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STRATEGIC MANAGEMENT OF POULTRY FARMING IN NORTHERN MALAYSIA: A CASE STUDY ON RURAL COMMUNITY IN KEDAH

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Abstract

The rural agriculture sector in Malaysia is vital to the economy because it employs many. Agriculture employs 3.5 million Malaysians and amounts for 9.1% of GDP, according to Statistics Malaysia (2019). Malaysian poultry farming is vital to rural income and jobs. Poultry farmers must grasp market dynamics and prepare strategically to succeed in animal production. A socioeconomically challenged group was used to evaluate rural Malaysian

chicken raising practices. The case study demonstrated how these principles apply pragmatically to similar groups. The study collected qualitative data via in-person interviews. Interview covered poultry producers' issues and data was analyzed accordingly. Results indicated that lack of extension agents, technical expertise, budgetary constraints, and communication infrastructure hinder poultry breeding farmers. These challenges drove them to forsake their poultry farm and focused on rubber tapping as the main source of income. The latter strategy is less profitable but less laborious and cheaper. The study analyzed how community empowerment sustains rural development. To enhance rural areas, policymakers and development practitioners must understand community-led activities and create focused policies. Further research should study how government agencies might boost rural economic activity and supply chain efficiency.

Keywords:

Rural Development, Agriculture, Farmers, Malaysia, Poultry

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1. INTRODUCTION

Poultry farming is an important economic activity in Malay rural areas. The activity has a positive impact on rural farmers income source and is considered a suitable income generation activity without much hassle and difficulty. However, while the activity is deemed to be not too complicated, rural poultry farmers need to have a clear understanding of the market and develop strategic plans to meet the demands of the industry. This paper will provide an overview of the strategic guidelines for poultry farming in rural Malaysia, based on the case study done on a group of rural poultry farmers in Kedah.

Rural farming in Malaysia plays a significant role in the country's economy, providing employment and income for many communities. According to the Department of Statistics Malaysia (2019), the agriculture sector employs approximately 3.5 million people and contributes to approximately 9.1% of the country's Gross Domestic Product (GDP).

Poultry and livestock farming, including chicken and duck breeding, are among the most common forms of agriculture in rural areas of Malaysia. These activities provide a source of food for the population and serve as a source of income for farmers (Ministry of Agriculture and Food Industries, 2018). In addition, the cultivation of oil palm and rubber are also major contributors to the agricultural sector in Malaysia (Department of Statistics Malaysia, 2019). Poultry farming plays an important role in rural development in Malaysia and that supporting smallholder farmers is an effective way to improve livelihoods, reduce poverty, and drive

economic growth in rural areas (Wang et al.,2021 Hussain & Ahmad, 2012; Thorpe & Hristov, 2007; Sulaiman, et al. 2016; Ismail, et al. 2019; Hussain & Ahmad, 2012)

However, the rural farming industry in Malaysia faces several challenges such as disease outbreaks, high feed costs, and competition from large commercial farms (Ministry of Agriculture and Food Industries, 2018). In addition, small-scale farmers often lack access to technology, training, and financial resources, which can limit their ability to improve their operations and increase productivity (Ministry of Agriculture and Food Industries, 2018; Sulaiman, etal. 2016).

2. LITERATURE REVIEW

Rural poverty is a significant issue in Malaysia, affecting a significant portion of the population living in rural areas. According to the Department of Statistics Malaysia (2019), the poverty rate in rural areas is higher than that of urban areas, with 9.3% of the rural population living below the poverty line compared to 6.1% of the urban population.

The main causes of rural poverty in Malaysia are attributed to low levels of education, limited access to economic opportunities, and inadequate infrastructure and services in rural areas (Ministry of Rural and Regional Development, 2016). Additionally, many rural communities in Malaysia rely heavily on traditional forms of agriculture and are often affected by market fluctuations and changes in global commodity prices (Ministry of Rural and Regional Development, 2016).

2.1. Rural Development in Malaysia

Rural development in Malaysia has been a crucial area of focus for policymakers and researchers in recent years. The country's rural communities play a significant role in the nation's economy and social fabric and addressing the challenges they face is essential for achieving sustainable development. Thus, previous studies often undertook this subject for further exploration and understanding.

Mohd-Yusof (2011), examined the key issues facing rural communities in Malaysia, including poverty, lack of access to basic services, and limited economic opportunities. The study found that while the government has implemented various policies and programs to address these issues, more needs to be done to ensure that they reach the intended beneficiaries and have a lasting impact. Another study by Mohamad and Hassan (2012), looked at the effectiveness of government policies and programs aimed at reducing poverty in rural areas. The study found that while these policies have had some success in reducing poverty, they have not been able to address the underlying structural issues that contribute to poverty in rural

communities. Previous study has also explored the relationship between relationship between rural development and economic growth in different regions of Malaysia. Zain, etal. (2019), analysed and found that rural areas with higher levels of economic development tended to have better infrastructure, more diversified economies, and higher levels of education and human capital.

Overall, it is evident that while some efforts have been made to address the challenges rural communities in Malaysia face, more must be done to ensure that these efforts are effective and sustainable. To gain a deeper understanding of the specific issues facing rural communities and to develop effective policies and programmes to address them, additional research is required.

2.2. Farming and Rural Development

Farming is a significant contributor to rural development, providing a source of livelihood and food security for millions of people around the world. Several studies have been conducted on the role of farming in rural development, and the ways in which it can be supported and strengthened. Bryceson (2002) and Sulaimanetal. (2016) highlighted the importance of agriculture in rural development and argued that sustainable agricultural practices can play a key role in reducing poverty and improving livelihoods in rural communities. These study emphasized the importance of supporting smallholder farmers and investing in infrastructure and technology to improve productivity and profitability.

Thiele and von Braun (2018) examined the challenges and opportunities facing farmers in sub-Saharan Africa, and the ways in which they can be supported to improve their livelihoods and contribute to rural development. Smallholder farmers face several constraints, including lack of access to markets, credit and extension services, and poor infrastructure (Thiele & von Braun, 2018; Hussain & Ahmad, 2012; Ismail, et al. 2019). The studies suggested that by addressing these constraints and increasing investment in agricultural development, smallholder farmers could play a crucial role in driving rural development and poverty reduction in sub-Saharan Africa. Similarly, Wang et al.(2021) Hussain and Ahmad (2012) and Thorpe and Hristov (2007), conducted a comprehensive review of the literature and studies on the relationship between farming and rural development. They found that farming is a key contributor to rural development and can play an important role in poverty reduction and economic growth. The study also highlighted the importance of smallholder farmers, and the need to support them through targeted policies and programs, including access to markets, credit, extension services and technology. focused on the importance of animal farming in rural

development and argued that sustainable livestock practices can play a key role in improving livelihoods and reducing poverty in rural communities.

Various studies emphasized on the importance of investing in infrastructure, technology, and extension services to improve productivity and profitability of animal farming (Gong et al., 2015; Adeola, et al. 2021) in order to sustain animal farming as a key contributor to rural development and play an important role in poverty reduction and economic growth.

Overall, farming plays a crucial role in rural development and that supporting smallholder farmers is an effective way to improve livelihoods, reduce poverty, and drive economic growth in rural areas. Further research is needed to gain a deeper understanding of the specific constraints and opportunities facing smallholder farmers, and to develop targeted policies (Adeola, etal., 2021) and programs that can help them to succeed.

2.3. Government Initiatives

The government of Malaysia has implemented various policies and programs aimed at reducing poverty and promoting rural development. These include providing training and education programs for farmers, increasing access to financing, and promoting the use of technology in agriculture (Ministry of Rural and Regional Development, 2016). However, there is still a need for further research to better understand the specific challenges and issues faced by rural communities in Malaysia and to evaluate the effectiveness of current poverty reduction strategies.

In retrospective, the local or state governments also focus on rural development and not depending solely on federal government supports. In this case, the local Kedah state government has spearheaded various initiative to support local rural communities. However, despite the efforts made by the government of Kedah to promote and support the development of rural areas in the state, there are still several challenges that hinder the economic development of these areas.

Malaysia has been actively promoting rural poultry breeding as a way to improve the livelihoods of rural farmers and to increase food security in the country. The efforts to promote rural poultry breeding have been led by various government agencies, non-government organizations, and private sector companies.

One notable effort by the government is the implementation of the "Program Pembangunan Telur Rakyat" (PPR), which was launched by the Ministry of Agriculture and Agro-based Industry in 2016. This program aims to increase the production of rural poultry by providing technical support, financing, and marketing assistance to farmers. Additionally, the

program provides training and extension services to help farmers improve their poultry breeding practices and increase the productivity of their operations.

Another effort by the private sector is the establishment of the "Malaysian Poultry Industry Council" (MPIC), which was established in 2006 with the aim of promoting and supporting the development of the poultry industry in Malaysia. The MPIC provides technical support, training, and networking opportunities to farmers and industry stakeholders, and helps to promote the marketing of rural poultry products. However, all these initiatives are still

One of the main challenges faced by rural areas in Kedah is a lack of access to economic opportunities and markets. Many rural communities in Kedah are isolated and lack the necessary infrastructure and transportation to connect them to urban areas and markets (Ministry of Rural Development, 2017). This can make it difficult for rural farmers and entrepreneurs to sell their products and access necessary resources, limiting their income and livelihoods.

Another challenge faced by rural areas in Kedah is the lack of access to financing and business development services. Many rural entrepreneurs and small and medium enterprises (SMEs) lack the necessary capital and resources to grow their businesses and expand their operations (Ministry of Rural Development, 2017). This can make it difficult for them to compete with larger businesses and can limit their ability to create jobs and improve their livelihoods.

Additionally, rural areas in Kedah often face limited access to education and training opportunities. Many rural communities lack access to quality education and training programs, which can limit their ability to acquire the skills and knowledge necessary to improve their livelihoods (Ministry of Rural Development, 2017).

To address these challenges, the government of Kedah has implemented various policies and programs aimed at improving access to economic opportunities and markets, increasing access to financing and business development services, and providing education and training opportunities for rural communities. However, there are still need for a more concerted and coordinated effort to address the underlying causes of poverty in rural areas and ensure sustainable economic development.

2.4. Objectives

This study aimed to contribute to the understanding of rural issues of poultry farmers in Malaysia by examining the specific challenges and issues faced by the community and evaluating the effectiveness of current poverty reduction strategies. The findings of this study

provided valuable insights for policymakers and practitioners working to address rural poverty in Malaysia and can inform the development of more effective and targeted interventions.

Based on the literature review done on this topic, we have found that there are numerous issues related to rural farming such as technical knowledge, funding, supplier, market, resource, communication, and access to information. We have arranged these elements into a conceptual framework as shown in Figure 1.

3. METHODOLOGY

3.1. The location of the study

In this study, 10 clusters of rural farmers, men and women from Padang Terap rural village were selected randomly through open interviews with the researchers.

3.2. The respondents

The community chosen for this case study is a group of rubber tappers s which are categorized under the B40 classification. B40 is an acronym used by the government of Malaysia that identify a cluster of people with bottom 40% of households' income. These households typically have lower incomes and fewer resources than the other 60% of households in a given population, and they are often considered to be at higher risk of poverty and economic insecurity.

According to the National Bureau of Statistics Malaysia (NBS), B40 households are defined as those with a monthly income of between RM2, 500 and RM4, 000. The B40 group is a target group for poverty reduction programs and policies, as they are considered to be the most vulnerable to poverty and economic insecurity.

3.3. The Protocol

During the interviews, the researchers explained the project in detail and asked their willingness to participate in it. During this project, chicks and poultry farming equipment including some poultry feeds (starters) was provided to them. Using the provided tools and material, they started to breed the given chicks (3 days old) and breed it for a period of 60 days per cycle. During this time, the researchers kept very close monitoring, provided mentoring, and implemented open reporting and communications with them. After the first cycle, a second round was repeated with similar protocols.

3.4. Data Analysis

Data analysis through observation is a valuable method for investigating complex issues and providing a detailed understanding of the subject matter in a case study. It allows the researcher to examine real-life situations in depth and provides insights that can be used to inform policy and practice. In this study, the process of data analysis was an iterative one, and the researcher may need to go back and collect more data for a second in order to further explore or clarify findings.

Collected data was then analysed the data to identify patterns and themes. This process involved coding the data, which included breaking down the data into smaller segments and identifying key concepts or categories. The researchers then used the codes and organized the data and identified patterns and themes accordingly.

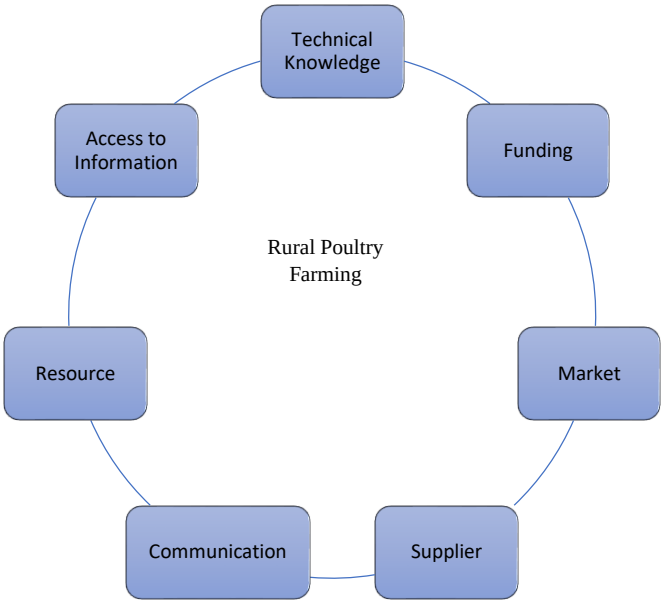
4. RESULTS

The findings from these studies were compartmentalized into challenges and issues faced by the community involving internal and external environment.

4.1. Challenges and Issues Faced by the Community.

Various issues and challenges are faced by chicken farmers in the studied rural community. From this study, the seven main issues that breeders often face are technical knowledge, financial resources, marketing, suppliers, communication, resources and access to information.

Figure 1 *Conceptual framework*



(Source: Authors' Own Illustration)

Table 1: *Summary of findings*

Problems	Number of Clusters	Details
Technical knowledge	10	Most of the participants are elderly with minimum education and had never attended any training about poultry farming. Their farming practices are self-taught with input from either from their friends or families.
Funding	10	During this project, they were supplied with only starter feed for chicks until it reached 14 days of age. However, the respondents had to feed the chicks until they reached 60 days of age using their own fund. At this point, they started to deviate from using commercial feed and start using food leftovers to compensate for the high feed cost. The farmers are not aware of any funds and incentives from the government, and they have never been visited by any agencies offering such fund.
Market	10	The respondents faced a problem in selling their adult chickens at the end of the project as their location is too far into the rural area. This caused low priced chicken as the buyers are also small, local butchers who also can't afford to offer competitive price to the farmers. To overcome this issue, another buyer who was also supplying chicks at the start of the project, was arranged to buy the adults chickens. He not only agreed to buy the chickens at market price, but also agreed to collect the chickens from each cluster, automatically eradicating the need for the farmers to travel far to sell those chickens. The rural location proved to be a huge challenge to the farmers as they do not have any mode of transport that is suitable for poultry transportation to its market, leaving them with no chance of selling their products at competitive prices.
Supplier	10	During the project, the farmers tried to purchase additional items such as grower feed from nearby suppliers in their village

		however the price is high and with very limited products choice. This issue is pertaining to all agriculture equipment and materials needed, further limiting their ability to support any agriculturally based economic activities they participated in.
Communication	9	All communications with the participants needed to be done face to face for clarification. One of the participants chose to withdraw from the second round due to misunderstanding of instruction and unwillingness to further cooperate with the rest of the team.
Resource	9	At the beginning of the project, the participants were provided with not only chicks and starter feed, but were also given tools and equipment such as brooders. The only requirement which the participants must readied themselves are the housing which will allow the chicks to grow properly. The participants are heavily dependent on the research team to provide resource to support this project as they are barely able to allocate any budget to the project.
Access to information	7	All farmers have handphones but not everyone know how to use it to get any beneficial information about poultry farming or available grants or incentives from the government. During this project, some farmers received assistance from their young, teenager's children to submit their progress update using google form that was provided by the research teams. There were also times when the internet and phone service were disrupted and caused limited communication between the research team and the farmers.

(Source: Authors' Own Illustration)

5. DISCUSSION

The challenges encountered by farmers and ranchers can be attributed to their specific geographic circumstances. The considerable distance between the community and the town presents a range of challenges pertaining to commercial endeavours. The economic

activities of individuals in isolated areas typically face limitations in terms of development and expansion due to the lack of access to diverse sources such as agricultural suppliers, government agencies providing aid, and larger markets. In addition to that, rural areas frequently encounter challenges with internet connectivity, which further restricts their access to critical information. The limited understanding of animal husbandry among individuals, particularly in relation to technical issues such as enhancing productivity, managing diseases, and ensuring optimal feed nutrition, poses a significant challenge to the advancement of their economic endeavours.

Based on the statistics provided by the World Bank in 2019, it can be observed that a significant portion of Malaysia's rural regions lack comprehensive infrastructure, including roads, bridges, and public transportation systems. These elements pose challenges for government officials in their efforts to visit and facilitate the development of communities in those places. The findings of this study indicated that the geographical location of the community engaged in this research is at a considerable distance from the next small town. Consequently, the farmers residing in this rural area are compelled to rely on their personal transport which consist of motorcycles, in order to commute to the agency's office, as the absence of public transportation infrastructure prevents convenient access to their vicinity. In addition, they are engaging in other sources of income such as rubber tapping in the early hours of the day, thus limiting their availability to commute frequently to the nearby government agencies office for consultation and other aides. The government authorities also encounter challenges in accessing data and information pertaining to farmers requiring assistance. Additionally, the geographical remoteness of rural farmers poses obstacles in the provision of financial aid and technical support initiatives. The numerous challenges associated with accessing farmers in remote areas will impede the progress and advancement of their economic endeavors.

The farmers' geographical position poses challenges for accessing different agricultural extension services. Agricultural extension refers to a systematic process of informal education aimed at providing services and promoting the adoption of new techniques, technologies, and information among specific groups or individuals. This process is tailored to meet their specific needs and capacities, with the ultimate goal of achieving socio-economic advancement. This service encompasses the provision of information and technical assistance. This study highlights the various obstacles encountered by breeders in accessing government-provided agricultural extensions, which can be attributed to multiple factors.

5.1. Lack of extension agents

One of the missing pieces in rural development is the lack of extension agents in this area. These agriculture extension services are mainly provided by government agencies, which have limited resources to send agents to every rural community around Malaysia. These agents are mainly placed in various small towns, some of which are barely accessible by the remotely located communities. Farmers in remote areas must travel long distances to access the offered extension services, which are both costly and time-consuming. In this study, most of these farmers main mode of transportation is motorcycles which they used to commute to the nearest small towns, however if they need to seek assistance from major agencies agricultural agencies, extra effort is needed in order to go to the main town which is Alor Star, located about 2 hours away. The rural area demographic also posed a huge challenged with limited phone and internet coverage.

5.2. Communication Infrastructure and language

Another issue is the lack of communication infrastructure in rural areas. Many farmers in these areas may not have access to the internet or reliable phone service, which makes it difficult for them to access information and resources online. This can also make it difficult for extension agents to reach farmers in remote areas. In line with paperless government and IR 4.0, the agencies use online platforms to spread awareness and announce available grants and schemes for the agriculture stakeholders. However, due to unstable and limited coverage of internet in some remote villages, farmers tend to miss out on this crucial information and thus is left behind and not participating in available schemes and initiative.

Another issue is the language barrier, which can also make it difficult for farmers to access extension services. Many rural farmers may not speak the same local dialect as the extension agents, which can make it difficult for them to understand and implement the information provided. In this study, the farmers speak a dialect which is a mixture of local and Siam dialect, which proved to be difficult to understand by the agents especially if they are not from the same state. Thus, the ability to communicate clearly face to face with officers might prove to be difficult is crucial in order to prevent misunderstandings and to help eradicate possible conflicts.

5.3. Lack of Funding

Lack of funding is a major challenge for many rural farmers. Many farmers may not have the financial resources to invest in new farming equipment or technologies, which makes it difficult for them to implement the recommendations provided by extension agents.

One of the main problems faced by this group is the limited amount of fund that they could channelled into their poultry farming. With the rising cost of poultry feed, the issue seem insurmountable and they are forced to rely on food leftovers to compensate for the increasingly expensive feed. While the alternative feed seems able to support their farm, the ideal nutrition required for the growth of their chickens are widely questionable. During the process, they were also introduced to other source of free protein such as the '*madre de agua'* plant, scientifically known as *Trichanthera gigantea*, which can be grown easily and cheaply around their farms.

While there some funds available from the government, these farmers lack the capability to go through the paperwork to obtain it. They are already doing two jobs daily to survive thus any additional demand to submit fund applications are treated hesitatingly.

5.4. Technical Skills among Poultry Farmers

Technical knowledge among rural poultry farmers can greatly impact the success and profitability of their operations. Chicken farming while seem simple actually requires a certain level of knowledge and skills. Knowledge on nutritious feed, disease control and management, sanitation and proper housing for the chickens are crucial to ensure proper growth and avoid high mortality rate. Farmers who lack all these necessary skill and knowledge struggled to raise healthy chicken and face challenges when their birds are infected with various diseases. The lack of nutrition knowledge also dampened farmer's ability in compensating the expensive chicken feed with nutritive alternative. Without proper nutrition, these chickens are even more vulnerable to diseases, and it might incapacitate the flock's growth further. Poultry farming is exposed to a wide range of diseases, and the farmer's lack of knowledge in prevention and disease will cause those losses (Gebremedhin et al., 2016; Nwagbara et al., 2015).

Nutrition knowledge is also crucially lacking among the farmers. Most of these rural poultry farmers do not have access to basic information on proper nutrition for their flocks, and most of them rely heavily on whatever feed is available in their area. The high price of feed also caused them to but cheaper feed disregarding feed quality. The remote location further imposed limitation, as there are only limited choices of feed to choose from when buying it from the suppliers. All these factors can lead to improper feeding and malnutrition. The impact to the flocks is significant especially in the form of decreased growth rates and low egg production. Malnourished chickens are most likely underweight, lesser eggs, with smaller egg size and decreased quality (Jiang et al., 2017; Gebremedhin et al., 2016).

Disease management is another element which caused a lot of problem to these rural poultry farmers. As poultry farming can be exposed to various diseases, the inability of the effected farmers to manage such problem will be disastrous. Farmers with low technical skills were more likely to experience disease outbreaks and higher mortality rates in their flocks, due to their lack of knowledge of proper nutrition (Nwagbara et al., 2015). Disease outbreaks are not uncommon in the poultry industry, and it is extremely important for these farmers to understand and know how to handle such predicament. Lack of disease management among these farmers, caused them to depend heavily on local agencies such as the veterinary department and most of them did not even seek additional help due to long distance of their farms to the agency office. However, if these farmers are properly equipped with enough knowledge on disease management, they could prevent and curb the outbreak when it occurred, effectively.

These farmers also faced problem in the aspect of poultry housing and sanitation management of the farm. As mentioned earlier, these farmers are basically doing two jobs and their main source of income is rubber tapping. With the lack of money and time, most of the poultry housing a makeshift structure near their houses. No proper sanitation plan and schedule maintenance are done prior to establishing the structure beside their resident. This was due to lack of understanding of proper animal housing and sanitation and resulted in future problem for the rural poultry farmers. Chickens need to be kept in clean, dry, and well-ventilated environments in order to grow well and healthy. Lacking knowledge of how to build and maintain proper housing and sanitation program, farmers may struggle to provide their chickens with the required living environment to thrive.

Rural poultry farmers may also lack knowledge on the latest advancements in poultry farming technology. Many farmers may not have access to information on new breeds, feed, and equipment that can help improve their production levels.

5.5. Strategic sustainable guideline for rural poultry farmers.

5.5.1. Source of Technical Knowledge

Addressing this issue requires educating and empowering rural farmers with the necessary knowledge and resources to improve their poultry management practices. This can be achieved through government or non-profit-led training programs, providing access to educational materials, and partnering with private sector experts to offer technical assistance and support. For instance, suppliers who are supplying chicks to these farmers could be roped in to become their trainer whom can provide the technical know-how of poultry farming as well as the crucially needed nutrition and disease management skills. The suppliers will be

viewed as the right person to share these knowledge as they deal with the farmers closely and seemed more familiar to these farmers compared to government agencies.

While government agencies such as the Department of Veterinary Service (DVS) could arranged regular trainings for the farmers, this support must be provided at the location of the farmers to ensure full participations. The farmers will perhaps be more approachable in adapting any new breeding technology and innovations that are introduced.

5.5.2. Close monitoring of the project

Close monitoring is important for rural breeders as it allows the relevant agencies to accurately assess and track the health and progress of the animals. Close monitoring can provide real-time information and data, which can be used to make informed decisions about herd management, breeding, and veterinary care. Agencies involved in any economic activity of rural farmers need to pay close attention and proper program monitoring on the rural farmers in order to ensure that the formulated rural development policies and intended programs are implemented in alignment with the requirement and expectation of these rural farming communities. Such systematic and strategic approach will ensure that adequate resources are allocated accurately and reached the targeted group accurate, without much red tape and clerical hassle for the farmers. This approach is crucial in order to ensure that the relevant policies and strategies are implemented in harmony with the requirement of the rural farmers. Barham and Toma (1997) found that close monitoring from government agencies on rural communities will ensure successful implementation with positive impact on the rural communities. Properly tailored program stood better chances of farming technology assimilation and improved farm management practices.

5.5.3. Local Champions

This study also emphasized the important of local leader or local champion in order for the project to come to fruition. The local leader help integrated community buy-in, involvement and most importantly, support of the development program. The leader is usually a respected local personal and is seen as an example and thus listened to when new initiatives are introduced. Their role in the community will help overcoming resistance and build strong supportive environment for the intended program. This is particularly important in rural areas, where development initiatives may be seen as foreign or imposed from the outside without much discussion with the local community, prior to the program. This supposition is supported by Miguel and Kremer (2004) who found that the involvement of local leaders in improvement programs in rural areas always led to a significant success of the program impact. The local leaders are also important as they serve as the mediator between agencies, extension agent and

even to federal government agencies when there are new roll-out of initiatives for the rural areas.

5.5.4. Complete Supply Chain

For rural farmers, accessibility to suppliers for their resources is crucial to enable their economic activities. In the case of these farmers, dur to their isolated location, they face limited access to high-quality animal feed, agriculture tools and even good quality of chicks' supply. These limitations have a direct impact to lower production of good chickens and by default impacted their income from poultry farming.

On the other hand, these farmers also faced problem with selling their grown chickens at the end of each cycle as there is also limited buyers for these chickens in the rural area. When they embarked into poultry farming, these farmers intended to sell off the chickens in batches and prefers cash on delivery payment for each transaction. However, most of buyers who will buy in bulk and pay cash are located in the town and farmers need to figure out how to transport their grown chickens to these suppliers. Thus, in this case, a special arrangement needed to be plan where buyers could come and collect these chickens from the farm itself. Such arrangement will result in slightly cheaper buying price as the supplier need to factor in the transportation cost incurred as he made his round to each individual farms.

From this event, it indicated how a complete supply chain is acritical for rural farmers to reach market. Complete supply chain will ensure the rural products be transported from farm to market in a timey manner, in good condition and most importantly cost effective. A disruption to the supply chains will cause limited market access and difficulty in selling their products at the right price to the right buyers. Inability to do so will cause below market price for their products and ending up reducing the income for the farmers. Thus, it is up most important to ensure a complete supply chain for rural farmers in order to help them increase their productivity and profitability. This proclamation is supported by studies from World Bank (2016) and the Food and Agriculture Organization of the United Nations (FAO, 2014) in which suggested that a complete supply chain can improve farmers' access to markets, inputs, and financing, which can help to increase their productivity and profitability.

In conclusion, the provision of a complete supply chain is essential in supporting the success of farmers in their agricultural operations. It provides farmers with access to the essential elements that are needed to increase their productivity, profitability, and competitiveness, which can help to reduce poverty, improve food security, and contribute to rural development.

5.5.5. Funding

Besides monetary funding for rural farmers, non-monetary fundings are also crucial in poultry farming. Non-monetary fundings includes free training, support farming equipment and consultation will provide the necessary support and resources for the rural farmers to succeed. While capital funding remains important, non-monetary support prove to be just as important to support the rural farmers. Non-monetary funding also grants farmers to access of critical resources such as chicks, chicken feeds, and vaccination. This type of funding can be provided through public or private sector initiatives, with the aim of increasing the productivity and competitiveness of rural farmers. Agencies hoping to cover far-fetched rural communities should think about the establishment of community 'source' banks and the distribution of poultry farming needs which are easily accessible and near to their location. This is where the role of local leaders or local champion can synergize with agencies to ensure effective implementation. The formal establishment of rural farmers' cooperative is another platform which related agencies should look into. Non-monetary funding is not only easier to manage but is also a way to avoid mismanagement of funds.

6. Conclusion

This paper has shown that developing rural area through economic activities is not something that is simple and straightforward initiative. It involves various aspects of elements which in congruence will contribute to the positive outcomes of the actives. Whilst monetary funding remains as one of the crucial factors in it, there are other social aspects which needed to be looked into in details. Rural farmers need technical support and guidance from relevant authorities to ensure their economic activities are sustainable and profitable in the long run. Through various monitoring and guidance, it is not impossible for these farmers to become the backbone in strengthening our food security and support Malaysia self-sufficient drive in producing our own food.

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