

## Community Readiness of Urban Farming Practices in Malaysia

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### Abstract

Urban farming refers to agriculture activities around cities with limited spaces. People can plant leafy or any easily grown vegetables at their home and urban space. Urban agriculture is not just a source of food but also a way forward of hedge against the negative effects of rapid urbanization. In fact, with the current situation of pandemic strike right now, it is an urgent need for communities to practice urban farming for their personal consumption, besides supporting food security, human safety, and a healthy lifestyle. Hence, this study will determine the community readiness of urban farming practices in Malaysia. Specifically, this study intends to determine the level of independent variables (knowledge, attitude and leadership) as well as community readiness, also the relationship between the factors towards community readiness in urban farming practices. This study was driven by Community Readiness Model (CRM) and employed a simple random sampling technique. A total of 353 participants from Peninsular Malaysia were sampled using a structured questionnaire through a google form. Data gathered was analysed using IBM SPSS (Version 26). The study revealed that the level of all independent variables and the community readiness are high. In addition, the three factors contribute significantly towards community readiness in urban farming practices. Hence, by reflecting to the aim of this study, the three factors (knowledge, attitude, and leadership) might lead to improve the readiness of the community towards urban farming activities in Malaysia. Thus, the finding has potentially to enhance the awareness and readiness of community either in urban or rural areas to involve in agriculture activities while promoting sustainable agriculture in the future.

**Keywords:** Community, readiness of urban framing, practices

### Introduction

Agriculture activity is a way to increase the availability and quality of food. The contribution of agriculture activities has increased the household income and has gradually decreased the difficulties and challenges, particularly in urban and rural areas. The use of natural resources

makes it easy to grab a chance for an improvement in food supply and health conditions and a sustainable environment to solve the demographic problems created by climatic and environmental changes (Dolekoglu & Gun, 2017). In urban areas, practicing urban agriculture which refers to farming activities around cities with limited space is the best solution. The community can plant leafy vegetables, tomatoes, chilies, Brazilian spinach, okra, eggplant, and any easy-grow vegetables. According to Society for Public Health Education (SOPHE) (2015), urban farming is one of the innovative solutions that accesses healthy foods and contributes to the social health of communities in local areas. Agriculture also plays a vital role in rural development, especially related to land use, in countries where agriculture is less economically important (Agriculture's Contribution to Rural Development, 2000). Agriculture is the most common land use in rural areas around the world, and it is a critical component of rural sustainability. Farming and related activities are essential to rural life, greatly contributing to the general health of rural areas in terms of job and business prospects, infrastructure, and environmental quality.

Urban agriculture can be responsible for human well-being, food security and urban stability. The urban farming activity might help to reduce and solve environmental, economic, and social challenges other than satisfying the needs and requirements of people (Md Ibharm & Salim, 2020). Furthermore, By referring a research conduct by Rafiqah and Aziz (2015) and Rezai et al (2016), a studies from Zainal and Hamzah (2018) explained that the things become more difficult when urban households were faced with a high level of living costs as a consequence of rapid rising on food costs. These situations can be seen by the participation of communities in urban farming practices help them to access healthy foods and improve the environment especially in developing countries.

In Malaysia, the population growth is currently focus on urban areas which has reached 74.3% of the total population in 2015 and expected to increase to 79.6% (27.3 million) by 2025 (Department of Statistic, 2010). This scenario would occur due to the rising migration of rural people to the city due to improved economic conditions which results in competition for food sources, education, accommodation, and food security (Nafisi et al., 2020). In addition, less than 10% of people are employed in agriculture sector and less urban people grow crops or breed animals for food (Department of Statistic, 2020). Thus, by establishing food production within urban regions such as urban agriculture activity where it can increase the availability and quality of food, cost-effective food supply, and revenue production through sales and marketing.

Moreover, with the pandemic of Coronavirus Disease 2019 (COVID-19) has spread rapidly across the world-shaking lives and livelihoods. Malaysia started to experience the COVID-19 pandemic in March 2020. All the activities either economic, social, agriculture and others were totally shut down where this action contribute to disruption in the agriculture supply in chain. During the pandemic, each sector was moved slowly including agriculture. People were asked to stay at home and were not allowed to go outside with limited activities. As a result, COVID-19's restrictions had a negative effect on each sectors including agriculture and caused people's livelihoods, public health, food systems and also experiencing income or job losses. It is important for the community to really practising an urban farming activity for their own consumption, particularly during this hard situation.

The participation of communities in agriculture activities might help community or urban dwellers to access healthy foods and improve the environment especially in developing countries. Since the concept of farming in the city not just to access healthy food but also might avoid a negative effect of rapid urbanization. Therefore, searching and learning more about farming is the best way to address and implement their awareness of agriculture to get a better lifestyle. As a result, it is important for the community to really practicing farming activities for their own consumption, particularly during this hard situation of the pandemic COVID 19.

Therefore, there is a need to pursue this study in order to determine community readiness towards urban farming practices while facing challenges by the outbreak of COVID-19 and to improve their livelihoods. At the same time, through urban farming also might increase food security and availability in the country. Thus, it is important to create the awareness among urban communities in Malaysia to boost the positive impact towards environmental, food security, health, cost-living or economics. This study will determine three (3) important factors which are knowledge, attitude and leadership that contributing to community readiness of urban farming practices in Malaysia. These factors might improve the readiness of community towards urban farming practices in Malaysia and to be ready to face challenges of the outbreak in the future. Thus, by understanding the attitudes and readiness of community is therefore vital as it helps to increase the awareness among them to take an action toward urban farming practices for now and for the future of agriculture movement.

### **Methodology**

This study employed a quantitative approach. A survey was focuses on Peninsular Malaysia, where the target 353 communities were from various background of communities such as B40 category, unemployed workers, retired and unemployed graduates. Based on *Raosoft.com* calculation of sample size, the sample for this study required 185 of urban communities. A sample of 185 communities who involved with Koperasi KEBUNITI training (under the Human Resource Development Fund (HRDF) Project) was selected randomly for this study.

The study made use of a questionnaire as survey instruments through online (google form). Measurement model from the Community Readiness Model (Oetting et al., 2014) was modified and adapted questionnaire from Fairuz et al (2018) has been used to answer all the research objectives. The questionnaire was designed to collect information demographic characteristics of communities and factors (knowledge, attitude, and leadership) that contribute to the readiness of urban farming practices in Malaysia. A six (6) Likert-scale with a score ranging from strongly disagree to strongly agree was used to examine the level and the readiness of communities. All constructs were written in Malay language to aid in community comprehension and minimize misinterpretation. This research primarily used SPSS version 26 to conduct a statistical test for the analysis.

### **Result and Discussion**

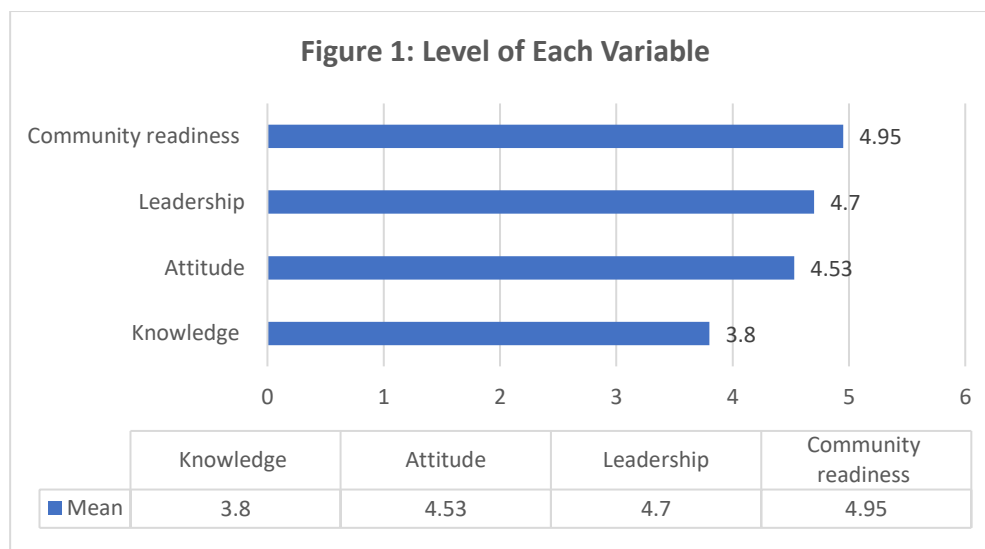
Table 1 illustrates the communities' demographic profile of the respondent, that comprise of gender, age and ethnicity. Results indicates that 60% of the respondents in this sample were male and 40% female which means that both males and females participate actively in urban farming activities. In term of the age, majority of the respondent were at the age ranging from

29 to 64 years old. The largest number of communities were elderly with the age from 53-64 years, followed by age of 41 to 52 years with 28.1%. The lowest age was from 17-28 years old (6.5%). From here, we can see that, only a few of the youth generation participated in urban farming activities. For ethnicity, most of the respondents were Malays with 93.5%, followed by Indian (3.8%) and Chinese with 2.2% in this sample.

Table 1  
*Profile of Respondents*

Items	Frequency	Percentage (%)
<b>Gender</b>		
Male	111	60
Female	74	40
<b>Age</b>		
17-28	12	6.5
29-40	44	23.8
41-52	52	28.1
53-64	63	34.1
65-76	14	7.6
<b>Race</b>		
Malay	173	93.5
Chinese	4	2.2
Indian	7	3.8
Others	1	0.5

Figure 1 shows the level of independent variables (IV) and dependent variable (DV). The independent variables consist of knowledge, attitude and leadership while the dependent variable is community readiness toward urban farming practices. From the results, the level of attitude, leadership and community readiness of urban farming practices are high, while knowledge indicates a moderate level. For independent variables, the highest mean score is leadership (4.70), followed by attitude (4.53 mean score) with a standard deviation 0.86 and 0.84 respectively. The mean score of knowledge is moderate level with 3.80 (SD=0.84). Meanwhile, the community readiness level is high with mean score of 4.95 (SD=0.86).



Pearson's correlation coefficient was used to measure the association between the knowledge, attitude and leadership towards the readiness of urban farming practices, whereas the strength of the relationship is measured by Guilford's Rule of Thumb. Table 2 shows that all independent variables are positively correlated towards the community readiness of urban farming practices. The leadership correlates the highest, followed by attitude, however, knowledge indicate low association towards the communities' readiness of urban farming practices in Malaysia

Table 2

*Relationship between Knowledge, Attitude, Leadership towards Community Readiness of Urban Farming Practices*

	Variables	Y	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>
Y	Community readiness	1			
X <sub>1</sub>	Knowledge	.386**	1		
X <sub>2</sub>	Attitude	.831**	.593**	1	
X <sub>3</sub>	Leadership	.854**	.437**	.827**	1

\*\* . Correlation is significant at the level 0.01 level (2-tailed).

Based on the findings, leadership and attitude factor has a higher contribution towards communities' readiness of urban farming practices. As the greater leadership and attitude increases, therefore their readiness towards urban farming practices will also improve. The effective leadership in farming communities would be beneficial to promote urban farming activities and the development of agriculture in Malaysia (Ishak & Abd Manaf, 2020). Meanwhile, research done by Azman et al (2013) explained that if community have high positively attitudes towards their surroundings including farming activities, they become more open to accept good agriculture practices such as organic farming cultivation. Thus, the attitude influence the community involvement in urban farming activities, where it might also promoting their own vegetable production in urban areas (Rezai et al., 2016). Active urbanization, accompanied by the development and specialization of agriculture activities in large cities, might transform the term "city" areas into professional activity and leisure (Elena Tsyplakova, et al., 2020).

## Conclusion

The highest factor contribute to community readiness of urban farming practices is leadership, followed by attitude and knowledge. The leadership contributes as the main factor that influence communities to involve in agriculture activities. The involvement of local leaders among the community might influence the readiness of the community to involve in urban faming activities. Knowledge also contributes to the readiness of the community, however, the background of the communities that have had an experience in gardening and agriculture might reduce the chances of the readiness towards agriculture practices. The greater readiness of the community or urban dwellers towards urban farming practices, the higher chances for them to implement it by their own. This will lead to help them in changing and enhancing their quality of lifestyles to face the challenges of endemic of COVID19 in the future. The contribution of the farming activities might enhance the quality of life in terms of health, economy, lifestyle, and social status where it creates an attractive and healthy green environment in urban and rural areas.

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