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## Article

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## Energy Equality in Indonesia Villages: A Discourse Analysis

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### ABSTRACT

This study aims to uncover the program of energy independence in Indonesia villages by the government for several decades. As a development program phenomenon of energy use and the development of its sources in the developing villages in Indonesia. The areas selected for observation are four rural areas outside Java, namely the state of Central Sulawesi, West Kalimantan, Halmahera, and East Nusa Tenggara. Interview results show that not all villagers understand energy term and there are still rural areas that do not have access to energy sources. Using discourse analysis as a qualitative method and Amartya Sen's theory of development as a freedom, this study shows that energy development still unequal in Indonesia Villages. Development as an extension of human freedom requires a more comprehensive goal. This study recommends that development plans must focus on the main rights of citizens to survive and have reason to live. Villagers have the right to obtain facilities and resources equal to those of urban residents, especially in energy access equity, and to live in prosperity.

**Keywords:** Energy, Village Development, Energy Access, Energy Equality

**JEL Classifications:** O13, P25, P28, Q42

### 1. INTRODUCTION

The disparity of energy has become one of the biggest problems in various developing countries. Energy in the form of electricity, gas, the internet, and so on is essential for sustaining people's lives. The gap in access-to-energy, especially in rural areas outside Java, has led to uneven development outcomes. The data on national electrification show this problem.

Supply of electricity is the top priority in the government's development agenda to reduce the energy gap. In the 2015-2019 RPJMN and the 2015-2019 Ministry of Energy and Mineral Resources (ESDM) Strategic Plan, the electrification rate for the end of 2019 was targeted to be at 97%. At the end of 2017, the national electrification ratio had reached 95.35% with only two provinces remaining with electrification ratio below 70%, namely

East Nusa Tenggara (NTT) and Papua, and some provinces with rates below 90% (Dikjen EBTKE, 2020; IESR, 2019). There are 22 State Electricity Company (PLN) electricity systems spread from Aceh to Papua. The new interconnection system connects the islands of Bali-Java-Sumatra. Approximately 85% of the existing electricity supply is concentrated in the afore mentioned three islands. Meanwhile, the red and yellow colours for the large PLN system are still dominated by the eastern part of Indonesia, namely the islands of Sulawesi, Maluku and Papua (Ketenagalistrikan, 2019).

The problem of energy access and equity has not only been faced by Indonesia but also other countries in Asia such as Malaysia. A comprehensive and inclusive bioenergy policy towards a sustainable future of renewable energy development also need in Malaysia (Salleh et al., 2020). Another study in South-East

Asia shown that providing power from residual biomass in small agricultural communities would reduce environmental impacts significantly while improving waste management practices. This best practice should be disseminated to other farmers (Aberilla et al., 2019). A study in Slovenia found that each village has its own characteristic and because of rural areas are not uniform a smart rural development has to be applied in combination with place-based approach which is called Fab Village concept (Zavratnik et al., 2018) or future smart rural network electrification (Daneshvar et al., 2018). Another study suggests a fairer energy systems using ICT mobilization to enhance energy transition (Summeren et al., 2021). A broader study by Smart Village Initiative also suggests an integrated approach to rural development and creating supportive, coherent, and flexible policy framework at national level to achieve universal energy access SDGs in 2030 (van Gevelt et al., 2018) (Asian Development Bank, 2016).

Unlike many previous studies on energy in rural areas, this research will focus on the aspects of justice and alleviating the energy gap which leads to the quality of life and welfare of the villagers. Also, to confirm the results of several previous studies, and some observation of several aspects of energy development in rural areas that show the energy development has been more fairly distributed among people in rural areas of Indonesia over the past decade.

## 2. LITERATURE REVIEW

Global climate change, environmental pollution, and the degradation of the world's ecosystems had a detrimental impact on the world. People who live below the poverty line with limited access to clean water, sanitation, health care, education and security has been deprived of their basic human rights. The Sustainable Development Goals (SDGs) were first announced on September 25, 2015 as a part of the new sustainable development agenda. However, there are also some criticisms and concerns about the implementation of SDGs and the actual commitments of companies. As SDGs are a global agenda with global scale goals, some consideration is needed to redefine strategies and reporting at the national level and collaboration among countries for better world (Kim, 2018; GEEF, 2018).

The United Nations General Assembly declared 2014 as the beginning of the 'Decade of Sustainable Energy for All', symbolizing momentum and calling for a coherent and integrated approach to energy issues and synergy of the global energy agenda. This global target –including Indonesia's target to achieve 98.7% people have access to energy and electricity (Energy, 2019)-- will not be easy to achieve (International Energy Agency, 2012). The International Energy Agency (IEA) noted that although the proportion of people without access to electricity has dropped by 20%, by 2030 there will still be close to one billion people without access to the grid. In reality, the universal energy access that was expected to improve development in many rural areas are still too slow to meet the Sustainable Development Goals.

Renewable energy becomes an important issue that must be seriously considered as a policy in order to achieve sustainable and clean energy on a global scale, especially in all developing

countries (Wang et al., 2020). In the seventh goal of the Sustainable Development Goals agenda, efforts should be increased to provide environmentally friendly energy and renewable-based rural development in order to achieve a more balanced regional development (Benedek et al., 2018). This is important because electrification in remote rural areas can indirectly support opportunities for social and economic development, thereby accelerating poverty alleviation (Amir et al., 2008). Community-based renewable power projects and public participation are increasingly seen as a promising means to alleviate rural energy poverty by ensuring fair and inclusive results (Nurlaila et al., 2015). Renewable energy policies play a role in improving energy security, protecting the climate and promoting economic development (ESCAP, 2019). As an archipelago country, Indonesia has abundant renewable energy resources with high potential to be developed in the context of implementing environmental development policies (Bappenas, 2019; Blum et al., 2013).

Most Southeast Asian countries have set an annual universal electrification ratio annually from 2020 to 2030 based on the predictions that some rural populations still cannot obtain electricity due to various technical and financial challenges at that time (PwC and APLSI, 2018) (Naimoly and Nakano, 2018). The relatively high number of people without electricity in Southeast Asia is millions. In Indonesia, Laos, the Philippines, and Vietnam, 1.5%, 6%, 4.7%, and 1% of the population have 3.9 million, 1 million, 5 million, and 2 million, respectively, without access to electricity (Energy, 2019). Countries such as Cambodia and Myanmar are particularly affected because only 60% and 40% of the population in these countries have electricity (Pandyaswargo et al., 2020). In addition, the electrification rate has nothing to do with the reliability or stability of the electricity supply, especially in rural areas. Indeed, there is evidence that communities in Southeast Asian countries still frequently experience power outages (Falentina and Resosudarmo, 2019).

The Indonesian government (2014-2019) has pledged to provide an additional 35,000 MW of electricity to meet Indonesia's electricity demand. The plan is due to energy supply gaps and increased demand for economical development in settlements, trade, and industry. A study conducted in Selo district to examine the ability to become an energy resilient village. From surveys in two villages that introduced biogas technology for household energy supply, the adoption is still slow and limited but still there is a promising results of biogas adoption (Sagala et al., 2015). In early 2020, Indonesian President Joko Widodo specifically encouraged the Ministry of Energy and Mineral Resources (ESDM) to identify villages that are not yet connected to electricity to improve economic productivity and the quality of education (Ministry of Energy and Mineral Resources, 2020). Energy development has become one of the central government's priorities, as demonstrated in RPJMN 2015-2019 (SMERU Research Institute, 2017). In addition, the 2017 electrification quota report also showed that relatively low quota levels were only found in some areas such as Papua and East Nusa Tenggara (Ketenagalistrikan, 2019).

Several studies on energy development in rural areas of Indonesia have been carried out in the past. *Dusun Ngentak, Desa Poncosari,*

*Kecamatan Srandakan, Kabupaten Bantul, Daerah Istimewa Yogyakarta* are among the rural areas (among many other villages in Indonesia) that do not receive electricity from the State Electricity Company (PLN). A Hybrid Power Plant (PLTH) that combines wind and solar power was eventually built to supply electricity in the area (Anggraeni et al., 2018). Apart from *Dusun Ngentak*, villages in Selo sub-district in Boyolali, Wonolelo villages in Bantul sub-district, Yogyakarta (Sagala et al., 2015), Rawasari village in Jambi (Wardhana and Ma'rifatullah, 2019), and Haurnombong village in Sumedang have succeeded in using biogas from cow manure as the source of energy for daily activities and for improving local economy in the communities (Aisah and Herdiansyah, 2020); This was also found in other villages in Sigi District Central Sulawesi Province (Kali, 2012), Lembu Village in Semarang (Ardi and Simanjuntak, 2017) and Kebumen and Pekalongan District in Central Java (Sofianto, 2017), and also Southern Lampung in Sumatera island (Sugiyono, 2015) whose economy has increased since electricity from renewable energy becomes accessible in the village. Other research result shown that Village Funds significantly impact to strengthen the system of rural development, and optimize the role of Village-Owned Enterprises/BUMDES (Tarlani and Sirajuddin, 2020).

However, not all development of renewable energy sources succeeded. Among the unsuccessful energy development programs are The *Jatropha Plant Project* in Grobogan Village (Fatimah, 2015) and other villages in Indonesia, Biofuel (BBN) processing in rural Garut (Munawar, 2012), as well as the Biofuel-based Energy Independent Village project in other villages in Indonesia (Al Qadi et al., 2018). Many researches on renewable energy have been carried out for rural communities in Indonesia as well as outside. Some studies focus on improving the welfare of its citizens from the economic aspect, others focus on the technology and methods used, calculating the financing and effectiveness of village funds (Ilman et al., 2020), empowering the community, and a few others discuss the point of view of justice and equality in electricity accessibility (Pandyaswargo et al., 2020; Pratomo, 2016)

Community-based renewable energy projects are increasingly seen as a promising means of alleviating rural energy poverty by ensuring fair and inclusive outcomes. Based on two case studies from Sumba Island in Eastern Indonesia, the micropolitical process of planning and implementing community-based renewable energy projects was examined to understand the impact of energy equity on the local region. The analysis on the matter shows that the socio-historical dimension has shaped contemporary energy inequality in the post-colonial setting of Sumba Island (Fathoni et al., 2021).

Earlier documentation on energy, environment and equity was more limited in their scope, taking the human-centred perspective to examine the dynamics of energy systems. Traditionally, technological, and economic factors have been the dominant forces in energy decisions (Jenkins, 2018). This issue has often caused the degradation of social justice concerns by making economic efficiency and technological innovation as key indicators of the energy transition. The global discourse about access to clean and renewable energy through the Sustainable Development Goal (SDG) 7 encounters similar problems as evidenced in

the dominance of technology management regulations in policy formulations (United Nations DPI, 2016).

As a result, many short energy access interventions may fail in the political economic processes that often plays a hand in (re) producing of energy marginalities. To this end, energy equity is a useful concept for investigating energy access interventions beyond just a matter of resource distribution, but also for critically questioning whose voice matters and whether fair decision-making has been enforced across different groups of people (Munro et al., 2017).

### 3. METHODOLOGY

Discourse analysis using interviews is used as a research method. In short, discourse analysis aims to explore certain discourses in order to uncover the true reality of a phenomenon (Dhona, 2020). According to Jørgensen and Philip: “discourse is a particular way of talking about and understanding the world. Discourse is a form of social action that plays a part in producing the social world—including knowledge, identities, and social relation—and thereby maintaining specific social patterns” (Jørgensen and Phillips, 2012, pp. 1-240).

There are three approaches used in discourse analysis as shown on Table 1.

This research is consistent with the second method, which focuses on empirical discourse analysis. Based on the results of interviews conducted virtually in two locations (Bandung City and several rural areas outside Java, Indonesia) between September 2020 and July 2021. The results of the interview transcripts were then processed, coded and produced. The result of the classification is based on the theoretical concept proposed by Amartya Sen, “development as freedom,” which is used to analyze the micro and macro aspects of at the local scale as village/district/regency and at the national scale.

The stages of research are carried out as follows: Submit the questionnaire, and the respondents are from: (i) villagers, (ii) representatives of village apparatus, and (iii) village officials from the Ministry of Village or Non-Governmental Organizations for verification. Next, the interview results are coded to find “keywords” in order to put them in the same category. The next step is examining the relationship between the concepts category discovered using Amartya Sen’s concept and theory of development equality. Theoretical findings are then developed, synthesized to enrich the concept or theory. In summary, four stages of the research are shown in Figure 1.

### 4. RESULTS AND INTERPRETATION

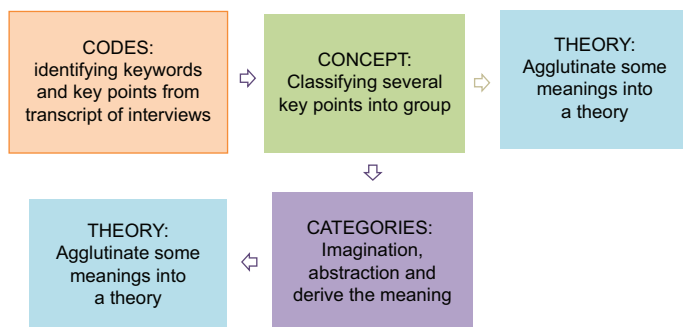
Seven questions have been compiled to obtain information on energy and the use of village funds in rural Indonesia. The questions are as follows:

1. Do you understand the term “energy” and its role in daily activities/work?

**Table 1: Three approaches to discourse analysis**

Orientation to discourse	Sources of data	Analysis
Formal linguistic analysis (such as sociolinguistic)	Samples of written or oral language and text	Microanalysis of linguistic, grammatical, and semantic
Empirical discourse analysis (such as conversation analysis)	Samples of written or oral language and texts; and of the text in social settings	Microanalysis and macro analysis of the situation analysis, data on the “uses” way in which language or text construct social practices
Critical discourse analysis (such as Foucauldian)	Samples of written oral language/texts and data on the in social settings the institutions and individuals who produce and are produced by the language texts	Macroanalysis of how discourses (in analysis “uses” of the text many forms construct what is possible for individuals and institutions to think and to say

Source: Hodges et al., 2008, pp. 570-572

**Figure 1: Research Stages**

Source: Manurung and Kameo, 2021

2. What do you understand about “renewable energy”?
3. Does the village where you live have a source of energy? How did the energy source appear/created?
4. Is there a role and government assistance channelled through village funds, to build and maintain energy sources in the village?
5. Is there a role for local residents in building and maintaining energy sources?
6. What is the impact of developing these energy sources on people’s lives – socially, economically?
7. What are people’s hopes for the future improvement of economic welfare?

Four rural areas have been purposively selected to be interviewed based on the results of previous studies that show disparities in access to energy in rural areas outside Java. The selected rural area is also based on a network of friends of facilitators/coordinators in rural areas who can be contacted and are willing to be interviewed. These four rural areas are:

- a. Pelempea Village and Banasu Village in Tikoro District, Province, Central Sulawesi
- b. Debululik and Fatuberal Villages in South Lamaknen District, Belu Regency, East Nusa Tenggara
- c. Sumber Agung village, Teluk Mastura village and Teluk Nibung village in Batu Ampar District, Kubu Raya Regency, West Kalimantan
- d. Galala Village, North Oba District, Tidore, Halmahera.

Some excerpts from the interviews with villagers, village officials, and assistants during conversations with the research team about energy use in the village are described according to the coding results as follows:

- a. Energy as power, power, to do daily work  
*“In my opinion, energy is a force or power that can generate*

*energy. I think energy is very essential for daily lives.”* (PY, resident of Banasu Village, Central Sulawesi)

*“In my opinion, energy is power. one of its function is for activities in the evening. If I don’t have energy or power, how is it possible for me to work? Whether gardening activities in the afternoon gardening, energy are required everywhere. I think that’s all I can understand about energy”* (PB, resident of Pelempea Village, Central Sulawesi)

- b. Energy as lighting  
*“Energy is something that is really needed, especially for lighting at night.”* (HR, resident of Batu Ampar Village, West Kalimantan)  
*“In particular at Teluk Nibung, Batu Ampar village, lighting is still limited, it is very dark at night, while activities in the morning and afternoon are still very dependent on lighting from the sun”* (confirmation to AB, Head of Dusun Batu Ampar)
- c. Didn’t have any understanding on energy  
*“We, the villagers do not understand about energy. Our village is dark, with no electricity. Rarely take a shower, don’t wear slippers. If you are sick you can’t go to the local clinic, due to it’s long distance, a day’s journey. The average education level is elementary school.”* (BN, resident of D&F Village, Belu Regency, NTT)  
*“Electricity has not yet entered the village in Belu Regency...”* (co-facilitator in Belu Regency)
- d. Citizen participation in building energy sources  
*“Before the Village Fund, citizens had built a windmill, by way of community contributions (self-help). Before there was a mill, we used Petromax with a generator. Now there are 14 mills. Sanitation is now better, there is drainage, and a source of clean water (from the “pansimas” fund). There is already health services at the Puskesmas – which manages 7 villages. Next year a hospital will be built.”* (PYS, resident of Banasu Village, Central Sulawesi)  
*“Our village has had electricity from PLN since 2015... we don’t need additional energy sources.”* (BD, resident of Galala Village, North Oba, Tidore)  
*“In 2015, the community collected materials such as stones and sand. Transportation were funded by the government, as well as the dynamos and pipes. If a person asks for help from a certain group for electricity, the payment can be arranged. Each neighbourhood is free to use lighting, watch TV for unlimited hours, all free to use at any time. If the windmill is damaged, it is the duty of each neighbourhood to repair it.”* (PB, resident of Pelempea Village, Central Sulawesi)

“Residents donate in the form of energy, time or money during the initial construction of Communal Solar Power Plant. From preparing the site, laying network poles, cutting trees and so on. There is also the Jaya Makmur Bumdes business unit with one unit head, two technicians and twelve families as community dues collector. According to the village rules of the PV mini-grid management, so residents are not inconvenienced.” (PA, Head of Kubu Raya Village, West Kalimantan)

e. Benefits of village funds in energy development

“In addition to energy sources, our village also receive the Village Funds for village ring roads, facilities such as Village Health Posts/PosKesDes (available albeit limited), kindergarten (PAUD). In the past, you had to carry produces on your shoulders while walking, now you can take it on a motorbike. But the roads inside the village are better than those outside the village. Drainage is also available now as well as a water source. The benefits of the village fund are truly felt. People used to be lazy, but now they could work harder.” (PY, resident of Banasu Village, Central Sulawesi)

“Cabang Ruam Village and Teluk Air Village is located in another island, you have to take a speedboat to get there... a maximum of 45 minutes journey. Our situation is very sadding, unlike other villages, our energy comes solely from solar power that only last about 6 hours a day... lighting needed for children to study still rely on kerosene lamps... please take notice of the condition of remote villages like ours which is located almost at the tip of West Kalimantan” (PHP, Head of Dusun in Batu Ampar, West Kalimantan)

“Since 2016, there was village funds from the government that are used to buy and raise (breed) cattle. Then there are also funds for farming roads and livable houses. However, there are still no funds available to build energy sources. Electricity and water are the biggest problems in Belu Village” (confirmed to PC assistant staff, Village in Belu Regency, NTT)

f. Problems in village development

“Currently, 6 villages have access to electricity, while 2 others have not. Before there was any village funds or solar-cell energy system, we used generator that was turned on from 6 pm to 10 pm. Since the village funds budget of 2019-2020, we barely receive anything. There are still 2 villages (out of 8) with no electricity. Procurement of solar cells with a capacity of 4 lamps. One house gets only 1 package of solar cells. That is only for the 4 neighbourhoods within the scope of Teluk Air hamlet.” (PHR, resident of Batu Ampar Village, West Kalimantan)

“Thank God, the village funds are truly useful for our village. However, the amount is still not enough considering the number of necessities and the large area. A lot of infrastructures require building and renovations, such as roads-bridges-lighting... as well as for Health needs. Especially since this covid pandemic, it is very difficult to manage the village fund because it is completely absorbed to treat the ill.” (PBS, resident of Sumber Agung Village, West Kalimantan)

“Our village is quite isolated... if you want to sell your product, you must ride a motorbike for 34 km = 2.5 hours (if it went smoothly) but if there's a landslide, it could take up to 4 hours! If you walk, it would take more than a day's journey” (PC, D&F Village assistant in Belu Regency, NTT)

“The main problems are electricity and water. We submitted a complaint to the village head regarding electricity, but was not responded. After being discussed at the village level, called MusDes – village council, the aspirations (for better roads and electricity) are then brought to MusDes. But there was no response, perhaps due to a shortage of funds.” (BN, resident of D&F Village in Belu District, NTT)

After coded, then the transcript of interview is classified into several categorization as shown in Table 2.

Disparities in development, particularly in the access to energy, have led to poverty all over the world. This is a huge global issue with no found solution. In rural areas, energy is still narrowly interpreted as lighting or performing night activities. From 4 case studies in rural areas in Indonesia, the energy access gap still exists. The village electricity program which began in the New Order and continued with other programs such as the Energy-Independent Village and the Village Fund Program by President Jokowi over past decade (2014), still cannot solve the energy gap in rural Indonesia. The outermost villages in Indonesia have not been fully developed, such as Debululik and Fatuberal villages in Belu Regency, East Nusa Tenggara.

There are several rural areas in Indonesia, such as the village of Galala in Tidore Halmahera, which has received direct support from the central government to integrate the PLN network into the village. Several other villages, such as Banasu and Pelempea in Central Sulawesi and Sumber Agung and Teluk Nibung in West Kalimantan, allow villagers to participate in the energy development of their area based on the potential of their natural resources. The residents of this village are fortunate enough to receive attention in Indonesia's development. The Village Fund Program, which was initiated by President Jokowi's government since 2014, has proven to have contribution in alleviating the energy gap in these areas. However, the residents of rural areas in Central Sulawesi and West Kalimantan, still hopes for continued attention and assistance from the central government regarding the development of village infrastructure, including energy. The purpose is to allow commercial sales of agricultural products to enter a wider market (not limited to local villages), thereby opening up the possibility of a better economic life.

Other rural villages in the remote area of Indonesia, such as the village of Debululik as well as Fatuberal –that couldn't be contacted because the communication network is not capable – proves that there are still areas outside of Java in particular, that have not been reached by energy development. Villagers find it very difficult to carry out their daily activities, namely farming and raising livestock. They can only work when the sun is up and its light shines on the field and livestock. Then, they are forced to stay at home for the rest of day and cannot perform activities/work productively. In this condition, it is difficult for villagers to survive, resulting in a shorter life span of 40-50 years. Residents also considered the attitude of village leaders as not understanding nor capable to accommodate the aspirations of the residents regarding access to energy. Despite the several discussions held regarding the matter, the village leader seems to be silent and passive.

**Table 2: Categorization results**

No	Assessment aspect	Pipikoro District Villa- ges, Central Sula- wesi	Belu Villa-ges, EastNusaTenggara	Batu Ampar Villa-ges West Kali-mantan	Galala Villa-ges, Halmahera
1	Energy Sources	Hybrid Power Plant	None	Solar Power Plant	State Electricity Com-pany
2	Geography Potential	Water from two big river	Wind	Solar Thermal	None
3	Initiator	Villa-gers	None	Minis-try of ESDM (Ener-gy-Mi neral Resources	Central Government
4	Villagers Contribution	Man-power, money, equip-ment	None	Man-power, skills, money	None
5	Sustaina-bility	Survivemanagd by each house-hold	None	Limited elec-tric power managed by Village-Enterprise	Stable and conti-nue
6	Accessto the Market	Local	Local	Local	Local and inter-village
7	Govern-ment Support	Village fund	Villa-ge funds	Villa-ge fund	State electricity channel and also Village Funds
8	Primary Factor to Succeed	Social capital from village residents and Village Leader cooperation	None Village Leader is passive, does not listen to the residents aspira-tion	Villagers cooperation and active leader	Coopera-tion between central and local govern-ment. Village leader serve the residents

According to Amartya Sen, development is primarily for the people, so the people's free right to participate in the decision-making process should be administered. In Sen's view, a country that's unable to develop due to its unawareness of the will of the people is an authoritarian state. Development must be carried out by the people freely. In a broader perspective, Sen does not only emphasize development as limited to economic growth, but also as a creation of space of freedom (Syawaludin, 2015).

Through his writing entitled "Poverty and Famine: An Essay on Entitlement and Deprivation," claims that poverty and hunger are not only caused by natural disasters, but also by dictatorships in a country's political system. For Sen, development always relates to efforts in seeking the emergence of the building of real freedom and or a greater development that can be enjoyed by the people "development can be seen as a process of expanding the real freedoms that people enjoy." There can be no successful development if it relies on only a few people. No person or persons should be the target or instrument of development, because all levels of society are a subject of development who have freedom (Indro, 2013).

Development means freedom. In other words, freedom is the main goal of development, and the main means of development. Humans are an engine of change. Development is driven by democracy and must be an advocate for human rights. Protection of these rights will increase the possibility of an honest, clean and good government. Sen claims that "no famine in world history has ever occurred in (or if there is) a functioning democracy" (West, 2014).

## 5. CONCLUSION AND RECOMMENDATION

Decades have passed and so does government leadership changes since Indonesia's independence, however, development in rural areas of Indonesia, especially in terms of access to energy, still shows inequality and poverty. Rural development does not

mean making cities out of villages. Rather, development in rural areas should provide the same facilities as those in urban areas. Numerous programs have been initiated and carried out by the central government, but in reality not all regions have been able to coordinate well (between the regions and the centre, or between regional officials and village leaders and local residents), thus the goal of alleviating the energy gap to reduce poverty and improve people's economy has not yet been fully achieved. This also shows that democracy in rural development in Indonesia has not been realized yet.

Coordination between the central and local governments needs to be improved, and there must be supervision over the use of funds or spending in the regions. It is necessary to have regional leaders, especially in rural areas, who have the will and awareness to serve their citizens, prioritizing the interests of the citizens over the interests of themselves or the few groups that support them. The Village Fund program that was made by President Jokowi through Ministry of Finance since 2014, is starting to show good results. Rural areas outside Java, especially in Eastern Indonesia, have started to be included in the development program, albeit not massively. There are still quite a lot of rural areas on the outer islands (remote areas) that are marginalized and untouched by development. This is reflected in the citizens education, which is limited to only the basic level, and their average life span of only 40-50 years.

To realize the concept of development as an extension of human freedom, a more comprehensive development goal is required. The programs carried out by the government should not only focus on certain numbers or nominal amounts but rather, on the main rights of citizens to survive and have a reason to live. Development must begin to focus on eliminating the main source of inequality and poverty, which is injustice. There should be no higher privilege for the island of Java compared to islands outside Java, nor between villages and cities. This does not mean that villagers have to move to cities, or villages are forced to change to the same conditions

as the cities; it simply means that the villagers are entitled to the same facilities to achieve a comparable quality of life with those in the city. Villagers also need clean water and access to energy (not just lighting or electricity) as well as the means to communicate and understand information technology.

According to the validated and interpreted results of this research held in four rural areas in Indonesia, four important things would like to be recommend are as follows:

1. The village fund program that has been in place since 2014 needs to be continued and improved, not only in terms of amount/nominal, rather in other aspects that require development. Along with the infrastructures, villagers also need access to energy, education, and health facilities
2. Facilities and infrastructure in villages that have been focused on road and bridge construction should be extended to inter-village roads and bridges to the “world outside” the village; there are still residents who have difficulty selling agricultural products outside their area. Access to a wider market needs to be considered and executed in village development programs
3. The lack of success on access to energy in village development programs, indicates the lack of leadership from the village leaders. There has to be a transparent mechanism and freedom given to villagers in choosing a leader who is truly responsible and attentive to the aspirations of all citizens
4. Villages in unfavourable geographical conditions, like it or not, must be assisted 100% by the central and local governments. They do not have adequate resources and capabilities to build their own energy sources. There must be a help, the complete assistance of the central government, like PLN entering the area. Considering this reality, the term “energy independent village” becomes irrelevant jargon that cannot be fully actualized.

## 6. LIMITATION AND SUGGESTION

This research has several limitations, namely: the area of respondents being only in four rural areas in four islands outside Java, Indonesia; and the method used -exploratory research method- is somewhat loose. Notwithstanding the limitations, we believe that the issue of energy equity needs to be scrutinized from more specific perspectives like what we have done. To get better view on the issue, other research can continue with different area of participants (informants) and other research methods.

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