

THE ROLE OF VILLAGE GOVERNMENT IN MANAGING POWER PLANTS (PLTS) IN TANJUNG BATU KECIL VILLAGE, KARIMUN REGENCY

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Abstract

Dalam suatu pemerintahan sebuah negara listrik memiliki peran penting dalam mendukung kinerja pegawai dan pengoptimalan pelayanan publik dan penunjang produktivitas masyarakat, namun dewasa ini banyak desa di Indonesia yang belum merasakan listrik selama 24 jam salah satunya adalah Desa Tanjung Batu Kecil Kabupaten Karimun. Melihat fenomena tersebut Kementerian Energi dan Sumberdaya Mineral memberikan bantuan berupa 3 unit Pembangkit Listrik Tenaga Surya (PLTS) berkapasitas 30 kWp yang terletak di Dusun I Tanjung Batu Kecil, Dusun II Pelakar dan Dusun III Kampung Baru. Penelitian ini bertujuan untuk menganalisis peran Pemerintah Desa dalam pengelolaan Pembangkit Listrik Tenaga Surya (PLTS) di Desa Tanjung Batu Kecil, Kabupaten Karimun. Latar belakang penelitian ini didasarkan pada keberadaan PLTS sebagai bantuan dari pemerintah pusat melalui Kementerian Energi dan Sumber Daya Mineral yang diserahkan kepada pemerintah desa untuk dikelola demi pemenuhan kebutuhan listrik masyarakat. Dalam pelaksanaannya, pengelolaan PLTS di tiga dusun menunjukkan hasil yang bervariasi: Dusun III masih beroperasi dengan baik, sementara Dusun I dan II mengalami kerusakan dan tidak berfungsi. Penelitian ini menggunakan pendekatan kualitatif deskriptif dengan teori peran pemerintah oleh Ryaas Rasyid yang mencakup tiga indikator, yaitu: sebagai dinamisor, fasilitator, dan regulator dengan jumlah informan sebanyak 15 (Lima Belas) informan. Hasil penelitian menunjukkan bahwa Pemerintah Desa memiliki peran yang cukup signifikan dalam perencanaan, pengorganisasian, dan pengawasan PLTS, namun masih ditemukan kendala dalam aspek koordinasi, pemeliharaan, dan pengelolaan iuran masyarakat, yang mengakibatkan ketimpangan operasional antar dusun. Oleh karena itu, peningkatan kapasitas pemerintah desa serta keterlibatan aktif masyarakat menjadi kunci keberhasilan pengelolaan PLTS yang berkelanjutan.

Keywords : Pengelolaan; Peran; PLTS.

Abstract

*In a country's governance, electricity plays a vital role in supporting employee performance, optimizing public services, and enhancing community productivity. However, many villages in Indonesia still do not have access to 24-hour electricity; one such village is Tanjung Batu Kecil in Karimun Regency. In response to this issue, the Ministry of Energy and Mineral Resources provided assistance in the form of three Solar Power Plant (PLTS) units, each with a capacity of 30 kWp, located in Dusun I Tanjung Batu Kecil, Hamlet II Pelakar, and Hamlet III Kampung Baru. This study aims to analyze the role of the Village Government in managing the Solar Power Plants (PLTS) in Tanjung Batu Kecil Village, Karimun Regency. The research background is based on the existence of PLTS units as aid from the central government through the Ministry of Energy and Mineral Resources, which was handed over to the village government to be managed in order to meet the electricity needs of the community. In practice, the management of PLTS across the three hamlets shows varied outcomes: the PLTS in Dusun III remains operational, while those in Dusun I and II have become damaged and non-functional. This research employs a descriptive qualitative approach using Ryaas Rasyid's theory of government roles, which includes three indicators: as a **dynamisor**, **facilitator**, and **regulator**, with a total of 15 informants. The findings reveal that the Village Government plays a significant role in planning, organizing, and supervising the PLTS, although challenges remain in terms of coordination, maintenance, and community fee management, leading to operational disparities among the hamlets. Therefore, strengthening the village government's capacity and increasing active community involvement are key to achieving sustainable PLTS management.*

Keywords: Management; Roles; Solar Power Plants.

INTRODUCTION

Decentralization refers to the diversion authority organization authority government from center to area autonomous . This action based on the principle autonomy , which provides right to area For organize and manage affairs government in the framework of the Unitary State Republic of Indonesia. Delegation authority This covers various affairs government from level center to level area , with objective main For realize organization efficient government (Rauf, 2018).

Indonesian Governance is undergoing a transformation process from the centralized model become decentralized , which results in birth A autonomy in Indonesia. Self- governing or autonomy implemented in Indonesia does not only valid For level area only , but also expanded until covers village (Sulistiyani et al., 2024) .

Referring to to provision general Constitution Number 6 of 2014 concerning village explained that government village is head the village which then assisted by a number of device a village consisting of from secretary village , head hamlet , and head affairs in operate duties and authorities in organization government village (Raharjo, 2021) .

In a way general , government Village own very important role important in give

optimal service to improve welfare and eligibility life society . This is assessed based on authority and duties strategic government village in a way classified general become four category , namely authority village based on right origin proposal , one of which is covers governance arrangements organization public customs as well as coaching institutions and laws Customary law . Furthermore, local authority at the village level encompasses the development of village infrastructure through the management of new and renewable energy and the use of appropriate technology (TTG). The next category of authority is authority delegated by the central government, provincial government, and district/city governments (Ramli, 2024) .

National development is a process that encompasses all aspects, including social structures and institutions, as well as economic growth and community welfare. This is done with the aim of reducing social disparities and alleviating poverty. As a sustainable government effort and equitable national development, the government grants village governments the authority to manage development according to the needs and local wisdom of their respective village communities. Therefore, village heads, as

dynamic actors, are required to play a role in involving the community in development implementation and forging good cooperation with the central and regional governments (Sagala, 2024).

In an effort to achieve the planned development goals, village governments need to strengthen village infrastructure development by utilizing natural resources and other potentials to support the collective efforts undertaken by village communities to achieve shared prosperity. Strategic and efficient accelerations are needed through policies made by the central and regional governments to encourage the productivity of daily life. The acceleration undertaken by village heads is expected to be a positive step in implementing sustainable infrastructure development.

The development of village infrastructure is one of the important factors in the sustainability of community life, road construction for the convenience of transportation and community mobility, development of rice field irrigation to encourage harvest productivity and results from the agricultural sector, utilization of natural resource potential into renewable energy through the implementation of appropriate technology which aims to encourage the acceleration of community electrification and ensure the availability of electricity supply so that the community can

feel the benefits of the electricity available for daily life.

Village infrastructure is a basic facility that supports community life. One village infrastructure that plays a crucial role in community life is electricity. The availability of electricity is fundamental to community life, not only for rural communities but also for the general public throughout Indonesia. Electricity is likened to a dynamo, driving the wheels of community productivity. In remote villages, border villages, or underdeveloped villages, electricity shortages and limited availability are often encountered. This has prompted communities to utilize natural resources to generate renewable energy through the implementation of appropriate technology.

Advances in science and technology require various groups, especially researchers, to develop and create appropriate technology that is easily understood by the public. Appropriate technology is one implementation of technology widely known among rural communities. It is called appropriate technology because it is considered appropriate for its intended beneficiaries and has high utility value, using simple and practical tools (Priyanto et al., 2024).

From a community empowerment perspective, technology is considered capable of enhancing community

empowerment and increasing scientific knowledge regarding appropriate technology management. Policies and assistance from the central and regional governments regarding appropriate technology can boost community economic productivity, thereby improving the standard of living (Nugroho, 2021).

Karimun Regency is one of seven regencies/cities in the Riau Islands Province. According to 2023 data from the Central Statistics Agency, Karimun Regency is administratively divided into 12 sub-districts, comprising a total of 29 sub-districts and 42 villages. Despite the large number of villages within Karimun Regency, several still lack 24-hour electricity service.

Table 1Number of Villages That Have Not Received Electrification for 24 Hours

No.	District Name
1.	Subdistrict Strait Gelam
2.	Subdistrict Splint
3.	Subdistrict Sugie Big
4.	Subdistrict Durai
5.	Ungar District
6.	Moro District
7.	Buru District

Source : *Processed Researcher , 2025 .*

Refer to the table above , found phenomenon that of the 42 villages in the district Karimun

There are 12 villages in 7 sub-districts that have not been fully feel electrification for 24 hours so that This has an impact on the limited accessibility public in life daily so that matter This influence level productivity a very society slow If compared to with villages that have access full to electrification within 24 hours. Respond matter the government center through ministry energy and mineral resources make regulations related electrification intended .

Regulation of the Minister of Energy and Natural Resources Mineral Resources Law Number 38 of 2016 concerning acceleration electrification in rural , remote , border and island areas small populated identify that Still there is population significant that has not been served by access power electricity . In connection with matter said , the government viewed need For accelerate provision power electricity in adequate volume , with Guaranteed quality and affordable prices in rural areas . This is the legal basis for the government to provide electricity assistance to villages lacking electrification. One village that hasn't had electricity for a full day is Tanjung Batu Kecil, located in Buru District, Karimun Regency .

One form of implementation of the acceleration of electrification and availability of electricity in the village of

Tanjung Batu Kecil carried out by the Ministry of Energy and Mineral Resources is by providing a grant in the form of a Centralized Solar Power Plant (PLTS) with a capacity of 30 kWp. This is regulated in the document of handover of state assets to the work unit of the Directorate General of New, Renewable Energy and Energy Conservation of the Centralized Solar Power Plant (PLTS) to the Karimun Regency Regional Government on February 23, 2017. In the minutes, it is explained that the regional government as the recipient of the assistance is fully responsible for the arrangement, storage, use, management, supervision, maintenance and recording of assets and is responsible for all risks arising from state property that has been handed over.

Table 1.22 Amount Aid Delivered

No	Name Goods	TA	Amount Unit	Capacity	Location
1.	Solar Power Plant Centralized	2015	1	30 kWp	Tanjung Batu Kecil (Dusun II Pelakar) Buru District
2.	Centralized Solar Power Plant	2015	1	30 kWp	Tanjung Batu Kecil (Hamlet I Tanjung Batu Kecil, Buru District)
3.	Centralized Solar Power Plant	2015	1	30 kWp	Tanjung Batu Kecil (Hamlet III, Kampung Baru, Buru District)

Source: *Researcher's Processing of Grant Manuscripts of the Directorate General of New, Renewable Energy and Energy Conservation, Ministry of Energy and Mineral Resources, 2025* .

The above data confirms the significant solar power generation capacity provided by the Ministry of Energy and Mineral Resources to the Karimun Regency government, which will then be managed and utilized to support electricity supply to support community productivity and accessibility. The guaranteed availability of electricity through the operation of the handed-over solar power plants is expected to boost economic growth and the community's standard of living, while also reducing the number of villages in Karimun Regency with less than 24-hour electrification.

To maximize the management of PLTS, decentralization is carried out by the regional government handing over the management of Solar Power Plants (PLTS) from the regional government to the village government as regulated in the Karimun Regent Regulation Number 37 of 2017 concerning Village Authority Article 10 letter K concerning the implementation of local authority at the village level in an effort to empower village communities, it is stated that one of them is the utilization of appropriate technology and holding

appropriate technology training as explained further in point N. Based on this law, the head of Tanjung Batu Kecil village has the authority and responsibility for regulating policies and managing Solar Power Plants in Tanjung Batu Kecil Village which are located in Hamlet I Tanjung Batu Kecil, Hamlet II Pelakar and Hamlet III Kampung Baru.

One form of village planning and policy-making based on the principle of decentralization is village deliberation. This is very often found in remote, underdeveloped, and villages with small populations. This is done because it is an effective way to mobilize the community and the habit of people gathering together to deliberate. Another purpose of holding village deliberations is to increase community participation in determining village government policies and implementing village laws (Tanaya, 2019). In the course of managing the PLTS, the Tanjung Batu Kecil village government then held a village meeting with elements of the village government and the village community to determine the number of watts of 300 watts per house and the amount of monthly fees agreed upon in the village meeting of 40,000 (Forty Thousand Rupiah) per month and appointed the village PLTS administrators to facilitate coordination

between the village community and the village head and facilitate the work of the village head in controlling the quality of the PLTS.

Initially, the solar power plant was managed directly by the village head. However, the management process often encountered obstacles. Among them was the village government's inability to manage the operational costs of the solar power plant, which were funded by the community, the beneficiaries. Based on these indications, several residents protested to the village government demanding firm action regarding the phenomenon.

Based on this phenomenon, the Tanjung Batu Kecil Village government conducted an evaluation of the management of the Solar Power Plant (PLTS) through a Village Deliberation attended directly by the village community, and it was agreed that for the sake of more effective, systematic and measurable PLTS management, the management of PLTS and policy making related to its management would be handed over to each hamlet.

After the policy was implemented, management became more organized, but its implementation was not smooth and was even deemed a failure. Initially, the Village-Owned Enterprise (BUMDes) managed the solar power plants in Hamlets I and II, but

when they were handed over to their respective hamlets, damage occurred to the solar power plants in Hamlet I, Tanjung Batu Kecil, and Hamlet II, Pelakar.

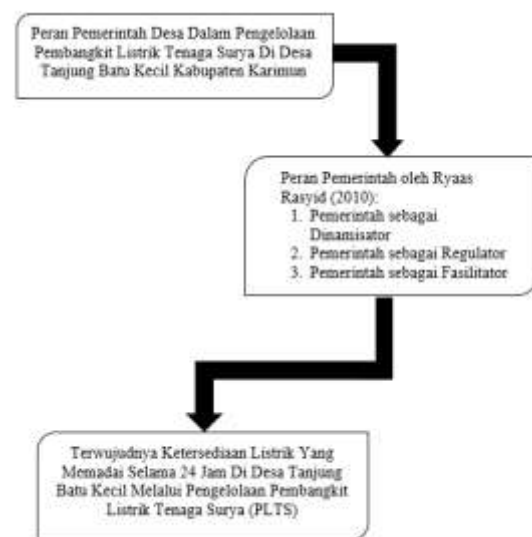
This causes the productivity of the people living in the two hamlets to decrease and the duration of electricity availability is reduced from 24 hours to only 14 hours per day. Based on the background of the problem above, the author is interested in conducting a scientific research regarding the empirical phenomenon that is currently occurring and its impact is directly felt by the people of Tanjung Batu Kecil village, especially those who live in Dusun I Tanjung Batu Kecil and Dusun II Pelakar with the research title The Role of Village Government in Managing Solar Power Plants (PLTS) in Tanjung Batu Kecil Village, Karimun Regency.

METHOD

Writing This use method approach qualitatively capable explain How role Government Village Cape Rock small Regency Karimun in management of PLTS. In data collection , author do interview with Head Village Cape Batu Kecil, Head of Hamlet, Consultative Body Village , Chairman Daily PLTS, PLTS Operator, Community of Dusun I Tanjung Small Stone , Community of Hamlet II Pelakar and Community of Hamlet III Kampung Baru as well as do observation and documentation .

Observation writer do observation in a way directly to management Solar Power Plant (PLTS). Collection document originate from Minutes of the Manuscript Grant handover PLTS assets from the Ministry of Energy and Mineral Resources, books , journals , online mass media and in the form of Images supporters . After the data is collected so analysis done with inductive data analysis that is withdrawal conclusion from data collection .

Figure 1.1 Framework Thinking



Source : Processed researcher , 2025

Government as an organizational body that has role important in move wheel his government as well as guard stability , peace order people as well as obliged realize every hopes and opinions people . According to Samuel Edward Finer (in Hadinata , 2020) explained that government must own ongoing activities continuously carried out in his country by officials government so

that everything matter about governance aspects can filled with Good .

Good governance is functioning government , well functioning in a way executive , legislative or judiciary . 3 things the is foundations that have long been in effect in the system the Indonesian government which adheres to system government presidential during for years . Function executive namely live and practice the contents contained in the The Constitution of the Republic of Indonesia , whereas legislative function is supervise executive in operate wheel government as well as represent interest people in take policy . Meanwhile judiciary as institution enforcer law highest in Indonesia on duty For uphold law and justice in Indonesia (Fitriani , 2023).

Function government that is directing and fostering public For independent in various thing , start from economic , social , health and welfare society to create prosperity in the region those goals the No fully charged to society . The role of government According to Ryaas Rashid in Muhammad Labolo (2010:26), is as following :

a. Government as Dynamist

The role of government village cape rock small as dynamicator one of them is For involving participation public in maintain , care for and manage PLTS assets in general

periodically so that the generating assets electricity the can enjoyed benefits to the community village in term long time and can optimize management and use asset grant help from the country.

b. Government as a Regulator

Government as a regulator of its meaning is government village as maker rules and policies about management of PLTS which is asset state aid granted to village . Rules made by the government village Then made into as reference basic nature tie For arrange how to manage this PLTS walk with good and right use in accordance with regulations that have been set .

c. Government as Facilitator

Government as facilitator is government role as driver potential public with method involving participation public in every determination policy about management of PLTS in order to create atmosphere management of PLTS in the village Cape Small Stone which is conducive and safe so that it can You're welcome realize objective goals that have been set specifically objective about availability sustainable electricity .

RESULTS AND DISCUSSION

Solar Power Plant in Village Cape Small Stone is one of the form innovation energy renewable energy implemented into the A integrated system with depend on

source energy renewable that is hot the sun then converted become power the next electricity streamed to houses public For utilized in life everyday . In the beginning Village Cape Small Stone is one of the village of a total of 42 villages in the Regency Karimun which has not been own electrification The same once , for carry out activity everyday , the majority society Village Cape Little Stone relies on generator engine for get electricity .

Utilization energy renewable through Solar Power Plants (PLTS) have very important role important in matter availability electricity in the village Cape Small and easy stone public in carry out activity daily without worry with limitations electricity Village . Solar Power Plant (PLTS) in the Village Cape Small Stone is assistance that comes from from The Central Government through the Ministry of Energy and Mineral Resources (ESDM) as stated in Minutes of Handover Accept State-Owned Assets Unit Work Directorate General Energy New , Renewable and Conservation Energy to District Government Karimun 2017 .

Assets transferred in the form of Centralized /Off Grid Solar Power Plant (PLTS) with a capacity of 30 kWp located in 3 hamlets, namely Hamlet I Tanjung Batu Kecil, Hamlet II Pelakar and Hamlet III Kampung Baru . Asset This Of course own very

valuable value fantastic , thing This be one of lack from Off Grid PLTS, namely cost beginning installation is quite expensive. Therefore that , role government very required in matter management Solar Power Plant (PLTS) in the Village Cape Small Stone so that the assets received can used with appropriate use based on interest together .

Submission management of PLTS in general symbolic stated in document minutes of handover accept goods state- owned in the form of Village Solar Power Plant (PLTS) Cape Small Stone which then handed over to government village through government area in matter This Regency ESDM Service Karimun . After it was done handover , PLTS is functioning since 2017 and managed directly by the Government villages that play a role set a number of rules that are tie for public PLTS users . However, in 2020 there was surge protest public village to management of PLTS by the Government Villages assessed No competent in manage budget PLTS and Head contributions Village Cape Little Stone handed over management of PLTS to hamlet each through head hamlet and known by the community .

In the research this , researcher focus on problems found in the field into the a number of indicators that can analyze and explain How role Government Village Cape Small

Stone in management of PLTS in the village Cape Small Stone . Then from That For deepen discussion more carry on researchers use theory Ryaas Rashid that there are 3 things that must be done attention to the role something institution government specifically Government Village Cape Rock Small can walk with good and achieve the purpose , namely :

1. Role of Government As Dynamist

In run duties and functions of the Government Village own role as dynamist or driving force for society and strive create good condition in implementation management Solar Power Plant (PLTS) for ensure sustainability availability electricity in the village Cape Small Stone . PLTS is needed become attention special for Government Village Because This is help from government center in form state assets handed over its management For need electricity public village everyday . As driving force , government village play a role full in management of PLTS which has begun from socialization , management , supervision and maintenance

A. Socialization and Management

Government Village has carry out his role as dynamist in management of PLTS, before PLTS assistance is implemented in the

village , head village appeal to public village For do liberation land For used as location special operation of the PLTS. This welcomed well-received by the community Village Cape Little Rock , they Then together carry out mutual cooperation for liberation land in 3 hamlets, namely Hamlet I Tanjung Batu Kecil, Hamlet II Pelakar and Hamlet III Kampung Baru .

Installation Solar Power Plant (PLTS) which is carried out government center in the village Cape Small Stone is efforts made For realize electrification in rural , remote , border and small areas populated and installed asset the is A wind fresh for public Village Cape Small Stones due to they feel matter This is form change significant good from problem availability sustainable electricity . Therefore that , enthusiasm public Village increase in line with productivity public the village is growing increase impact from availability electricity through PLTS.

Based on the results of interviews with the researchers and the residents of Tanjung Batu Kecil Village, the community felt helped at

the beginning of the PLTS operation, in addition to land acquisition, the Village Government as a dynamic then took regulatory steps by appointing a number of residents as structural administrators of the PLTS management whose role was to assist the village government in managing and supervising the PLTS management mechanism. During the course of the PLTS management carried out by the Village Government, the community was happy at first because they could experience electricity 24 hours a day.

After all the deliberation processes were carried out and the land had been obtained, the Central Government began building a Solar Power Plant assisted by the local community, so in 2017 the Solar Power Plant (PLTS) in Tanjung Batu Kecil Village began operating and could be used by the village community for a full day. To maximize the management of the PLTS, the Village Government sent several people from each hamlet as many as 2 people to attend the PLTS operation training held by the Central Government. This was done to increase the capacity and new knowledge for the community

appointed as operators and to assist the Village Government in operating the Solar Power Plant (PLTS) in the field.

The community members sent by the Village Government to undergo technical training on solar power plant management demonstrates the government's role as a dynamic force and the central government's efforts to decentralize government affairs by providing comprehensive knowledge on solar power plant management techniques to the people of Tanjung Batu Kecil Village. The training was well-received by the villagers as a positive contribution to both themselves and the village community at large.

b. Maintenance and Supervision

After operating for quite some time, the Power Plants in the three hamlets experienced a number of damages, a common form of damage and one of the weaknesses of the Centralized Solar Power Plant is the limited power storage battery due to uncontrolled use by the community, making it difficult for operators to manage the Solar Power Plant's electrical load. The village government, acting as a dynamic force, has stepped in to oversee the management of solar power plants (PLTS). This phenomenon has become a significant

source of concern for the village community, prompting them to demand a shift in the management of solar power plants, initially managed by the village, to the transfer of management to their respective hamlets. This is in line with the worsening damage to solar power plant assets that have not been repaired and used properly. At the community's insistence, the village government's role as a dynamic force in solar power plant management has been transferred to the heads of each hamlet. Following the transition, a village-level solar power plant management structure was established. The mechanism for the handover of solar power plant management from village to hamlet was determined through a village meeting in 2020. This handover of solar power plant management represents a form of decentralization of government affairs from village to hamlet, driven by unresolved technical issues and declining public trust in the village government in terms of effective solar power plant management.

2. The Role of Government as a Regulator

The government's role as regulator is to create a number of binding rules or policies for the community with the aim of creating order and a conducive atmosphere in

managing solar power plants. These policies are also used as a reference for the community and village government in supervising the management and utilization of solar power plants. The form of regulation created by the village head is the determination of the amount of electricity and monthly fees that serve as operational funds for the solar power plant.

The regulations, established by the Village Head through a village deliberation forum, then became guidelines for the community in utilizing the electricity facilities in their respective hamlets. After being established and implemented, significant obstacles arose, including the inability of village officials to manage the monthly fees paid by the community. Consequently, the village government held another village deliberation with the entire village community and established a policy to hand over overall management of the solar power plants to each hamlet.

The Village Consultative Body as a partner of the village head assesses that the regulations implemented by the village government are ineffective, the handover of PLTS operations to the respective hamlet heads causes problems in its application which is considered practical and efficient but turns out to have weaknesses, namely the hamlet head does not take firm action against

people who are not orderly in using PLTS and PLTS operators in hamlet I Tanjung Batu Kecil and Hamlet II Pelakar who do not work optimally in operating, supervising and maintaining PLTS.

In terms of PLTS operations, there are still some residents who are in arrears in paying their monthly PLTS fees and also using electricity beyond the capacity agreed upon at the beginning of the regulation's enactment. In the preparation of the regulation, there is also no official written document made by the village apparatus which creates gaps in the implementation of the regulation itself.

In 2024, the enforcement of regulations regarding irregular monthly fee payments by hamlet communities led to the emergence of new regulations aimed at accelerating the financing of solar power plant maintenance facilities, this then became a serious polemic because the new regulations were felt to be burdensome for some hamlet communities. As a result, community participation in maintenance decreased, this phenomenon was supported by the occurrence of damage to the inverter used to channel electricity generated by solar panels to be stored in batteries 2 months after maintenance was carried out by the PLTS operator in Hamlet I Tanjung Batu Kecil and Hamlet II Pelakar.

In terms of supervision, the village government through the hamlet head has

carried out supervision efforts through direct reviews of the PLTS location and coordination with the PLTS administrators at the hamlet level, supervision is carried out periodically in each hamlet aimed at creating a conducive atmosphere in the use of PLTS by the village community. The supervision carried out by the hamlet head which was massive yielded results when it was found that community members were using electricity not according to the specified capacity and a number of people were in arrears with monthly fees, based on this phenomenon the hamlet government in collaboration with the village government summoned the community who violated the above regulations to follow up on the problem.

The follow-up mechanism for the above problem was explained by Mr. Andi as the hamlet head that every community member who has arrears in PLTS contributions of more than 3 (three) months will be summoned by the hamlet head to confirm the cause of the arrears. If the reason for the arrears is understandable due to a condition such as experiencing a disaster or a sick family member, the arrears will be tolerated and given leniency in paying them off. However, if the cause of the arrears is an intentional element, the electricity supply to the house concerned will be cut off until the person concerned pays the arrears in full.

Meanwhile, for those who use PLTS electricity exceeding the capacity determined by the Village Government, the person concerned will be summoned by the Village Head for questioning and required to pay a fee for the amount of electricity used beyond the capacity determined by the Village Government and required to make a stamped statement signed by the village head and the community concerned. This is done as an effort by the village and hamlet governments to carry out their role as regulators and assist them in carrying out supervision to create a conducive atmosphere in the management of PLTS.

A number of regulations implemented have raised public awareness to be orderly in the use of PLTS, instead of the community being orderly, this is not followed by PLTS managers. Operators on duty in Hamlet I Tanjung Batu Kecil and Hamlet II Pelakar are not orderly in carrying out daily electrical load controls, resulting in overcapacity in a number of electricity storage batteries. This was revealed by Mr. Jais as a PLTS operator, stating that the reason the operators in the three hamlets, especially hamlets I and II, are reluctant to carry out routine PLTS load controls is a declining work ethic due to monthly incentives that are considered inadequate.

The operators feel that managing their own businesses or gardens yields far better results than managing solar power plants, compounded by the frequent breakdowns and high maintenance costs. This phenomenon, which has not yet found an effective solution, has led solar power plant operators in Hamlet I Tanjung Batu Kecil and Hamlet II Pelakar to resign from their duties. These resignations have left the solar power plants in both hamlets neglected and unmanaged. The village government, acting as regulator, has not yet been able to create regulations or rules to address this issue.

3. The Role of Government as a Facilitator

A government program or assistance program that has utility for the community in their daily lives requires the government to act as a facilitator to ensure orderly management and act as a liaison between the community and solar power plant managers. Once managed by each hamlet, oversight of solar power plant management by the hamlet head is ineffective.

The village government, through the hamlets, has been ineffective in supervising and facilitating the creation of a conducive environment, as some residents are still irregular in their monthly solar power plant (PLTS) payments. In 2024, the PLTS in

Hamlets I and II were abandoned due to significant damage, and repairs and maintenance were not carried out due to the operator's resignation and a limited budget. Damage to solar power plant facilities accompanied by long maintenance periods has limited community activities, especially housework for women, such as cooking, processing spices and communicating via telephone due to unstable signals during the day.

This phenomenon indicates the lack of electricity due to the damaged solar power plant in Hamlet I, Tanjung Batu Kecil, limiting the daily activities of the residents. This has reduced productivity, resulting in normal activities only being possible at night.

Furthermore, the damage directly impacted limited government activities. The village office in Hamlet I, Tanjung Batu Kecil, was directly affected by the damage to the solar power plant. Interviews with the author revealed that the damage to the solar power plant in several hamlets in Tanjung Batu Kecil Village significantly impacted the operation of the village office in Hamlet I, Tanjung Batu Kecil. The village government, through the village head, subsequently implemented a policy of operating a generator to support office activities in Tanjung Batu Kecil Village.

The use of generators as a power source is considered ineffective, resulting in significant impacts. Public services such as mail, which typically consume significant amounts of electricity, are not supported by adequate electricity availability due to the damage to the solar power plant facilities. This has naturally led to public dissatisfaction with the performance of the village government, which is considered slow in carrying out its duties as a facilitator by creating a conducive environment for solar power plant use .

CONCLUSION

In conclusion that role Government Village in Management Solar Power Plant (PLTS) in the Village Cape Batu Kecil Regency Karimun which is implemented by the Government Village Cape Small Stone by the hamlet each start 2020 to 2024 in implementation from aspect use , care , maintenance and supervision Not yet succeed with maximum . Because it is still the discovery of an abandoned PLTS in Dusun I Tanjung Batu Kecil and Dusun II Pelakar and lack thereof participation public in manage and maintain PLTS as asset technology appropriate use for interest together . For more to be clear can seen in a way details as following :

a. Role of Government as Dynamist

Can seen from participation public Village Cape Small Stone in very efficient

management of PLTS not enough since its management handed over to hamlet each until 2024 , no like beginning operation of PLTS which causes enthusiasm community and sufficient participation high . The Role of Government Village as driving force public in management supervision and maintenance Not yet maximum matter This caused by socialization utilization Solar Power Plant (PLTS) as source electricity from energy renewable No done in a way periodically by the Government Village and only

done once at the start of the PLTS operation in 2017. So that in participation public various aspect management of PLTS is very minimal so that build PLTS in a number of hamlet No well maintained .

b. Role of Government as a Regulator

Government village as a regulator creates a number of rule among them set dues monthly PLTS of IDR 40,000 for cost PLTS maintenance and determination amount magnitude electricity per house that is 300 watts which becomes reference together public village , government as well as PLTS managers in use asset said . However role the No maximum due to No There is regulations related budget incentive for PLTS operators so that make ethos Work they become reduce in operate PLTS and carry out

maintenance . Therefore That Several PLTS operators, especially in Hamlets I and II, have withdrawn self from task management so that the PLTS in Dusun I Tanjung Batu Kecil and Hamlet II Pelakar become abandoned . Not in 2024 either There is regulations new created by the head village in management of PLTS and No There is document or written files related management of PLTS by hamlets and regulations PLTS management .

c. Role of Government as Facilitator

Role of Government as Facilitator in do maintenance PLTS facilities are still not enough proven with many damaged PLTS facilities such as solar panels and batteries battery storage electricity that has been No Can used No done care and maintenance consequence limited budget . That's it makes PLTS operators experience enough obstacles Serious in do action carry on serve complaint public related to PLTS and running his role do maintenance PLTS assets , things This building a PLTS in Hamlets I and II is not functioning Because totally damaged . In matter awareness the environment is also lacking due to a number of PLTS substation that has been bushes and not There is initiative from government village and head hamlet For facilitate public

doing mutual cooperation to clean up
environment around the PLTS.

REFERENCE

- Nugroho, S. (2021). *Village Community Empowerment Based on Appropriate Technology in the Regions* . Guepedia.
- Priyanto, Y., Winarni, Sholikah, U., & Dewanto, R. (2024). Implementation of Solar Power Plant Water Pump Technology on Agricultural Land in the Sungai Wain Production Forest Area. *PIKAT: Journal of Community Service* , Vol.5 No.2 .
- Raharjo, M. (2021). *Village Governance* . Bumi Aksara.
- Ramli, H. (2024). *The Role of Village Government in Empowering Farmer Groups in Tawakua Village, Angkona District, East Luwu Regency* . Muhammadiyah University of Makassar.
- Rauf, R. (2018). *Principles of Regional Government Administration: Deconcentration, Decentralization, and Their Supporting Duties* . Nusamedia.
- Sagala, E. (2024). *The Role of Village Government in the Construction of Stone Stairs in Tanjung Medan District, Rokan Hilir Regency* . Sultan Syarif Kasim Islamic University, Riau.
- Sulistiyani, R., Afrizal, & Sophia, U. (2024). Development of the Mitra Karya Sejahtera Village-Owned Enterprise (BUMDes) in South Toapaya Village, Bintan Regency. *Consensus: Journal of Defense, Law, and Communication Sciences* , Vol. 1 No. 4 .