

SOCIALIZATION OF HYDROPONIC VEGETABLE SALES INCREASE STRATEGY IN SOUTH MERUYA REGION

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ABSTRACT

The need for vegetables in DKI Jakarta exceeds 1,500 tons, but the supply cannot be met internally. Vegetable supplies are supplied from various other regions, even from Lampung to Java. This will have an impact on the quality of vegetables that arrive in DKI Jakarta because they travel quite far with unpredictable weather. Therefore, several areas, especially South Meruya Village, have developed vegetable planting techniques using hydroponic media. However, the marketing is not that extensive because of their fear of the response to the selling price being more expensive than conventional vegetables. Therefore, this socialization provides SWOT analysis training to RPTRA managers and finds hydroponic business management strategies in order to develop appropriate market segments so that hydroponic vegetable sales increase and are sustainable. Based on the activities, it is known that the quality of hydroponic vegetables is still uneven in terms of size. This shows that it still takes time to improve the quality of vegetables in order to enter premium market segments such as supermarkets, restaurants, and hotels.

Keywords: Business Strategy, Hydroponic Vegetables, Organic, SWOT Analysis.

1. INTRODUCTION

The need for vegetables in DKI Jakarta reaches 1,500 tons per day. This is also driven by the post-covid-19 conditions that have made people aware of the need to consume healthy food. However, the availability of vegetable supplies still has to be supplied from other areas. This can have an impact on the quality of vegetables that are not suitable for consumption because they have to travel long distances and the weather is unpredictable. In addition, the limited green open space in DKI Jakarta for farming means that supplies must be met from outside the area (1). Based on data from the Ministry of Environment and Forestry, DKI Jakarta only has 34 percent of its area in green open space, 33 percent of which is in the Seribu Islands, West Jakarta City is the area with the least green open areas, especially the South Meruya sub-district. South Meruya has the second smallest area compared to other sub-districts in Kembangan District (2.8 km²), with a population of 50,735 people and is dominated by residential, mixed, public and social service zones. Therefore, the head of the Jakarta Maritime and Agriculture Food Security Agency suggested that people utilize limited space to grow vegetables using the hydroponic method. In addition to meeting their own food needs, growing vegetables using the hydroponic method can function as a dampener for the increase in greenhouse gases, the main cause of global warming and climate change, as well as increasing income.



Figure 1. PKK Team and Hydroponic Vegetables in South Meruya

South Meruya as one of the sub-districts in South Kembangan has implemented a limited land utilization program using hydroponic media. In addition to being planted in RPTRA, the community is also encouraged to participate in planting using plastic waste media. However, the consideration of the South Meruya community in trading hydroponic vegetables is the higher price factor compared to the price of conventional vegetables (2).

Although consumers are looking for healthier and better quality food products for consumption has increased, organic food products in reality still face problems related to high prices and the lack of distribution channels causing uneven distribution of products (3). In addition, the lack of information available to consumers about hydroponic food and its supply is still limited, causing hydroponic vegetables to not develop evenly. However, the potential demand for hydroponic vegetable products in Jakarta has increased quite a bit in recent years. Likewise, producers of organic food products are also increasing, as seen from the increase in the number of hydroponic planting media in the Meruya Selatan area from year to year.

The problem faced by South Meruya residents in growing hydroponic vegetables is the limited market segment. The surrounding community still considers the price of vegetables to be more expensive than conventional vegetables. So that the enthusiasm of the community is not as big as the target of the sub-district to increase the harvest of hydroponic vegetables to meet the needs of vegetables in Jakarta. Therefore, this program is designed to identify problems more deeply using SWOT analysis in order to determine a better hydroponic vegetable sales strategy in the future. This Community Service provides solutions to the problems faced by the Community, especially in the South Meruya Sub-district, Kembangan, West Jakarta, namely providing socialization of determining the selling price and marketing strategy for hydroponic vegetables.

Providing socialization of SWOT analysis to find the advantages and disadvantages of the current hydroponic vegetable sales system in South Meruya. Thus, the community can make the right decision in determining the selling price, how to market, and various other requirements that may be needed in order to find the appropriate market segment. SWOT analysis is a tool for planning strategies and strategic management in an organization. This analysis analyzes its environment both internally and externally which is able to assess the advantages, weaknesses of resources, market opportunities, and future threats of an organization (products offered). SWOT analysis stands for S, namely "Strengths", W is "Weakness", O is "Opportunities", and T is "Threats" (4). Strengths and opportunities can help achieve organizational goals. While weaknesses and threats are useful for building new strategies. This is useful for balancing internal and external factors in order to evaluate the marketing of hydroponic vegetables in the South Meruya sub-district. By finding the points of SWOT, it will produce the right decision in marketing hydroponic vegetables in the future.

2. IMPLEMENTATION METHOD

The stages of implementing community service activities begin with identifying SWOT analysis knowledge, identifying problems faced by RPTA managers in growing vegetables using hydroponic media so far, identifying RPTRA hydroponic business management based on SWOT, identifying strategies based on SWOT matrix, implementing knowledge from hydroponic experts, planting hydroponic vegetables, harvesting, and packaging.

3. RESULTS AND IMPLEMENTATION OF ACTIVITIES



Figure 2. Socialization of SWOT Analysis and Strategy

When identifying SWOT analysis knowledge, it is likely that all managers do not know what is meant by SWOT analysis, so it is important to provide basic concepts regarding SWOT analysis, such as definition, objectives, and benefits. This aims to enable managers to identify problems in accordance with the existing SWOT concept. Furthermore, identifying each SWOT analysis factor in the hydroponic vegetable production system in South Meruya Village

It is known that the Strengths of hydroponic businesses in South Meruya are more hygienic and pesticide-free product quality, efficient land use (vertical system), year-round supply regardless of the season, environmentally friendly and water efficient, and close to Mercu Buana University. Weaknesses in the form of relatively high initial capital, therefore at the beginning of the hydroponic trial, RPTRA managers utilized used plastic bottles. requires special technical expertise, so several managers were given training provided by the

government and Mercu Buana University. the risk of technical failure (electricity, water, nutrients), in addition to failures caused by power outages, in one place there is already a solar panel system, but the capacity is still small. This often causes electricity to go out in the middle of the night because the electricity supply runs out. market share is still limited and prices are relatively expensive, because production is still small. Finally, the weakness is the uneven quality of vegetables, because RPTRA managers still do not understand when to add nutrients so that the quality of vegetables is maintained.

Opportunities for RPTRA managers in hydroponic businesses are the trend of healthy food consumption among urban people, especially in DKI Jakarta as the capital city, cooperation with supermarkets, hotels, restaurants (HORECA), support from the government and environmental institutions, such as Mercu Buana University to continue to develop expertise in managing hydroponic vegetables and obtain hydroponic equipment and supplies. Finally, product diversification, the community does not only sell in the form of vegetables but also in the form of herbal drinks, vegetable noodles, vegetable and fruit juice drinks, and vegetable salads. This has also been given training by Mercu Buana University in every Community Service activity. While the threats are price competition with conventional vegetables, price fluctuations and purchasing power of the premium market, dependence on technology and electricity supply, lack of market literacy regarding the benefits of hydroponics. This is because the production capacity is still small, the market share is not that wide, so it only reaches the surrounding community with a lower middle economic level.

Based on the SWOT analysis with RPTRA management, several strategies developed are as follows:

1. Combination of strength and opportunity factors (Strength – Opportunity): a) following the Government program by utilizing government support in the field of food security and urban farming to obtain subsidies or training. In addition, the existence of Mercu Buana University which has Community Service activities is a great strength and opportunity for managers to develop Hydroponic capacity. Thus, the next strategy can be achieved, namely b) expanding cooperation with supermarkets and restaurants, using the advantages of hygienic and environmentally friendly product quality to enter premium markets such as supermarkets, hotels, and restaurants. This can be realized if vegetable production is sustainable.
2. Combination of Weakness and Opportunity factors (Weakness – Opportunity): a) Human Resource Training and Development, participating in hydroponic training to overcome the limitations of technical knowledge and maintain production quality. B) Investment or partnership scheme, inviting investors or running a partnership model to overcome the limitations of initial capital. This strategy tends to have been obtained by managers from Mercu Buana University, both in the form of training by bringing in experts and providing equipment and supplies.
3. Combination of Weakness and Threat factors (Weakness – Threat): a) Operational risk management, creating a backup system for electricity and water to anticipate technical disruptions. b) Diversification of sales channels, not only relying on the premium market, but also reaching local communities, MSMEs, or online markets. The diversification strategy has been introduced previously in Community Service activities to managers in the form of smoothies and making noodles from hydroponic vegetables. So far, what tends to work is vegetable noodles. In the future, the potential diversification is vegetable salad.

Some implementations that can be carried out by RPTRA managers are:

1. "Healthy vegetable to home" program: Subscription service for delivering hydroponic vegetables to household customers on a weekly or monthly basis.
2. Market education through social media: Creating content on how to grow hydroponics at home, health benefits, and advantages of hydroponic vegetables.
3. Collaboration with healthy catering and cafes: Becoming a permanent supplier for healthy catering and cafes that carry the concept of clean eating.
4. Urban farming workshops and training: Providing training for communities or schools that want to learn hydroponics.
5. Development of ready-to-eat products: Selling salad bowls, vegetable smoothies, or healthy juices from hydroponic harvests.

The next training is planting hydroponic vegetables by emphasizing how to manage nutritional balance, water PH, and how to keep vegetables from caterpillar pests by Mr. Sugiarto. The mistakes that hydroponic vegetable farmers tend to make are not understanding how to maintain balanced nutrition until harvest, maintaining the water PH so that it is not too acidic or alkaline which results in vegetable quality. And keeping it free of pests but not using pesticides.



Figure 3. Training in measuring nutrients, water pH, and caring for hydroponic vegetable plants.

RPTRA managers and students carry out seeding, transfer to hydroponic media, and evaluate the development of hydroponic vegetables every week. However, it appears that vegetable growth is still uneven.



Figure 4. Practice of growing hydroponic vegetables

The final process of this activity is harvesting and packaging vegetables, preparing vegetables ready to be marketed to supermarkets. Because, previously vegetable managers only sold to fellow PKK members, RPTA managers, and RPTRA visitors. So they only use plastic bags to wrap vegetables.



Figure 5. Harvesting and packing hydroponic vegetables

Based on the results of the evaluation of the socialization and training provided, there was an increase in knowledge on how to identify problems and develop strategies based on the problems faced. Participants also stated that the socialization and training provided had the potential to improve their hydroponic vegetable business in the future. In addition, the knowledge provided can also be implemented in other businesses.

4. CONCLUSION

The large demand for vegetables in DKI Jakarta provides an opportunity for the Meruya Selatan sub-district which has been farming vegetables utilizing narrow yards using hydroponic methods. However, the production results still enter modern markets such as supermarkets. Tend to be sold to fellow PKK managers, RPTRA, and RPTRA visitors. By providing training and socialization of SWOT analysis, identifying strategies based on SWOT analysis, managers will be more critical in developing hydroponic vegetable businesses so that they can enter larger market segments such as supermarkets, restaurants, and hotels. Although it still takes time to improve the quality of hydroponic vegetables.

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