



INNOVATIVE: Journal Of Social Science Research

Volume 5 Nomor 1 Tahun 2025 Page 6692-6711

E-ISSN 2807-4238 and P-ISSN 2807-4246

Website: <https://j-innovative.org/index.php/Innovative>

## Optimization Of Peat Land To Improve The Economic Welfare Of Tanjung Leban Village Community

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### Abstract

Lahan gambut memiliki berbagai fungsi dalam kehidupan masyarakat di Desa Tanjung Leban Kecamatan Bandar Laksamana Kabupaten Bengkalis salah satunya adalah sebagai Sumber Daya Alam berupa plasma nutfah dan komoditas kayu. Sebagai tempat makhluk hidup di lahan gambut juga sebagai gudang penyimpanan karbon sehingga ianya berperan sebagai penyeimbangan iklim. Disamping peranan lahan gambut, potensi yang dimiliki lahan gambut tersebut secara tidak langsung akan memberikan dampak pada sector perekonomian bagi masyarakat. Metode penelitian ini sebagai literature yang didasarkan pada data-data yang relevan dan akuntabel. Kemudian data tersebut akan dianalisis untuk mendapatkan hasil yang komprehensif.

Kata kunci : *Lahan gambut, perekonomian masyarakat*

## Abstract

Land peat own various function in life community in the village Cape Lebanon Bandar Admiral District Regency Bengkalis is one of them is as Source Power Natural in the form of germplasm and commodities wood . As place creature live on the land peat also as warehouse storage carbon so that it is play a role as balancing climate . Besides role land peat , the potential it has land peat the in a way No direct will give impact on the economic sector for society . Method study This as literature that is based on relevant and accountable data . Then the data will analyzed For get comprehensive results .

Keywords : Land peat , economy public

## INTRODUCTION

Commitment The Indonesian government in do protection and restoration ecosystem important (essential) continue experience upgrade . Started from the restoration program ecosystem peat through Establishment of the Restoration Agency Peat (BRG) based on Regulation President of the Republic of Indonesia No. 1 of 2016. Next The Indonesian government continues the restoration program ecosystem peat for 4 years to front until 2024. Even besides restoration ecosystem peat , the President also launched an acceleration program rehabilitation mangrove ecosystem as one of the task new must carried out by BRGM in accordance with Regulation President of the Republic of Indonesia No. 120 of 2020 concerning the Restoration Agency Peat and Mangrove.

The year 2021 is sheet new for BRGM to carry out mandate in acceleration restoration peat and mangrove rehabilitation . Restoration ecosystem peat and reforestation mangrove ecosystem is expected No only repair quality environment , but also provides improvement welfare public especially communities living in peat and mangrove areas . Therefore that , planning , control , reinforcement institutions , socialization , education and evaluation is stages important For to obtain performance or optimal impact .

BRGM as institutions that play a role in restoration peat and mangrove rehabilitation is interesting attention national and also international . Ecosystem peat and mangroves have potential lower Greenhouse Gas Emissions Glass (GHG) and provide benefit economy for community . The role of stakeholders also help in the process of acceleration restoration peat and mangrove rehabilitation . In addition potential , there is problems that can be hinder effort acceleration restoration peat and mangrove rehabilitation according to with mandate Presidential Decree 120 of 2020.

BRGM has task For coordinate and facilitate acceleration implementation restoration peat and improvement welfare community in the restoration area peat in 7 provinces . And has role in carry out acceleration mangrove rehabilitation in 9 provinces . Based on Presidential Decree 120 of 2020, the function of BRGM is as following :

1. Implementation coordination and strengthening policy implementation restoration peat
2. Planning , controlling and working The same organization restoration peat
3. Mapping unity hydrological peat
4. Implementation construction , operation and maintenance infrastructure rewetting of peat and all completeness
5. Strengthening institutional public in frame restoration peat
6. Socialization and education restoration peat
7. Repair livelihood community on the land peat
8. Acceleration mangrove rehabilitation inside and outside area forests in 9 provinces
9. Give support administration
10. Implementation other functions assigned by the President

In Indonesia it is ecosystem peat the 4th largest in the world, ecosystem peat The other largest countries are Canada , Russia and the United States . As in Minister of Environment's decision Life and Forestry number SK.129/MENLHK/SETJEN/PKL.0/2/2017 concerning determination water unity Hydrological National peat , Indonesia has ecosystem peat covering an area of 24,667,804 hectares . Ecosystem land Indonesian peat besides play a role in guard stability world climate , it also plays a role as guard stability world climate because place storage carbon of 46 giga tons equivalent or by 8.14 percent carbon from ecosystem peat in the world and become protection of flora and fauna and endemic germplasm that enriches diversity life on earth .

Management peat have in lemma alone , between fulfillment need society and sustainability nature that exists on the land peat That alone . Number the population continues to grow increase force man must fulfil need the primary in the form of food , clothing and place live in the area are . From various studies that have been done happen contradiction between fulfillment primary needs of society with sustainability ecosystem peat . Use land peat but with No notice characteristics typical from peat That Alone so make land peat degraded .

Based on land data survey global wet in 2019 where Indonesia has ecosystem peat the biggest second in the world, with area 22.5 million hectare (ha). Province with largest area is Papua with area of 6.3 million ha. Followed by Central Kalimantan (2.7 million ha), Riau (2.2 million ha), West Kalimantan (1.8 million ha) and South Sumatra (1.7 million ha). In addition that

is also West Papua which has 1.3 million hectares of land peat , East Kalimantan which has 0.9 million ha and North Kalimantan, North Sumatra, and South Kalimantan each have 0.6 million ha.

Production and productivity plant can improved with optimize land peat that has been reclaimed and abandoned . Better water management Good with build and revitalize existing infrastructure , especially system drainage and water regulator then will increase results harvest . Productivity land can also improved with diversification plants , fish and poultry . The results show importance involving public local in development and management land peat with No leave wisdom local . For sustainability management and development land peat must focus on revitalization network existing drainage .

Moment This forest on the ground peat and land Indonesia has a lot of peat converted For needs agriculture and plantation especially For coconut palm oil , acacia and rubber . With transition land said , function beginning forest and land peat as conservation diversity life and reserves carbon changed be one of factor production commodity agriculture . Conversion forest swamp peat experience highest occurred in Sumatra.

In Riau Province itself is province both of which have land peat the widest in Indonesia where wide land the peat is 3,864,414 Ha or 60.1% of land peat on the island of Sumatra. With estimate thickness peat not enough of 300 cm covering an area of 1,417,762 Ha (36.7%) and thickness more from 300 cm is 2,449,652 Ha (63.3%). ( Wahyunto et.al., 2003)

Opening land peat done with method burn is one of very way traditional and costly cheap so that impact on damage environment and also has an impact to health society . As example in 2015 it happened severe smoke disaster in Riau Province , where happen lost forest and land reaching 500,000 hectares and in 2019 also with forest and land burnt reaching 300,000 hectares . And recently this , expansion fast agriculture commercial and plantation industry create pressure strong on the ground Indonesian peat Opening land peat cause peat dry up Because No Again can absorb water and become more prone to to fire . (Miettinen et al., 2016; Turetsky et al., 2015)

Peat in Riau Province is formed by the accumulation of residue vegetation tropical in abundance contains lignin and nitrogen. Soil properties peat that is not Can return Again like back to Because existence drying , requires a development balanced knowledge in order to be able to minimize from impact environment and water management , so that reduce risk fire . Besides That things to do be noticed in management land peat is see characteristics land , landscape and design use land , and development community public land peat . ( Sulaiman et.al., 2019)

Utilization land peat in the sector agriculture very determined by nature irrigation / drainage , power support crop , thickness and level maturity and nature chemical changes adapt with form land , so that potential and its development Of course follow pattern said . Viewed from characteristic said , land peat generally more in accordance For plants that have a long growing period ( annual ) than perennial plants food and horticulture , vegetables and fruits seasonal . ( Syahza . Et.al., 2020).

Land peat own uniqueness , besides as component land wet , components from room land , also components environment live . Land peat own various functions , one of which is as source Power natural in the form of germplasm and commodities wood as place creature life in the form of fish and animals others , and as warehouse storage carbon so that play a role as balancer .

Role and function land peat especially in the village Cape Lebanon is as hydrological system buffer determinant Power support availability of water in the area below especially in development cultivation very agricultural need water. Stability water supply is very depending on the condition and stability of the peak area dome peat That myself . Therefore That disturbance or damage to function shelter at the peak dome peat That will impact on stability the required water supply .

Potential land peat especially in the area Village Cape Lebanon in a way No direct give impact on the economic sector for the people living around Village Cape Lebanon . Management land peat will capable produce potential or product certain from results utilization land peat This is . can in the form of potential in the field agriculture ( in the form of land Palm oil , pineapple and so on ), livestock ( in the form of animal cows , goats , chickens and others ), Forestry ( place cultivation nursery forest protected ) and even as object tourism in the village area Cape Lebanon as center research and studies be in place which is called " House " Stop by " so can made one of effort in support economy community in the village Cape Lebanon .

Related with use land For agriculture , as well as For other sectors so implementation technology and its policies must customized with condition environment for benefits land and yield from agriculture to be optimal until can increase welfare society . One of the problems that occur on land peat resulting in damage function ecosystem peat is not enough specifically there is election commodity or sector economy developed on land In the agricultural sector , commodities that are not in accordance with characteristics land peat and its occurrence peat water drainage resulting in drought so that trigger fire land .

## LITERATURE REVIEW

Land peat is one of type land that can be found in Indonesia. In fact, the area land peat in an archipelago This including the largest among other countries. The existence of land peat hold role important for stability climate Because his ability in absorb carbon.

### Understanding Land Peat

Peat soil consists of from two words, namely 'land' and 'peat'. The word 'land' itself contain understanding in the form of a tangible area mainland with characteristics that can to form land and environment surrounding areas, such as hydrology, geology, to atmosphere. Then, the word 'peat' contains understanding as accumulation experience ingredients organic like grass, moss, and remainder plants, which experience decomposition No perfect and located in the area beach, swamp, to basin.

Peat formed due to accumulation of organic material on a land Far the comparison with the process of decomposing organic material said, so that decomposition or the breakdown No perfect Then experience weathering.

From the discussion previously, then conclusion that land peat is area with layer composed land from organic material with decomposition No perfect, so that accumulated become material peat. Thickness land peat usually more than 50 centimeters with content carbon organic reaching 18 percent. Peat land can to form A ecosystem, named ecosystem peat, covering a unity plant element interconnected peat influence.

### Function Land Peat

For understand and deepen about function from land peat for environment surrounding area is as following:

#### 1) Help Stability Climate

Peat soil consists of from 3% of the coverage area of the entire land area in the world. The number the tend seen small, isn't it? However, three percent land peat the capable absorb carbon in amount big.

As comparison, land peat own ability absorption carbon of 550 gigatons. If in unit percent, then amount carbon that can absorbed by the soil peat worldwide is 30%.

Then, how with land peat in Indonesia? It turns out that the land Indonesian peat has ability absorption carbon up to 57 gigatons. The amount it is 20 times more tall from ability absorption carbon by forests and also type land other.

#### 2) Place Staying Diverse Biological

Function land peat next is as a natural habitat from diversity existing life . Enough Lots animals and plants that live as well as develop breed in a land peat .

You can find animal like crocodile , goose wing white , Sumatran tiger , until with bear honey . Besides that , some example sustainable plants on the ground peat is durian tree , tree island , until tree nutmeg .

### 3) Guard Environment from Flood

A land peat can holds up to 450 % water with 850% of weight dry , which is approximately 90% of its water volume . Power absorb land high peat the beneficial For guard environment from impact bad flood as well as drought .

Then , if land peat has experience decomposition or decomposition , then ability withhold water in the environment the to increase 2 to 6 times from heavy dry .

### 4) Increase Condition Economy

Function land the one peat This related with fertility high land , so that Can made into place For to cultivate plant seasonal . Example plant a season that can cultivated is rice , soybeans , corn , and cassava .

Plant the very suitable for you to maintain in the area peat shallow with high fertility as well as own risk minor damage for environment around .

Then , you can to cultivate plant annual also on the ground peat . However , with notes land peat own thickness 3 meters or more . Here are some examples plant its annual is rubber , coconut , and coffee.

No only plant only , you can to cultivate various types of fish in a land peat . Fish like dumbo catfish , patin Siamese , and value , is examples of fish that will develop breed with good on the ground peat .

Based on Material Compiler from land peat

Peat soil based on the compiler divided become three category , namely as following :

#### 1. *Peat Land Moss , or Moss Peat*

Land This consists of from arrangement mixture aquatic plants originating from from the Liliaceae family, such as moss to plankton.

#### 2. *Peat Land Seratan , or Sedge Peat*

For land peat One This is arrangement Sphagnum plants , such as sphagnum moss which has texture rough and usually found in freshwater swamps .

#### 3. *Peat Land Kayuan , or Woody Peat*

Composition land peat This is tree as well as plant bush or the nails that are below the land

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## Element improvement economy from land peat

Utilization land peat For sector agriculture very determined by nature irrigation / drainage , power support crop , thickness and level maturity and nature chemical changes adapt with form land so that potential and its development follow pattern . The nature of land peat generally more in accordance For plants that have a long growing period ( annual ) than perennial plants food and horticulture , vegetables and fruits annual ( Syahza et al., 2020).

Commodity Featured public Coast that is agriculture , coconut , rubber , coconut palm oil , pineapple, sago , coffee, cocoa , betel nut. Therefore that , is needed understanding about utilization land peat . This is For prevent damage ecosystem peat , maintain diversity life , save carbon , produces oxygen , and managing water. Management policies and strategies ecosystem peat done through development social economy and culture public For realize welfare public based on wisdom local .

Management and utilization land peat contribute to the economic sector . Even as source eye livelihood main society . Utilization land peat based wisdom local can guard sustainability ecosystem peat .

Utilization and development land peat at the time This always become debate . Difference view about utilization land peat divided become two aspect interests , namely aspect interest environment and aspects interest development land peat For agriculture commodity strategic . When This develop understanding that utilization land peat started with opening forest / land dominant peat cause problem environment that is the change function ecosystem peat and impact negative that exists in the surrounding community . Land peat utilized by the community previously done drainage with make channel around land mentioned . Purpose from making channel This is For reduce condition water saturated layer rooting plants that cause land peat become dry and not Again store water so that happen decline surface peat and subsidence .

Condition the requires the interested parties look for solution for balance between two interest the can achieved , including through development agriculture based on participation society and conformity land ( development) land peat sustainable ). Related with use land For agriculture , as well as For other sectors so implementation technology and its policies must customized with

condition environment for benefits land and yield from agriculture to be optimal and able to increase welfare society . One of the problems that occur on land peat resulting in damage function ecosystem peat is not enough specifically in election commodity or sector economy developed on land In the agricultural sector , commodities that are not in accordance with characteristics land peat and its occurrence peat water drainage resulting in drought so that trigger fire land

## Regulation utilization land peat

Regulation of the Minister of Environment Life and Forestry ( Permen.LHK ) Number P.14/2017 concerning Procedures for Inventory and Determination Function Ecosystem Peat , P.15/2015 concerning Procedures for Measuring Groundwater Level at Ground Points Compliance Ecosystem Peat , and P.16/2017 concerning Technical Recovery Guidelines Function Ecosystem Peat . Besides It also issued Decree (SK) No. 129/2017 concerning Unitary Maps Hydrological National Peat and Decree No. 130/2017 concerning Function Maps Ecosystem National Peat (Scale 1:250,000).

Dynamics conditions and problems in management Ecosystem Peat demand strengthening regulation For ensure effort protection and management Ecosystem Peat . The birth regulations that contain regulation about protection and management of the surrounding area Peak Dome Peat very required . Moreover remember its very vital role in guard the walk function hydrological Ecosystem Peat in a KHG. For that , on March 20 , 2019 the Minister of Environment Life and Forestry (LHK) determines Minister of Environment and Forestry Regulation Number P.10/2019 concerning Determination , Establishment and Management Peak Dome Peat Based on Unity Hydrological Peat (KHG). Regulation This aiming strengthen effort protection and management Ecosystem The previous peat has set up through 3 ( three ) Ministerial Regulations of the Environment and Forestry and 2 ( two ) Decrees of the Minister of Environment and Forestry.

## Potential Utilization Land Peat

Indonesia has land peat covering an area of 14.95 million hectares . Unfortunately , 44.6% of them has degraded Because fire land , error management , and mining . As a result , productivity land become decrease or The same very No productive and neglected . Although experience degradation and damage , in fact land peat own very potential Good For developed .

The community can utilise land This For various interest like cultivation plant plantation like coconut palm oil and rubber , as well as For interest plant food like planting soybeans , corn , cassava , rice , sweet potatoes , etc.

Land peat can also utilized For cultivation plant horticulture , such as bananas, pineapples, jackfruit , melons, oranges , and others, as well as plant vegetables like tomatoes , spinach , mustard greens , kale , and others. Although own potential adequate management good , but manage peat No may carelessly . Because , this the precisely can cause influence bad that is detrimental ecosystem and humans in a way overall .

Literature review is a form study special that produces knowledge new about a topic with review , critique , and synthesize representative literature on a topic in particular integrated so that produced framework work and perspective new about the topic . ( Tonaco , 2016)

Literature review is activity to examine through books , articles scientific and source other relevant with problem particular , field study or theory that aims For give description , summary and evaluation critical from works The literature review was designed For give description general about sources being researched related to a particular topic . (Fink, 2014).

Management land peat of course more complicated compared to with type lands others . In matter This seen from complex management required knowledge about management land peat . The need for education to management land peat through education environment especially for areas located in the land area peat . peat soil own great benefits especially For land agriculture , will but of course need proper management so that can utilized For development agriculture in peat areas . Constraints management in the form of constraint physical , chemical and water management which is indeed must truly managed with true ( Humairoh & Sutikno , 2019).

Knowledge about land peat very seldom very discussed in book lessons at school , because peat Alone No spread evenly distributed throughout Indonesia. Only part school only one who teaches his students about peat , because they Alone feel impact damage peat in their local area . Referring to the problem said , researchers interested use Review Literature ( *Literature Review*) For see development utilization land peat in *increase economy public Village Cape Lebanon* . Review Literature This expected can give input from various study previous in introduce land peat to the community in the village Cape Lebanon . Expected results research This can bring change in education environment in society village Cape Lebanon with enter source regional power as a learning medium .

In make design need existence study library that can made into runway For make A work scientific . Appointment writing This is results work original author and not results duplication work writer others . Research with title , *Land peat increase economy public Village Cape Lebanon* Bandar Admiral District Regency Bengkalis . However if studies about the Role of the Restoration Agency Peat (BRG) In Countermeasures Fire Forest and Land the Already Once studied by researchers previously , then study This can used as material complement from study previous . Authenticity material This can proven with compare research that has ever been done other researchers previously used as material main Literature review .

First study regarding prevention programs fire land through MPA (Community Care) Fire ) and DPG ( Village Care Peat ) was conducted by Wahyono et al., (2018), Andriani et al., (2018), Yuhana & Iskandar (2017).

Wahyono et al., (2018), Prevention fire land and forest is all effort , action or activities carried out For prevent or reduce possibilities the occurrence fire forest and needed *fire manager* in activity control fire forests and land . For overcome problem on so agreed solution with partner in matter This is Making well drill and also training Usage and maintenance . Stages implementation activity Dissemination Product Technology to the community includes : counseling about health especially fire smoke and Risk fire land , practice drilling and its use as well as care , and empowerment of caring communities Fire (MPA) and Community Care Peat (MPG) Through 2 Partners , Namely BPK Landu and Kelurahan Foundation West Ulin . Andriani et al., (2018),

Fire land is disaster experienced by Indonesia annually . There have been many effort self-reliance and also government For prevention fire forests and land . Efforts approach new thing done government in prevention fire forest and land with put forward synergy between institutions and society level village . Control fire land , leader participating opinions is head village , secretary village , chairman of the consultative body village , extension worker agriculture field leader opinion very play a role . role leader opinion in the village Cape Lebanon start from to initiate consultation village For formation of MPA, synergize with government For socialize the prevention program fire land , inviting public participate active For support government programs and together do processing land without burn . Yuhana & Iskandar (2017),

Research result show that : (1) participation MPA and non-MPA communities within prevention fire land in the District Rasau Jaya, Kab . Kubu Raya. Every tall in prevention fire land . (2) internal MPA and non-MPA relationships prevention fire land , knowledge level , field work , and education , no relationship at the level connection cosmopolitan in prevention participation level fire land . (3) using prevention fire land for MPA to revitalize MPA community , with government , for it is non MPA controlled burning land .

Second study about Revegetation and Revitalization Community Economics conducted by Imam Masud (2018), Puspita (2018). Imam Masud (2018), Research Results shows : (1) Village Work Farmer is the entire area its territory slowly peat and is the whole village the area is also located in Unity Hydrology Peat (KHG) Enok River – Batang River . (2) Type dominant vegetation in the split north Village Work Farmer is plantation mixture that is in the form of plantation palm oil , coconut and areca nut which follow flow ditch , while next to south is plantation monoculture palm oil owned by the company private . (3) Fire land Peat in the Village Work Farmers in 2015

were found in the area Ditch Pity until to H Tari Ditch with area burned reaching 146.38 hectares directly with limit concession plantation palm oil company with depth peat around 4 - 6 meters. (4) Village Care Peat (DPG) was built on base draft eye livelihood Sustainable Rural Livelihood (SRL), which means sustainability life society is also based on restoration and preservation environment in matter This is ecosystem peat .

Puspita (2018), Research results show There is two important thing namely :

1. Implementation of the Restoration Agency program Peat in the Village Village Rimbo Panjang viewed from a number of factor namely Communication Source Power , Disposition and Structure Bureaucracy Not yet walk optimally .
2. Revitalization Program Community Economy with help economy productive in the village Long Rimbo with do activity

Third study discuss about development construction infrastructure land peat done by Sri Nurhayati English : Sri Nurhayati Qodriyatun (2017), Policy restoration peat launched government For reduce impact negative fire forest and land on land peat .

The existing problems is How readiness second province the in implementation policy This process is show that government area South Sumatra Province more Ready carry out policy restoration peat , visible from implemented programs , sources prepared power , and commitment head area in implementation policy .

However implementation policy constrained by not existence regulation For support implementation policies in the region . For that , to front need existence namely :

1. Coordination between government center with area in every plan activity .
2. Supporting regulations utilization of donor funds for implementation restoration peat in the area ;
3. Mapping social and mapping economy in KHG mapping ;
4. Evaluation of moratorium on permits on land peat ; and
5. Improvement law enforcement

Based on results study previous describe that between three component said , not only Restoration Agency Peat and the Government just will but public general but also the parties private other follow and play a role important in countermeasures fire forest and land peat . With existence compactness among them so that effective in restoration and preservation environment . In study This then that becomes the main focus is How the Restoration Agency carry out policy to program management .

## METHODOLOGY

Methods used with framework Work studies This combine between field observation data with information system geographical participatory or GIS- Participatory as approach science For help in development community in the field economy with balancing need public as well as sustainability environment life .

Method This can enrich spatial planning regency especially in the village Cape Lebanon Bandar Admiral District Regency Bengkalis so that will more effective If get commitment political from party authority and support from the community in the village Cape Lebanon That alone . Mapping Details will more advanced to the next level subdistrict required For visualize boundaries physique from land peat and management to in planning management land peat in a way detailed . Besides there For apply approach This must get support from party government . ( Sulistyawan et al., 2018)

## RESULTS AND DISCUSSION

Regency Bengkalis including in Unity Hydrological Peat (KHG) Restoration Agency Peat (BRG) of the Republic of Indonesia, in matter This Regency Bengkalis is 8,426.48 KM<sup>2</sup>, has wide land peat equivalent with 69.68% of the total area mainland district . Also has more mangrove areas less than 33,016 hectares , covering a number of village and sub - district . Livelihood community in the area ecosystem peat Regency Bengkalis majority moving in the sector agriculture ( agriculture , plantations and fisheries ). Based on the data obtained from the Central Statistics Agency (BPS) of the Regency Bengkalis 2020 sector dominant business growth economy is Health Services and Activities sector Social , Information and Communication and Agriculture , Forestry and Fisheries . The following table rate growth Product Gross Regional Domestic Product (GRDP) of Regency Bengkalis .

Following is a number of potential land Peat in the Village Cape Leban which can optimized by the community , one of which is is :

### 1) Potential as land agriculture

Potential land agriculture in the area land Peat in the Village Cape Lebanon No only as land empty merely which is in fact seldom very utilized by the community , but can utilized with well , one of them with utilise land peat as land agriculture which is a things that can made into potential by the community in the village Cape Lebanon as source income for communities in the village area Cape Lebanon the .

However before do farming on land peat , need noticed by the public namely fertility and soil Ph in the field peat said . Before the planting process is started by the farmer

moreover formerly must increase soil pH to Ph 5, so that plants growing on site the can develop as expected .

As for plants that can cultivated on land peat is one of them is Pineapple plant . Pineapple fruit contains various nutrition and low calories This is one of fruit which is very popular among Indonesian people , especially in villages Cape Lebanon Bandar Admiral District Regency Bengkalis . Good to eat in a way direct or processed become various type type processed food made from base from pineapple . Like pineapple made chips , sweets , candy , chili sauce, drinks and various type processed other .

Pineapple is one of the productive , profitable and environmentally friendly commodities peat . Besides That areca nut plants , fresh water fish and also honey bees . Pineapple cultivation in the field peat the good thing is done with pattern Agroforestry and practices best (best practices) in preparation land , nursery , planting and strengthening various type of capital. For example are social capital, human capital , and financial capital . This description as opportunity for public For utilise land peat that makes area pineapple cultivation in the area .

Cultivation Plants in the Village Cape Lebanon Bandar Laksamana District the initiated by the group farmers and also individuals , so capable produce quality plant worth high and can for sale and exported .

Like known that potential Pineapple exports from Indonesia increase each year . Data from the Central Statistics Agency recorded that from 2013 to 2018 pineapple exports continued experience increase . Pineapple exports in 2013 were recorded at 174 thousand tons. While 2018 happened increase significant to 229 thousand tons. So with thus in a way No direct results the sale of pineapples can become support economy from public area the .

## 2) Potential Farm

Potential others that can optimized on land peat namely in the field farm . In the form of field fisheries . For optimize potential land peat through fishery strategy is needed to to overcome existing low pH problems . No all creature life Can endure to change pH value in peat water . One of the method in handle changes in water pH is with method Liming . Liming is purchase lime to in land in general No Because land lack element Ca, but Because land peat too sour . Because of that that's the pH of the soil need increased so that nutrients such as P are easy absorbed by water and poisoned aluminum can avoided . ( Kordil , 2010).

Potential This can applied through approach biological with utilise optimally local fish that have adapt with environment In general , local fish in the area Peat is dominated by

types of fish that are capable of breathe use oxygen from air such as puyu fish , sepat fish, gourami fish, snakehead fish or haruan fish and also toman fish.

Local fish in the waters land peat own mark economical for community in the village Cape Leban around land peat . Potential This expected will capable develop fishery in frame optimization waters land peat .

Quail fish for example own Lots superiority compared to with other fish, can life in condition waters with minimal oxygen , because own ability in take oxygen on the surface of the water, has tolerance to sufficient pH change wide with pH range 3-8 and is capable of life in condition waters that are almost dry or season drought .

### 3) Potential Tourism and Research

In management ecosystem land peat , involvement public very much important , in matter This No only For to obtain profit financial only , but For recovery ecosystem peat . Therefore That service environment specifically ecotourism and materials research become potential For developed . In a number of case For guard sustainability ecosystem peat in a way sustainable , government Regency Bengkalis and Bandar Laksamana District as well as apparatus village Cape Lebanon cooperate with party outside such as the University of Riau (UNRI) and even from Japan in create a program as center Research research and materials testing forest protect at a time as destination tourism in " Home" Stop by ". Which of course can utilized by the community local For selling and facilities other to visitors so that later later will trigger growth economy community in the village Cape Lebanon .

Area on land peat will give Lots benefit for community in the village Cape Lebanon . As example play a role important in storing and controlling rainwater and runoff surface . This is minimize danger flood in the season rain . Management land sustainable peat will impact on welfare public in a way Overall . Management ecosystem based on local wisdom and welfare community in the village Cape Lebanon need focused on socio- economic and cultural development strategies . The objectives overall from habitat management is For increase welfare people living in the village Cape Leban . Utilization ecosystem This by for public village Cape Lebanon has give contribution economy Good regionally and national .

Land peat in Bengalis District is estimated amounting to 800,017.67 Ha (69.68%) of the total area mainland district . Which can differentiated based on distribution on each sub-district , namely Bukit Batu District and Bandar Laksamana District as much as 120,181.38 Ha, Merbau District as much as 110,920.17 Ha , Edge as much as 99,778.20 Ha, District Siak Kecil as much as 86,455.81 Ha, District Appearance as much as 66,260.52 Ha, District Bengkalis as much as

41,584.23 Ha, District bantan as much as 33,030.86 Ha and Subdistrict North Rupert as much as 13,913.75 Ha.

Innovation in field agriculture and plantation must done by the community Village Cape Lebanon with objective For guard sustainability land peat but still can fulfil need economy . Innovation the is bring up potential commodities become featured on the service peat Because still guard ecosystem and value tall .

In study This can done with scheme development economy public land poured peat in table as following :

Table 1.

Development scheme economy public Village Cape Leban in Regency Bengkalis

Subdistrict	Depth land peat	Activity economy public Village Cape Lebanon	Development activity economy potential in land peat	Things to do done For development economy public Village Cape Lebanon
Admiral Port	100 > 700 cm	1. Agriculture ( Palm oil , pineapple, chili, banana) 2. Fisheries ( Ponds) Shrimp )	Planting valuable vegetation sell tall a. Palm oil b. Pineapple c. Vegetables d. Fruits	Land peat must always covered with plant or vegetation that has mark economy tall . Then utilise land degraded peat . Then give education since school to public especially Village Cape Lebanon about importance guard sustainability land peat in line with

				fulfillment need economy
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Empowerment strategy public in effort protection ecosystem peat among others:

- 1) Push development social the community that does cultivation , especially in the sub-sector plantations and plantations industry ;
- 2) Ensure sustainability wisdom local in the community ; and
- 3) Recommend to government area For emit policy related utilization land peat with the way to maintain balance environment and development sustainable based on wisdom local .

In policy strategy matters , transfer technology adaptive farming with characteristics unique ecosystem peat must become the main target . This need combined with building institutional systems strong farmer , providing access to system capitalization farmer local , and develop system cultivation with increase knowledge public Village Cape Lebanon .

## CONCLUSION AND SUGGESTIONS

### Conclusion

Village Cape Lebanon Bandar Admiral District Regency Bengkalis Riau Province found sector agriculture Keep going grow in time economy experience decline . Plants coconut palm oil and rubber Still dominate utilization land For agriculture , as well as pineapple plants . Through observation and utilization of information systems geographical obtained on land peat suitable For plant worth economical high , like Palm oil , pineapple, Bidi power shrimp , agarwood , wood geronggang and Liberica coffee and plants horticulture rice , mature vegetables and fruit short . Besides That Fish farming on land wet suitable For done in the Village Cape Lebanon Bandar Admiral District Regency Bengkalis such as catfish, catfish , tilapia and tilapia . Through system participatory information This Can determined the area to be developed in a way complete .

Potential Source Power Nature on land land Peat in the Village Cape Lebanon Bandar Admiral District Regency Bengkalis in a way No direct will give impact on the economic sector for community . Management land the right peat will capable produce potential or product certain from results utilization land peat mentioned , both in terms of agriculture , animal husbandry , fisheries and objects tourism . With optimize the existing potential with hope later in the future land peat can awake and keep going sustainable .

## Suggestion

From the results research and has done , then writer try For provide suggestions , namely :

1. The need for cooperation from government and also other For give a counseling to community in the village Cape Lebanon in a way continuous to management land peat
2. The community is expected do Operation and maintenance infrastructure that has been built in a way independent and in groups

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