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Community empowerment in manufacturing and online marketing of environmentally friendly hand soap made from *Reu Gongga Bulbs* in the middle of Covid-19

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Abstract. Hand soap is one of the products made from reu gongga bulbs, which is widely manufactured by the community. Hand soap, which is generally made from fat, has a high selling price caused by the price of fat, which is relatively expensive. These factors become the reason for the authors to propose alternative manufacture of hand soap at a fairly affordable price by using reu gongga bulbs as a raw material for making the hand soap. Processing reu gongga bulbs as raw material for hand soap can minimize the cost of raw materials, which will certainly affect the selling price of the hand soap and can create new ways of utilizing reu gongga bulbs, which are generally only used as cattle fodder. The aim and target of the results of the community service program activities are as an effort to help the community to maximize the production of processed hand soap based on reu gongga bulbs which can be used as an alternative effort in increasing community income. Hand soap made from reu gongga bulbs has a relatively low price compared to other hand soap without reducing the quality of the hand soap itself. Thus, it is expected to increase the productivity and income of the community. The development of increasingly sophisticated technology makes almost all manufacturers offer products in the online market. Thus, the authors are interested in participating in marketing products online. Online marketing, which is an alternative in the process of selling hand soap products, is social media in the form of Instagram, WhatsApp, Facebook, etc.

1. Introduction

Community empowerment is the concept of economic development that encapsulates the values of the community to build a new paradigm in *people-centered*, *participatory*, *empowerment*, *and sustainable* development [1][2]. Seeing the number of *reu gongga bulbs* that thrive in various regions in Indonesia, so it needs to be processed into a product that can benefit the community, such as hand soap. However, in the community, *reu gongga*, which belongs to the Cyperaceae group, its existence is often overlooked [3]. *Reu gongga* has many benefits. Some problems the main problem faced by the community in the Masamba subdistrict is the lack of knowledge of limited technology in packaging and promotion [4]. So

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by looking at this matter, it is necessary to move on to the presentation and marketing programs favored by the community so that the community is interested in using them.

Seeing this opportunity, the writer is interested in processing *reu gongga* into a hand soap product. Soap is a sodium compound with fatty acids that are used as a body cleansing agent, in the form of solid, foam with or without other additives and does not cause irritation to the skin [5]. Soap is generally known in two forms, liquid soap, and solid soap. The main difference between the two forms of soap is the alkali used in the soap-making reaction. Solid soap uses sodium hydroxide or caustic soda (NaOH), whereas liquid soap uses potassium hydroxide (KOH) as alkali [6].

The quality of the soap is influenced by the raw materials used. Hand soap is usually made with a mixture of fat or oil. Soap production is currently very abundant, but most of it is still using synthetic ingredients that are very dangerous for human skin. Examples of synthetic active ingredients that are highlighted today are *diethanolamine* (DEA), *Sodium Lauryl Sulfate* (SLS), and *triclosan*, which is found in almost all hand soap on the market. The use of soap can be increased from cleaning agents to medicinal preparations if certain active ingredients are added [7].

Product manufacture certainly cannot be separated from the marketing process. The success of marketing a product is not only judged by how many consumers are successfully obtained but also how to retain these consumers [8]. Consumer reputation and trust are used as indicators of success and development of a business and predictions of its future success in market share [9]. The increasingly advanced internet has influenced economic development. Various buying and selling transactions that previously could only be done by face to face or by telephone and post are now much easier because it is done via the internet. Technological developments increasingly expand free trade as if trade became without space and time. Social media also allows market participants to communicate with fellow producers, customers, and or prospective customers. Social media gives brand identity to the marketed brand and helps in spreading the message in a relaxed and communicative way. Promotions conducted by producers have also experienced a shift; many producers have switched from promotions through print and electronic media to promotion through the internet; one of them is social media. Social media such as *Facebook, Twitter, and YouTube* are now used as promotional media because social media has become a platform that is often used by consumers when spending time online. Therefore, social media is the right place to promote products to consumers [10].

2. Empowerment and method

The implementation of the activities has been adjusted according to the schedule prepared beforehand. Then the implementation is regulated: 1. Soap making was carried out in Kappuna Village, Masamba District, North Luwu Regency, South Sulawesi Province. 2. The target audience for this soap making were the people in Kappuna Village, Masamba District. 3. Soap making equipment consists of a basin, spoon, measuring cup, bowl, mixer, filter, knife, mold, gloves (handscoon), mask, glasses, and packaging. 4. The ingredients for making soap consist of caustic soda (NaOH), coconut oil, palm oil, essential oils, natural dyes, cavity reels, and mineral water.

The methods for making the hand soap are 1. Prepare the tools and ingredients; 2. Mix coconut oil and palm oil into a basin, 3. Pour fire soda water into the oil while stirring, 4. Pour *reu gongga* root extract into the mixture, 5 Stir using a mixer until it thickens, 6. Add the coloring, 7. Stir until evenly mixed, 8. Prepare the mold; 9. Pour the mixture into the mold, 10. Leave the mixture for 24 hours until it hardens, 11. After 24 hours, cut the soap that has hardened into several parts, 12. Do the drying process for at least 4 to 6 weeks, 13. After the soap dries, pack the soap with the packaging provided, 14. The soap is ready to be marketed and used.



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3. Results and discussion

The implementation of the activities is adjusted to a pre-arranged schedule through the following stage:

3.1. Preparation and guidance

After conducting observation, the socialization of making hand soap began to be carried out by holding seminar activities at the Kappuna Village Office by inviting the local community and community leaders. Socialization of the importance of knowledge in utilizing existing resources around especially *reu gongga bulbs*, through several stages:

- 1. Discussion with the community in the Kappuna village about the material and preparation for resource use
- 2. Agreement on the time and place of conducting training in making handwashing soap based on *reu gongga bulbs*
- 3. Drafting a schedule of community training activities on the importance of utilizing available resources, especially reu cavity tubers and online marketing training

It is expected that with this socialization, the local community will know and implement the program that will be implemented, especially in the Kappuna Village, Masamba District, North Luwu Regency.

3.2. Implementation

This program has been carried out by 4 students, along with supervisors and the community as the target of this program joined in group 06 of Kappuna Village, Masamba District, North Luwu Regency. This program was facilitated by a supervisor of Muhammadiyah Palopo University in the amount of Rp 5,000,000 from financial assistance so that the planned activities could be carried out. The stages of making environmentally friendly, handwashing soap products based on *reu gongga bulbs* that have been successfully carried out can be seen in Figure 1.







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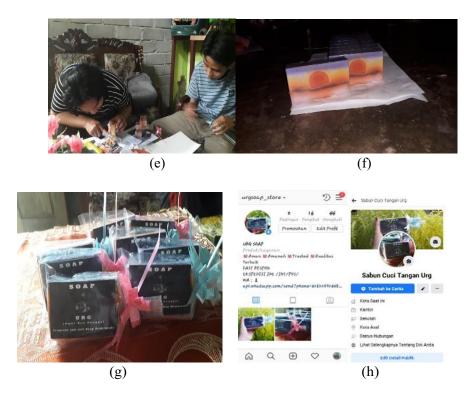


Figure 1. manufacturing stage: (a) basic ingredients of *reu gongga bulbs*, (b) preparation of tools and materials, (c) mixing materials, (d) printing soap, (e) cutting soap, (f) soap drying, (g) soap packaging, (h) soap online marketing.

3.3. Monitoring and evaluation

Running an activity or work program in an effort to empower the community, especially in the Kappuna Village, Masamba Subdistrict, North Luwu Regency requires systematic, structured planning, starting from monitoring to the evaluation of activities. Good planning can be seen from various sides, starting from the input, output, outcome, and impact that you want to produce from an activity. It takes monitoring in seeing thoroughly about the development of activity and evaluation is needed in assessing or analyzing the level of success of the implementation of activities that have been planned since the beginning. Community empowerment activities in processing *the reu gongga bulbs* into environmentally friendly hand soap can certainly be implemented properly according to a predetermined schedule, but in implementing it, there were still deficiencies that need to be addressed so that in the future this deficiency will become a breakthrough in the success of an activity.

4. Conclusion

Based on the results of the implementation of the dedication, some conclusions are formulated as follows; 1. This activity is strongly supported by the local government as a program that helps local governments in community empowerment, 2. This Program is a means of community empowerment in Kappuna Village, Masamba District, North Luwu Regency, 3. This program is a means to explore the potential of the Village Kappuna, Masamba District, North Luwu Regency, which has not been well managed, 4. This program is a facility for the community in Kappuna Village, Masamba District, North Luwu Regency to increase income.



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