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### Challenges and Strategies of Rural Community Towards Sustainable Development

Afza Razan Salleh<sup>a</sup>, Nur Kamaliah Mustaffa<sup>a\*</sup>, Che Maznah Mat Isa<sup>b</sup> & Azizul Salfaizal Aziz<sup>c</sup>

<sup>a</sup>School of Civil Engineering, College of Engineering, Universiti Teknologi MARA Shah Alam, 40450 Selangor, Malaysia

<sup>b</sup>Civil Engineering Studies, College of Engineering, Universiti Teknologi MARA Pulau Pinang Branch, Permatang Pauh Campus, 13500 Pulau Pinang, Malaysia

> <sup>c</sup>Yayasan Telekom Malaysia, Level 6, TM Annexe 2, Jalan Pantai Jaya, Wilayah Persekutuan, 59200 Kuala Lumpur, Malaysia

\*Corresponding author: nurkamaliah@uitm.edu.my

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#### ABSTRACT

Disparities between rural and urban areas continue to face the dilemma of spatial inequality in social and economic development. Sustainable development plays a major role in rural areas since it can improve their quality of life through socio-economic development whilst preserving the environment. This study is conducted to explore the knowledge and attitudes of rural communities towards sustainable development and to determine the challenges and strategies of rural communities on sustainable development. A mixed-method research approach was adopted from 131 respondents from the rural communities supported by interviews with three (3) experts in environmental and sustainability in Malaysia. The data was analyzed by using Statistical Package for the Social Sciences (SPSS) and content analysis. The respondents perceived themselves as having a good level of knowledge and attitudes towards sustainable development and by improving basic utilities and communication services can help the rural communities to have a better lifestyle and sustainable life which are echoed by the experts. This study is significant to improve lifestyle of the rural communities and contribute to the sustainable development of the country.

Keywords: Rural community; Sustainable development; Sustainability; Environment

#### INTRODUCTION

Realizing that a development must be carried out in a way that meets present needs while safeguarding the ability of future generations to satisfy their own needs is known as sustainable development (Edirin 2018). It takes a comprehensive effort from society to embark on sustainable development. The focus on sustainability often includes not only carbon emissions, energy use, and waste management, but also the role of communities in addressing socio-economic growth. According to Baharuddin et al. (2021), rural development is a planned process that use any form of action or communication to change the environment, practices, institutions, and mindset of the rural population in order to end poverty and improve quality of life. Bakar et al. (2016) emphasize that a sustainable process of economy, social, cultural, and environmental is continuously change that aimed for a better long-term well-being of the community.

The Sustainable Development Goals (SDGs), a global agenda that calls to action, seek to end poverty, protect the environment and climate, and ensure that everyone may live in peace and prosperity. Rural areas in developing countries are characterized by a strong reliance on agriculture and natural resources, a high prevalence of poverty, marginalization, and policymakers' neglect, as well as lower levels of human development (Basuki, 2015). In contrast to urban areas, which gain from proximity to consumers and producers, rural communities may only have a comparative advantage over urban areas in primary activities based on immobile natural resources and connected activity (Bawazir 2020). Nevertheless, despite these benefits, Malaysia's rural areas continue to be underdeveloped for a variety of reasons, including a lack of sustainability, poor communication, low productivity, and a lack of social integration. According to Malaysia Voluntary National Review (2021), one of the Malaysia's national development goals is "fair growth," that can be used to achieve the regional development policy on regional growth imbalance. Thus, education and the diffusion of knowledge are essential for achieving sustainability. Despite the importance of public awareness on the significance of sustainable development, the level of low awareness among citizens has become a major concern in many countries. Akinlolu et al. (2017) established that public awareness of the SDGs in the developing country has not seen any much improvement meaning that measures to promote sustainability is required. Therefore, this study is undertaken to achieve three (3) objectives as follows: 1) to determine the knowledge and attitudes of rural communities towards to determine sustainable development and 2) to determine the challenges and 3) strategies towards rural empowerment and sustainable development. The following is the structure of the paper: the first section provides a literature review of the previous study on rural empowerment and sustainable development. The methodology and data collection are discussed in a subsequent section. The conclusion follows a discussion on the challenges and potential solutions for successfully achieving sustainable development.

#### LITERATURE REVIEW

# CURRENT IMPLEMENTATION OF RURAL EMPOWERMENT IN MALAYSIA

Since the last 50 years, rural empowerment and sustainable development policies were introduced and implemented by various international agencies and national governments and briefly discussed as follows: 1. Sustainable Development Goals (SDGs)

A unifying framework for peace and prosperity for people and the planet, both now and in the future, is provided by the 2030 Agenda for Sustainable Development, which was accepted by all United Nations Member States in 2015 (Delendi 2017). The 17 Sustainable Development Goals (SDGs), which are an urgent call to action for all nations—developed and developing—in a global partnership, are at the centre of it (Edward et al. 2022).

2. Twelfth Malaysia Plan (2021-2025)

The Twelfth Plan's successful execution will increase inclusivity, foster shared prosperity, and pave the path for a more sustainable Malaysia for next generations. The Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development (2030 Agenda) will continue to be in line with the Twelfth Plan's national development priorities (Islam et al. 2017).

- 3. Dasar Perancangan Fizikal (DPF) Desa Negara 2030 The vision of "Prosperous Rural, Prosperous Nation" inspired the formulation of the DPF Desa Negara 2030, a crucial plan for guiding development initiatives towards the prosperity of rural communities (Dasar Perancangan Fizikal Desa Negara 2016). According to this perspective, Malaysia's rural areas should be given the most weight when making decisions on the regional planning. It is focused on achieving its goal of "liveable and resilient rural" (Kapur 2019).
- 4. Dasar Pembangunan Luar Bandar (DPLB) 2030 To improve Malaysia's rural areas by the year 2030, DPLB emphasizes the goal of "A Prosperous, Inclusive, Sustainable and Holistic Rural" as the key agenda. This vision emphasizes the guarantee of equitable access to infrastructure and social services for both urban and rural communities (Dasar Pembangunan Luar Bandar, 2019). Most importantly, rural regions are planned to provide employment and business opportunities that can raise the income of the rural community and entice people who have moved away to settle there again. This objective supports the DPF Desa Negara 2030. Manggat et al. (2018) also emphasises the necessity of empowering rural products like agrotourism and other tourism-based projects to increase rural peoples' income.
- 5. Wawasan Kemakmuran Bersama (WKB) 2030 The Shared Prosperity Vision's enablers emphasize building social capital, outcome-based education, and awareness to create an educated society that realizes social cohesion and unity in diversity (Klarin 2018).

The goals and objectives under the Shared Prosperity Vision are precise and quantifiable. Towards the community's advantage, the measurement will also consider the distribution of national wealth, a growth in purchasing power, and an improvement in well-being.

### CHALLENGES TOWARDS SUCCESSFUL RURAL EMPOWERMENT AND SUSTAINABLE LIVING

There are many obstacles to overcome in order to empower rural communities and encourage sustainable living, including social, economic, environmental, and infrastructure related as outlined in Table 1.

Key Factors	Description	Sources
Lack of Education	Due to a variety of issues, including a lack of qualified and dedicated teachers, a lack of textbooks or teaching-learning materials, among others, communities in rural areas continue to get a poor level of	(Edward et al. 2022), (Mabeba & Mmila 2020), (Kapur 2018)
	education.	(Manaf & Ibrahim 2017),
Poverty	Lack of the means to maintain a specific level of living constitutes poverty as a state or condition.	(Sagaran & Nair 2017)
	Numerous social, economic, and political factors and outcomes can contribute to poverty.	(Kapur 2019), (Islam et al. 2017)
Social Economy Aspect	The idea of a social economy has been pushed as a solution to the growing scarcity of resources and as a means of accelerating the shift to a more sustainable economic structure. Social economy aspect offers several goals for achieving sustainable	
	development as well as strategies for generating value for stakeholders such as societies	(Manggat et al. 2018), (Dali & Caidi, 2023)
Lack of Infrastructure	The opportunity for people to enhance and maintain their social and economic well-being is constrained by a lack of infrastructure. There is a link between enhancing infrastructure and reducing poverty.	
Climate change and its potential to agriculture	Agriculture is a bio-industry depending on climate that exhibits distinctive geographical characteristics. Both local and regional agriculture may be impacted by climate change.	(Mia et al. 2022), (Zhang et al 2022)

TABLE 1. Challenges Towards Successful Rural Empowerment and Sustainable Living

STRATEGIES TOWARDS SUCCESSFUL RURAL EMPOWERMENT AND SUSTAINABLE LIVING

takes into account different facets of social, economic, and environmental development. The following are some strategies to promote sustainable living and better rural empowerment:

Promoting sustainable living and empowering rural communities requires a multidimensional strategy that

TABLE 2 Strategies Towards Successful Rural Empowerment and Sustainable Living

Key Factors	Description	Sources	
Improving provision for quality education and skills training	Education and training providers and practitioners in many developing and developed nations share the goal of raising the quality of education and training.	(Nazuri et al. 2022), (Twelfth Malaysia Plan 2021)	
Multi sector approach to end poverty	A framework that empowers communities to take part in decisions that impact their lives is the approach to community empowerment.	(Manggat et al. 2018) (Mabeba & Mmila 2020)	
Innovation of society for socio economy	In this context, innovation is essential because it promotes the implementation of knowledge and research into better practices that aid in finding answers to new issues and enhance the provision of healthcare services.	(Rami et al. 2018), (Mabeba & Mmila 2020) (Delendi 2017), (Kapur 2019)	
Improving basic amenities and infrastructure	Infrastructure, amenity, and facility upgrades have been found to be extremely advantageous to the people.		
Conservation of the	Ways to safeguarding earth resources.	(Muhammad & Kabir 2016),	
ecosystem	Conservation of ecosystems considers entire species' populations and their interactions with the physical environment.	(Mohd et al. 2018)	

#### RESEARCH METHODOLOGY



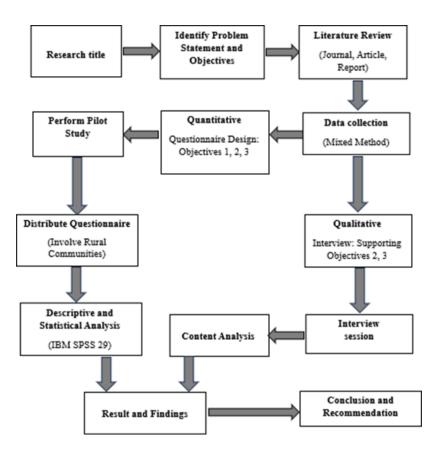


FIGURE 1. Research Methodology Flowchart

As shown in Figure 1, this mixed-method involved both quantitative and qualitative approaches that inlcudes problem identification and objective establishment, literature review, data collection, data analysis, interpretation of the results, discussion, conclusion and recommendation.

#### SURVEY QUESTIONNAIRE DESIGN

The survey questionnaire for this study was divided into five (5) sections: A, B, C, D, and E. The questionnaire was designed using both multiple choice and Likert scale ratings. It is essential to determine the respondents' knowledge and understanding of a specific study through the dissemination of questionnaires. All five (5) sections prepared in the questionnaire are shown below;

1. Section A: General information about the respondents includes their gender, age, employment status, monthly household income, etc.

- 2. Section B: The responses to this question reveal the respondent's level of knowledge and attitudes of rural communities towards sustainable development.
- 3. Section C: The responses to this question reveal the respondents' challenges living among rural communities towards achieving sustainable development. A Likert scale score between 1 and 5 was provided to describe the most accurately challenges that respondents have observed towards sustainable living.
- 4. Section D: The responses to this question reveal the respondents' opinion on the proposed strategies in order to improve rural communities' knowledge and attitudes towards successful rural empowerment and sustainable development. A Likert scale score between 1 and 5 was provided to describe the most accurately strategies that respondents have observed when implementing sustainable development.
- 5. Sections E: The responses to this question reveal the respondent's opinion of what strategies need to be implemented to achieve sustainable development.

Respondents were chosen by a non-probability sampling approach. A total of 131 participants in the survey were drawn from rural communities all over Malaysia. Using Google Forms link, the survey has been widely disseminated via emails and social media. A total sample of 384 was selected by using Krejcie and Morgan sampling procedure (Krejcie & Morgan 1970). The sample size for this study was deemed adequate compared to other studies that employed identical purposive sampling approaches (Coviello & Jones 2004).

	Respondent's characteristics	No. of respondents $(total = 131)$	Percentage (%)
Age	18-24	27	20.6
	25-34	39	29.8
	35-44	43	32.8
	45-54	11	8.4
	55-64	4	3.1
	65 and above	7	5.3
Gender	Male	76	58
	Female	55	42

TABLE 3. Demographic Profile of Respondents

#### INTERVIEW WITH EXPERTS

As part of an explanatory sequential design, semistructured interviews are used to supplement and explain quantitative data obtained from cross-sectional survey questionnaires. The rationale for this explanatory process is that quantitative measures and outcomes provide a comprehensive insight into the topic, permitting for a more thorough examination. In this study, interviews with three (3) experts in the field of environmental and sustainability were carried out.

#### DATA ANALYSIS

SPSS (Statistical Package for the Social Sciences), a statistical software-based program was used to analyse the data for this study. The percentage frequency distribution, mean, standard deviation and reliability test were used to analyse the quantitative results from the cross-sectional survey.

#### RELIABILITY TEST

The reliability analysis approach generates a number of widely used scale reliability measures and offers information on the item correlations of the scale. The reliability test is widely used when a questionnaire has multiple Likert scale questions and the researcher wishes to determine whether the scale is reliable (Young 2015). Utilizing Cronbach's Alpha was necessary for reliability analysis to demonstrate the appropriateness of tests and scales created for use in research projects (Young 2015).

In this study, the Cronbach's Alpha value for each variable was  $\alpha = 0.968$  for 10 variable items, falling within the range of  $\alpha \ge 0.9$ , which Nunnally and Bernstein (1994) indicate as excellent internal consistency.

#### CONTENT ANALYSIS

In this study, interviews with three (3) experts in the field of environmental and sustainability, were analysed using the content analysis technique. This interview used a qualitative data content analysis since it is an efficient method of data analysis for the interviews, given that the research consists of verbal interactions. A traditional content analysis was performed in this study. The basic theme was created based on the collected data. This entailed an exploratory approach involving the arrangement of the codes until a collection of themes represented the fundamental concepts. The respondents' responses were analysed by converting raw narrative data (notes, audiotapes) to semi-processed data (transcripts) and then manually transcribing it.

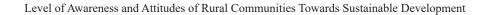
The following section presents the results and discussion based on a quantitative method using survey questionnaires administered to 131 rural communities followed by a qualitative method using interviews with three (3) experts in sustainable development in Malaysia.

#### RESULTS AND DISCUSSION

The first part comprises the data gathering on participants' feedback through a survey questionnaire based on three

(3) parts: (1) level of awareness and attitude of rural communities towards sustainable development, (2) key challenges faced by the rural communities towards sustainable development and (3) strategies to improve rural

communities' knowledge and attitudes towards successful rural empowerment and sustainable development. Percentage frequency distributions were applied to analyse the data from survey.



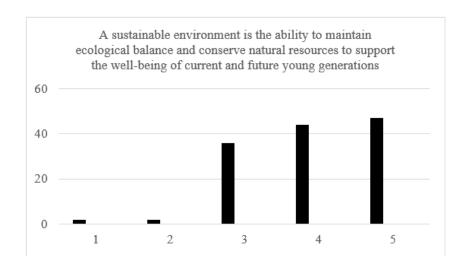


FIGURE 2. Level of Respondents Agreement on the Definition of Sustainable Environment

Figure 2 shows that 47 (35.9%) out of 131 respondents strongly agree with the statement that a sustainable environment is the ability to maintain ecological balance and conserve natural resources to support the well-being of current and future young generations. 44 respondents agree (33.6%), 36 respondents moderately agree (27.5%), and 2 respondents (1.5%) vote for not agree and strongly disagree, respectively. Hence, we can conclude that the majority of the respondents have knowledge and awareness of sustainable environment.

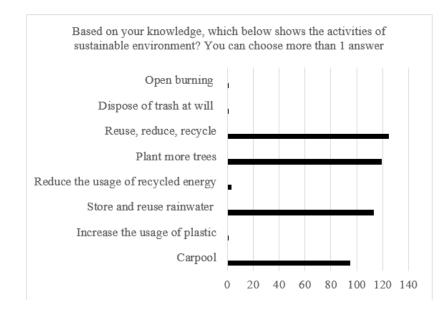


FIGURE 3. Sustainable Environment Activities Voted by the Respondents

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From Figure 3, it can be seen that the majority of the respondents are aware of the activities related to sustainable environment. Only a small number of respondents were

unaware of sustainable environmental activities and chose options such as open burning, disposing of trash at will, or increasing the use of plastic, with each option selected by 1 respondent (0.8%).

### KEY CHALLENGES ON RURAL COMMUNITIES TOWARDS SUSTAINABLE DEVELOPMENT

Items	Mean	Standard deviation	Rank
Lack of education			
C1a. Not much of an awareness programmed directed towards rural communities, hence their understanding and practices of sustainable living are limited	4.00	0.956	7
C1b. Teacher shortages can contribute to the education gap and lack of knowledge in rural areas	4.06	0.926	4
Rural Poverty			
C2a. The work they do mostly not commercialized but rather for their own use and limits their awareness of the importance of a sustainable development	3.87	0.956	9
C2b. Children from low-income families are more likely to experience poor nutrition which contributes to their health, behavioural and their knowledge level	4.01	0.981	6
Lack of Socio Development			
C3a. Lack of rural community involvement in decision-making result to lack of awareness and exposure towards sustainable development	3.87	0.995	8
C3b. From a sociological aspect, rural communities only socialize with the people around them causing less development of knowledge about the outside world	3.73	1.029	10
Lack of Infrastructure			
C4a. Lack of infrastructure results in difficult access to water, electricity, roads and reliable transportation	4.24	0.867	1
C4b. Lack of infrastructure hinders economic development increases unemployment and promotes poor living standards	4.16	0.901	2
Climate change and its potential to agriculture			
C5a. Climate changes can reduce the availability of local natural resources	4.06	0.886	5
C5b. Climate change can exacerbate erosion, organic matter depletion, loss of soil biodiversity, landslides, desertification and flooding	4.07	0.887	3

Table 4 indicates the descriptive analysis based on the five (5) key challenges towards sustainable development namely; lack of education, poverty, social economy, lack of infrastructure and climate change and its potential for agriculture. Based on the findings, it was shown that the majority of the respondents were concerned about the lack of infrastructure results especially difficulties in accessing water, electricity, roads and reliable transportation and additional costs during use such as the cost of installation, repair, and maintenance, with the greatest mean score of 4.24 (SD = 0.867) and making item C4a the first of ranking. Manggat (2018) highlighted that failure to incorporate infrastructural development into communities is believed to affect the community's state of wellbeing. Moreover, item C4b, lack of infrastructure hinders economic

development, increases unemployment and promotes poor living standards comes in second on the rank, with a mean score of 4.16 (SD = 0.901). Both of these items are under the issue of lack of infrastructure which reveals that respondents find that poor access and inadequate roads increase transportation costs, difficulties in obtaining highquality resources, and limit the uses of local markets to sale their goods, the acquisition of consumer goods, and the creation of opportunities for off-farm employment (Dali et al. 2022). Thus, these challenges have to be taken into account and indicates that the integration of governance through policies and institutional roles needs to be emphasize in the rural infrastructure planning practice (Edward et. al. 2022).

## STRATEGIES TO IMPROVE RURAL COMMUNITIES KNOWLEDGE AND ATTITUDES TOWARDS SUCCESSFUL RURAL EMPOWERMENT AND SUSTAINABLE DEVELOPMENT

TABLE 5. Descriptive Analysis of the Strategies That Need to Be Implemented to Improve Rural Communities Knowledge and
Attitudes Towards Successful Rural Empowerment and Sustainable development

Items	Mean	Standard deviation	Rank
Improving provision for quality education and skills training			
S1a. Provide more provision for high quality education to improve the level of education and awareness on sustainable development among low-income household members	4.41	0.643	4
S1b. Providing skills training and scholarship facilities for those in need	4.38	0.685	6
Multi sector approach to end poverty			
S2a. Stimulate economic growth to increase income and expand employment opportunities for the poor	4.39	0.719	5
S2b. A multi-sector approach as well as a complementary role by NGOs and the private sector in helping to reduce rural poverty rates	4.32	0.726	9
Innovation of society for socio economy			
S3a. Introduction of something new to economic or social life in rural areas, which adds new economic or social value to rural life	4.31	0.755	10
S3b. Held more program to help people in recovery gain and sustain employment	4.38	0.685	7
Improving basic amenities and infrastructure			
S4a. Obtain sufficient funding through domestic sources, foreign investment, and international aid	4.41	0.689	3
S4b. Basic utilities and communication services such as treated water, electricity and broadband connectivity should be enhanced, particularly in remoted areas	4.43	0.668	1
Conservation of the ecosystem			
S5a. Prioritizing the most isolated and marginalized people. With secure access to land and affordable finance, small-scale producers can invest in their future and escape poverty	4.36	0.765	8
S5b. Provide suitable areas in the agricultural sector with technological equipment facilities	4.43	0.681	2

The descriptive study focuses on the five (5) main strategies needed to be implemented to improve rural communities' knowledge and attitudes towards successful rural empowerment and sustainable development as displayed in Table 5 which are; (1) improvement in provision for quality education and skills training, (2) multi sector approach to end poverty, (3) innovation of society for socio economy, (4) improving basic amenities and infrastructure and (5) conservation of the ecosystem, Responding to the data, the majority of respondents agreed on the strategy **S4b**, to improve basic utilities and communication services with the highest mean score of 4.43 (SD=0.668) followed by **S5b**, providing suitable areas in the agricultural sector with technological equipment facilities with the second highest mean score of 4.43 (SD = 0.681). Technologies offer greater opportunities for organizations to realize the concept of sustainable development (Bawazir 2006). This finding was consistent with prior research, which found that having alternative energy sources, like solar power, is essential instead of overly depending on hydroelectricity and goods made from petroleum (Molinoari et al. 2019).

The second part of the discussion presents the content analysis on the opinions of the experts based on three (3) specific themes aligned to the survey questionnaires, namely the rural communities' knowledge and attitudes, the challenges they faced, and strategies used to improve the rural community.

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TABLE 0. List of interviewees opinion on chanenges and strategies of Kurai Community on Sustainable Developmen		
Challenges	Strategies	
Difficulty to implement sustainability events	Community engagement and participation	
Difficult to change rural community lifestyle	Government and local authorities need to held more programme related to sustainability and conduct Corporate Social Responsibility (CSR)	
Language and communication barriers	Education and engage on capacity building design for rural community	
Low level of understanding and awareness on sustainability Lack of infrastructure and services Cost barrier to implement the sustainability lifestyle	Empowering social media platform to promote sustainability Require more rural empowerment programme from government and private sector More budget must be allocated for rural empowerment and community development to improve infrastructure and network services at rural areas	

TABLE 6. List of Interviewees' Opinion on Challenges and Strategies of Rural Community on Sustainable Development

Overall, on knowledge and attitudes of rural community, all interviewees agreed that rural community still not fully aware on the "sustainability" term while their level of knowledge and understanding on sustainability is still low. They stated that only several people from the community that may have the knowledge about sustainability. All interviewees think that the rural community may only have basic knowledge but did not have awareness to put it into action and difficult to implement it in long term of period. One of the interviewees stated that one of the current implementations of rural communities towards sustainable development in Malaysia is by doing community engagement and education. The level of awareness and knowledge of the sustainable development goals in Nigeria as found to be fair (Akinlolu 2017). However, a study by Kamarudin et al. (2018) shows that the level of environmental awareness and knowledge of Malaysian university students is high. However, the level of practice was moderate. Thus, nowadays numerous awareness-raising and educational initiatives must be carried out to help rural communities comprehend and embrace sustainable practices (Mustaffa et al. 2022). The government and private agencies must create rural empowerment programs such as workshops, training sessions, and community outreach initiatives to raise awareness and educate rural communities on sustainability issues.

In terms of challenges, many programs and activities can be done but to implement them and keep them sustainable for a long term of period is tough since some of the activities are new for them and it may take some time to adapt with the new things and to change their lifestyle. Changing the lifestyle of rural communities to achieve sustainable development involves a multifaceted approach that respects the community's unique context and challenges. For example, rural communities maybe get used to dispose waste by open burning so it may take some time to change their lifestyle and to dispose the waste more sustainably. All the three (3) interviewees agreed that the level of understanding and awareness of the rural community is still low and needs to be educated on the interest and advantages of implementing sustainability effort. Other than that, they stated that cost is one of the challenges for rural communities in order to implement sustainability by themselves.

In terms of strategies, enhancing rural communities' understanding and perspectives regarding effective rural empowerment and sustainable development necessitates a multidimensional strategy that takes into account different facets of empowerment, education, and awareness. Some of the strategies that can be implemented including community engagement and participation, active involvement from government and private sector and many more as stated in Table 6.

The interviewees suggest that getting involved in rural communities' activities indirectly can educate them on sustainability. Government, local authorities and the communities itself play an important role in making the strategy successful such as doing more sustainability activities and by conducting Corporate Social Responsibility (CSR) programs more frequently in rural areas. Other than that, engaging locals in the decision-making process when it comes to sustainable projects and initiatives is guaranteed to align with their needs and values. Furthermore, it is also suggested to empower the usage of social media platforms as a tool to promote a rural community and promote a sustainable lifestyle. Coordinated implementation of these strategies can improve attitudes and knowledge regarding successful rural empowerment and sustainable development, with positive results for both rural communities and the socio-economic.

#### CONCLUSION

In an attempt to bridge the information gap, this study explores the knowledge and attitudes of rural communities towards sustainable environment, the challenges faced and finally determines the strategies and success factors towards rural community and sustainable environment. This mixed method study was carried out using survey questionnaires responded by 131 rural participants and interviews with three (3) experts on environmental and sustainability. The consolidation of the findings indicates a growing awareness and commitment to sustainable development, while the challenges to achieving a sustainable environment remain relatively minimal. Despite the positive trend in awareness and attitudes towards sustainable development, certain areas require further attention and improvement. The main challenges identified in this study include a lack of education, rural poverty, insufficient social development, inadequate infrastructure, and the impact of climate change on agriculture. To encounter the challenges faced by the rural communities, the strategies suggested are improving provision for quality education and skills training, multi sector approach to end poverty, innovation of society for socio economy, improving basic amenities and infrastructure, and conservation of the ecosystem. Furthermore, the top challenges to better sustainable practices would be obstacles that prevent the adoption of sustainable practices to accelerate Malaysia's sustainable development. The path to sustainability is paved with challenges, ranging from limited resources and technological barriers to strongly rooted cultural norms and gaps in policy. But it is significant to see these challenges as the opportunities for creativity, teamwork, and coordinated action.

The finding of this research could be beneficial in addressing particular concerns regarding sustainable development and rural empowerment status in Malaysia. This study makes a significant contribution of insight pertaining to the rural community's prior knowledge and strategies in integrating sustainable development, as well as the key challenges and factors associated to achieve sustainable development in Malaysia. The research outcomes could serve as a framework for further discussion on promoting awareness at all levels to accomplish all 17 Sustainable Development Goals (SDGs) This is also necessary for supporting the government's aspirations to become sustainable nation, as highlighted in the Twelfth Malaysia Plan 2021-2025.

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None.

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