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## **Analysis of Urban Farming Success Determinants**

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#### **ABSTRACT**

### **Abstract**

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Malang City experiences an increase in population every year, which has led to a reduction in agricultural land. In addition, the population continues to grow due to the arrival of newcomers and students from outside the city. Despite having a high population, there is still unused agricultural land that has not been optimally utilized. These areas have transitioned to urban farming by using the land to produce healthy vegetables. This study aims to analyze the factors influencing interest in agriculture, such as knowledge, attitude, and perception. A quantitative approach was used in this research, employing purposive sampling techniques, including interviews and documentation. The total sample size in this study was 70 respondents. Data processing was conducted using descriptive statistical analysis and SEM-PLS. The results of the study indicate that knowledge and attitude toward urban agriculture do not have a significant effect on people's interest in farming in urban areas. However, perception of urban agriculture has a positive influence on interest, as the community recognizes its economic, social, and environmental benefits.

#### INTRODUCTION

Urban farming refers to agricultural practices conducted within urban environments, encompassing aquaculture, crop cultivation, and livestock rearing. These activities are typically carried out in limited spaces, such as using polybags or vertical farming systems. Urban farming not only provides health and economic benefits to urban communities but also

contributes to oxygen production and food security (Putri et al., 2023). Amid rapid urbanization and the conversion of agricultural land into non-agricultural uses, urban farming serves as an adaptive solution to the decreasing availability of productive land in many cities, including Malang. Lowokwaru District, particularly the Tlogomas Subdistrict, is a densely populated area experiencing a steady influx of migrants and students each year. Consequently, agricultural land in the area has steadily diminished (Mutiara, 2021).

The agricultural land area in Tlogomas decreased from 7.15 hectares in 2014 to 6.5 hectares in 2015, 5.73 hectares in 2016, 5.27 hectares in 2017, and further to 4.87 hectares in 2018. The most significant decline occurred between 2017 and 2018, with a reduction from 5.27 to 4.87 hectares. This trend is primarily attributed to the conversion of agricultural land for non-agricultural purposes, resulting in declining agricultural productivity (Mutiara, 2021). The land-use change has also had adverse impacts on the physical environment, such as increased flood risk, water scarcity, and water pollution. These conditions pose substantial challenges for land availability in the Tlogomas Subdistrict. In response, some community members across several neighborhood units (Rukun Warga/RW) have utilized small parcels of land to cultivate a variety of vegetables using urban farming systems. These efforts provide access to healthy food, contribute to local food security, and empower the community economically. However, not all residents express interest in adopting such practices. Therefore, it is essential to understand the factors that influence community interest in participating in urban farming.

As a socio-ecological phenomenon, urban farming has garnered interest across interdisciplinary studies. Theoretically, the success of urban farming is often analyzed through individual and collective behavioral approaches, with specific emphasis on the interest in engaging in urban agriculture. Interest is defined as an internal drive that reflects an individual's attraction to a specific object or activity, generally shaped by a combination of knowledge, attitude, and perception (Woodworth & Marquis D.G., 2001). Interest is not innate; it develops over time through learning processes and, in turn, fosters further engagement. This implies that interest can be cultivated and strengthened (Aprijal et al., 2020). In the context of urban farming, interest may be reflected in a willingness to experiment, learn more, or actively participate in related activities.

Knowledge refers to the information acquired through human experience and evolves through ongoing learning. It is a crucial domain that shapes individual actions. Knowledge can be direct or indirect, dynamic, specific, subjective or permanent, general, and objective (Mubarok, 2014). Within urban farming, knowledge includes understanding farming techniques in limited spaces, health benefits, contributions to food security, and environmental impacts in urban settings. Attitude refers to an individual's belief, which is shaped by personal knowledge or information about a person, object, or issue (Dewi Larasati et al., 2020). A positive attitude toward urban farming may reflect how much an individual values it as a viable solution to urban food, environmental, and social challenges. Such attitudes often stem from the belief in long-term benefits and the sustainability of urban farming practices. Perception, meanwhile, refers to the process through which sensations are received, selected, organized, and ultimately interpreted by individuals (Fuady et al., 2017). Perception of urban farming relates to how individuals interpret its feasibility, challenges, and readiness to implement urban farming (Nzaramyimana et al., 2024).

Previous studies on determinants of urban farming practices have been conducted by (Ilvira et al., 2021), who found that knowledge did not significantly influence the interest of Generation Z in engaging with urban agriculture. However, these findings contrast with the variables of interest- and motivation-based classes, both of which were found to have a significant influence on Generation Z's interest in practicing urban farming. The urban farming framework identifies individual factors as critical aspects influencing one's interest in engaging in urban agriculture activities. These factors include interest, capital,

knowledge, and skills. Additionally, individual characteristics, the economic environment, socio-cultural conditions, management capacity, and interest all exert influence on agricultural performance, particularly in the farming activities of young farmers in Malang (Mufriantie, 2021). Based on this framework, it can be stated that the implementation of urban agriculture is highly influenced by community interest. A previous study (Sugandini et al., 2020) found that norms and publicity (subjective norms) are the most influential factors in shaping the intention to participate in community urban farming, followed by the availability of agricultural facilities and costs (perceived behavioral control), as well as attitudes toward community urban farming activities (attitude) (Firdausa, 2025) found that interest in urban farming is determined by attitude, subjective norms, and perceived behavioral control. However, most of these studies still focus on youth groups, volunteer communities, or regions with strong policy support. Few studies have explicitly analyzed the combined influence of knowledge, attitude, and perception on urban residents' interest in urban farming, particularly in densely populated residential areas with limited land availability, such as in Tlogomas Subdistrict, Malang City. This study addresses that gap by providing empirical evidence on how the three psychological variables, including knowledge, attitude, and perception, affect public interest in practicing urban farming in a distinctive urban setting: densely populated, land-constrained, and predominantly inhabited by elderly groups. By employing a quantitative approach and testing the model using SEM-PLS, this study contributes both methodologically and substantively to the development of the literature on community participation in urban agriculture in Indonesia.

The main issue raised in this study concerns the low level of interest among some residents of Tlogomas Subdistrict to engage in urban farming activities, despite the availability of underutilized land. This phenomenon raises questions about the factors influencing community interest in urban farming practices. Based on a review of the literature and preliminary findings, the research problem formulated in this study is how knowledge, attitude, and perception influence community interest in implementing urban farming in their residential environment. The objective of this research is to empirically analyze the influence of the three main factors, including knowledge, attitude, and perception, on community interest in developing urban farming in Tlogomas Subdistrict, Lowokwaru District, Malang City. Through this approach, the study aims to provide a deeper understanding of the psychological determinants that contribute to public participation in urban farming activities, while also offering evidence-based policy recommendations for the development of more participatory and sustainable urban agriculture programs.

#### RESEARCH METHODS

This study employs a quantitative approach to analyze the factors influencing public interest in the implementation of urban agriculture. The research was conducted in RW 05 and RW 09 of Tlogomas Subdistrict, Lowokwaru District, Malang City, East Java Province. The selection of Tlogomas Subdistrict in Lowokwaru District was based on the consideration that this area experiences a reduction in agricultural land area each year, which impacts the fulfillment of community food security needs.

The population in this study comprises all productive-age residents (18–65 years) who are permanent residents of RW 05 and RW 09 in Tlogomas Subdistrict, Lowokwaru District, Malang City, East Java Province. Respondents were selected purposively based on their involvement or potential involvement in urban farming. The sampling method used in this study applies Cochran's formula. This method is employed to statistically analyze the success rate of data and to test hypotheses involving several dichotomous variables with the same mean values. Cochran's formula carries a 10% margin of error and a 90% confidence level. Based on this formula, the minimum required sample size is 67.24 respondents. To minimize errors and invalid data, the researcher increased the sample size to 70 respondents.

Data in this study were collected through a combination of documentation techniques and surveys using questionnaires directly distributed to respondents. The research instrument was self-developed using a Likert scale (1–5). The collected data were then analyzed using quantitative analysis techniques with the assistance of SEM-PLS (Structural Equation Modeling – Partial Least Squares) software. SEM-PLS was selected because the model used is predictive, the data are not normally distributed, and the sample size is relatively small (n < 100), as recommended by Hair et al. (2017). The hypotheses in this study are as follows: 1) Knowledge has a significant influence on public interest in developing urban agriculture; 2) Attitude has a significant influence on public interest in developing urban agriculture.

# RESULTS AND DISCUSSION Results

A total of 70 respondents participated in this study. Respondents were selected from the communities in RW 05 and RW 09 of Tlogomas Subdistrict and included individuals who had participated in urban agriculture activities and those who had not. Respondent characteristics were analyzed based on gender, age, highest level of education attained, occupation, area of origin/address, marital status, and position. The following presents the results of the descriptive statistical analysis of respondent characteristics in this study:

**Table 1.** Characteristics of Research Respondents Based on Urban Farming Activity, Gender, Age. Education, Occupation, Area of Origin, Marital Status, and Position

	Characteristics	Total	Percentage (%)
Urban Farming	Have done urban farming	56	80
Activity	Have not done urban farming	14	20
-	Total	70	100
Gender	Male	12	17.1
	Female	58	82.9
	Total	70	100
Age	26 -35 y/o	1	1.4
S	36 - 45  y/o	14	20
	46 – 55 y/o	27	38.6
	56 – 65 y/o	28	40
	Total	70	100
Education	Elementary School	5	7.1
	Junior High School	5	7.1
	Senior High School	11	15.7
	Senior High School/Equivalent	26	37.2
	D3	4	5.7
	S1	16	22.9
	S2	3	4.3
	Total	70	100
Occupation	Entrepreneur	2	2.9
•	Housewife	39	55.7
	Bank employee	1	1.4
	Self-employed	17	24.3
	Retiree	9	12.9
	Lecturer	2	2.9
	Total	70	100
Area of origin	Tlogomas Highway RW 05 Tlogomas Village, Lowokwaru District, Malang City	35	50
	Permata Hijau Housing RW 09 Tlogomas Village, Lowokwaru District, Malang City	35	50
	Jumlah	70	100

	Characteristics	Total	Percentage (%)
Marital Status	Married	56	80
	Not married	14	20
	Total	70	100
Position	Chairman	2	2.9
	Secretary	2	2.9
	Member	66	94.2
	Total	70	100

Table 1 presents the socio-demographic characteristics of the 70 respondents involved in this study. The majority of respondents (80%) have had experience in urban farming activities, while the remaining 20% have never been involved in such practices. The gender distribution reveals a notable disparity, with females dominating the sample at 82.9%, and males comprising only 17.1%. In terms of age, most respondents belong to the older age group: 40% are aged 56-65 years, and 38.6% are aged 46-55 years. Respondents aged 36-45 years account for 20%, whereas only 1.4% fall within the 26-35 years age group. About education level, the majority of respondents have completed senior high school or its equivalent (37.2%), followed by those with a bachelor's degree (22.9%). Other education levels include senior high school (15.7%), elementary and junior high school (each 7.1%), diploma (5.7%), and master's degree (4.3%). In terms of occupation, the majority of respondents are housewives (55.7%), followed by selfemployed individuals (24.3%), retirees (12.9%), entrepreneurs and lecturers (each 2.9%), and one bank employee (1.4%). The respondents are evenly distributed between two areas: Tlogomas Highway RW 05 and Permata Hijau Housing RW 09, both located in Tlogomas Subdistrict, Lowokwaru District, Malang City, each contributing 50% to the total sample. Regarding marital status, 80% of respondents are married, while the remaining 20% are unmarried. In terms of their roles in community activities, the vast majority identify themselves as ordinary members (94.2%), with only a small proportion serving as chairpersons (2.9%) or secretaries (2.9%). Overall, the respondents in this study are predominantly older housewives, and this demographic dominance may influence the study's findings.

The following presents the results of the convergent validity test on the research variables:

**Table 2.** Convergent Validity Test Results Using Loading Factor

	Knowledge about Urban Farming (X1)	Attitude about Urban Farming (X2)	Perception about Urban Farming (X3)	Interest for Urban Farming (Y)
X1.1	0.791			
X1.2	0.870			
X1.3	0.895			
X1.4	0.893			
X1.5	0.898			
X1.6	0.875			
X2.1		0.781		
X2.2		0.897		
X2.3		0.934		
X2.4		0.824		

	Knowledge about Urban Farming (X1)	Attitude about Urban Farming (X2)	Perception about Urban Farming (X3)	Interest for Urban Farming (Y)
X2.5		0.811		
X2.6		0.840		
X3.1			0.889	
X3.2			0.856	
X3.3			0.886	
X3.4			0.941	
X3.5			0.949	
X3.6			0.894	
Y1.1				0.953
Y1.2				0.951
Y1.3				0.914
Y1.4				0.741

The following are the results of the convergent validity test for the research variables based on the Average Variance Extracted (AVE) values:

Table 3. Convergent Validity Test Results Using AVE

Variables	Average Variance Extracted (AVE)	
Knowledge about Urban Farming (X1)	0.759	
Attitude about Urban Farming (X1)	0.722	
Perception about Urban Farming (X1)	0.816	
Interest for Urban Farming (X1)	0.799	

Source: Processed by the researchers, 2025

Based on Tables 2 and 3, it can be concluded that each variable has a loading factor value greater than 0.7 and an AVE value greater than 0.5. This indicates that all indicators have valid or acceptable loading factors and Average Variance Extracted (AVE) values. Therefore, all variables in this test have met the criteria for convergent validity, and there are no issues concerning the loading factor and AVE tests.

The following section presents the results of the discriminant validity test for the research variables:

**Table 4.** Discriminant Validity Test Results Using Pattern Loading

	Knowledge about Urban Farming (X1)	Attitude about Urban Farming (X2)	Perception about Urban Farming (X3)	Interest for Urban Farming (Y)
X1.1	0.791	0.505	0.334	0.260
X1.2	0.870	0.448	0.341	0.340
X1.3	0.895	0.485	0.330	0.298
X1.4	0.893	0.445	0.435	0.385
X1.5	0.898	0.441	0.442	0.424
X1.6	0.875	0.405	0.404	0.382
X2.1	0.427	0.781	0.408	0.487

	Knowledge about Urban Farming (X1)	Attitude about Urban Farming (X2)	Perception about Urban Farming (X3)	Interest for Urban Farming (Y)
X2.2	0.427	0.897	0.544	0.561
X2.3	0.372	0.934	0.586	0.508
X2.4	0.421	0.824	0.564	0.393
X2.5	0.493	0.811	0.538	0.396
X2.6	0.512	0.840	0.592	0.442
X3.1	0.428	0.636	0.889	0.730
X3.2	0.373	0.598	0.856	0.603
X3.3	0.430	0.548	0.886	0.666
X3.4	0.394	0.605	0.941	0.683
X3.5	0.375	0.534	0.949	0.843
X3.6	0.407	0.525	0.894	0.911
Y1.1	0.389	0.466	0.820	0.953
Y1.2	0.305	0.463	0.749	0.951
Y1.3	0.407	0.422	0.745	0.914
Y1.4	0.357	0.652	0.656	0.741

Based on the table above, it can be observed that all pattern loading values for each variable are greater than their respective cross-loading values. This indicates that all variables in this study fulfill the requirements of possessing good discriminant validity.

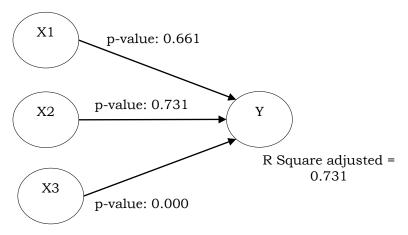
The following are the results of the reliability test for the research variables:

**Table 5.** Reliability Test Results Using Cronbach's Alpha & Composite Reliability

Variables	Cronchbach's Alpha	Composite Reliability
Knowledge about Urban Farming (X1)	0.791	0.950
Attitude about Urban Farming (X2)	0.870	0.939
Perception about Urban Farming (X3)	0.895	0.964
Interest for Urban Farming (Y)	0.912	0.940

Source: Processed by the researchers, 2025

Based on the table above, it can be concluded that each variable has Cronbach's Alpha and Composite Reliability values greater than 0.7. This is evidenced by the Composite Reliability values for the variables: knowledge about urban farming (X1) at 0.950, attitude toward urban farming (X2) at 0.939, perception of urban farming implementation (X3) at 0.964, and interest in urban farming (Y) at 0.940. In addition, the Cronbach's Alpha coefficients also meet the reliability criteria of being above 0.6, as seen in the knowledge variable (X1) at 0.791, attitude (X2) at 0.870, perception (X3) at 0.895, and interest (Y) at 0.912.



**Figure 1.** *Inner Model Structural Equation Modeling* Source: Processed by the researchers, 2025

The following are the results of the R-squared test for this study: **Table 6.** Coefficient of Determination (R-Square) Results

 R-Square
 R- Square Adjusted

 Y
 0.698

 0.684

Source: Processed by the researchers, 2025

Based on the table above, it can be seen that the Adjusted R-Square value is 0.684. This indicates that the ability of the variables, knowledge about urban farming (X1), attitude toward urban farming (X2), and perception of urban farming implementation (X3) in explaining interest in urban farming (Y) is 68.4%. Therefore, this model can be categorized as good or strong.

The following are the results of the F-squared test for this study:

**Table 7.** F-Square Test Results

Knowledge about Urba Farming (X1)	n Attitude about Urban Farming (X2)	Perception about Urban Farming (X3)	Interest for Urban Farming (Y)
X1			0.003
X2			0.002
X3			1.226
Y			

Source: Processed by the researchers, 2025

Based on the table above, it can be concluded that the variables knowledge about urban farming (X1), attitude toward urban farming (X2), and perception of urban farming implementation (X3) have F-squared values, with the perception variable showing a value of 1.226. This indicates that the influence of the exogenous variables on the endogenous variable has a strong or significant effect.

The following are the results of the hypothesis testing in this study:

**Table 8.** Hypothesis Testing Results Using Path Coefficients

	Original Sample	Sample Mean (m)	Standard Deviation (STDEV)	T Statistics	p- Values	Description
Knowledge about Urban Farming (X1)	0.038	0.038	0.087	0.439	0.661	Rejected
Attitude about Urban Farming (X2)	0.032	0.025	0.093	0.344	0.731	Rejected
Perception about Urban Farming (X3)	0.797	0.813	0.077	10.353	0.000	Accepted

Based on the results of the first hypothesis test, it was found that the knowledge variable does not have a significant effect on interest. This is indicated by the original sample value of 0.038, a p-value of 0.661 (greater than the 0.05 threshold), and a T-statistic value of 0.439 (lower than the critical value of 1.96). Therefore, it can be concluded that the null hypothesis (H0) is accepted and the alternative hypothesis (H1) is rejected, meaning there is no significant influence of knowledge (X1) on public interest (Y) in RW 05 and RW 09, Tlogomas Subdistrict, Lowokwaru District, Malang City.

This finding is consistent with the study conducted by Zulfikar et al. (2023), which concluded that knowledge does not have a significant effect on public interest in engaging in urban farming. Similarly, previous research (Ilvira et al., 2021) showed that, partially, knowledge is an insignificant variable in influencing interest in urban farming practices.

The insignificance of knowledge about urban farming in influencing the interest of residents in RW 05 and RW 09, Tlogomas Subdistrict, may be attributed to the suboptimal involvement of the community in urban farming activities. This may be because the majority of the population in the area falls into the older age group. Furthermore, the educational level in this community is relatively low, with most individuals having only completed elementary school. As a result, challenges such as mistakes in planting and maintaining crops in the urban farming system are frequently encountered.

To address these challenges, collaboration with external parties and support from academic institutions are crucial in building a knowledge-based community. This aligns with previous research (Sugihartini et al., 2023) that academic institutions can assist communities by providing skilled and critical human resources capable of generating innovative, proactive, and entrepreneurial knowledge.

Based on the results of the second hypothesis test, it was found that the attitude variable does not have a significant effect on interest, as indicated by the original sample value of 0.032, a p-value of 0.731 (greater than 0.05), and a T-statistic value of 0.344 (less than 1.96). Therefore, it can be concluded that the null hypothesis (H0) is accepted and the alternative hypothesis (H1) is rejected, indicating that there is no significant influence of attitude (X2) on public interest (Y) in RW 05 and RW 09, Tlogomas Subdistrict, Lowokwaru District, Malang City. This finding is consistent with previous research (Ali et al., 2020) that attitude does not influence public interest in practicing urban farming.

Attitude consists of three main components: cognition (beliefs or knowledge about an object), emotion (feelings toward the object), and behavior (the tendency to act) (Simbolin, 2015). Although attitudes can influence behavior, they do not always directly result in behavioral outcomes due to several moderating factors (L. Dey et al., 2023). In the context of

urban farming, this helps explain why attitude may not have a significant effect on public interest in participating in such practices. First, the cognitive and emotional components may not be strong enough to trigger action. For instance, individuals may believe that urban farming is beneficial (cognition) and even feel positively about it (emotion), yet still lack the motivation or capacity to engage in the practice. This disconnection often arises when behavioral interest is hindered by situational factors such as limited time, lack of land or resources, or insufficient skill.

Second, according to the Theory of Planned Behavior (Ajzen, 1991), behavior is not only determined by attitude but also by subjective norms and perceived behavioral control. Even if individuals possess a positive attitude toward urban farming, the absence of social encouragement or a perception that the activity is difficult to carry out may suppress their interest (Kusumasari, 2015). For instance, individuals may ideologically support urban farming but do not perceive it as relevant to their circumstances, resulting in low practical interest. Therefore, although residents may display supportive attitudes toward urban farming, this does not necessarily translate into a willingness to participate, particularly when practical barriers or weak behavioral commitments are present. This is evidenced by the irregular attendance of some residents in urban farming activities. Thus, it can be assumed that some residents in RW 05 and RW 09 of Tlogomas Subdistrict may be reluctant to participate collectively in urban farming initiatives.

To address this issue, it is recommended to develop innovations that integrate external knowledge with local wisdom. Such an approach serves as a strategic effort to improve public attitudes, which in turn can foster greater interest in urban farming. Ultimately, this strategy can enhance the effectiveness and sustainability of urban farming programs.

Based on the results of the third hypothesis test, it was shown that the original sample value was 0.797, the p-value was 0.000 (which is less than 0.05), and the T-statistic was 10.353 (which is greater than 1.96). These results indicate that the variable of perception toward urban farming has a positive influence on the interest of residents in RW 05 and RW 09, Tlogomas Subdistrict, Lowokwaru District, Malang City. This positive influence reflects a unidirectional relationship between the two variables: the better the perception of urban farming, the greater the interest of the residents in RW 05 and RW 09. These findings suggest that the community's perception of urban farming is relatively high, indicating that individuals in this neighborhood generally possess a comprehensive understanding of urban farming and view it positively. This finding is consistent with previous research (Zulfikar et al., 2023), which found that perception significantly influences public interest in practicing urban farming.

Perception refers to the brain's ability to interpret stimuli or the process of interpreting incoming stimuli through the human senses. The responses resulting from perception may take various forms, depending on the individual. Perception varies across individuals because it is influenced by differences in sensory experiences and personal perspectives, resulting in either positive or negative evaluations of stimuli, as well as interpretations of visible or tangible aspects of human life (Brands et al., 2024). Interest does not arise spontaneously within individuals. Several factors influence interest, one of which is internal factors such as perception (Ramayanti & Khoiriawati, 2023). When an individual has a positive perception of an activity, it can shape their interest in engaging with it.

Furthermore, the influence of perception on interest in practicing urban farming in RW 05 and RW 09 can be attributed to the community's consensus that urban farming is easy to implement. According to (Syabrina et al., 2022), urban farming provides benefits across economic, social, and environmental dimensions. Therefore, it can be concluded that perception significantly influences the interest of the community in RW 05 and RW 09, Tlogomas Subdistrict, Lowokwaru District, in engaging with urban farming practices.

#### CONCLUSION

Based on the analysis conducted in this study regarding the determining factors of successful urban farming, which examined the influence of knowledge, attitude, and perception toward urban farming on public interest in its application, it can be concluded that the key factor influencing public interest is the perception of the implementation of urban farming. The knowledge variable was found to have no significant effect, likely due to the relatively older age group and lower education level, which hindered the correct cultivation and maintenance of plants. Similarly, the attitude variable did not significantly influence interest. These findings reinforce the role of perception as a key factor in shaping public interest in social innovations such as urban farming, in alignment with the Theory of Planned Behavior approach. The results of this study confirm the importance of perception as a key predictor in the intention to adopt agricultural innovation in urban areas.

#### **RECOMMENDATIONS**

Based on the findings, discussion, and conclusions of this study, several key recommendations can be proposed. First, the knowledge and attitude variables toward urban farming, which were found to have no significant effect on public interest, indicate the need for academic support to enhance public understanding and conduct outreach programs to strengthen belief and trust in urban farming. Second, the perception variable, which showed a significant effect on interest, underscores the importance of maintaining consistent and scheduled implementation while maximizing community participation. Third, as some variables did not show significant effects, future researchers are advised to increase the number of respondents or apply the same topic to different research objects to allow for comparative analysis, as well as to consider adding or modifying indicators for each variable. Lastly, it is recommended that the government enhance the implementation of urban farming programs in Malang City, particularly in the Tlogomas Subdistrict, and promote its commercialization as an effort to increase public interest and strengthen community food security. The Malang City Government may engage women's groups as agents of urban farming promotion through community-based training and vertical garden demonstrations.

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