

Factors that Influence Knowledge Sharing in the Development of Farming in Talang Keramat Urban Village of Banyuasin Ditric

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Abstract

The study on backyard farming in Talang Keramat Village analyzed knowledge sharing behavior and its influencing factors such as creativity, social support, appreciation, shared mentality, member diversity, team cohesiveness, education, extrinsic motivation, and social capital using a quantitative survey of 45 randomly selected respondents. Results show that all factors except extrinsic motivation significantly influence knowledge sharing behavior in the development of backyard farming. This behavior not only fosters social and environmental benefits, such as improved cooperation and a more organized, comfortable environment, but also supports the sustainability of backyard farming. The study implies that optimizing knowledge sharing through community-based and cross-sectoral approaches can further enhance the sustainability and impact of backyard farming. For future research, it is suggested to investigate the mechanisms of intrinsic motivation and digital platforms in facilitating knowledge sharing to strengthen community farming initiatives.

Keywords: agriculture, soil, yard, behavior, knowledge sharing

INTRODUCTION

Farmers' dependence on large areas of land for farming has become a major challenge in the sustainability of farming in Indonesia (Fitria et al., 2024) . Along with the increasing land conversion for non-agricultural purposes, the availability of agricultural land is narrowing (Lapatandau et al., 2017) . This has an impact on decreasing production yields and employment opportunities for farmers. This causes farmers' income to decline and increases their economic vulnerability (Purwanti, 2020) .

On the other hand, food security challenges are also reflected in the low consumption of vegetables and fruits in the community, especially in rural areas. In fact, both commodities are the main source of nutrition in supporting a diet that is Diverse, Nutritious, Balanced, and Safe (B2SA) (Rumasukun et al., 2024) . The utilization of yard land is one of the innovative solutions to address both challenges simultaneously, increasing access to nutritious food while boosting farmer household productivity (Alfiyani et al., 2024; Sirnan et al., 2025) . Khomah & Fajarningsih, (2016) explained that the utilization of yard land is very beneficial for households. Besides being able to meet family food needs independently, yard products such as vegetables and fruits can also be sold so as to provide additional income. This organically cultivated yard also

ensures the quality and safety of food for the family. The utilization of this yard can also improve the creativity, independence, and financial condition of the community.

To optimize the utilization of the yard, the Ministry of Agriculture has launched the Rumah Pangan Lestari (RPL) program. The concept of RPL encourages the management of home yards by utilizing local resources wisely to provide diverse and sustainable food. When EPL is developed on an area scale such as a hamlet or village, the concept is known as Rumah Pangan Lestari (KRPL) (Badan Litbang Pertanian, 2017). KRPL also includes intensified use of living fences, green open spaces, public facilities, and processing and marketing of produce.

One example of successful KRPL implementation is in Talang Keramat Village, Banyuasin Regency. Since 2011, this village has been designated as a model village in the KRPL program for South Sumatra Province, with 800 hectares of residential area and 200 hectares of yard. The utilization of yard land is focused in several RTs, such as RT 15, RT 19, and RT 22, and is supported by the existence of women farmer groups such as Mekar Sari and Kusuma Jaya.

The innovations include the development of nurseries, verticulture, and organic vegetable cultivation. Each household is given polybags and seeds such as cherry tomatoes, mustard greens, leeks, and chilies. This activity is part of sustainable agriculture which prioritizes the use of local resources and knowledge (Sunarti et al., 2015) (Asiah et al., 2021) .

In the context of backyard farming development, knowledge sharing is a key element that supports the success of the program. Iqbal & Qureshi, (2022) define knowledge sharing as the process of sharing information, experience, and expertise between individuals to solve problems, develop ideas, or implement policies. This process includes four types of shared knowledge: professional, coordinative, object-based, and know-who knowledge. Raharso & Tjahjawi, (2016) added that the success of knowledge sharing depends on the extent to which the organization or community encourages and facilitates these activities.

Communities in Kelurahan Talang Keramat show high enthusiasm for new knowledge that can increase income and strengthen family food security. Yazid et al., (2013) observed the emergence of a positive attitude of the community in developing organic vegetable cultivation with simple, environmentally friendly technology. In addition, there is also a growing initiative to establish a joint training center and demonstration land comparing organic and non-organic cultivation (Redny, 2023) .

With its potential and the high collaborative spirit of the community, Kelurahan Talang Keramat is an ideal area to study in the context of developing home-garden farming through a knowledge sharing approach. Based on this background, this study aims to analyze the behavior and factors that influence knowledge sharing in the development of yard farming, as well as identify the benefits in terms of income, social, and environmental aspects of yard farming in Talang Keramat Village, Banyuasin Regency. Practically, this study provides benefits in strengthening farmer empowerment strategies through increasing social and individual capacity, as well as providing

empirical evidence on the effectiveness of the yard-based farming model in improving food security and household welfare.

METHODS

This research was conducted in Talang Keramat Sub-district, Banyuasin Regency. The determination of the location of this study was carried out purposively, with the consideration that in the sub-district there was a lack of knowledge sharing among yard farmers. The research method used in this study is the survey method (Sari et al., 2022). Survey research is quantitative research using the same structured questions to everyone, then all the answers obtained from each respondent are recorded, processed, and analyzed. The sampling method in this study is a simple random sample or often known as simple random sampling where each farmer has the same opportunity to be sampled, the reason researchers took 45 samples because it was believed that the 45 samples could represent the total population in Talang Keramat Village.

To answer the first objective of knowing the behavior of *knowledge* sharing in the development of yard farming in Talang Keramat Subdistrict, Banyuasin Regency, using a Likert scale. To answer the second objective, namely the factors that influence knowledge sharing in the development of yard farming in Talang Keramat Village, Banyuasin Regency, using the Chi Square Test ($\alpha = 0.05$) then processed using SPSS 16.0.

H0: Factors do not influence knowledge sharing in yard farming development

H1: Factors affecting knowledge sharing in the development of farmyard farming.

The formula used is:

Description:

O_i = Number of observed cases in the i -th category

E_i = Expected number of cases in the i -th category

K = Number of categories observed

$X^2_{count} < X^2_{\alpha} (0.05)$ = Accept H0, meaning there is no influence of factors affecting knowledge sharing on the development of farmyard farming.

$X^2_{count} > X^2_{\alpha} (0.05)$ = Reject H0, meaning there is an influence of knowledge sharing factors on the development of farmyard farming.

To answer the third objective, namely the benefits of yard farming development in Talang Keramat Village, Banyuasin Regency, using descriptive statistics provides an overview of the research objects sampled. Explanation of data through descriptive statistics is expected to provide an initial description of the problem under study.

RESULTS AND DISCUSSION

Knowledge Sharing Behavior in Backyard Farming Development

This study aims to measure knowledge sharing behavior among yard farmers in Talang Keramat Village, Banyuasin Regency. Knowledge sharing behavior is measured through three main indicators, namely: attitude, subjective norms, and social communication. The results of data recapitulation are presented in Table 1.

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Table 1. Average Knowledge Sharing Behavior of Respondents

No	Indicator	Average Score	Category
1	Attitude	7,71	High
2	Subjective Norms	6,44	Medium
3	Social Communication	6,60	Medium
	Total	20,75	Medium

Source: Primary data processed, 2025.

Based on the table above, knowledge sharing behavior is in the medium category with a total score of 20.75. This shows that respondents have practiced knowledge sharing, but not optimally. The attitude indicator obtained the highest score (7.71) and is in the high category, which means that the majority of respondents have a positive view of the importance of knowledge sharing in the development of farmyard farming. However, the subjective norms (6.44) and social communication (6.60) indicators are still in the medium category, indicating limitations in social influence and frequency of knowledge interaction. The results showed that the knowledge sharing behavior of yard farmers in Talang Keramat Village was in the medium category. This indicates that although there are efforts to share knowledge among farmers, there are still barriers that limit information disclosure and optimal collaboration.

More specifically, the three indicators of knowledge sharing - attitudes, subjective norms, and social communication - provide a different picture:

- Attitude refers to the extent to which respondents perceive knowledge sharing as positive and beneficial in backyard farming. A high mean score on this indicator indicates that farmers have a positive perception of the benefits of knowledge sharing, such as increased profits, experience, and the development of new ideas.
- Subjective norms describe the extent to which individuals feel compelled to do knowledge sharing due to social pressure or expectations from the surrounding environment. The medium score on this indicator indicates that although respondents acknowledge social expectations, the influence is not strong enough to encourage active knowledge sharing behavior.
- Social communication is an indicator that reflects the extent to which respondents are involved in interacting, discussing and exchanging information with fellow farmers and the community. The moderate score on this indicator indicates that the quality and intensity of communication among farmers is uneven, thus slowing down the diffusion of information and innovative farming practices.

Analysis of the Influence of Factors on Knowledge Sharing Behavior

To determine the influence of various factors on knowledge sharing behavior, statistical analysis is used with the Chi-square test. The test results can be seen in Table 2.

Table 2. Chi-square Test Results of the Influence of Factors on Knowledge Sharing

No	Factor	χ^2 Count	χ^2 Table ($\alpha = 0.05$; $df = 4$)	Sig. (p-value)	Description
1	Creativity	10,929	9,487	0,027	Influential
2	Social Support	12,655	9,487	0,013	Influential
3	Awards	14,697	9,487	0,005	Influential
4	Shared Mental	11,092	9,487	0,026	Influential
5	Member Diversity	9,769	9,487	0,045	Influential
6	Team Cohesiveness	10,216	9,487	0,037	Influential
7	Education	10,929	9,487	0,027	Influential
8	Extrinsic Motivation	7,462	9,487	0,113	Not Affected
9	Social Capital	10,495	9,487	0,033	Influential

Source: Primary data processed, 2025.

From the test results above, it is known that 8 out of 9 factors have a significant influence on knowledge sharing behavior ($p < 0.05$). These factors are: creativity, social support, rewards, shared mentality, member diversity, team cohesiveness, education, and social capital. In contrast, extrinsic motivation has no significant effect on knowledge sharing behavior, which means that external motivation is not enough to encourage respondents to actively share knowledge.

The results show that knowledge sharing behavior is not yet fully optimal among yard farmers in Talang Keramat Village. Despite having a positive attitude towards knowledge sharing, social influence (subjective norms) and the quality of social communication are still limited.

This finding is in line with research by Atmoko, (2023) which emphasizes that the knowledge sharing process is largely determined by social, cultural, and organizational factors. Thus, strategies to improve knowledge sharing should focus on strengthening the internal farming community - through creativity training, social empowerment, the formation of solid farmer groups, and the development of trust between members.

Farm Income, Social and Environmental Benefits of Backyard Farming Development in Talang Keramat Village

a. Income Benefits of Backyard Farming

Income is the total net profit obtained by farmers from the results of production in their farms or the difference between revenue and income. With production costs.

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The following average production costs, revenue, and income of respondents can be seen in Table 3.

Table 3. Average Production Costs, Revenue, and Income of Farming Yards in Talang Keramat Village

No.	Type of Cost	Average (Rp/lg/year)
1.	Revenue	19.165.422
2.	Production Cost	5.008.166
3.	Revenue	14.157.256

Source: Primary data processed, 2025

Based on Table 3, the average farm income per cultivated area per year is Rp. 14,157,256, where the average revenue is Rp. 19,165,422 and the average production cost is Rp. 5,008,166. While the average farm income of respondents is Rp. 14,157,256 / year, where the total average income is taken from the total sales of seeds and vegetable sales.

b. Social Benefits in the Development of Farming Yard in Talang Keramat Village

Social interaction is the ability of an individual to carry out social relations between individuals or groups characterized by social contact and communication (Yuswatiningsih & Rahmawati, 2020) . The yard is one of the places or containers where social interaction occurs. Social interactions that occur in the yard are generally interactions between individuals, which are interactions with neighbors around the house. In the community of Talang Keramat Village, the yard is a place to gather with neighbors. In general, people in Talang Keramat Village when they have finished household affairs or do household chores, in the afternoon they will gather together with neighbors in the yard to chat. Not only in the afternoon, people in Talang Keramat Village also sometimes gather with neighbors because they do not have a permanent job, especially mothers who develop their yards as farms, usually mothers in Talang Keramat Village exchange knowledge and help each other in developing their yard farms. Their yard farms. With the use of the yard in Talang Keramat Village, the community in Talang Keramat Village interacts more with the surrounding community or with the yard farmer group, in addition to selling the results of the yard, the community in Talang Keramat Village also shares the results of their yard with neighbors or family. In the development of yard farming in Talang Keramat Village, farmer groups were formed among fellow yard farmers, including the mekar sari farmer group in RT 22, kusuma jaya in RT 19, and melati jaya in RT 15.

c. Environmental Benefits of Backyard Farming Development in Talang Keramat Village

Pekarangan is a traditional private home garden, which is an integrated system with a close relationship between humans, plants, and animals (Narumi et al., 2022;

Sugito et al., 2017) (Ratnawati & Widyastuti, 2022) . The yard is also an open space that is often utilized for kinship events and social activities (Wurianingsih, 2011) .

In the utilization of this yard if properly maintained will provide an attractive, beautiful, cool, comfortable and healthy and pleasant environment that makes us feel at home. Utilization of this yard can make the environment healthier, the use of The utilization of the yard using verticulture planting patterns can provide more beauty value because using this verticulture pattern makes the yard look neater and more organized, in addition to polybag media the community also utilizes other used items such as gutters, plastic balls and others. In the utilization of this yard can also help the community to accommodate rainwater to be more useful because of the plants in the yard, besides that some yard farmers in Talang Keramat Village utilize kitchen waste which is used as natural fertilizer for plants.

CONCLUSION

Based on the research conducted in Talang Keramat Village, knowledge sharing behavior in the development of farming yards is categorized as medium, with an average score of 20.75. Attitude towards knowledge sharing is high, while subjective norms and social communication are medium. The chi-square test indicates that knowledge sharing behavior is significantly influenced by factors such as creativity, social support, appreciation, shared mentality, member diversity, team cohesiveness, education, and social capital, whereas extrinsic motivation does not have a significant effect. Economically, yard farming benefits farmers with an average annual income of Rp14,157,256, while socially it enhances interaction, cooperation, and knowledge exchange. Environmentally, the farming yards become more organized, cooler, and comfortable, improving the respondents' quality of life. Future research could explore the role of intrinsic motivation and its interaction with social factors in enhancing knowledge sharing behavior to develop more effective community-based agricultural programs.

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