

Poverty Alleviation Under the Gana Resettlement and Integrated Development (GRID) Project

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Abstract

Community-based project in Lingkabau Forest Reserve (LFR), known as pioneer project: Gana Resettlement and Integrated Development (GRID) Project focuses on conservation and poverty alleviation through rural development. Sabah Forestry Department [SFD] provided various initiatives in alleviating poverty and improving the standards of living of the communities in Kg. Gana. The GRID Project is developed to improve the standard of living of households in Kg. Gana. Various programs had been introduced under GRID to alleviate poverty such as the agropolitan project and the Gana European Union-Reducing Emissions from Deforestation and Forest Degradation (EU-REDD++) project. The GRID Project consists of two phases: The first phase in 1998-2000 and the second phase in 2001-2010. The GRID Project sought to improve the living condition of households in Gana. This study examines the progress of the GRID Project in alleviating poverty in Gana. Primary data were based on observation done within the 10 areas or villages under the GRID Project and a total of 50 respondents were interviewed among the villagers in Kg. Gana. Secondary data were derived from reports: Newspaper and SFD. The GRID Project has improved the infrastructure, access to education, health services, job opportunity and services offered in Kg. Gana and has contributed to alleviating poverty in the area

Keywords: GRID; Poverty alleviation; Community-based project; Kg. Gana; Rural development; Sabah

INTRODUCTION

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Poverty becomes the main concern mainly in rural areas without proper infrastructure, amenities and facilities as well as basic needs. Rural development is one of the initiatives taken by the government to alleviate poverty among the communities. Gana Resettlement and Integrated Development (GRID) Project was known as a pioneer project on a community-based project located in Kota Marudu, Sabah. GRID had started in 1998 and has successfully reduced the difficulties faced by communities that lived around the forest reserve. Lingkabau Forest Reserve (LFR).

LITERATURE REVIEW

Poverty

Monetary Term

Poverty can be defined as not being able to receive enough resources in obtaining daily needs (Wolff, Lamb & Zur, 2015). Nair and Sagarin (2015) highlighted “human rights and basic needs of rural areas” through equal distribution of monetary terms. It could reduce the poverty rate and improve the standards of living among the communities. To successfully tackle poverty, the focus should be on basic needs with enough resources. The government needs to increase engagement with various parties and introduce initiatives for poverty alleviation.

The implementation of a new methodology to calculate the Poverty Line Income (PLI) resulted in a hike in the poverty rate. The change from 2005 to 2019 methodology increased the poverty rate to 7.6% (2016) and 5.6 % (2019) from 0.4% (2016) and 0.2% (2019) (Syed, 2020). The change of methodology aims at “food intake and quality non-food basic requirement”. The 2019 methodology resulted in higher hard-core poverty rate with 0.6 % (2016) and 0.4% (2019) from 0% (2016) and 0.02% (2019) under the 2005 methodology. It also marks RM 2 208 as a new level of PLI from RM 980 previously with the 2005 methodology. According to Heng (2020), collaboration has been made from “various stakeholders” such as the Ministry of Health which focus on “healthy eating and quality basic needs” (Lim, 2020). Sabah has high poverty before the methodology revision and an even higher poverty rate after the new PLI has been introduced using the 2019 methodology. Based on the data from DOSM (2019), several states had high poverty rate including “Sabah (19.5%), Kelantan (12.4%), Sarawak (9%), Kedah (8.8%), Perak (7.3%) and Terengganu (6.1%)”. Other states such as “Negeri Sembilan (5.6%), Pahang (4.3%), Melaka, Perlis and Johor (3.9%), Pulau Pining (1.9%) and Selangor (1.2%)” recorded lower in poverty rate (DOSM, 2019).

Table 1: *Malaysia's National Poverty Line Income in 2016, 2019 (New & Old Methodology)*

	2016 (2019 m.)	2019 (2019 m.)	2016 (2005 m.)	2019 (2005 m.)
National PLI (RM)	2 141	2 208	980	983
Absolute Poverty (%)	7.6	5.6	0.4	0.2
Number of Absolute Poor Households	52 743	405 441	24 673	16 653
Hardcore Poverty (%)	0.6	0.6	0	0.02
Number of Hardcore Poor Households	45 004	27 158	0	1 752

Source: Department of Statistic Malaysia [DOSM], 2019

Sabah recorded 24.2% of the poverty rate in 2006 (Sabah Economic Planning Unit, 2006). According to the Department of Statistics Malaysia (2017), the median and mean household income (2016) had increased for the three groups of households: Top 20 (T20), Middle 40 (M40) and Bottom 40 (B40) compared to 2014. Malaysia's mean income in 2016 was RM 5, 228 compared to RM 4, 585 in 2014.

Non-Monetary Term (Multidimensional)

According to the United Nations [UN] (2016), poverty is more than the lack of monetary term and an estimated 726 million people were still struggling in fulfilling their basic needs like "health, education and access to water". Poverty measurement assists countries to determine related programmes and guiding them to an effective strategy to reduce poverty. Action taken prioritise productivity, economics and reducing inequality mainly for countries requiring assistance the most. Alkire (2013) explained that poverty can be multidimensional which includes "malnutrition, poor sanitation, lack of electricity, facilities, amenities and school" which does not depend on money alone. In the context of the rural area, money indicators do not reflect the actual situation within rural areas. It involves indicators to measure multidimensional such as Multidimensional Poverty Index (MPI), Multidimensional Poverty Assessment Tools (MPAT) and Oxford Poverty Human Development Index (OPHI).

The basic needs theory was introduced by Sir Arthur Lewis and others in the 1950s. Basic needs theory concentrates on what has been provided and the needs for it such as health than income. It emphasised minimum specified quantities especially

food, clothing, shelter, water and sanitation to prevent ill health, undernourishment and the like by organising, analysis and policy-making (Lipton & Ravallion, 1993). This approach on basic needs is a “revolutionary on radical redistribution income, power and political mobilisation”. The five basic needs are education, health, water & sanitation, nutrition and shelter. Lipton and Ravallion (1993) are concerned with needs that provide the satisfaction of the whole population mainly education and health. It was based on count, cost and delivery approach. Count refers to the number of deprived or vulnerable groups affected, whereas cost refers to the goods and services. The delivery approach focuses on the delivery process towards the targeted groups. In line with this theory, the multidimensional aspects of poverty need to be addressed and not only focus on monetary terms.

Gana Resettlement and Integrated Development (GRID) Project

Gana Resettlement and Integrated Development (GRID) Project is part of the conservation project initiated to improve the living condition among the communities under Sabah Forestry Department-Social Forestry Projects (SFD-SFPs). SFD is accountable for planning numerous programmes and activities to be implemented in Kg. Gana under the GRID Project. According to Yahya, Mohd. R. I., Talib, & Fong (2012), SFD-SFSPs prepare on the objective, criteria, outputs and policies as guidelines in managing the whole project and communities. It also provides “technical support, education, control and services” to the communities in Kg. Gana. As a pioneer model of the community-based project or community forestry under the Lingkabau Forest Reserve (LFR), it surrounded the GRID project as a Protected Forest Reserve (Class I) with Gana Forest Commercial Forest Reserve (Class II) (Annual Report 2009).

Due to the forest reserve activity, communities that formerly were scattered around the area of conservation were resettled into one area known as GRID Project. It also assists the poor communities and is dependent on forest resources. Through the GRID project, the government assists in terms of infrastructures and amenities for the communities. Kg. Gana is one of the districts of Kota Marudu with “1 619 ha area and about 130 kilometres north of Kota Kinabalu” (Yahya et al., 2012). The initial population of the GRID Project were only 1, 500 people with 450 households (Annual Report, 2009) with only 9 villages “Kg. Kipopogong, Kg. Lianangkahan, Kg. Sonsogon Paliu, Kg. Toguhu, Kg. Garung, Kg. Gouton, Kg. Nasapu, Kg. Minsusurud and Kg. Makatol Darat” as an original member of Kg. Gana (Yahya et al., 2014). Currently, it has 3, 213 populations and 741 households consisting of 10 villages. The 10 villages are

Kg. Kipopogong, Kg. Linangkahan, Kg. Sonsogon Makatol Darat, Kg. Toguhu, Kg. Tagibang, Kg. Gouton, Kg. Nasapu, Kg. Garung, Kg. Minsusurud and Kg. Dalamanson.

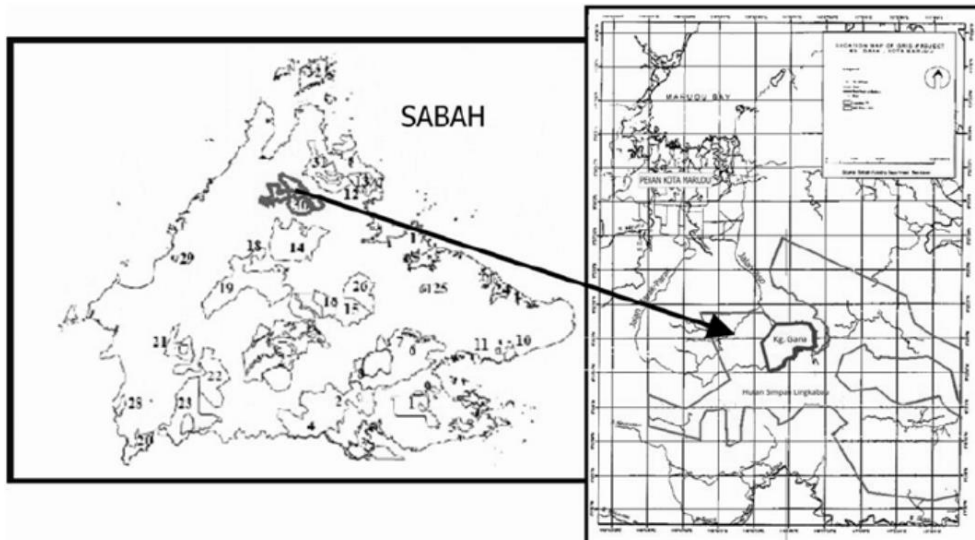


Figure 1: *Location of the GRID Project*

Source: Sabah Forestry Department (2009)

According to Annual Report (2009), the main objective of the establishment of the GRID Project is to “strengthen socio-economic, introduced balance development” especially in the under-developed area like rural and to have equal economic growth among the poor communities. It was done through activities, programmes and projects implemented under the GIRD Project with the participation from communities as well as the collaboration of several organisations. SFD used a bottom-up approach at the community level, empowerment, equality and increase awareness on environment protection.

The Gana Resettlement and Integrated Development (GRID) Project can be divided into two phases: Phase 1 (1998-2000) and phase 2 (2001-2010). Phase 1 emphasised infrastructure development due to the scattered villages and phase 2 focus on improvement on the socio-economic of the communities (Dennis, 2014). GRID project was managed by International Tropical Timber Organisation (ITTO) in 1993 under the project of Development of an Operational Model for Sustainable Management

of Natural Tropical Forest (Jaafar, 1996). Working together with organisations to improve GRID is undeniable and in 1992 Sabah collaborated with Sabah Foundation and Face Foundation that aims to reduce carbon emissions in a forest conservation area. According to Annual Report (2018), another project was to “enriched planting and rehabilitation of degraded logged-over forest” in Ulu-Segama-Malua Forest Reserve. Initiatives were taken to reduce carbon in forest areas including the European Union-Reducing Emissions from Deforestation and Forest Degradation (EU-REDD).

There are three stages for the EU-REDD+ Project in Kg Gana: Pre-preparation (2011-2012), Readiness & Advanced Readiness (2013-2019) and Full implementation (2020 & Beyond) (Annual Report, 2018). It is to increase participation from the communities in taking care of forest reserve by reducing carbon through the activity of planting trees according to the community value and practices (“Making locals equal partners in Forest Management”, 2016). The project aims to “tackle climate change through sustainable forest management and community development” with two emphasised activities such as protection and rehabilitation of water catchments in the forest reserve and Agroforestry in degradation area in the forest reserve. It was funded by State Government and European Union as well as involving all the communities in Kg. Gana.

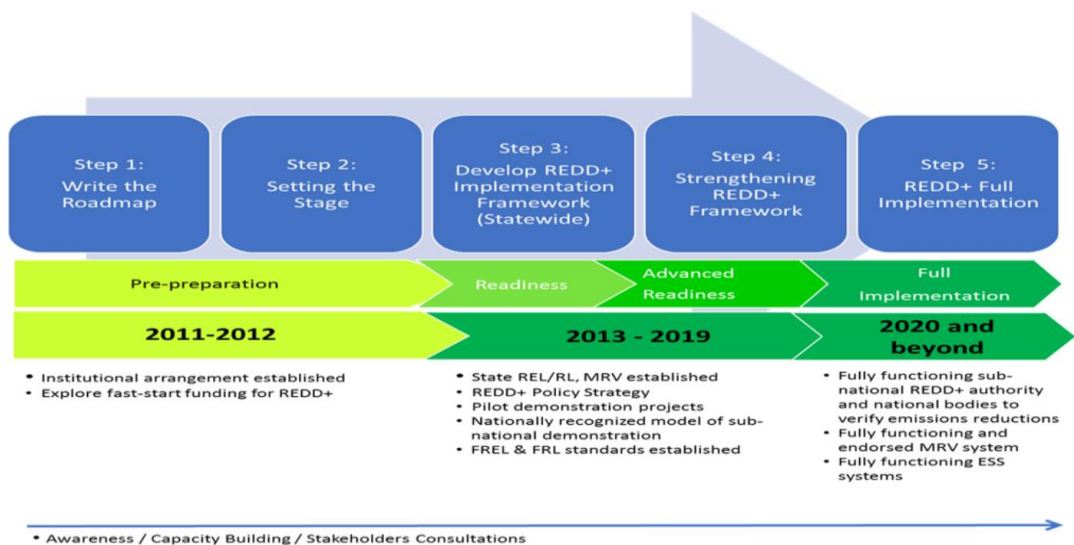


Figure 2: *The road map of Gana-EU-REDD+*
 Source: Sabah Forestry Department (2016)

The timeframe for the EU-REDD in Kg. Gana was 3 years, from 2014 until 2016. It is to demonstrate and teach local communities to manage forests effectively and efficiently by “maintaining the fertility of the soil” and create awareness on the importance of conservation in avoiding natural disasters in the future (“Making locals equal partners in forest management”, 2015). The initiatives also encourage local communities to engage in sustainable forest management by reducing forest carbon stocks in the forest reserve. EU-REDD not only to teach or demonstrate but to practice and execute the culture of the locality to manage forest without “interfering with their ways of living” stated the head of EU Delegation to Malaysia, Maria Castillo Fernandez. It is to ensure equality with communities to “take care between communities and local in fulfilling the need of both parties (“Making locals equal partners in forest management”, 2015).

Apart from EU-REDD, there are few other programmes implemented under the GRID project mainly for improvement in socio-economic and development among the communities (Annual Report, 2010). The programmes involved are Projek Agropolitan FELCRA (“Better Road access for Kg. Gana folk, 2018) and Rubber Industry Board introduced Ladang Sejahtera Phase 1 (Annual Rport, 2013). SFD-SFP has actively implemented programmes to reduce poverty, create opportunity and boost the Sabah’s economy through the involvement of local communities in Kg. Gana (Annual Report, 2010). With a current population of 3,213 and 741 households under the GRID project, the project will not only open opportunities but also increase entrepreneurship among the villagers and boost the economic activities based on agricultural products. This study aims to evaluate the GRID Project in alleviating poverty among the communities of Kg. Gana.

RESEARCH METHODOLOGY

Materials

Materials used in this study consist of interview questions and field notes.

Methodology

Primary data were collected through observation and interviews. Observation through on-site visits to Kg. Gana was made three times: 22nd September 2019, 29th August 2020 and 16th September 2020. The first visit (September 2019) is a preliminary observation for research planning purposes and to familiarise with Kg Gana before the distribution of questionnaire (for master thesis). The next visit was delayed because of the Covid-19 pandemic and because arrangements need to be made with the community development officer, village head and representative of the GRID Project before the collection of further data in the area.

Interviews were also made during these visits regarding infrastructure, facilities and other questions related to the GRID project. There were 50 participants in the interview. The questions asked are as followed:

1. Is there improvement in terms of infrastructure or facilities that can be seen under this project?
2. Overall, what facilities or infrastructure are available for the communities?
3. How many family members are in your household?
4. Did the government provide any initiatives in terms of land programs to increase agriculture Activities/production?
5. What is your housing condition, and does it have complete facilities like a toilet?
6. What are the sources of the water supply of your household under the GRID Project?
7. How many health care centres are available in your community under the GRID Project?
8. How many schools are available in Gana under the GRID Project?
9. Are there socio-economic activities offered to the community in Gana?
10. Are the villagers given equal chances to participate or to get involved in the socio-economic activities or programme organised?

FINDINGS

The Preliminary Stage of GRID

Before the implementation of the GRID Project, only 5 villages were being resettled. The 5 villages were s Kg. Makatol Darat, Kg. Mangkasulap Baru, Kg. Kipopogong, Kg, Sonsogon Paliu and Kg. Toguhu (Jaafar, 1996). The infrastructure and facilities were also still in bad condition with no proper materials. Building materials still depend on forest resources such as bamboo and timber. The housing condition in the villages lack quality and the houses were without proper basic amenities. Villages also shared toilets and no water proper water supply.

According to the United Nation Development Programme [UNDP], (2008), the villagers were unable to access clean water, has no electricity and assistance from the government was difficult to reach the area due to bad road conditions. Bad road conditions occurred during the rainy season that causes mud floods as well as a landslide. Assistance in terms of health, medical staff were unable to go through the bad road. The village depended on forest resources for daily living, income and traditional medical treatment. There was limited job opportunity where most of the villagers work as farmers, and some sought to increase their income through forest resources. Interaction between other villagers is also difficult due to the location of houses, distance and bad road (Annual Report, 2012). Communities also were disconnected from the outside world due to a lack of connectivity.

Access to education was only available in town: Kota Marudu and made it hard for the villagers as it could take hours to reach the town Kota Marudu. Water supply for daily uses such as drinking, cooking and other essentials can be obtained from the nearby river of the villages (UNDP, 2008). Problems with electricity were also limited with not proper sources for electricity which resulted in no lights during the night. The condition of the villagers with poor living conditions and low standards of living had caused poverty among the rural communities without income sources and multidimensional poverty. The government decided to manage the area by resettling the existing villages with other villages around the forest reserve.

The Aftermath of the GRID Project

There are significant changes seen after the implementation of the GRID Project. The road condition has improved and was tarred in 2013 and made it convenient for the villagers to go to the town of Kota Marudu. It only takes about one and a half hours or less from Kota Marudu to the GRID area. Besides that, kindergarten (Tadika Komuni Kg. Gana) and primary school (Sekolah Kebangsaan Gana [SK Gana]) were also now available in Kg. Gana for the children to receive an education. The health centre of Klinik Desa in Kg. Gana mainly offered non-serious illnesses with RM1 fee. The housing scheme is also still in progress to replace the old houses of communities by providing 15 houses for each village. Facilities such as places of worship s and community halls are available with various job opportunities through various programmes as well as training by the government. Opportunity to gain knowledge and skills in managing forest as well as handling forest wisely was also given. Kg. Gana communities depend on water gravity that is connected to each household with water piped. Electricity is also available in the area and each household does not have to worry about the supply.

Suhaini Panji an 18-year-old youth (September 22, 2019) explained that housing, road and availability of grocery stores or shops within Kg. Gana had improved [since??] the implementation of GRID. Shop owners can easily obtain supplies for their shops due to the good road to Kota Marudu. Electricity was available in 2014 and water gravity for all after the resettlement. Alizandra Valentina (September 21, 2019), a 20-year-old youth expressed her happiness of the opportunity to work or gain income under Lembaga Industri Getah Sabah (LIGS). Community members are taught specific techniques in rubber-tapping, forest management and crops. Juanis Indung (September 22, 2019) also expressed his relief on the housing scheme that started to replace the previous housing with proper infrastructure and a better interior (three-room house). Under the housing scheme, houses were allocated incrementally where each village was given 15 houses (Regina Mogumis, September 22, 2019). The house under the new housing scheme is much bigger than the existing house and a transit house is also provided for the villagers before moving to the new house. A Transit house is temporary housing for communities while waiting for the house construction to be completed. The improved condition of the road had reduced the difficulty of going to Kota Marudu town and was easily accessible to different types of vehicles (Gundop Andong, September 22, 2019).

However, improvement is still needed despite the changes made by the government. The main concern for the improvement is water supply, telecommunication and electricity. Usually, no water supply was available for the communities during the dry season including gravity water d. As a result, households are unable to do chores like washing and must depend on stored water supply. Although telecommunication tower exists in Kg. Gana does not properly function. There is no reception within Kg. Gana. The electricity supply is unstable due to frequent power failure which could be last a whole day. Nonetheless, overall, community members in Gana are satisfied with the GRID project but wish more improvement can be implemented in the future.

Table 2: *Questions and Frequency for Randomly Selected Interview (50 Respondents)*

No	Questions	Answers	Frequency
1	Is there improvement in terms of infrastructure or facilities that can be seen under this project?	Yes	50
		Total	50
2	Overall, what facilities or infrastructure are available for the communities?	Mostly answered: Community Hall, football field, churches, Surau	46
		Don't know	4
		Total	50
		3-5 members	30
3	How many family members are in your household?	6-8 members	17
		9-11members	2
		12 and above members	1
		Total	50
		Did the government provide any initiatives in terms of land programs to increase agriculture Activities/production?	Yes
4		No	10
		Don't Know	3
		Total	50
5	What is your housing condition, and does it have complete facilities like a toilet?	Yes, with toilet	42
		Yes, without a toilet	6
		Total	50
6	What are the sources of the water supply of your	Gravity water	50

	household under the GRID Project?	Total	50
7	How many health care centres are available in your community under the GRID Project?	One, <i>Klinik Desa</i>	50
		Total	50
8	How many schools are available in Gana under the GRID Project?	Two, <i>SK Gana & Tadika Komuniti Kg. Gana</i>	50
		Total	50
9	Are there socio-economic activities offered to the community in Gana?	Yes	45
		No	5
		Total	50
10	Are the villagers given equal chances to participate or to get involved in the socioeconomic activities or programme organised?	Yes	27
		No	15
		Don't Know	6
		Total	50

Based on the data obtained, most of the households consists of 3-5 family members followed by 6-8 members. The establishment of the Gana Resettlement and Integrated Development (GRID) project in 1998 has brought significant changes to the communities in Gana in terms of infrastructure and facilities as well as has improved socio-economic condition in the area as shown by the response of question no.1 and no. 2. Infrastructures such as housing were provided to households under the GRID project. Currently, the housing scheme under the Projek Ladang Agropolitan (Phase 1) is in progress with the construction of 150 houses for each village. Another 350 houses are to be built in the 2nd phase of this project. Facilities available are community hall, football field, churches and surau to the communities under the GRID Project. The communities in Gana are satisfied with the amenities provided compared to the previous condition in the area.

In the context of government initiatives under agriculture activities and equal participation most of the communities answered agreed that the government provided support or assistance from the first stage of the GRID Project. The government sought to include each household in the project as participants such as EU-REDD+ and Projek Ladang Agropolitan. The government provided agricultural land for the cultivation of

padi, ubi kayu, ubi keledak and many more. This activity has opened job opportunities for the people in Gana. Collaboration with Lembaga Industri Getah Sabah (LIGS) boosted households' income as well as improved their living conditions.

Housing conditions or facilities are complete with toilets and only a few households still share toilets with other households. Education facilities comprised of two schools: Kindergarten (Tadika Komuniti Kg. Gana) and Primary School (Sekolah Kebangsaan Gana, SK Gana). Secondary school is only available in Kota Marudu so students from Gana need to stay in a hostel or with relatives in the town. Communities of Kg. Gana depends on gravity water that is connected to a small dam and transferred to each house using a water pipe. Problem is encountered during the dry season where gravity water is not available. Klinik Desa is the only health centre available within Kg. Gana only offers non-serious illness treatments to the communities. Serious cases will be referred to the main hospital in Kota Marudu.

Ten villages under the GRID Project have been involved with activities or programmes implemented without discrimination. For example, the festival celebration was done in the community hall and all villagers are invited. Members of the community have also participated in workshops and training conducted by the government and LIGS within Kg. Gana. The progress of the GRID Project's poverty alleviation programme has improved through various government initiatives to tackle poverty, promote social equality, public service access and employment among the communities since its establishment. The road to Kg. Gana is no longer an issue, and this facilitates assistance from various sources to develop Gana through the GRID Project. Apart from the road, other changes that can be seen are telecommunication tower, electricity infrastructure, water tank, housing, agricultural land, drainage system and cultivated land area.

DISCUSSION

Although changes in facilities and infrastructures can be seen, improvement is still necessary for certain sectors such as employment, [the authority that is responsible under the GRID Project?? Delete or transfer to other sections] and access to education. Employment opportunity in the GRID Project needs to be improved especially for youth. After completing secondary schools or STPM, many youths prefer to stay and

assist their parents instead of searching for them. This will increase the number of unemployed among the youth in Kg. Gana and lower chances to earn income outside the GRID Project. Sabah Forestry Department could conduct more training or workshop for youth to improve their employability. This can be done through collaboration with Perbadanan Usahawan Nasional Berhad (PUNB) and Majlis Amanah Rakyat (MARA) in organising programmes and providing financial assistance. MARA could also offer a scholarship to youth in pursuing studies and engaging in the business. The Head of the village also plays an important role to ensure the youth of Kg. Gana will not be left behind in terms of education and employment. Employment for households under the Lembaga Industri Getah Sabah (LIGS) should also increase to involve more communities in the rubber sector or managing forest reserves.

Access to secondary school needs to be improved. After primary school, students from Gana need to go to Kota Marudu town for secondary education. Certain youth is unable to continue due to financial constraints and no place to stay near the Kota Marudu town. Besides, only a few of the youth can continue school. It is good to build a secondary school in Gana or at least near to Kg Gana. The building of Technical and Vocational Education and Training (TVET) in Gana or nearby should also be considered in the future to boost employability among the youth. Community leaders such as state assemblymen, government officials or GRID representatives need to make a regular visit to Kg. Gana. This is to ensure they are aware of what is happening within Kg. Gana, problems encountered or difficulties that exist in the communities. Government assistance could be made directly to the concerned parties and improve the living condition. The Head of the Village also could be the middleman between government and communities. The Head of the village could convey information to the relevant parties without having to wait for the representative. This can reduce the time for the problem to be solved. Effective monitoring and evaluation by the government should be done to ensure that projects are carried out efficiently and effectively. The new housing scheme is currently under construction and was delayed due to events like General Election (GE14) and Covid-19 Pandemic. The GRID project needs to be completed within the time frame.

In the context of health care and infrastructure, there is a need to emphasise the quality and services offered to the communities such as acceptable quality of materials or design for the houses in Kg. Gana. In terms of health care, medical treatment for certain serious illnesses should be offered through a scheduled visit by medical doctors to Kg. Gana. This can limit the time spent on the road to the hospital in Kota Marudu for diagnosis and treatment purposes. Sufficient supply of medication and adequate

presence of medical staff in Kg. Gana needs to be ensured. Also, telecommunication connection including internet connectivity should be upgraded to enable communities to be connected with their family members, relatives and friends outside kg. Gana.

CONCLUSION

Gana Resettlement and Integrated Development (GRID) Project shows a positive contribution to the Gana communities. Government initiatives on the GRID Project through collaboration with related agencies to develop rural development have been successful in alleviating poverty through participation from the local and international organisations in Kg. Gana under GRID. Based on the interview with local communities and the head of the village, most of them are satisfied with the project. However, the project required improvement to fully benefit all the villagers in the future. Improvement in living conditions indicates that the GRID Project has alleviated poverty. It will be the starting point to another project of rural development in different districts or areas. Continuous monitoring of the progress of the project is needed so that the GRID project can continue to improve the standards of living among the people in Gana.

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