

Empowerment of Riverside Communities in Sustainable Environmental Management (Study in Petuk Katimpun Village, Jekan Raya District, Palangka Raya City)

Saputra Adiwijaya¹, Purnama Julia Utami², Herlina Eka Shinta³, Yovita⁴

^{1,2,3}University of Palangka Raya, Indonesia

⁴UPBJJ-UT Palangka Raya, Indonesia

saputra@fisip.upr.ac.id

Abstract

This study aims to analyze the empowerment of people who live and settle on the banks of the river in Petuk Katimpun Village, Jekan Raya District, Palangka Raya City, especially in stunting prevention efforts. Data were collected through in-depth interviews with 10 key informants who were considered to have distinctive characters. The data collected were analyzed by qualitative methods. The results of this study illustrate that there is a model in empowering riverbank communities because the character of the people who live on the banks of the river has its own characteristics and plus generally are Dayak ethnicities, people who live on the banks of the river are very dependent on all the potential of the river and its surroundings, especially in the field of fisheries with the karamba method. and the fish produced are partly a source of nutrition, then also by utilizing purun plants as their alternative livelihood. Then the position of the house on stilts occupied also affects the fisheries sector they manage. On the other hand, the flood impact caused losses to the fish seeds that were developed because they came from fertilizer residue from oil palm plantations upstream.

Keywords

community
empowerment; river
banks; fisheries sector;
purun plants; ethnic
dayak



I. Introduction

An advanced and independent nation can be realized with adequate food availability, able to synergize and collaborate in realizing sustainable development in all fields and being able to implement it in the community. Even so, river ecosystem problems include global, national and local interests because they are multidimensional. Population growth and the pace of development demand an increase in the use of natural resources for exploitation and consumption, and this triggers a decrease in environmental quality which results in a decrease in human quality.

One way to improve the quality of human resources is through health development and economic empowerment, the productivity of human resources is in their own health. Low levels of nutrition and calories will result in less productive workers resulting in low output. Malnutrition is closely related to poverty (Tjiptoherijanto, 1986). The reasons for the increasing burden of disease on the poor are malnutrition, limited economic resources, and tend to be powerless.

Based on the above, there is a close consequence that development must pay attention to the conditions and potentials possessed by each region (city), to balance the practice of physical development, of course, to also pay attention to environmental conditions and the people who inhabit the area with all its characteristics, including

those in the area. The city of Palangka Raya as one of the cities that also has the characteristic of having a river flow.

Cities on the island of Kalimantan have settlement patterns that are oriented to the river, including Pontianak City which is crossed by the Kapuas River, Banjarmasin City which is crossed by the Barito River, and Palangka Raya City which is crossed by the Kahayan River. The characteristic types of buildings on the banks of the river are stilts and floating types, and the use of rivers in the Palangka Raya City area is only to fulfill economic needs by keeping fish in cages. Since the construction of the city of Palangka Raya leading to land, the community has experienced a change in sociological patterns, when in the past there was no land road, the community really appreciated and used the river responsibly. When the road is there,

Online media states that there are 5 districts in Central Kalimantan with the highest stunting rates, namely East Kotawaringin Regency, East Barito Regency, Kapuas Regency, South Barito Regency and Gunung Mas Regency (Borneo24, 2019). In fact, the five regencies are crossed by rivers and are areas rich in natural resources. This should be part of the state's responsibility because in the 1945 Constitution of the Republic of Indonesia (UUD NRI 1945) the state guarantees the rights and obligations of its citizens Article 34 paragraph (1) which reads "the poor and abandoned children are cared for by the state" This is the mandate of the 1945 Constitution of the Republic of Indonesia that the state is a protector and protector and must be directly responsible for handling stunting.

II. Research Method

2.1. Development Theory; Empowerment

Development is a systematic and continuous effort made to realize something that is aspired. Development is a change towards improvement. Changes towards improvement require the mobilization of all human resources and reason to realize what is aspired. In addition, development is also very dependent on the availability of natural resource wealth. The availability of natural resources is one of the keys to economic growth in an area. (Shah, M. et al. 2020)

In this section, we will discuss the development paradigm that is commonly considered to be able to provide opportunities for communities or individuals to become independent or empowered. The failure of various theories of development so far has given rise to a new theory which is then known as the theory of people-centered development. The originator of this theory is David Korten in 1984 in *Mardikanto* (2010) mentioning this theory as one of the answers in seeking a just direction of development that presents important new potentials to strengthen human growth and welfare, justice and the sustainability of development itself. Therefore, the people become the center of study in development.

In simple terms, Korten (1993) states that production-centered development focuses more on:

1. Industry and non-agriculture, whereas the majority of the world's population derives their livelihood from agriculture;
2. Urban areas and not rural areas;
3. Centralized ownership of productive assets, and not broad productive assets

4. Development investments benefit the few rather than the many;
5. Optimal use of capital and not optimal use of human resources, so that capital resources are utilized while human resources are not utilized optimally;
6. Utilization of natural resources and the environment to achieve short-term increase in physical wealth without management to sustain and enlarge resource yields, by causing environmental destruction and rapid control of the natural resource base;
7. The efficiency of large-scale production units that are interdependent and based on differences in international profits, leaving the diversity and adaptability of small-scale units organized to achieve local self-sufficiency, resulting in an inefficient economy in terms of energy; lack adaptability and are susceptible to serious disruption due to political breakdown or manipulation in any part of the system.

This is what can be used as an antithesis of previous development theories, then in describing this theory it is based on increasing the production output of development to meet the needs of a very large and growing population, but this increase must be achieved in ways that are in accordance with the principles of The basic principles of participation and justice and the results must be preserved for human survival in this world.

There is a broad side of autonomy for humans (society) to be creative and empowered in meeting their life needs, this simply indicates that whatever things become a habit of the community in trying and acting, it must be appreciated not forcing programs from above, it can also be said that whatever the will of the community needs to be supported by the government, because they are the ones who understand and understand the continuity of their life in their own way. This model can also be said to be a bottom-up program, namely the authority given by the State to the community to manage their lives for the better.

This is what then by Korten (1993) states that the concept of people-centered development views creative initiatives from the people as the main development resource and views their material and spiritual well-being as goals to be achieved by the development process.

In another section, it is also stated that there are three important themes that are considered decisive for the concept of people-centred planning, namely:

1. Emphasis on supporting and building self-help enterprises of the poor to address their own needs;
2. Awareness that although the modern sector is the main source of conventional economic growth, the traditional sector is the main source of livelihood for most poor households;
3. The need for new institutional capacities in an effort to build the capacity of poor beneficiaries for productive and self-reliant management based on local resources.

The people-centred development approach seeks to raise public awareness to challenge their subordination through local organizations on a bottom-up basis. The organizations that are considered most effective are those that start with the concrete practical needs of society related to health, employment and basic service provision, but which can take advantage of these issues as a means to achieve the strategic needs of society in a particular socio-political context.

When the community-centred development model (people) begins, the real essence of community empowerment begins to grow. By Waryana (2016) community empowerment is a process of developing potentials and abilities, so that capacity grows to solve the problems they face, community empowerment is social development, from,

by, and for the community independently. The concept of community empowerment has several principles, namely: awareness, training, organizing, developing strengths, and building dynamics.

On the other hand, according to Pranarka and Vidyandhika (1996) community empowerment is defined as the individual's ability to combine with the community in building the empowerment of the community concerned. Empowerment can be equated with gaining power and access to resources to earn a living.

From these several understandings of community empowerment, it can be understood that community empowerment as an alternative in community development with all its potential to open and gain access with the main goal is independence, which can collaborate with all things that characterize the community itself.

2.2. Community Empowerment in the Health Sector

Community empowerment in the health sector with regard to health promotion. This is also part of a global strategy so that people have the ability to maintain and improve their own health. This indicates that there is a link between community development in a global era that must be equal to the health of its people. Notoatmodjo (2007) in Waryana (2016) states that community empowerment is an effort or process to raise awareness, willingness, and ability of the community to recognize, overcome, maintain, protect, and improve their own welfare. The limitations of empowerment in the health sector include efforts to raise awareness, willingness, and ability to maintain and improve health.

Furthermore, quoting from WHO in Sulaeman et al (2012) states that community empowerment in the health sector is defined as a process of enabling people to increase control over decisions and actions that affect public health, which aims to mobilize vulnerable individuals and groups by strengthening basic life skills and increasing influence on matters that underlie social and economic conditions.

The purpose of community empowerment in the health sector by Adisasmito (2010) mentions growing awareness, knowledge, and understanding of the health of individuals, groups, and communities, creating a will which is a tendency to take an action or attitude to support the realization of healthy behavior.

To understand that a society is said to be empowered in terms of health is when the community is able and understands to recognize health problems and all the factors that influence them, in this connection the most decisive is the awareness of the environment in which they live and settle. The ability to understand health problems includes sanitation, diseases caused by the environment, good nutrition and healthy food, proper housing, and all matters relating to things that can harm health, such as the dangers of instant food, polluted environmental conditions and so on. so.

From the various definitions above, community empowerment in the health sector emphasizes community independence with regard to health problems, especially in people who experience vulnerability by utilizing what is their insight and knowledge as well as their actions on the promotive, preventive, curative and rehabilitative aspects of health. This paradigm is indeed specifically for countries that are included in the category of developing countries such as Indonesia because in some parts of the region in Indonesia there is still something to do with the vulnerability side, for example the problem of poverty. So then as part of this empowerment, the community can cooperate with NGOs or other institutions that exist in the community that have a focus on the health sector, for example PKK,

Another focus is that the health vulnerabilities that exist in the community are related to bad environmental problems, as well as unhealthy lifestyles in protecting the environment, because in some cases a pandemic of a disease has a lot to do with poor environmental health. From this it can be illustrated that empowerment in the health sector is closely related to healthy living behavior in maintaining the environment in which people live and settle.

2.3. Stunting

In simple terms stunting can be interpreted as stunting or stunting it can be understood the condition of the body at the age of the child whose growth is stunted below the standard, in other words there is an asymmetry between the age of the child and the growth of his height.

According to the manual of the Secretariat of the Vice President of the Republic of Indonesia. The National Team for the Acceleration of Poverty Reduction (TNP2K) in Satriawan (2018) states that stunting describes a condition of failure to thrive in children due to malnutrition or chronic malnutrition during the growth and development period that appears after the child is 2 years old. This situation is represented by a z-score of height for age (TB/U) less than -2 standard deviations (SD) based on growth standards. Then referring to Sakti (2018) stunting has an impact on reducing cognitive function and can lead to low education and productivity, and of course this can decrease the quality of development in the Republic of Indonesia.

Epidemiologically, according to Vonaesch, et al (2017), it is stated that globally, one in four children (25%) under five years of age experience growth retardation/stunting and based on this, around 90% of these children live in Sub-Saharan Africa and Asia. (Levels and Trends in Child Malnutrition, WHO, UNICEF, World Bank, 2012). The situation of stunted toddlers in Indonesia has the highest prevalence in the Southeast Asia region/South-East Asia Regional (SEAR) is in Timor Leste and followed by Indonesia which is included in the third country with an average prevalence of stunting under five in Indonesia in 2005-2017 is 36.4%. In 2010, approximately 26.7% of children in Asia and 26.7% of children in Southeast Asia were stunted.

In the context of pathogenesis, the mechanism of environmental contamination and stunting shows that ingested microbes cause changes in intestinal structure and function (Mbuya & Humphrey, 2016). Atrophy of the intestinal villi which results in a reduced ability of the intestine to absorb maximally leads to indigestion and malabsorption of nutrients. Chronic exposure causes the following conditions: (i) malnutrition, (ii) suppression of growth hormone, so that growth and bone remodeling are inhibited and growth disorders occur, (iii) cause further damage to the intestinal mucosa. From this situation, the absorption of nutrients in the intestines is not optimal, so that the nutrients that are very important for the growth and development of children become insufficient and children experience linear growth disorders or stunting.

In a review of legislation in Indonesia, stunting is one of the focuses that gets attention as a priority that must be eradicated, this is based on Law No. 36 of 2009 concerning Health and Law No. 18 of 2012 concerning Food which states that stunting (Dwarf) is a chronic nutritional problem in toddlers/children characterized by a shorter height for their age. Children who suffer from stunting are sensitive to disease even as adults are at risk for developing degenerative diseases.

2.4. Dayak Ethnicity

The Dayak ethnicity are generally people who live on the island of Kalimantan, generally occupying the DAS (Watershed Area) and some parts living in the interior. The Dayak ethnicity spreads to Malaysia and Brunei Darussalam. Riwt (2007) states that the term Dayak is a common term in Kalimantan, throughout Indonesia, everyone who hears the word Dayak, of course, has his eyes set on one of the tribes in Indonesia who inhabit the island of Kalimantan.

Based on a news article from Aeni (2021) in the online media katadata.co.id, it is stated that quoting from Social Horizon: Journal of Social Education Volume 3 Number 2 Year 2016, Dayak is the name for the natives of the island of Borneo. This tribe has 405 sub-tribes, each of which has similar customs and cultures. The Dayak tribe originates from Kalimantan, but spread to Sabah and Sarawak Malaysia. According to history, this tribe had established a work before it was finally destroyed by Majapahit. This incident made the Dayak community scattered and desperate.

Meanwhile, Kompas online media (October 13, 2021) mentions the origin of the Dayak, stating that the Dayak are the original inhabitants of the island of Kalimantan, which consists of various cultures and sub-ethnic groups. The term Dayak was first used by a Dutch scientist named August Kaderland in 1895. The meaning of the word Dayak itself is actually still a matter of debate among experts. Some say that it means humans, inland, to people who live upstream of the river. While others claim that the term Dayak refers to personal characteristics recognized by the people of Kalimantan, namely being strong, brave, brave, and tenacious. Despite these differences, the natives of Kalimantan themselves are generally not familiar with the term Dayak. It is people outside their scope who call it the Dayak Tribe.

The ancestors of the Dayak tribe by some experts argue that the Dayak are one of the largest and oldest indigenous tribal groups that inhabit the island of Borneo. This idea is based on the theory of population migration, in which the ancestors of the Dayak people are thought to have come from several waves of migration. The first wave consisted of the Australoid race, which was then followed by the Mongoloid race. This wave of migration continues, causing the Dayak to have so many languages and cultural characteristics. The Dayak tribe has 268 sub-tribes which are divided into six clumps, namely the Punan clump, Klemantan clump, Apokayan clump, Iban clump, Murut clump, and Ot Danum clump. The Punan Dayak tribe is the oldest tribe inhabiting the island of Borneo. While the other clumps are the result of assimilation with the Malays.

Referring to history, in Ferreira Rodrigues Sarquis et al (2019) states that the people of Kalimantan are people who depend on rivers for their lives and are the identity of the people who live and live in Kalimantan, rivers are a means of transportation and transformation of the formation of cultural identity of the people on the island of Kalimantan. Riverside communities in general still use traditional ways to survive and create ways for natural resource management to meet their needs by minimizing environmental damage. on the other hand according to Adiwijaya (2019) that the long river flow and reaching to other areas makes the river a transportation route to move from one place to another.

2.4. Purun Plant

Purun (*Eleocharis Dulcis*) is a grass plant that grows in swampy areas, has high tensile and stretch characteristics, this plant generally grows on peatlands, for example in Kalimantan and Sumatra. In online media mongabay.com (2016) it is stated that

Purun is a typical plant of peat swamp land, used to make various kinds of handicrafts of the type of Purun rat (*Eleocharis dulcis*). This plant is gray to shiny green, the leaves shrink to the base, the midrib is thin like a membrane. asymmetrical tip, reddish brown.

According to Irawan et al., (2014) in Andarista (2020) stated that purun plants are plants that can adapt well to peatlands and grow wild and fertile in all places that have not been widely used. West Kalimantan and East Kalimantan, South Sumatra and Riau. Purun Danau and Purun cucut plants have slight differences. The difference is seen in the height of the stems where the purun lake plant grows taller than the purun cucut plant. Then, in the rhizome, the lake purun has a larger rhizome and grows lengthwise. In purun cucut plants, there are no rhizomes, but there are roots that grow directly.

According to online media pantaugambut.id (2018), it is stated that the benefits of this purun plant apart from being woven craft items such as mats, baskets (bags), hats, wallets, can actually be useful in terms of. organic fertilizer to increase soil fertility in peatlands. The combination of purun with lime can be used to provide nutrients in inland peat soils so that they can be absorbed by various plants, especially maize. Furthermore, purun that grows in waterways is also useful for improving water quality in the dry season and absorbing toxic substances in the water, such as iron, lead, and mercury.

III. Research Method

Community Empowerment in this study uses the Participatory Action Research method, where researchers, partners and the community learn together to understand the situation and conditions that occur in the research area (Institute of Development Studies, nd). This method is focused on promoting democracy, and answering the problems that exist in this empowerment, much more specifically this research focuses on the actions and reflections of the parties involved in this research, in the process of making people aware of their situation in the environment where they live. stay. Participatory Action research uses two research methods, namely qualitative to describe existing phenomena and quantitative to explain changes that occur before and after empowerment. What underlies researchers to use the Participatory Action Research method is to make changes for the better, besides that there is a close relationship between active community participation, research carried out and actions taken and decided together, so that research is implemented in action, research has consequences. generated and things change as a result of research.

This research is based on research subjects who come from several communities living on the banks of the river which the researchers have characteristics and deserve to be key informants as many as 10 (ten) people. While the object of research is to analyze community empowerment on the banks of the river in the Petuk Katimpun Village area, Jekan Raya District, Palangka Raya City starting from July - October 2021. Primary data were obtained by observation and in-depth interviews with research subjects, while secondary data were obtained of various relevant documents.

The data obtained were analyzed using descriptive qualitative research methods, this is related to efforts to describe or describe phenomena or relationships between phenomena studied systematically, factually and accurately. Data analysis techniques are guided by the interactive technique of Miles and Huberman in Sugiyono (2012) that activities in qualitative data analysis are carried out interactively and take place continuously until complete, so that the data is saturated. Activities in data analysis are data reduction, data display, and conclusion drawing/verification.

IV. Result and Discussion

The river bank is known as a public area, so it is used for various activities, both residential and economic, but since the construction of the asphalt road there has been a decline in river cultural activities. This transition changes the livelihoods of people who used to use rivers as a means of transportation, now use two-wheeled or four-wheeled vehicles as a means of transportation, but have not been supported by adequate empowerment of riverside communities. The ease of access by land then makes people who live on the banks of the river lose their main livelihood as providers of water transportation services. The concept of the Water Front City development with the object of an unspoiled river ecosystem is predicted by the government in the process of creating economic equity and increasing the selling value of tourism for the watershed area (DAS). As a result, the areas that are used as water front city sites are areas with good road access. An important effort to be made in Indonesia is the alignment of sustainable development in realizing an advanced and independent nation.



Figure 1. *Petuk Katimpun Village Administration Map*
Source: Gmap Map Data 2021



Figure 2. *The location of Petuk Katimpun Village on the banks of the river*
Source: Geospatial Information Agency, 2021

Based on Central Kalimantan BPS data, there are 860,426 people living on the banks of the river (Central Kalimantan BPS, 2018). With many and varied natural resources, there are still health problems that occur in Central Kalimantan Province, one of which is stunting.

The characteristic types of buildings on the banks of the river are stilts and floating types, and the use of rivers in the Palangka Raya City area is only to fulfill economic needs by keeping fish in cages. Since the construction of the city of Palangka Raya leading to land, the community has experienced a change in sociological patterns, when in the past there was no land road, the community really appreciated and used the river responsibly. When land roads already exist, people tend to turn their backs on the river and only throw waste and garbage into the river and result in a decline in river quality which has an impact on the decline in the function of the river ecosystem which results in a decrease in the quality of human health. In Law no. 32 of 2009 concerning Environmental Protection and Management in Article 1 number 14 which defines environmental pollution as the entry or inclusion of living things, substances, energy, and or other components into the environment by human activities so that they exceed the environmental quality standards. Waste and garbage have great potential to pollute the environment and damage ecosystems. The negative impact of decreasing the quality of the environment either due to pollution is the emergence of threats to the health of riverbank communities, as well as reducing the aesthetic value. Waste and garbage have great potential to pollute the environment and damage ecosystems. The negative impact of decreasing the quality of the environment either due to pollution is the emergence of threats to the health of riverbank communities, as well as reducing the aesthetic value. Waste and garbage have great potential to pollute the environment and damage ecosystems. The negative impact of decreasing the quality of the environment either due to pollution is the emergence of threats to the health of riverbank communities, as well as reducing the aesthetic value.

The position of the watershed is a logical consequence to maintain the sustainable use of forest, land and water resources in Central Kalimantan, awareness and empowerment of the people on the banks of the river is one of the efforts to improve the quality of human resources, especially the people who are adjacent to the river, because Central Kalimantan has fishery potential. which is quite large, but has not been used optimally and sustainably.

The fulfillment of community nutrition, especially protein, has become a serious concern for the Central Kalimantan provincial government, and the fish consumption rate for Central Kalimantan Province in 2017-2018 shows an increasing trend every year. The fish consumption figure of Central Kalimantan Province in 2017 was 47.63 per capita per year above the national fish consumption figure of 47.12 per capita per year, in 2018 the fish consumption rate of Central Kalimantan province rose to 48.19 per capita per year. years (MMC Central Kalimantan, 2019). However, the high value of fish consumption in Central Kalimantan Province is not yet comparable to fish production in Central Kalimantan. Based on the results of the analysis, it was found that the fish consumed in Central Kalimantan was still obtained from the Province of South Kalimantan,

Then based on the results of the processed data in this study that in Petuk Katimpun Village, Jekan Raya District, Palangka Raya City, several local fish potentials were found which if managed properly will generate increased income for the surrounding community so that it is possible to be used as a model for riverbank community empowerment.

One type of local fish that is managed by the community is fish cages with the types of fish being cultivated are toman fish (*Channa micropeltes*) and baung fish (*Hemibagrus mumurus*). These two fish were chosen because they tend to be resistant to

the extreme conditions of the rivers in Kalimantan which tend to change. In addition, we found that the management and utilization of Natural Resources (SDA) in some areas of the Watershed (DAS) are still very local in nature, the community takes and utilizes river products in the form of fish and river prawns using simple tools such as nets. and spices. And in managing fish in cages, the community uses fish feed using fish stomachs left over for household consumption, as additional feed for fish. Meanwhile, the main feed of fish kept in cages is small fish caught using rempae. The process of finding seeds, maintaining, harvesting and selling fish in watersheds is still individual. The activities of local fishermen are still carried out on a small and simple scale both in terms of fishing gear, fishing methods and also how to cultivate them.

Watershed communities (DAS) understand that rivers have great potential, they understand the types of fish that have a selling value that is considered profitable, such as toman fish (*Channa micropeltes*), baung fish (*Hemibagrus mumurus*) or other types of fish. However, there are obstacles faced in this regard, namely that a systematic river fisheries system has not yet been developed, and as a result, watershed communities still rely on nature.

In the context of health, fish contains good nutrition for the growth and development of the human body, for people who inhabit the river, the development of empowerment can be a model of empowerment which will later be used as a prototype for people who live in other riverside areas. Meanwhile, on the other hand, the development of an empowerment model for people living on the banks of the river also has the function of fulfilling family nutrition and creating self-reliance for riverside communities. These two things cannot be separated from the national stunting prevention program which is adapted to existing programs in Central Kalimantan Province, and nationally programs cannot be separated from the national target of creating HR competitiveness in 2045.

Meanwhile, for other potentials besides fisheries, there are many purun plants in Petuk Katimpun Village, Jekan Raya District, Palangka Raya City. The use of this purun plant is usually done by women (mothers) by processing it into woven handicrafts in the form of bags (baskets), mats, hats. They sell this woven product to the market while offering the results of the fish harvest or the catch they get. But there are also those who just make and display the woven products in front of the house in the hope that someone will buy it when people pass by. The selling price for the webbing varies from the price range of Rp. 5,000, - up to Rp. 15.000,- for a bag (basket), while the price for a mat is around Rp. 45.000,- for size 80 x 180 cm. This area for the city of Palangka Raya is not too far away and is a fishing spot that is still repressive for those who have a hobby of fishing because in some parts of the area using motor boats there are many lakes where there are still lots of fish. The anglers from the city of Palangka Raya are the ones who buy the wickerwork that is placed in front of the weaver's house.

There are several problems that were found in the research on community empowerment on the banks of the river, especially the Petuk Katimpun Village area, Jekan Raya District, Palangka Raya City, as below:

1. The fish that they develop in the cage system are vulnerable to death when there is a flood because the water contained during the flood is contamination from fertilizers for oil palm plantations in the upstream area.
2. Technology in fish rearing is still traditional, because there is no good and integrated breeding in baung fish breeding, even though the potential selling price is profitable, because fish seeds are based on catch.

3. The fish feed provided is also still based on the dependence on the availability of processed feed, while the natural feed made is not maximized.
4. There is no such kind of fishery business group as a forum for cooperation in order to facilitate coordination if there is assistance from the government.
5. For processed products from purun plants, marketing is still very limited, because there is no product development innovation, so the selling price cannot increase.

Many more models are needed that adapt to the conditions and potential in analyzing empowerment in terms of health for the people who inhabit the banks of the river. Providing freedom and flexibility for the people who inhabit the area with the guidance of health standards is a part that can be the beginning for the creation of empowerment for the community.

V. Conclusion

The Dayak community living on the banks of the river in the Petuk Katimpun Village has the characteristics of being able to use the river as a source of their livelihood, especially in the fisheries sector. From here, the empowerment begins as their adaptation in processing and managing the potential that exists in the environment around them. The form of empowerment that they do apart from the fishery sector is utilizing purun plants as additional income.

However, on the other hand, the empowerment that they do is not yet maximized, they need support from the government so that their independence can reach all sectors, for example in terms of fisheries and SME development, therefore assistance in other fields also needs to be done.

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