

## Perception of Community Residents on Supporting Urban Agriculture in Malaysian City: Case Study at Bukit Mertajam

*(Persepsi Penduduk Komuniti terhadap Sokongan ke atas Pertanian Bandar di Malaysia: Kajian Kes di Bukit Mertajam)*

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### ABSTRACT

*The purpose of this study is to identify the concept of urban agriculture in the residential environment of a community by taking the Taman Desa Damai community of Bukit Mertajam City, Penang State, Malaysia as the sample. This study conducted in-depth interviews and observations with 15 community residents to explore the influences of setting up urban agriculture with respect to three aspects of community residents benefits at the social, economics and environmental levels, and followed by about future farm environmental effect, key stakeholders and the challenges. The results indicate that community farming has become significant in realizing the full potential of the residential community and facing obstacles to be sustained in the long term. We recommend stakeholders to support in terms of finance so that community farming has more access to technical facilities and achieve household food self-sufficiency, food availability and food security, diversity of diet and contribute immensely to urban household's livelihoods. It is hoped that this work will be a useful reference in promoting more urban community participation in community urban agriculture in order to achieve sustainable urban environment.*

*Keywords: Community farming; urban agriculture; social benefits; economic benefits; environmental benefits*

### ABSTRAK

*Kajian ini bertujuan untuk mengenal pasti konsep pertanian bandar di persekitaran kediaman komuniti dengan mengambil komuniti Taman Desa Damai di bandar Bukit Mertajam, Pulau Pinang, Malaysia sebagai sampel. Kajian ini telah mengendalikannya wawancara dan pemerhatian mendalam dengan 15 penduduk untuk mengkaji persepsi mereka terhadap pertanian bandar berkenaan dengan tiga aspek faedah yang akan diperolehi, iaitu dari peringkat sosial, ekonomi dan alam sekitar, serta diikuti dengan tentang kesan persekitaran pertanian bandar pada masa depan, pihak berkepentingan dan cabaran yang dihadapi. Hasilnya mendapati bahawa pertanian komuniti adalah penting dalam kalangan penduduk komuniti dan terdapat kekangan untuk melaksanakannya untuk jangka masa panjang. Dicadangkan agar pihak berkepentingan untuk menyokong dari segi kewangan supaya pertanian komuniti mempunyai lebih banyak akses kepada kemudahan teknikal dan mampu diri dari segi keperluan makanan, ketersediaan dan jaminan keselamatan makanan, kepelbagaian makanan serta menyumbang kepada hasil penghidupan isi rumah di bandar. Diharapkan kajian ini akan menjadi rujukan berguna untuk menggalakkan lebih banyak penyertaan penduduk komuniti bandar dalam pertanian komuniti bandar demi mencapai persekitaran bandar lestari.*

*Kata kunci: Pertanian komuniti; Pertanian Bandar; Faedah Sosial; Faedah Ekonomi; Faedah Alam Sekitar*

### INTRODUCTION

The Food and Agriculture Organization of the United Nations (FAO) defined food security exists when all people, at all times, have physical and economic access for sufficient safe and nutritious food to meet their dietary needs and food preferences for a healthy and active life as agreed upon at the World Food Summit in 1996 (FAO 1996). There are numbers of different cities that are working on achieving food security to overcome

the issues to feed their own population growth in urban and peri-urban areas. There are many types or forms of urban agriculture which includes, but is not limited, to those activities that take place within or surrounding urban boundaries such as backyard gardens, community gardens, balcony gardens, container gardens, vertical farming, greenhouse agriculture, schoolyard or institution gardens, and metropolitan food clusters. The ability of households and individuals to access food is one of the key aspects of food security to achieve sustainability in

their cities. Therefore, urban growth impacts positively and negatively on farming communities (Cournanea et al. 2016).

Urban farming may orient urban citizens towards the growing issues of food insecurity and the need for continuous supplies for citizens own food basic needs. Community farming can improve food security through self-consumption at household level in urban and peri-urban areas. Interventions that build within community connectedness in urban and peri-urban settings may increase the household food security (Lee et al. 2018). Community gardens play a significant role in serving as spaces of alternative food production and community development activities in marginalized neighborhoods (Ghose & Pettygrove 2014). In the shape of community gardens, it is estimated that around 15-20% of the world's food is produced in urban areas (Armar-Klemesu 2000). In recent years, the concept of community farming or community garden in the city has received more attention. A community garden plays a huge role in changing the way of life in the capital cities where members from diverse socio-economic backgrounds come together to grow food, which also influences on changing cities' landscape, changing individuals' attitude and perspective towards the environment and nature (Trendov 2018). In the earliest definitions, according to Mougeot (1996), urban agriculture was intended as an economic activity related to the production of cropping or livestock keeping and distribution of food, meat, fruits, vegetables, and non-food crops such as herbal in urban or peri-urban areas. It also includes the use of resources and recycled products and services related to agricultural activity. According to FAO, urban farming is defined as a multifunctional system that connects traditional agricultural activities with the benefits of individual health, well-being of the community, economic vitality, leisure activities, landscape and environment protection issues (Butler & Moronek, 2002). The latest definition by Miccoli, Finucci and Murro (2016), urban agriculture is feeding the city through a combination of resources, networks, opportunities and contributing to the improvement of the welfare of the community. Therefore, urban agriculture plays a very important role in two main global problems, i.e. urbanization and food security. Consequently, urban agriculture contributes towards sustainable urban development (Trendov 2018).

This study explores the viewpoints of community residents on the concept of urban agriculture in the residential environment. The objectives of the study are to understand the feelings of community residents in the three aspects of urban agriculture at the social, economic and environmental benefits, and to study the future farm environment effect, the role of stakeholders and challenges in community urban farming.

## LITERATURE REVIEW

The term "community garden" is such a broad term that it can be applied to many situations and locations. In England and China, community farming is practiced in diverse settings of spaces and times, and the findings show that farmers make strong connections with the land, the farmers and other members regardless of their situations (Liu et al. 2017).

With regards to the implementation of urban farming or community gardens have been used in American cities since the 1890s, with the first gardens appearing in Detroit. Detroit was the first city in the United States to create an extensive municipally sponsored urban gardening program using vacant lots in the city. Mayor Hazen Pingree started the program in response to the economic recession that began in 1893, to confront social problems such as jobless and hungry (Smithsonian Institution 2017). During World War I in 1918 period, community gardens as supplement and expand the domestic food supply. During the Great Depression in 1930s, community gardens provided a means for the unemployed to grow their own food. During this time, private, state and local agencies provided individuals with garden plots and employment in cooperative gardening. In 1940s, the Victory Garden campaign during World War II encouraged people to grow food for personal consumption, recreation and to improve morale. From the victory gardens during WW1 and WW2, to large greening projects, to small curbside gardens, community gardening has taken many forms that gave rise to the rebirth of community gardening in the 1970s (University of Missouri Extension 2015). In London, the first community farm was established in Kentish Town in 1972 (Federation of City Farms and Community Gardens 2015).

While, according to Tina Jackson (2017), of *Do Something and Food wise*, community farming has emerged in various forms. "In the UK and Europe allotment gardens have been an important source of food for many families, some passing on allotments for several generations. In Cuba organically farmed community gardens fed millions of people after the collapse of the Soviet Union and its economic support in 1989. In Asia, community gardening remains a typical way of life in many villages," she explains. "In Australia, the recent wave of community gardening began with Melbourne's Nunawading in 1977, followed a few years later in 1985 in Sydney, with community gardening at Callan Park in Rozelle", she adds. This has proved that community garden concept is not a new idea. Indeed, the connection between foods and the community garden had already evolved since ancient times.

Urban farming or community garden has universal benefits towards community in achieving sustainable environmental (Lanarc-Golder 2013), social improvement (Scott 2012), economic reliance (Giedych 2013), and health and nutrition improvement (Kumar 2012). In

Cuba, Havana urban agriculture has played a major impact on Cuban food security for the urban and suburban populations (Altieri et al. 1999). Chronological periods of Cuban agricultural policy show beneficial impact on environmental, social and economic and has changed from a conventional intensive to organic farming system (Febles-Gonzalez et al. 2011) through urban agriculture. In the city of San Jose, California, involvement in community gardening has contributed towards food affordability of community gardeners in an urban setting and cost savings, although yields depend on growing conditions, gardener's skill, availability of water, and other factors (Algert et al. 2014). Community gardens in Duncan Street Miracle Garden, Baltimore city, Maryland contributes to individual, household, and community food security (Corrigan 2011). Successful community gardens can increase the involvement of urban residents with the urban food system. Individual, mostly female and older participation in urban farming like to grow their own food products that affect their psychological and personal attitude towards urban farms (Grebilus et al. 2017). In Barcelona, urban agriculture is practiced as a leisure and social activity rather than food production activity (Sanye-Mengual et al. 2016). As a social-ecological resilience, community gardens in post-Sandy New York City function as multi-purpose community refuges which hosted meaningful and restorative greening practices and developed supportive communities (Chan et al. 2015). In Melbourne, community gardens provide a space to engage immigrants in urban activities by transplanting the gardening practices from their country of origin, or by creating a connection to the new community of Melbourne (Agustina & Beilin 2012). Studies have shown that community farming is a possibility to prevent overweight/obesity by enhancing physical activity levels and improve diet effectiveness (Heise et al. 2017). Community farming contributes to well being benefits where participation in community garden influences the nutritional health environmental and social environment factors (Egli, Oliver & Tautolo 2016). A study by Alaimo et al. (2008) shows that household participation in a community garden may improve fruit and vegetable intake among the urban adults compared to those who did not participate.

In Malaysia, urban and peri-urban agriculture (UPA) plays an important role in supplying food and managing urban and peri-urban open space (Ramaloo & Siwar 2016). Urban farming is practiced to increase the household food security to achieve sufficient quantities of food, appropriate nutrition, cost-effective food supplies and reduction in food bills (Rezai, Shamsudin & Mohamed 2016). According to Othman et al. (2017) from the year 2014 to the year 2016, the government and related agencies have helped to make urban farming in Malaysia increases rapidly and become increasingly popular among urban communities, especially in the low-cost residential areas. The cultivation areas are the compounds of house, institutions and offices, government reserve land, and suitable wasteland. It is importance of the urban farming

activities to be implemented within cities environment, however, the role of community is very crucial in the implementation of urban farming activities within urbanized areas as the demand for green development increases (Yusoff, Hussain & Tukiman 2017). Thus, the acceptance of urban agriculture among farmers in the Malaysian city was influence by their level of cognitive, affective and behavioral aspects (Zainal & Hamzah 2017).

Although many researchers have mentioned about the benefits of community urban farming activities in the global urban perspective, but very few studies regarding urban farming have been conducted in Malaysia (Islam & Siwar 2012; Kaur & Hitam 2010). This is because urban farming is lack of contribution in terms of public support due to the absence of communities' participation in creating a greener environment although massive farming systems are available (Hussain, Yusoff & Tukiman 2017).

## METHODOLOGY

### BACKGROUND OF STUDY

Bukit Mertajam is urban city located at Penang State, Malaysia. Taman Desa Damai, a Bukit Mertajam community located in the Central Seberang Perai district (daerah Seberang Perai Tengah) made up largely of terrace houses with six blocks of walk-up flats (250 units) and some shop lots. In September 2009, Penang state government to set up a Pusat Sumber Alam Sekitar (Environmental Resource Centre) in every district to promote environmental awareness. These centres are to be platforms for community to meet and share ideas and experiences about green environments. Therefore, Rukun Tetangga (RT) and Residents Associations (RA) selected by the Seberang Perai Municipal Council (MPSP) as the part of Environmental Resource Centre for the Seberang Perai Central District. The centre is headed by a main committee and several sub-committees. Others are elected among invited Taman Kawasan RT/RA representatives and other NGOs and individuals. Urban farming Project Taman Desa Damai was established in April 2010 under the guidance and advice from the Penang Department of Agriculture (DOA, 2017). In the beginning the project was name as "Projek Bumi Hijau", it mean Green Earth Project and now it was namely as Urban Farming Project by Penang Department of Agriculture (DOA, 2017) authorities. Urban farming Project, Taman Desa Damai Community is the first area in the Malaysia where obtained the Malaysian Organic Scheme Certificate (SOM) on 2013. The management ensures that members of the community do not use any pesticide or chemicals. The supervising officer from the Department of Agriculture visits regularly to ensure that the plants are grown organic. Currently there are 15 household (2016) reduce from 30 household (2010) who become member of this Urban farming Project and working on 0.125 HA farm size plot. The household



members involve in this urban farming project become less due to health issues and getting aged. While, other members sustaining this urban farming developed as their own interest to go green environment for a better quality of life. All crops are grown for self-consumption. Vegetable types such as kale, spinach, salad, cabbage, sawi, radish, okra and other green leafy vegetables are produce by this resident community (Figure 1). The average income of the community resident who involve in urban agriculture project is RM500 or about 116.37USD per month.

Apart from organic farming via urban farming project, the communities conduct some environmental activities such as environmental monitoring of rivers and waterways, making garbage enzymes, making mud balls (Figure 1) and “bokashi” for sale, making furniture out of used pallets, kitchen waste composting, recycling material (Figure 1) and research and development (R&D) using banana trunk fibres to absorb oil from waterways.

Other residents in Penang have also begun to grow edible plants in open space, and other neighborhoods have also begun to follow suit as Taman Desa Damai Community urban farming and Penang Department of Agriculture authorities encourage Taman Desa Damai Community to sustain urban farming as best example of urban farming in the state, therefore, this community is taken as the subject of this study.

#### DATA PREPARATION AND ANALYSIS

This research is a qualitative study. Taking the residents of the Taman Desa Damai Community, Central Seberang Perai District in Bukit Mertajam City as subjects, this study adopted a semi-structured interview and observation method to assess the community residents who have claimed as management of the Green Earth community garden in order to explore and understand their feelings about the home living environment of the community as constructed with urban farms. The interview was

conducted in December 2016. There are a total of 15 interviewees; the basic data of the participants are given in Table 1.

TABLE 1. Basic data of the participants

Respondent	Subject	Gender	Age
R1	Chairperson of Urban Project Farming	Male	67
R2	Working Private Environmental	Male	53
R3	Self Employee	Male	63
R4	Retired Teacher	Female	63
R5	Housewife	Female	71
R6	Private Worker	Male	55
R7	Qwn Bussiness	Female	69
R8	Retired Teacher	Female	67
R9	Private Worker	Male	57
R10	Housewife	Female	65
R11	Caterer	Male	56
R12	Qwn Bussiness	Male	57
R13	Qwn Bussiness	Female	62
R14	Retired Teacher	Female	58
R15	Qwn Bussiness	Male	57

To gain a complete understanding of the resident’s views, experiences and perspectives on community farming; a qualitative approach was deemed appropriate (Creswell 2007). Specifically, this study utilized semi-structured, in-depth interviews, which enable researchers to explore community resident’s experiences on a deeper level (Lyndon et al. 2015; Sarmila et al. 2015; Halim, Salleh & Omar 2011; Azman et al. 2010). The semi-structured interview approach was utilized for this study because the participant’s viewpoints are more likely to be expressed in an openly designed interview situation (Flick 2009). Interviews were 60 minutes in length and were digitally recorded. Audio files were transcribed, serving as the primary data source.



FIGURE 1. The vegetable plot, mudballs and recycling material at Taman Desa Damai

## RESULT AND DISCUSSIONS

This section presents the results of the study starting with the background information through interviews regarding three aspects from the point of view of social, economics and environmental benefits, and followed by future farm environment effect, the role of Penang Department of Agriculture (DOA) and other stakeholders, and challenges. The explanations are as follows (some of the responses of the respondents were edited for language):

### 1. Social Benefits

#### (a) Opportunities for Community Interaction

*Respondent R5:* “We older people always meet, share and make friendship; our feelings toward one another are closer and happy relationship.”

*Respondent R14:* “We creating good bond and togetherness by knowing each other as our community friends when we started to joint this urban farming project.”

*Respondent R1:* “We have good bond and interactions with our stakeholder especially with DOA officers, Penang Environmental Resource Centre for the Seberang Perai Central District and NGOs.”

#### (b) Urban Farming as Place of Teaching

*Respondent R2:* “We are teaching and handle workshop regarding environmental protection like how to make mud ball, “bokashi”, and producing soap from used cooking oil and composting kitchen waste.”

*Respondent R1:* “There are many visitors personally, government agencies and NGO’s learning from us.”

*Respondent R4:* “We are always invited by school teachers to teach about the vegetables growing using organic method and composting.”

#### (c) Household Food Sufficiency from Own Production

*Respondent R10:* “Our own vegetables are sufficient for us. We don’t buy vegetables from market. We only buy some type of vegetables which we never grow by ourselves.”

#### (d) Opportunities to Improve Personal Health and Wellbeing

*Respondent R14:* “I go into the garden in the morning and evening and spend 3 hours. I feel very active and relax.”

*Respondent R6:* “Gardening every day after my work, I feel my body was healthy and sweating.”

*Respondent R8:* “Everyday gardening is like exercise for me.”

*Respondent R15:* “Our vegetables are 100% organic and we feel safe eating our own grown vegetables.”

*Respondent R12:* “Our vegetable are higher levels in nutrition and is healthy food to consume.”

*Respondent R7:* “We all getting older make more friends and relief our stress and loneliness when we meet our community farming friends here.”

*Respondent R9:* “We are happy seeing our vegetable every day.”

In modernization development in urban areas, people often neglect to interact and be healthy, while urban agriculture increases the opportunities for residents to interact and for communities to participate at a social level. By sharing experiences and education through the process of growing vegetables, urban agriculture succeeds in promoting feelings between one another, health improvement and increases the opportunities for exchanges between different age groups and educates the younger generations.

### 2. Economic Benefits

#### (a) Economic Savings on Food

*Respondent R13:* “Each of us take care of our own farm plot. Once the vegetables are grown we exchange the food in system barter way with our community friends.”

*Respondent R5:* “Growing own food, it saves cost and reduces our grocery budget.”

*Respondent R7:* “Every time save cost in transportation. Just pick it up from our vegetables plot and save our time”.

#### (b) Finding Income to Sustain Urban Farming

*Respondent R1:* “To pay our water bill and land rent for one year duration we are making mud balls and “bokashi” for sale to support our technical urban farming cost. We can’t use river water because it was polluted so that we have to use domestic water pipe supply and we paid our bill by our own self participation.”

*Respondent R2:* “As a part to sustain our urban farming cost, we are selling recycling material and kitchen waste composting too.”

The study found, economic benefit were of little significant to many gardeners in the study area. Although the income was not fully supported, however the gardeners have a little bit of economic saving through food production by own production and community food exchange.

### 3. Environmental Benefits

#### (a) Reduction of Pesticides and Herbicides Entering Waterways

*Respondent R3:* “We never use polluted water from river to watering our crops.”

*Respondent R4:* “Our urban farming management conducted environmental monitoring of the rivers and waterways activities.”

#### (b) Reductions in The Amount of Green Waste Sent to Landfill through Composting

*Respondent R11:* “We compost kitchen waste, making garbage enzymes and mud balls and ‘bokashi’.”

(c) *Preserving the Biodiversity of Plant Species*

*Respondent R1*: “Farming methods impact our lives of all who share the ecosystem and they can pollute the environment. Therefore, we believe our organic farming produces more biodiversity than any other farming systems method and we want to produce healthy food.”

Urban agriculture development of community gardens have potential role in urban waste and recycling management. Community gardens contributions to the organic movement as incubators of organic enterprises (locally) were develops of innovative in urban agricultural practices, and through education and awareness rising about organic food production in the study area.

## 4. Respondent Perception about the Future of the Farm Environmental Effect

*Respondent R5*: “We are scared that nobody will take care of our plant after we all die or unable to do gardening.”

*Respondent R10*: “We need our children to know about and value the farming, but they are not interested.”

*Respondent R13*: “Our own community people also not many are joining us. Everyone said they are busy. Actually it was our wish to help the environment, not maybe.”

*Respondent R7*: “We at this age also still makes us learning, how to grow plant in safety and healthy way. Our farm should sustain as ‘go green’ to create awareness to many people who are living in the cities.”

*Respondent R1*: “We use our own pocket money to pay the water bill and land bill per year. It is thankful to DOA and NGOs who support us, but if municipal also give free of charge for our water bill usage for irrigation, it will give much hope for us to sustain and give awareness to youth and other community about this urban farming.”

Although urban agriculture has multifunctional benefits to the community, the community-based developments mostly are carried out by using the

residential space in a manner co-existent with nature. Therefore, in addition to taking into consideration the future effect on farm environment, the residential itself, authorities and public should fully supports, as well as the provisions related to water and land availability for farming.

## ROLE OF STAKEHOLDERS

Table 2 summarizes the activities and role of the Municipality of Seberang Perai Tengah (MSPT) and other stakeholders in developing the community urban agriculture in Bukit Mertajam City, Penang state. According to the Taman Desa Damai community household, the main key stakeholder’s supporter to sustain their urban farming project is Department of Agriculture (DOA) Penang and Non-governmental organization (NGO).

The study has also found that the key stakeholders had ‘a considerable impact’ on linking government and non-government agencies as a supporter to sustain the urban agriculture project. Based on the findings of this study it is recommended that the key stakeholders to sustain funding, start-up support for new community gardens, increase organic knowledge-sharing among gardeners, providing a range of activities in the gardens, efforts to involve young people and to promote ongoing community consultation and involvement.

## CHALLENGES IN URBAN FARMING

A community farming is a multi-functional benefit especially to the society. However, the community farmers faced some challenges to sustain the urban agriculture farming in long term. According to the Taman Desa Damai Community Urban Farming management, the challenges that affect them are:

*Respondent R1*: “Our community urban farming management is lack of financial support to pay the rental fees on land use and domestic water supply per year”.

*Respondent R1*: “Our community urban farming management is lack of supporter from our own residential

TABLE 2. Activities of key stakeholders in community urban agriculture

Name of Stakeholder	Role played in community gardens
Municipality of Seberang Perai Tengah	<ol style="list-style-type: none"> <li>1. Provision of land to community urban farming.</li> <li>2. Provision of domestic water supply to community urban farming.</li> </ol>
Environmental Resource Centre	<ol style="list-style-type: none"> <li>1. Promoting environmental awareness to the residential community.</li> </ol>
Department of Agriculture (DOA) Penang	<ol style="list-style-type: none"> <li>1. Promoting and supporting the establishment of urban farming project.</li> <li>2. Advisor and technical supporter for proper organic urban farming.</li> <li>3. Supporting little amount financial to buy technical items to set up the community urban garden.</li> </ol>
Non-governmental organization (NGO)	<ol style="list-style-type: none"> <li>1. The main source of income that support in terms of finance by buying “bokashi” and “recycling waste” from the urban farming management.</li> </ol>



community and public to involve in urban farming production activities”.

*Respondent R2*: “Our community urban farming management is lack of youth support and their interest in urban farming due to nonprofit activities”.

*Respondent R1*: “Our community urban farming management using our own participants’ money to give workshop on the organic farming method to schools and institutions”.

There are many challenges to implementing the community urban farming. Based on the findings of this study, related factors that affect the management are a community garden requires money for technical support and attention from local authorities, residential community, the public and the younger generation to sustain this community urban farm in the long term.

#### CONCLUSION AND RECOMMENDATION

At the beginning it may be difficult for some community residents to accept urban farming concept. But, through the provision of resources it can be one of the best options to overcome the food crisis in the future. If urban agriculture is properly set up by government and agencies and well-practiced from now, it will give multiple benefits to the community residents, so that community residents gradually change their own ideas, and thus collaborate and support in achieving the green community vision. Through in-depth interviews with community residents, the conclusions of this study are as follows:

1. Setting up a proper urban agriculture in the residential environment of community allows retired residents to regain and happily focus on the rest of their lives.
2. The community residents in the urban area will consume healthy and higher level of nutrient plants with short food mileage.
3. By building urban agriculture, it can psychologically give satisfaction and peace of mind to the community residents.
4. Urban farming can results in not only food costs reduction but also consuming better quality food, as well as using organic method to plant biodiversity.

Based on the findings of this study, recommendation as a strategy to ensure that community’s urban agriculture is considered in Malaysian planning development includes the following actions:

1. The Municipalities to integrate urban agriculture into the community’s garden project in cities are considered as part of the planning process; especially where new housing development is constructed.
2. The Municipalities to provide land tenure security for gardens on-site in public housing development in Malaysia.

3. The Municipalities continue to explore funding to ensure the sustainability of the existing community garden project in Malaysia.
4. Community garden project to utilize and promote organic practices and pesticide use should be prohibited in community urban agriculture.
5. The Municipalities with the Department of Agriculture partnership to select food-producing plant materials for community garden project and cities landscape.

Establishing community’s urban agriculture allows urban residents to plant and consume their home-grown vegetables, fruits, and herbs. The addition of this community’s urban agriculture project will solve the food security problem and let urban residents get closer to the land. Further research is required to look at other criteria of urban farming to achieve sustainability in an urban environment by authorities in Malaysia, as well as public support and participation to implement community urban farming in their cities.

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