

Improving Life Skills and Community Income With Soap Entrepreneurs

Titik Taufikurohmah^{1*}, Sari Edi Cahyaningrum¹, Warju²

¹Department of Chemistry Faculty of Math and Science, Universitas Negeri Surabaya, Surabaya, Indonesia

²Department of Mechanical Engineering Faculty of Engineering, Universitas Negeri Surabaya, Surabaya, Indonesia

*Corresponding Author. Email : titiktaufikurohmah@unesa.ac.id

ABSTRACT

Soap is one of the cleaning agents used in everyday human life. Soap helps humans cleanse the body, clothes, and various tools from dirt, both oil and dust. The people of Sidokare village, Rejoso Nganjuk sub-district, are farmers who rely on family income from agriculture, especially shallots and rice. Between planting and harvesting periods where if there is no pest attack, they feel the need for activities that can increase family income. Entrepreneur training makes commercial products very appropriate, and they are delighted and even hope to be realized soon. The entrepreneurial products that will be trained and produced, including making liquid soap and making solid soap. The results obtained in this activity included an increase in skills in making entrepreneurial products that were not initially owned by the people of Sidokare. Several people from the members of the Sidokare community are entrepreneurs, both producing and marketing these entrepreneurial products. Another result of the activity is additional family income for each participant in this entrepreneurship training. Rupiah sales from week to week continues to increase; it can even be said that whatever is produced every week is sold out. Until now, where the materials prepared by the Team have been used up and have purchased the materials themselves. It was concluded that this activity was successful in increasing community skills and increasing family income.

Keywords: *liquid soap, solid soap, entrepreneurship, skills, income*

1. INTRODUCTION

Soap is a cleaning agent that is used in everyday human life. Soap helps humans clean the body, clothes, and various utensils from dirt, both dust and oil. Based on the function of soap, it can be divided into several types, namely bath soap, dish soap, clothes washing soap, and other soaps. Based on its form, soap is divided into liquid soap and solid soap. Liquid soap itself is based on ingredients classified as liquid soap made from KOH bases and detergents.

The people of Sidokare village, Rejoso Nganjuk sub-district, are farming communities who rely on their family income from agriculture, especially onions and rice. The people of Sidokare are known to be very resilient and diligent at work, how can they are not, in taking care of the shallot plants, it requires patience like caring for babies. People are accustomed to working all day in the fields, even late at night and early morning when there are pests. People are competing with problems that consume shallots leaves overnight if pesticides are not sprayed immediately. Thus sleeping in the fields is no longer impossible; they often do it for the success of this shallot farming.

Between planting and harvesting periods when there are no pests, they feel they need activities that can increase family income. Entrepreneurship training makes commercial products very appropriate, and they are pleased

and even hope it will be realized soon. The action is carried out in addition to providing entrepreneurial skills in making readily marketable household products, but will also provide material assistance for the manufacture of these entrepreneurial products. The entrepreneurial products that will be trained and produced include: making liquid soap, making solid soap, making clothes softener, and making lotions. Apart from being needed by the community, these goods are also quickly sold products.

The success of periodically producing and marketing activities in Sidokare village. The production process of liquid soap, solid soap, fabric softener, and lotion requires essential ingredients obtained from Surabaya and also supporting materials as active ingredients in the form of nutritious local fruits and plants. The team will ensure that after the training, the community can procure materials independently by introducing a place to buy essential materials.

The marketing of these products is mainly marketed in the Sidokare area and its surroundings, especially to meet the needs of local communities, food stalls, car wash businesses, and also people outside Sidokare village. Online marketing will also be taught to the participants of this training. The marketing progress will be monitored until the community can independently carry out these entrepreneurial activities. The results of periodic monitoring will be used as material for progress reports and

input for improvement so that these efforts produce results to increase family income.

An indicator of success is an increase in the skills to make entrepreneurial products that are not previously owned by the people of Sidokare. Several people from the Sidokare community members become entrepreneurs, both producing and marketing these entrepreneurial products. Another indicator is the additional family income for each participant in this entrepreneurial training. This indicator is easy to show in quantity from 0 rupiahs of entrepreneurial proceeds to a rupiah after this activity is carried out.

2. METHOD

A. Making of Facial Soap

1) Ingredients :

- a) Cipshop 1 Kg
- b) Perfume 5-10 mL
- c) Food coloring
- d) Fillers (honey, sulfur, milk, papaya, jicama, etc.)

3 spoons

2) How to Make

- a) Cut the Cipshop
- b) Place in a stainless steel pan
- c) Turn on the stove over low heat
- d) Wait for all the chips to melt
- e) After all the chipshop melted, turn off the stove and wait for it to warm (temperature 60oC)
- f) Add fillers (honey, sulfur, milk, papaya, jicama, etc.) depending on the type of soap to be made. And also add perfume and food coloring
- g) Stir well
- h) Ready to print
- i) When already cool, remove from the mold and ready to pack

Chipshop is the main soap ingredient made from raw soap (such as bath soap) mixed with glycerol (moisturizer) and alcohol (antiseptic / anti-germ)

3) Additional ingredients

- Honey: to clean and maintain facial moisture (best for daily use)
- Papaya: removes black spots
- Milk: moisturizes the face
- Bengkoang: whiten the face
- Sulfur: anti-bacteria, medicine for itching on the skin, e.g., tinea versicolor, prickly heat, moldy feet
- Noni: reduces oily skin
- Aloe vera/aloe vera: for dry skin
- Betel: for antiseptic (itching) and also can vouch for femininity
- Rice: face whitening

Dyes and perfumes are used as sweeteners and fragrances only

3. RESULT AND DISCUSSION

B. Liquid Soap Making Activities.

The liquid soap produced in this PKM activity has two criteria, namely liquid soap, for washing dishes, and body soap. Both have the same ingredients, namely Texaphon, NaCl salt, dyes, and perfumes. The difference is seen in the use of essential elements added to liquid soap for the body, namely extracts of natural ingredients. In this activity, mashed avocado is used to moisturize the skin. The addition of avocado, which is rich in natural oils and vitamin E to moisturize the skin, causes the hardness of the texaphon to decrease. It is characterized by a reduced amount of foam and is soft or bubbly with a fine foam grain.

Textaphon as much as 1 kg produces 58 bottles of 600 ml size consisting of 50 bottles of dish soap and eight bottles of liquid soap for the body with avocado or avocado fruit extract. Dishwashing soap will be sold for IDR 5,000, - rupiah per bottle @ 600 ml. This gives $58 \times 5,000 = 290,000$. With a capital of not more than 100,000, - rupiah gets 290,000, - rupiah. The profits are much enough to be a potential entrepreneur. The results obtained from entrepreneurship can be used to improve the welfare of the people of Sidokare, Rejoso sub-district, Nganjuk district.

C. Solid Soap Making Activities.

Solid soap is made from Chipsoap, which is the essential ingredient of transparent soap, namely from soap produced in the lathering reaction between oil and NaOH, which has been dissolved in glycerin and alcohol. Why the essential ingredient uses chip soap is because the lathering process must be done by someone who understands chemical reactions. If the response is not equivalent, it will endanger the soap user. If there is excess oil, the soap does not foam. If there is excess NaOH, the soap will contain excess free alkaline so that when it touches the skin, it will itch, heat, and cause irritation. Thus, let the area of lathering remain within the domain of the expert, namely chemists or soap industrialists.

50 kg of chipsoaps brought from Surabaya can be used for entrepreneurship for several months. Entrepreneurial proceeds can be used to repurchase raw materials. The team also provided perfume, dye, wrapping, soap molds, and a special pan for melting the chipsoap. One kilogram of chipsoap can produce 15-20 facial washes that can be sold at specific prices. In general, the cost per 25 g transparent soap is in the range of 3-5 thousand. For example, taking the lowest selling price for each soap @ 3,000, - rupiah with 40 soaps, you will get 120,000 rupiahs. The capital of the essential soap used is Rp. 60,000 - per kg of soap, which produces 40 soap seeds. Thus the profit is 60,000 rupiah. The yields are a lot enough for an entrepreneur.

The production of liquid soap with 500 g ingredients produces 14 bottles of liquid soap, which can be used as dishwashing, body soap, shampoo, or hand soap depending on the active ingredient added. One kg of ingredients produces 28 bottles @ 600 ml, which are sold for 6,000 rupiahs, a total of 168,000 rupiahs. Materials and bottles needed are worth 70,000 rupiahs. Thus, the profit per kg of ingredients is 98,000 rupiah. For this activity, the Team strived for packaging in the form of solid soapboxes and labeling for liquid soap with a brand that will also be

registered through LPPM, Universitas Negeri Surabaya as the "Sidokare-Sembada" supervisor. Sidokare residents will experience the benefits of this entrepreneurial activity. The PKM and LPPM teams of the State University of Surabaya will continue to monitor the development of these entrepreneurs, even if necessary, they will help with marketing for the next PKM activity. However, it turns out that a Sidokare resident, Rejoso, has succeeded in marketing simultaneously without the help of the Team. The results of sales of solid soap and liquid soap every week are as follows:

Table 1. Results of Sales of Liquid Soap and Solid Soap Week 1 (M1) to Week 8 (M8)

Week	Soap Type		Rupiah's sale (thousand)
	Liquid Soap	Solid Soap	
W1	28	40	288
W2	56	60	516
W3	84	80	744
W4	84	80	744
W5	112	100	972
W6	140	120	1200
W7	168	120	1368
W8	168	140	1428

Table 2. Life Skills Improvement Questionnaire

No	Life Skills Improvement Indicators	1	2	3	4
1	Do you already know the ingredients of soap?				
2	Do you know how to make soap?				
3	Have you ever received training like this?				
4	Are you happy to have this skill?				
5	Do you know the benefits of fruit in soap?				
6	Are you able to make soap?				
7	Do you know the price of a soap base?				
8	Can you calculate the profit of entrepreneurship making soap?				
9	Have you ever marketed soap?				
10	Can you run soap entrepreneurship?				
11	Do you get a profit from entrepreneurship in soap?				
12	Are you happy with soap entrepreneurship?				
13	Has your family income increased by doing soap entrepreneurship?				
14	Does entrepreneurship in soap help family finances?				
15	Are the benefits of entrepreneurship soap big enough and promising?				
16	Are you going to continue this entrepreneurship even though the UNESA PKM TEAM is not capitalized?				
17	Are you having problems with marketing soap?				
18	Have you ever thought about selling soap online?				

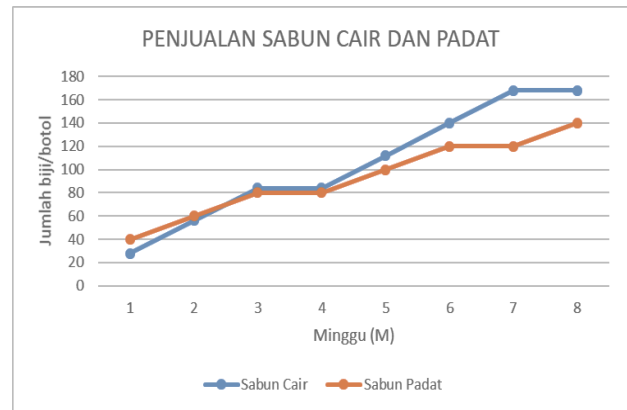


Fig. 1. Increased Sales of Liquid Soap and Solid Soap in Sidokare Residents

From Table 1. As well as Figure 1. The increase in production and sales of liquid soap and solid soap is seen. In fact, it can be said that all the soap produced is sold out through PKK and Karang Taruna. This is very encouraging because the Team does not need to participate in selling soap made by Sidokare residents. Their enthusiasm and their enthusiasm for entrepreneurship motivated the Team to continue to accompany Wirauhasa's progress. The spirit of entrepreneurship has basically been attached to the residents of Sidokare, where they do not want to sit idly by spending their days.

The obvious, quantifiable benefits made them more excited. Furthermore, their plan is that if all the soap needs of the Sidokare residents are met, then the marketing development will go to the area around Sidokare. Karang Taruna markets in the Karang Taruna area in the surrounding villages, as well as PKK women who are also ready to market to fellow PKK women. Mobile vegetable vendors are also willing to participate in marketing with a profit percentage of 10% of the selling price. Thus, the profit per item decreases but the amount of production is increased. Thus the total income will continue to increase.

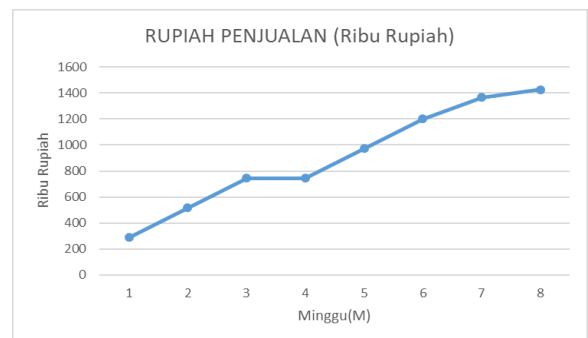


Fig. 2. Increased Sales of Liquid Soap and Solid Soap in Sidokare Residents

The sales rupiah from week to week continues to increase, it can even be said that whatever is produced each week is sold out. Until now the ingredients prepared by the

Team had run out and had bought their own ingredients. Thus the materials provided by the Team have become entrepreneurial capital. A total of 280 bottles of liquid soap @ 6,000, - and 2000 seeds of solid soap @ 3,000, - so that the total capital rupiah = 7,680,000 rupiah.

The turnover of capital into production materials will continue to generate profits or production and sales profits. Everything will continue to be circulated and enter the Village treasury, which is then managed to become sustainable entrepreneurship. Furthermore, the team plans to visit in early January to see the condition of the soap entrepreneur. Inputs and improvements for entrepreneurs will continue to be made. Further guidance for production and financial management is necessary so that entrepreneurship continues to increase. Digital marketing also needs to be assisted in this entrepreneurship. It is hoped that the millennials in Sidokare will not be left behind with the national millennials. Exhibitions need to be followed to meet investors and other consumers outside Sidokare, Rejoso Nganjuk.

4. CONCLUSION

From the activities of making liquid soap and solid soap in Sidokare village, Rejoso Nganjuk can be concluded that:

- 1) People get increased life skills that can be used for entrepreneurship to make solid soap or liquid soap for household or home industry
- 2) People get high income from running liquid soap and solid soap entrepreneurship.

ACKNOWLEDGMENT

The gratitude conveyed to the Universitas Negeri Surabaya through the Institute for Research and Community Service, who has funded this activity so that the implementation team can help the community get increased life skills and income.

REFERENCES

- [1] Agnete, L., Kristian, K., Dan Sonne, P., Peter, D., Mie Østergaard, P., Gorm, D., et al. (2008). Gold ions bio-released from metallic gold particles reduce inflammation and apoptosis and increase the regenerative responses in focal brain injury. *Histochem Cell Biol Springer-Verlag* , 681-692.
- [2] Cormack, D.H. (2004: 299-303). *Introduction to Histology*. Philadelphia: J.B. Lippincott Company. Effect of heavy metals on human rheumatoid synovial cell proliferation and collagen synthesis.
- [3] Ji-Ae, P., Pattubala, A. R., Hee-Kyung, K., In-sung, K., Gab-Chul, K., Yongmin, C., et al. (2008). Gold nanoparticles functionalized by GD-complex of DTPA-bis(amide) conjugate of glutathione an MRI contrast agent. *Bioorganic & Medicinal Chemistry Letters*, Volume 18, Issue 23, 1 December 2008 , 6135-6137.
- [4] Taufikurohmah, T., Sanjaya, I., & Syahrani, A. (2011). Nanogold Synthesis Using Matrix Mono Glyceryl Stearate as Antiaging Compounds in Modern Cosmetics. *Journal of Materials Science and Engineering A* , 857-864.
- [5] Taufikurohmah, T., & Setiarso, P. (2012). Analisis kandungan merkuri pada krem yang beredar pada Klinik Kecantikan di Surabaya. *Prosiding Seminar Nasional Kimia* (hal. 112-120). Surabaya: Universitas Press.
- [6] Sharma, K Virender., Yngard, A Ria., Lin, Yekaterina. (2009). Silver Nanoparticles. *Green Synthesis and Their Antimicrobial Activities*. *Advances in Colloid and Interface Science*, 145,83-96.
- [7] Djajadisstra, J. 2004. *Cosmetic Stability*. Departemen Farmasi Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Indonesia. Depok: Seminar Setengah hari HIKI.
- [8] Gamal, M, Abo Azza, Al Gayeed dan Sawan. (2015). Microbiological Quality Assessment of Some Brands of Cosmetic Creams Sold Within Alkhoms City, Libya. *IOSR Journal of Dental and Medical Sciences*. Volume 14, Issue 2 Ver. II. Hal: 60-65.
- [9] BPOM, (2011). *Metode Analisis Uji Efektivitas Pengawet dalam Kosmetika*. Peraturan kepala BPOM Republik Indonesia (pp. 1-6). Jakarta: BPOM RI.
- [10] Darbre P.D., Aljarrah A., Miller W.R., Coldham N.G., Sauer M.J., Pope G.S. Concentrations of parabens in human breast tumours. *J Applied Toxicology* 24(1), 5-13 (2004a).
- [11] Mailu, S. N., Tesfaye T.W., Peter M. Ndangili, Fanelwa R. Ngece, Abd A. Baleg, Priscilla G. Baker dan Emmanuel I. Iwuoha. 2010. Determination of Anthracene on Ag-Au Alloy Nanoparticles/Overoxidized-Polypyrrole Composite Modified Glassy Carbon Electrodes. *Sensors*. No. 10 , hal 9449-9465.
- [12] Kim, J.S., Kuk, E., Yu, K.N., Kim, J., Park, S.J., Lee, H.J., Kim, S.H., Park, Y.K., Park, Y.H., Hwang, C., Kim, Y.K., Lee, Y., Jeong, D.H., dan Cho, M. 2006. Antimicrobial effects of silver nanoparticles. *Nanomedicine: Nanotechnology, Biology, and Medicine*. 3: 95-101.
- [13] WHO. (2003). *Silver in Drinking-water*. Vol.2. *Journal of Guidelines for drinking-water quality* 2nd.
- [14] Ariyanta, H. A., Sri, Wahyuni., dan Sigit, P. 2014. *Preparasi Nanopartikel Perak Dengan Metode*

- Reduksi Dan Aplikasinya Sebagai Antibakteri Penyebab Infeksi. Unnes. Semarang: Jurusan Kimia FMIPA Universitas Negeri Semarang.
- [15] Guzman, M.G., Jean D., dan Stephan G. 2009. Synthesis of silver nanoparticles by chemical reduction method and their antibacterial activity. *International Journal of Chemical and Biomolecular Engineering*. 2: 3.
- [16] Kusmayati dan Agustini, N. W. R. Uji Aktivitas Senyawa Antibakteri dari Mikroalga (*Porphyridium cruentum*). *Biodiversitas*. 2007. 8(!) : 48-53
- [17] Taufikurrohmah, T. 2015. *Kimia Kosmetik*. Surabaya: Jurusan Kimia-UNESA.