

APPLICATION OF FLOWER PRESERVATION METHODS AND SIMPLE ACCOUNTING TO INCREASE THE COMMUNITY INCOME

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Article	Abstract
<p>Article History</p> <p>Received : 15/02/2023 Reviewed : 03/03/2023 Accepted : 06/03/2023 Published : 20/03/2023</p> <hr/> <p>Volume : 24 No : 1 Month : March Year : 2023 Page : 136-148</p>	<p>Assistance and empowerment are carried out for the community in Sukapada , Cibeunying Kidul , Bandung City by producing preserved flowers, implementing Simple Accounting, training on managing online shopping websites, and registering preserved flower products in several markets. The survey results of PKM Team stated that some residents of Sukapada are retirees from various jobs who are interested in increasing the decorative flower business. The obstacles currently faced are the fast wilting of flowers, the non-uniform diameter of flowers and the speed of blooming. Based on these conditions, the PKM Team intends to help improve the quality of these ornamental flowers through a preservation process so that the flower life cycle is more than 1 year and has high selling power. Through the training conducted, business people are able to produce quality preserved flowers, calculate the cost of the product, set a high selling price, and able to maintain the website and market place so that they can be used at any time to increase profitable sales volume and increase their income.</p> <p><i>Keywords: Preserved Flower Methodology, Sales Volume, Simple Accounting Application.</i></p>

1. INTRODUCTION

Vision of Bandung city 2018-2023: "Building an Independent, Sturdy and Equitable Economy through economic growth based on labor-intensive and local MSMEs". " This mission has the meaning that the people of RT 02 RW 10 Sukapada Subdistrict Cibeunying Kidul Bandung City must be able to create productive home industries or MSMEs to support their lives which will further increase their income and standard of living.

On July 28 2022 and August 23 2022 a team consisting of three lecturers conducted a survey to collect data on ornamental flower MSME business activities. The problems encountered are regarding the results of ornamental flowers that do not last long, the list of customers who need decorative flower products, the volume of sales results, the mechanism for marketing ornamental flower products, and the financial records of MSMEs in the region. Based on these problems, the strategic issues that were carried out were introducing methods of preserving cut flowers as raw materials for decorative flowers, financial management, online shopping websites and market places as marketing tools.

Lavieflo (2022) stated that preserved flowers are flowers that have been processed so that fresh flowers can last for a long time. Fresh flowers begin to wilt within a few days, and their beautiful appearance is compromised, but "preserved flowers" can maintain their beauty for several years. Preserved flowers have freshness and softness of texture comparable to fresh flowers, but no allergies because there is no pollen. In addition, the color of preserved flowers can be colored at will and is lighter than fresh flowers, so they are used as bouquets or asflowers for decoration.

The method of preserving cut flowers is a technology that is used to maintain the resilience of flowers so that they do not wither quickly and can last more than 1 year (Wigland & Taylor (2009). The preservation method is carried out through a certain formula that uses a mixture of substances such as: water, glycerin, Zanzibar sand, and silica gel, so that cut flowers are more beautiful and their freshness lasts longer (China Patent, 2010); (Commerce United States Patent Application Publication, 2010). It is hoped that cut flowers that last a long time will be of interest to consumers, namely florists, because the quality of the flowers is much better, they

even have high selling power and can be sold at a higher price than cut flowers that are not preserved (Wirakususmah et al, 2018).

In running a business, MSME business people, in this case retirees in the Sukapada Village, definitely need financial reports. Without financial reports, it will be difficult for the business people to make calculations and find out whether his business has been successful or not. Financial reports are records of financial information for a company in a certain period, which can be used to find out and understand the company's performance (Sava et al, 2013).

Another thing that must be the focus of business people are marketing their products to target consumers in an effective way. One of the right and effective marketing methods is to introduce and display these products using digital technology to share, communicate, collaborate, buy and sell products (Singh et al, 2021) through websites and market places. Website is a collection of web pages that are connected to each other and all related files consisting of pages or pages and a collection of pages called the homepage, while the market place is a market that is easy and quite simple for buyers . From product selection to customer support, it's all there (Roddewig, 2013). In addition, market owners are constantly coming up with new features and tools to keep both sellers and buyers happy. The purpose of marketing through websites and market places is none other than to increase profit competitiveness and increase MSME income (Mansor, 2010); (Abebe, 2014).

Previous research regarding flower preservation technology conducted by (Sang & Young, 2019); (Ito et al, 2010); (Yoo & Kim, 2019) stated that preserved cut flowers will have better color quality and flexibility than unpreserved flowers. Furthermore (Seung et al, 2019) states that the correct composition of the mixture of substances used for the preservation process will produce a quality preserved flower that has high selling power.

Previous research related to financial reporting submitted by (Saraa et al, 2020) states that financial reporting is very meaningful and important as a tool for controlling business operations and assessing business performance. Furthermore, research conducted by (Sinkovics & Elfriede, 2005) states that product promotion and marketing through websites and market places will facilitate

communication between entrepreneurs and their consumers so that the target market is achieved and can increase the sales volume of these business actors. In addition, marketing mechanisms through websites and market places are very functional in terms of business transactions and are more effective in maintaining business continuity in the face of competition (Tandon, 2021).

Assistance and empowerment is carried out through training. Training and mentoring methods in the form of making preserved flowers, maintaining websites and registering on market places are very beneficial for PKM partners because they provide effective output in understanding easy and precise marketing methods so as to increase sales volume.

Studied by (Shantammaa et al 2021); (Eun et al, 2009), conducting training on making preserved flowers for several florists revealed that with this training the florists were able to produce decorative flowers of high quality and high selling power. Furthermore, training on financial management conducted by (Kappor et al, 2004) means that serious financial management will be able to control the receipt and disbursement of funds/cash so that it can easily plan profits from the business.

Previous studied (Lee et al, 2019) stated that conducting website training for several MSMEs in Korea revealed that MSME actors who successfully use the website properly can use the website effectively in marketing their products thereby increasing the number of buyers. Other research (Chaffey et al, 2018) stated that web site and market place training conducted for several MSMEs in several European countries stated that the training was able to increase MSME knowledge in the field of sales information technology and can utilize websites and market places to improve quality. marketing so that it can increase the number of customers who are interested in the products being sold. Furthermore, it will increase its sales volume.

2. METHODOLOGY

The 2022 Community Partnership Program, Community Service Activities will be carried out offline in the form of 4 face-to-face meetings while still observing health protocols. The following stages of Community Service activities are presented in the table below:

Table 1
Community Service Activities -2022

Steps	Activities	Description	Outcome
I	Make a list related to the quality of production results, financial management, and marketing mechanisms for preserved flower MSME products in Sukapada Village.	Collecting data through the head of the MSME community related to the data.	List related to the quality of production results, financial management, and marketing mechanisms for the products produced in the form of preserved flowers.
II	Make a list related to customers who need products produced by MSMEs in Sukapada Village.	Contacting consumers who need preserved flowers produced.	The list is related to customers who need preserved flower products produced by MSMEs in Sukapada Village.
III	Integrating this information with the method of preserving cut flowers, Simple Accounting Models, available Information Technology (websites, marketplaces, and other online media).	Existing information about the method of preserving cut flowers, Simple Accounting Models, websites and marketplaces or other online media.	Preservation method of cut flowers, Simple Accounting Model, Online shopping website and market place.
IV	Assistance and Empowerment of MSME Partners in making preserved flowers, making simple accounting, using online shopping websites and the suitable Market place for MSMEs.	<ol style="list-style-type: none"> 1. Providing training on making preserved flowers, making simple accounting, using online shopping websites and Market places to MSMEs 2. Providing Mentoring : <ol style="list-style-type: none"> a. to improve the quality of preserved flower, b. to improve the application of simple accounting, and implementation using of website online shopping and market places. 	MSMEs are able to: <ol style="list-style-type: none"> 1. make a quality preserved flower, 2. create precise simple accounting 3. use online shopping website applications 4. use and utilize the market place appropriately

Source: Processed Data, 2022.

The contributions of partners (preserved flower communities) from the retiree entrepreneurs in Community Service activities in Sukapada Village are:

Table 2
Contribution of Preserved Flower Entrepreneurs as partners

No	Institution	Contribution
1	Community of MSMEs preserved flower Sukapada Village.	The list is related to raw materials, the necessary materials for preserving i.e. cut flowers that still have to be preserved, materials for preserving that must be processed
2	Community of MSMEs preserved flower Sukapada Village	List related to the resulting decorative flowers

3. RESULTS AND DISCUSSION

RESULT

Based on the solutions and problems of partners, as well as activities that have been carried out, some of the results that have been achieved are:

Table 3
Results achieved

Steps	Activities	Description	Outcomes
I	Make a list related to the quality of production results, financial management, and marketing mechanisms for preserved flower MSME products in Sukapada Village.	Collecting data by the head of the MSME community related to the data.	<p>The quality of production produced by the preserved flower business through the preservation process.</p> <p>The stages of the preservation process carried out are as follows:</p> <ol style="list-style-type: none"> a. Immersion of flower stalks into diluted glycerin b. Drying the flowers by hanging upside down for 1 – 2 hours. c. Hoarding the glycerinized flowers with Zanzibar sand and silica gel d. The Preserved flowers produced can stay fresh more than 1 year.

Steps	Activities	Description	Outcomes
II	Make a list related to customers who need products produced by MSMEs in Sukapada Village	Contacting related parties who need preserved flowers produced	List of customers who need preserved flower products produced by MSMEs in Sukapada Village as follows: <ol style="list-style-type: none"> 1. Healthy House in Bandung City. 2. Hotels in Bandung City 3. Offices in Bandung City
III	Integrating this information with the method of preserving cut flowers, Simple Accounting Models, availability Information Technology (websites, marketplaces, And other online media).	Existing information about : <ol style="list-style-type: none"> 1. The method of preserving cut flowers, 2. Simple Accounting Models, 3. Websites and marketplaces or other online media 	MSMEs in Padasuka village havenot yet had : <ol style="list-style-type: none"> 1. Proper preservation methods, 2. Proper accounting methods, 3. Web-side and market place in marketing its product 4. Customer database <p>Therefore Community Service Team mentoring to make the right preservation method, the right accounting method, web-site and market place through training</p>
IV	Assistance and Empowerment of MSME Partners in Making the right flower preservation, the proper accounting methods, web-side and the right market place forMSMEs	<ol style="list-style-type: none"> 1. Provide training for the proper preservation of flowers, proper accounting methods, and the right web-side and market place 2. The use of Information Technology for MSMEs 3. Provide assistance with the use of the required application 	<ol style="list-style-type: none"> 1. Preserved flower companies have been able to make quality preserved flowers, 2. Create a simple accounting report that is precise 3. Implement and maintain website and market place as a means to market its products(Tokopedia). 4. MSMEs of Sukapada Villageafter being given training, theirsales increased by 30%

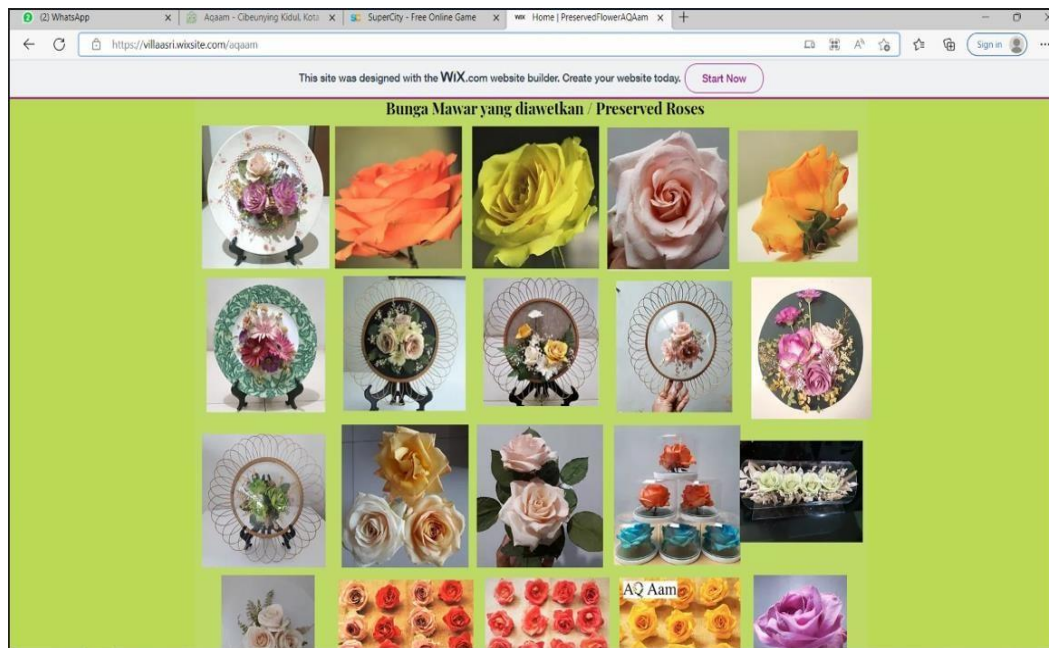


Figure 1. Website Display.

Source : <https://villaasri.wixsite.com/aqaam>

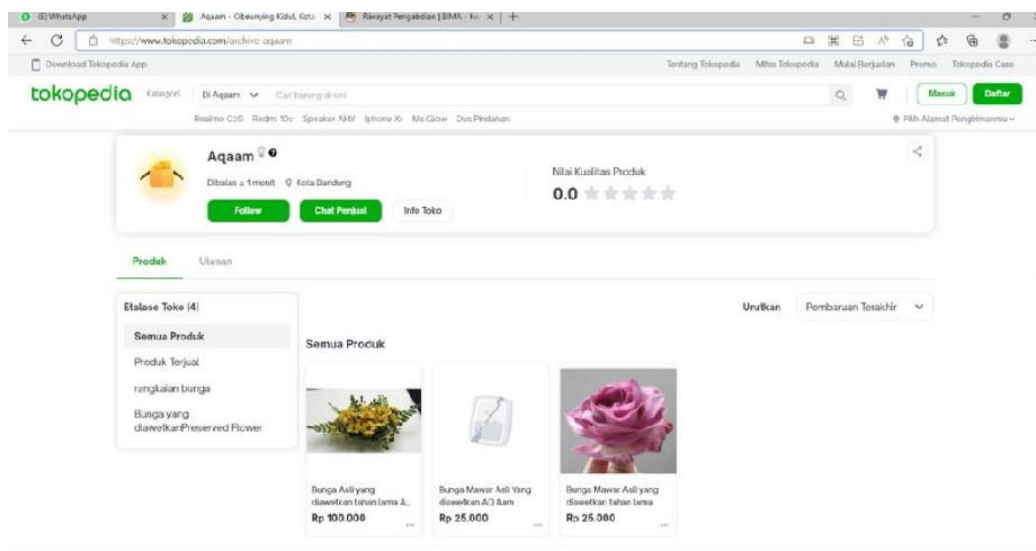


Figure 2. Market Place Display.

Source: <https://www.tokopedia.com/archive-aqaam>

DISCUSSION

Based on the survey results, it can be seen that the problems faced by SMEs in the decorative flower industry are the results of ornamental flowers that do not last long, lists of customers who need decorative flower products, sales volume, marketing mechanisms for decorative flower products, and inadequate financial records so that they have not been able to increase revenue MSMEs.

Through information on existing problems, the Community Service Team helped overcome these problems by providing training followed by assistance in making preserved flowers, collecting data on decorative flower customers, making simple bookkeeping, and using and maintaining the website and market place at Tokopedia as a marketing medium for preserved flower products.

Assistance in making preserved flowers is carried out in stages: soaking the flower stalks in diluted glycerin, drying the flowers and hanging them upside down for 1-2 hours, and filling the glycerinized flowers with Zanzibar sand and silica gel. Through this process, business people are able to produce quality decorative flowers and stay fresh for more than 1 year.

The PKM team collects data on ornamental flower customers to help business people create networks with ornamental flower customers such as Healthy Homes or Hospitals, Hotels and offices in the city of Bandung. Through these decorative flower customers, business people have been able to market preserved flower products.

In order for the preserved flower products to be useful and to provide income for the flower craftsmen, the preserved flower products must be marketed or sold. For this reason, the PKM team provides simple accounting training which includes calculating the cost of production of preserved flowers. After that, determine the right selling price so that business people get the desired profit. As a result, business people are able to calculate production costs and determine profitable selling prices.

In addition to the PKM team creating a network with decorative flower customers, to market the preserved flower products they produce, promotion is also carried out through the website. Assistance and training is provided in making a website to present the results of the preserved flowers produced. As a result, business people are able to create websites that present preserved flower products and are able to use and maintain these websites as promotional media.

Preserved flower marketing is not only done through sales to the decorative flower customers specified above, marketing is also done through market places. The PKM team provided assistance and registered the preserved flower production through online marketing to broaden the target market and make it easier for customers to purchase these products. From the results of this assistance, business people are able to market their preserved flower products through a market place, namely TOKOPEDIA.

Based on the assistance and training that has been carried out by the PKM team, business people are able to improve the quality of the ornamental flowers they produce, are able to determine the right selling price for ornamental flowers, are able to promote and market their decorative flower products effectively so as to increase sales volume by up to 30%. It is hoped that with these improved business conditions, in the future through this decorative flower business it can increase the income of the people of the SUKAPADA Village.

4. CONCLUSIONS

Community Service Activities with the Community Partnership Program (PKM) in 2022 can be carried out as planned.

Based on the results of surveys, training, and assistance conducted by the Community Service Teams, the following results are provided:

1. MSMEs that partner with Community Service already have a list of regular customers such as several healthy homes or hospitals, several hotels, and several offices in the city of Bandung.
2. MSME Community Service partners are already able to produce high quality decorative flowers and stay fresh for more than 1 year so it has a high selling price.
3. MSME Community Service partners are already able to practice simple accounting, Namely calculate the cost of production and determine the right selling price for each flower product preserves produced..
4. MSME Community Service partners have been able to market their products with utilization information technology through the website and market place (Tokopedia).

5. MSME Community Service partners have been able to increase sales volume up to 30%.

Through mentoring and training that has been carried out by the PKM team, business actors are able to increase their income specifically and in general can increase the income of the people of SUKAPADA Village.

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5. BIBLIOGRAPHY

- Abebe, M., 2014, Electronic commerce adoption, entrepreneurial orientation and small- and medium-sized enterprise (SME) performance”, *Journal of Small Business and Enterprise Development*, 21(1), 100-116. Available at: <https://doi.org/10.1108/jsbed-10-2013-0145>.
- Chaffey, Dave, Fiona Ellis, 2018, *Digital Marketing*, 7th Edition, Pearson.
- China Patent (2010, 13 September), Method for production of preserved flower, and processing solution for use in the method, accessed on 14 August 2022 from <https://patents.google.com/patent/CN101861092A/en?q=CN101861092A>.
- Commerce United States Patent Application Publication (2010, 30th September), Method For Producing Preserved Flower And Processing Solution Therefor, accessed on 20 August 2022 from https://patentimages.storage.googleapis.com/56/8e/f6/f9816ec6918003/US20100251431_A1.pdf.

- Eun Ha Yoo, Young-Wook Seo, Sun Jin Jeong, 2009, Textural Characteristics of Rose 'Heaven' Preserved Flowers according to the Composition of Glycerin and Propylene Glycol in the Preservative Solution, *Horticulture, Environment and Biotechnology*, Volume 50(6):588-592.
- Ito, Hiroaki, Takahiro Hayashi, Masaki Hashimoto, 2010, A Protocol for Preparing Preserved Flowers with Natural Color and Texture, *Hort Technology*, Volume 20 – issue 2, American Society for Horticultural Science.
- Kappor, Jack R., Dlabay, Les R., & Hughes, Robert J.. 2004. *Personal Finance*, 7th Edition. New York: The McGraw-Hill Company.
- Lavieflo (2022,). What's Preserved Flower?, 17 Agustus 2022 dari <https://www.lavieflo.com/>.
- Lee, Jong-Wha, Jong-Suk Han, 2019, The effects and challenges of vocational training in Korea, *International Journal of Training Research*, vol.17-Issue 1, Taylor & Francis.
- Mansor, Norudin , 2010, The Application of E-Commerce Among Malaysian Small Medium Enterprises, *European Journal of Scientific Research*, Vol.41 No.4, pp.591-605, EuroJournals Publishing, Inc
- Roddewig, Sven, 2013, *Website Marketing*, 1st Edition, Vieweg+Teubner Verlag.
- Sang Bok Lee, Young Hee Lim, 2019, Effect of Dehydration and Discoloration Time of Ethanol, Temperature, and Dipping Time of a Preservation Solution for Dyeing on Quality of Preserved Flowers of Rose 'Pink Aurora, *Flower Research Journal*, Volume 27- No.2 – pp.109-113.
- Saraa, I Made , Komang Adi Kurniawan Saputra, I Wayan Kartika Jaya Utama, 2020, Financial Statements of Micro, Small and Medium Enterprises Based on the Concept of an Economic Entity, *Journal of Hunan University Natural Sciences*, Vol 47, No 12.
- Sava, Raluca, Bogdan Mârza, , Nicolae, 2013, Financial Reporting for SMEs Past and Perspectives, *Procedia Economics and Finance*, Volume 6 : p. 713 – 718, Elsevier.
- Seung Hee Lim, Kyu Hyon Hwang, Ju Hyun Park, 2019, A Spray Chrysanthemum Cultivar for Cut Flower, 'Perky Star' , with Excellent Growth and Flowering Characteristics at High Temperature Period , *Flower Research Journal*, Volume 27-No.2 - pp.160-169.
- Shantamma, S, Evanjalina Monica Vasikarana, Roji Waghmare, 2021, Emerging techniques for the processing and preservation of edible flowers, *Future Foods*, Volume 4, Elsevier.
- Singh, Nisha, Anuj Kumar, 2021, Role Of E-Business In SMES, *New Paradigms In Business Management Practices* (pp.130-139), Amazon.
- Sinkovics Rudolf R., Elfriede Penz, 2005, Empowerment of SME websites— Development of a web- empowerment scale and preliminary evidenc, *Journal of International Entrepreneurship* , volume 3, pages 303–315.

Tandon, Mahek, 2021, How A Marketplace Marketing Strategy Helps To Boost Sales, CED.

Wagland, SP and Taylor, S. (2009). When It comes to financial literacy, is gender really an issue? Australasian Accounting Business and Finance Journal. Volume 3,

Issue 1. Welford, M., Wicks, S., 2011, Fresh Flower Arranging, DK Publishing, New York.

Wirakusumah, M., Santoso, G., Oktaroza, M. L., 2018, Preserved Flower sebagai Bunga Alternatif Perangkai Bunga, Fisip Unpas Press, Bandung.

Yoo, E.H. , Kim, H.D , 2009 , Proper Concentration and Treatment Duration of a Glycerine Solution for Making Preserved Flowers of Rose, Horticulture, Environment, and Biotechnology, Volume 49- Issue 6.