbon District covering an area of 15 thousand hectares with a population of around 462 people (Triyanti et al., 2020). Indigenous peoples for centuries have inhabited coastal areas like this. Also, indigenous peoples on the coast are known to have the ability to manage and conserve natural resources sustainably (Anna, 2018).

The ability to manage and conserve the natural resources of the Moi Kelim community can be seen from the application of subsistence production and consumption patterns and their local wisdom culture. Implementing this pattern only causes the Moi Kelim community to use natural resources to meet their daily needs. This transformed pattern and culture have become a tool for the Moi Kelim community in maintaining the sustainability of food security and the economy (Anna, 2018). Thus, the existence of the Moi Kelim community can be maintained while protecting the sustainability and diversity of natural resources in the region. Not only that, these indigenous peoples have their uniqueness, namely the lack of motivation in commercial and economic activities. The Moi Kelim people tend to be apathetic toward productive economic activities.

Due to their dependence on the natural surroundings, the cultural system of the Moi Kelim people is strongly related to the conservation and preservation of nature. This relationship then forms local wisdom known as 'egek', which means prohibition in the Moi language (Triyanti et al., 2020). The term egek refers to procedures for managing and utilizing fishery resources that are applied communally. In addition, egek is considered a shared system (common property resource) in an area seen as traditional territory (Warawarin et al., 2017). Legally, egek is contained in Regent Regulation Number 7 of 2017 concerning Customary Law and Local Wisdom in the Management and Protection of Marine Resources in Malaumkarta Village, Makbon District, Sorong Regency. Thus, the Moi community has the right to manage water areas as customary management areas (Arafat et al., 2022).

Egek is similar to a system of managing and utilizing a resource called sasi. Sasi is a system that deals with time management in utilizing and gaining access to resources (Warawarin et al., 2017). In addition, sasi is seen as a model for sustainable and conservatively utilizing the Moi Kelim community by managing coastal resources. Sasi is also considered a tool to limit exploitation (limited entry) at a particular time. In applying sasi, three types of fish are prohibited (only lobster, sea cucumber, and Lola) to be caught for one year and are only allowed every May of the following year. This exploitation activity is allowed together for only one month, while the proceeds from the sale are collected and used as village and church funds (Anna, 2018).

Meanwhile, people can fish for the next two weeks in June to meet their daily needs. In addition, fishing activities are also allowed to help the family economy. The tools used for fishing must also be environmentally friendly, such as fishing rods, snares, and spears (Anna, 2018). Sasi also applies to other areas that have been sanctioned, such as forests where hunting and harvesting of forest products are prohibited. Before a



banned area, the area must be closed first to carry out traditional rituals. Likewise, when the area that has been sanitized is about to be opened, the area will hold a traditional ritual (Cahyono et al., 2019).

In Malaumkarta Village, the Moi Kelim community also applies sasi, but the sasi adopted is partial sasi. With this type of sasi, the Moi Kelim people can distinguish three things: 1) Access rights are limited only to the Mobalen sub-clan; 2) Type of species caught; 3) Time. These three things are a form of adoption of external knowledge aligned with the needs and characteristics of the economic activities of the Moi Kelim community (Hidayat & Sidik, 2019). Meanwhile, the sasi/egek management area stretches from the west coast in the Klamiwin, Klabo, and Kalatebe areas to the east coast in the Klagin area. From the coast, the boundaries of the sasi/egek management area extend to Um Island to the coral reef area around it (Arafat et al., 2022). The community is imaginatively described, as shown in Figure 3.



Figure 3. Customary Management Area Limits (Arafat et al., 2022)

At sea, these boundaries are marked based on fishing grounds and sacred places. The location is called Kamkalak Malik (fish swimming area in the wave area), Ban (sweet), Kofok (sacred area), Sako Wara (fish crossing area), Kawak Len (side of the house), Safur (current waves), Sarmuson (area sea urchins), Sartie (coral that rises to the surface), Mar (person's name), and Sar Milik/bridge (Arafat et al., 2022). Meanwhile, the opening/closing period of this sasi/egek is determined jointly by the church, adat, and the village government (Triyanti et al., 2020). In general, sasi/egek is opened for a month or according to the needs of the community by observing the condition of the biota. Meanwhile, sasi/egek are usually closed for 1-2 years or according to community needs (Arafat et al., 2022). Activities such as sasi/egek are a local culture and wisdom developed in Malaumkarta (Muawanah et al., 2020).

In addition, the Moi Kelim people also have traditional education called kambik. Based on Cahyono et al. (2019), this education lasts a minimum of six months and a maximum of up to 18 years. Graduating from kambik will occupy a particular social position, such as the village head. Meanwhile, kambik education is only for men (nedia). Meanwhile, women (nelagi) only get an education in the family environment. Even so, knowledgeable women with unique skills are called fulus and will get social status



(Cahyono et al., 2019). Meanwhile, men who have not followed kambik are considered not to be real men.

This kambik education differs from formal education, where kambik has many customary rules. According to Cahyono et al. (2019), the rule is that there must be at least one child from one clan who follows the kambik because it will be made as a traditional elder in the future. Therefore, the traditional elders will choose and determine the children who will join the kambik. In this case, the traditional elders choose the child based on the supernatural abilities of the elders to review whether the child meets the requirements. Meanwhile, the selected child will be kidnapped and put into the traditional house (Cahyono et al., 2019). In this phase, the child's parents are not allowed to meet their child while attending kambik. The parents of the child will receive customary or honge sanctions in the form of death if they violate these rules.

Table 1. Levels, Degrees and Competences in Kambik

Levels	Graduate Degree	Competences
Basic (Ulibi)	Unsulan	Basic Skills
	Unsmas	
	Tulukma	
Highest (Untlan &	Professor (Wariek or	Medicine Expert
Kmaben)	Sukmin)	Healing Master
		Forecasting Expert
		Customary Law Expert
		Leadership Expert
		Magician Farming
		Expert Community
		Social Expert
		Indigenous Historian

Based on Cahyono et al. (2019), men skilled in healing can recite certain spells before making the sick person heal. An example can be seen when a person is sick after being shot by a gun, where the bullet penetrates the body. These spells cause the bullet penetrating it to wither, and the sufferer can recover immediately. Apart from that, in occult sciences, the Moi Kelim people can lock enemies by air. This lock causes enemies to be unable to escape while being attacked. Even in this case, the weapons used by the enemies are not functioning (Cahyono et al., 2019). On the other hand, this magic is also used to transform into a hunted animal and return to being a human when the hunted animals have been successfully collected. Traditional elders also use occult magic by communicating through eyes to determine whether the other person is a kambik graduate.

Also, the values of local wisdom towards nature are learned in kambik education. According to Cahyono et al. (2019), these local wisdom values have made the Moi Kelim community always link the unseen and natural worlds. Thus, the phenomena in nature



will be associated by the Moi Kelim people with the balance between the two worlds. For example, when a flood occurs, the Moi people will assess the symptoms resulting from an imbalance. In this case, there is excessive activity toward utilizing natural resources, such as cutting down trees. Thus, this activity caused the anger of the ancestors. Thus, the perpetrators will be rewarded with customary sanctions (honge) and curses to restore balance to nature (Cahyono et al., 2019). This customary sanction (honge) also applies to people who enter sacred places (kofok), where violators will be punished by being killed.

# C. Development Theory of Quality Improvement and Socio-Economic Outreach

Ethnographically, the Moi Kelim people are scattered in various regions, including the Mega, Makbon, South Seget, West Misool, Batbat, and Ayau and Waigeo Islands, which include the Raja Ampat Islands in the Moi Maya area. These areas are regulated by customary law (Suaib, 2017). In addition, the customs of the Moi people are very secret and are even forbidden from being recognized by the general public. Thus, this has resulted in a few Moi people needing to learn their customs. However, the Moi people are classified into three groups, namely Ne Folus, middle-class, and low class.

Ne Folus is a group of knowledgeable people, where this group of people is seen as knowing various things and understanding philosophy. Meanwhile, the middle class is a group that has limited knowledge and is not as deep as Ne Folus. Meanwhile, the lower class includes women in the Moi community (Suaib, 2017). In addition, the structure of the Moi community is based on a patrilineal line or following the male/father. In terms of customary structure, the mention of men is needle while for women is negili. This customary structure existed and was built long ago before outside influences entered the Moi community.

Generally, men in the Moi community structure have the right to occupy customary positions such as Keret head, tribal head, and the like. Men who occupy customary positions are responsible for maintaining the integrity and existence of the Moi community. In addition, Moi men are born with special rights such as land ownership (Suaib, 2017). These special rights are then passed on to the next generation by being responsible to their clan. Meanwhile, Moi women have their leaders known as fulus. In this case, Fulus is an expert in various fields, such as concocting medicine, women's knowledge, and caring for children as a Moi existence.

Meanwhile, the Moi community, from an economic perspective, is looking for a livelihood to specifically meet the needs of both individuals and groups acting on behalf of their customary rights. In this case, the Moi people have several livelihoods, such as potters, hunters, farmers, and fishermen (Malak, 2011). In addition, the Moi people fulfill their needs by implementing cultivation. One of the cultivation patterns in the Moi community is the cultivation of sago plants. This cultivation pattern is included in the food self-sufficiency program, which can increase production to meet the increasing needs every year (Soekamto et al., 2021).

Sago plants produce and store the most significant carbohydrates among other plants. In this case, Ishizaki (1996) suggests that sago can produce the largest



carbohydrates in one hectare of land. If this sago is developed, it can become an alternative food that can overcome food security problems (Purwani et al., 2005). In addition, sago is a commodity that has the most excellent starch yield among other commodities, such as rice, corn, wheat, potatoes, and cassava. Sago produces 25 tons/ha/year of starch, 6 tons/ha/year of rice, 5.5 tons/ha/year of corn, 5 tons/ha/year of wheat, 2.5 tons/ha/year of potatoes, and cassava of 1.5 tons/ha/year (Ishizaki, 1996).

Table 2. Yields of Sago Starch Compared to Several Other Commodities

Commodity	Starch yield (tonnes/ha/year)
Sago	25
Padi	6
Corn	5,5
Wheat	5
Potato	2,5
Cassava	1,5

On the other hand, Kampung Malaumkarta is also part of a marine tourism area located in Sorong Regency. Thus, Malaumkarta Village has become a well-known tourist destination in foreign countries besides Raja Ampat (Triyanti et al., 2020). As marine tourism, Kampung Malaumkarta offers various activities such as diving, snorkeling, releasing hatchlings, dugong, gull watching, and cultural civilization tours. Thus, the Moi Kelim ancestral territory can produce a socio-economic valuation of natural resources and environmental services of IDR 167.89 billion/year. However, the inadequate quality of human resources is an obstacle for the Moi Kelim community in utilizing technology. Thus, the impact given to the Moi Kelim community could be more optimal. Other problems can arise because of the potential conflict between clans in recognizing familiar territories (AMAN, 2018).

Even though there are many obstacles, the Moi Kelim indigenous people still accept modern technological developments in their area. For the Moi Kelim people, technological developments do not have a harmful impact, such as abandoning their distinctive customs. The technology received was then adopted and used wisely for the life of the Moi Kelim people. This wise use of technology is because the existence of technology makes life easier for the Moi Kelim people. Thus, indigenous peoples must learn how to adopt technology from outside their territory. Thus, this technology can generalize life so that no area is left behind (AMAN, 2018).

#### Conclusion

The Moi Kelim indigenous people are indigenous people who live in Indonesian territory and still preserve the values of local wisdom and their ancestral traditions. As an indigenous people, Moi Kelim also implements customary laws, resulting in their sovereignty over the territory and the wealth contained therein, both natural and social.



The existence of this customary law aims to maintain the sustainability of the indigenous peoples themselves. The Moi Kelim indigenous people have succeeded in achieving the first objective of the development goals, namely increasing the availability of basic needs. Natural resources are one of the needs that cannot be separated from the indigenous people of Moi Kelim. The existence of natural resources causes dependence on the life of the Moi Kelim indigenous people, including meeting energy needs.

Until now, the Moi Kelim indigenous people still hold and believe in their ancestral beliefs and local wisdom values. In this case, the Moi kelim indigenous people believe their existence will be maintained if the environment is not exploited. Thus, the Moi Kelim indigenous people cause the using of natural resources only to meet their daily needs. In addition, the values of local wisdom are still well taught by the Moi Kelim, indigenous people in kambik education. These local wisdom values connect the two worlds, namely the unseen and the real world. Thus, the Moi Kelim indigenous people will always consider the environmental balance when utilizing natural resources. Thus, the second objective of the development goals, namely improving the quality of life, can be achieved.

Also, the Moi Kelim indigenous people still differentiate society based on caste or class. However, as time has progressed, the Moi Kelim indigenous people have experienced many social changes. In this case, technological innovation triggers these changes among the Moi Kelim indigenous people. This technological innovation offers several new livelihoods for the Moi Kelim indigenous people. Apart from that, technological innovations have also made the life of the Moi Kelim indigenous people easier. Thus, the third objective of the development goals can be achieved, namely expanding the scope of choices in the economic and social fields.

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