# TRAINING ON MAKING NOODLE CRACKERS TO IMPROVE PRODUCT CAPACITY IN WANGUNREJA VILLAGE SUKABUMI

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#### **ABSTRACT**

Noodle Crackers (Ranggining) is one of the foods that are typical souvenirs from the city of Sukabumi which is still very traditionally produced by several mothers in Wangunreja Village, Nyalindung District, Sukabumi Regency. These crackers are only sold when there is demand coming in, they never market the noodle crackers to a souvenir shop because of the very low production capacity. The process of printing crackers is also done by a very heavy force, so the craftsman must use the foot as a pedestal to press the dough. The purpose of this community service activity is to produce a noodle cracker mould that can help simplify the process of printing noodle crackers. From this design activity, a cracker printer has been produced. From the results of the implementation of printing time for a tube volume of 839 cm3 or 0.839 litres carried out with 32 seconds while the previous pressing process with the same amount of dough takes 92 seconds. This means that using a new printer can increase efficiency by 60 seconds or 65.22%.

Keyword: Food, Noodle Crackers, Mold Tools, Design and Build

#### INTRODUCTION

Micro, small and medium enterprises (MSMEs) have large development and contribution to the national economy, especially in the food industry. At the MSMEs, in particular, the food industry there are several problems that are often faced by entrepreneurs engaged in food, such as intense competition, small profits, declining sales (Ongkorahardjo, 2015). More and more competitors are pushing the food industry to open up external sources of knowledge in finding good new products and technologies (Sarkar & Costa, 2008). For this reason, business motivation is needed that must be followed by business ability (Gemina et.al, 2016). In order to improve product yields and the ability to produce products that can compete in the market. To be able to compete requires the collaboration of SMEs with the industrial sector to be able to increase innovation from SMEs (Ueasangkomsate & Jangkot 2017).

### **Situation Analysis**

Noodle Crackers (Ranggining) is one of the typical foods of the city of Sukabumi which is traditionally produced by mothers in Wangunreja Village, Nyalindung District, Sukabumi District, these Noodle Crackers are made from rice flour which is also traditionally pounded using a lesung and then sifted to produce flour smooth one. For the process of moulding rice flour dough that has been mixed with water are printed by pressing on a milk can whose bottom is perforated and pressed using wood so that the rice flour dough is mould in the form of noodles. After moulding, the noodles are formed rounded on a banana leaf and then dried in the sun. Because the cracker production process is still very traditional, the production capacity is also still very low. These crackers are only sold when there is demand coming in, they never market the noodle crackers at a shop because of the very low production capacity.



Figure 1 Rice Flour Pounding Process



Figure 2 Process of Sifting Rice that Has Mashed



Figure 3 Side View of Noodle Crackers Mold

The process of printing crackers is also done by a very heavy force, so the craftsman must use the foot as a pedestal to press the dough. Because the printing process is very heavy so the printouts are short and intermittent. This causes the process of braiding the noodle crackers to be untidy.



Figure 4. Mould Results of Noodle Crackers

### TARGETS AND RESULT

The target outcomes to be achieved in this community service activity are: General-purpose

Increasing the productivity of the production process for the craftsmen of noodle crackers in the village of Wangunreja Sukabumi and increasing the sale of noodle crackers by conducting product development activities so as to produce product improvements with the taste desired by consumers.

Special purpose

Helps increase production capacity by providing printing equipment for crackers noodles to be able to reduce processing time, fatigue in the printing process and uniform size crackers. This printing tool is the result of internal research at Mercubuana University.

Solution offered

- Providing assistance in the form of noodle cracker printing equipment
- Providing training on the use of noodle crackers printing equipment to noodle crackers craftsmen in Wangunreja Sukabumi village.

#### METHOD OF IMPLEMENTATION

The target audience in the training and mentoring activities were the cracker craftsmen who gathered in the Cempaka 2 Posyandu organization in the village. Bangbayang RT 03 RW 07 Wangunreja Village, Nyalindung District, Sukabumi Regency, which is chaired by Mrs Lilis. Basically, crackers craftsmen are housewives. They make crackers after they finish homework to help the family economy.



## **RESULTS AND DISCUSSION**

The data obtained is the result of direct interviews with the craftsmen and conducted a direct survey of the location of making noodle crackers in the village of Nyalindung Sukabumi.

Table 1 Craftsman Expectations on Noodle Crackers Printing Activity

|    | Complaints  | Норе  | Needs   | Tools Design   |
|----|---|---|---|--|
| 1. | Moulding activities are carried out by being pressed  | The moulding process does not   | Dough suppressor tool that can help craftsmen   | The emphasis system is done by turning the   |
|    | and with enormous effort  | require a lot of energy   | 1   | screw-shaped lever   |
| 2. | Moulding activities because<br>the power needed is so large<br>that the craftsmen run out of<br>energy so that the resulting<br>print is short and broken | The results of the printout are long and not broken                                   | The pressing tool can make dough more length.  Produces more noodles than the previous mold | Emphasis is done with a threaded so that the process of emphasis can be easier   |
| 3. | Mould material made from cans so it is less hygienic  | Mould materials are made from hygienic materials and do not contaminate with crackers | Mould materials are made from materials that cannot be contaminated with crackers           | The mould material is made of stainless steel which is hygienic and does not contaminate the noodle crackers dough     |
| 4. | Because the mould is made of cans, so the mould is easily broken so that it must be replaced with new cans.   | The mold is made stronger and not easily separated                                    | The mould is made so strong that the mould will not loose when used                         | The mould is made of thick stainless steel and the assembly between the tube and the mould is done with strong welding |

Based on the interviews conducted with the craftsmen of noodles crackers in the village of Nyalindung, a noodle

cracker moulding tool design was produced as shown in the picture.



Figure 5. Results of the Design of Noodle Crackers Moulding Tool

From the results of the implementation of the noodle cracker printing tool for craftsmen of noodle crackers in Nyalidung Sukabumi Village, long, large and non-breakable printing results are obtained, as shown in Figure 10. And in the printing process by rotating the emphasis is obtained lightly and during printing, the mould is filled with batter. The pressing process which is usually done repeatedly with great effort now is just a simple press of the dough can be printed immediately. Printing time for a tube volume of 839 cm3 or 0.839 litres takes 32 seconds while the previous pressing process with the same amount of dough takes 92 seconds. This means that using a new moulding tool can improve efficiency by:

Effisien Waktu=
$$\frac{\text{Time after using the mould-Time before using the mould}}{\text{Time before using the mould}} x 100\%$$
$$= \frac{92-32 \text{ second}}{92 \text{ second}} x 100\% = 65,22\%$$



Figure 6 Implementation of moulding tool



### **CONCLUSION**

From the results of the design and build mould tool, noodles crackers have been produced with the working system pressed by rotating using a screw and four legs as a pedestal. From the results of the implementation of a noodle cracker printing tool for craftsmen of noodle crackers in the village of Nyalidung Sukabumi, long, numerous and non-breakable prints are obtained. Printing time for a tube volume of 839 cm3 or 0.839 litres takes 32 seconds while the previous pressing process with the same amount of dough takes 92 seconds. The new printer can increase efficiency by 65.22%. So saving working time by 60 seconds.

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