

Conference Paper

Packaging Design of Milkfish Products in Tambak Oso Village Sidoarjo

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Abstract

Increased marketing of a product can be done through the improvement of packaging design. Good packaging design is a design that is able to provide better information, more secure, more complete and interesting in marketing a product, especially processed products produced by community communities Tambak Oso Sidoarjo Village. The purpose of this research is to produce new packaging design, interesting and safe from processed product of milkfish that have been produced. Analysis technique used from this research is to use SWOT analysis to know the advantages, weaknesses, opportunities and threats of processed milkfish products that already exist. The analysis results obtained that in terms of form produced 3 (three) forms with different functions. Single rectangular base pack pattern, secondary packaging form there are additional tongue, tertiary packaging form there are two kinds, the first form of bag that can accommodate a maximum of 3 pieces of single pack and the second box-shaped containing 5 to 10 single pack. The material used from laminate art carton material on the outside and glossy laminate on the inside. For color use combination of brown, gray, yellow and black. As for the logo and the name still use the old because it was recorded at the time of permitting process.

Keywords: Milkfish, packaging design, Tambak Oso

INTRODUCTION

Sidoarjo regency is a regency adjacent to Surabaya city. Sidoarjo is known as Delta City, because it is located between two major river rivers of Brantas River, Kali Mas and Kali Porong. Fisheries, industry and services are the main economic sectors of Sidoarjo. In the fishery sector, Sidoarjo regency rely on shrimp and milkfish as a leading commodity used as the mascot of Sidoarjo Regency. The total production of both commodities reaches 85% and about 70% of them are milkfish production. The number of farmers Sidoarjo ponds reach 3,000 people with a total pond area of 15,530 ha. The amount of commodity of abundance of ponds is certainly balanced with efforts to increase the saving and durability of post-harvest fisheries. Therefore, there are also many small centers of small processing industries such as milkfish, milkfish cracker, etc. in the area of Sidoarjo, one of them is Tambak oso village.

The development of processing industry is currently limited to the local market because of the use of simple technology and the packaging of less attractive products. They have not been able to penetrate the wider market competition for example by entrusting in the center by even in a larger scale attracts consumers to the Pondok

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Oso area to shop for processed milkfish products because the packaging is less interesting yet to attract the attention of consumers. One effort that can be taken to face the increasingly sharp trade competition is through packaging design. The attractiveness of a product can't be separated from the packaging. Packaging is a pull factor because it directly confronts the consumer. Therefore packaging should be able to influence consumers to provide a positive response, in this case buy the product; because the ultimate goal of packaging is to create sales.

Packaging is one of the areas of art that has many special demands, among others, in terms of creativity, technical and communicative because of its function directly faced with consumers. From observations and interviews with some small industry actors obtained data that they are difficult to sell their products when the taste of their products can quite compete with other. The difficulty is due to the packaging of their products that are less attractive so as not to penetrate the larger market. This is what makes the background of this research is to find out the appropriate packaging design for processed products in the village Tambak Oso Village Sidoarjo.

In Tambak Oso village there are about 20 artisans who produce products such as presto milkfish, crispy milkfish, milkfish brain, milkfish, milkfish crackers, prawn crackers, petis, terasi etc. With this activity, it is expected that the small-scale producers of processed products in the village of Tambak Oso can be motivated to produce attractive packaging so that it can increase the selling value which in turn can increase their income source. The purpose of this program is to develop creativity and skills in designing the various results of their products so that more can compete in sales.

In the packaging process involves designing and producing activities, the main function of the packaging itself is to protect the product to keep the product maintained (Kotler & Armstrong, 2012). According to Nilsson & Ostrom (2005) in Cahyorini & Rusfian (2011), packaging design variables consist of 3 dimensions, namely: graphic design, design structure, and product information.

a. Graphic Design

Graphic design is the visual decoration on the packaging surface (Nilsson & Ostrom, 2005) in Cahyorini & Rusfian (2013), and consists of four sub dimensions: color, brand, typography and image.

b. Design Structure

The structure of the design deals with the physical features of the packaging, and consists of 3 sub-dimensions: shape, size, and material.

c. Product Information

One of the packaging functions is to communicate the product through the information contained in the packaging design. Product information can help consumers make purchasing decisions more carefully. (Silayoi & Speece, 2005).

The dimensions of the packaging have their respective roles to produce good and attractive packaging, because the more attractive the packaging is, the more it attracts the attention of the consumers. A package has an appeal, classified into two: visual appeal and practical appeal. (Wirya, 1999) The visual appeal of a packaging appearance that includes graphic elements to create an impression. A good design should be able to influence consumers to provide a positive response without realizing it. The practical appeal is the effectiveness and efficiency of a package addressed to both consumers and distributors.

METHODS

The target group is some industry players in Tambak Oso Village, including processed milkfish industry and cracker industry.

Method of implementation offered to overcome the problem of making packaging design:

1. Provide samples of similar product packaging as an initial description and identification of competitors.

The examples are through extension activities that are attended by industry players and some industrial prospective of PKK. It is hoped that with this counseling, industry players will open their insights into

attractive packaging designs, giving rise to the desire to improve and refine existing packaging designs. As for the prospective industry players are expected to arise desire to immediately produce products and market in order to increase revenue and improve the image of the Village Tambak Oso.

2. Teach how to design the packaging according to each product

After the next counseling done assistance on each industry actors. This mentoring process is done directly on each product to know the character of the product to be packed so that it can be produced optimal design.

3. Teach how to print and package each product

The next process after the packaging design is finished is the print process. At this stage is taught how to lay out design packaging that has been so to be processed in printing.

Evaluation is done every 2 weeks by looking at changes in attitude and behavior of artisans to science and technology that has been transformed. Has there been a change of attitude and behavior after being given counseling and training on packaging design. If there are obstacles it needs to be re-discussed so that the craftsmen understand and can apply it.

RESULT AND DISCUSSION

Packaging has an important role in maintaining the quality of the material. The packaging process is an integral part of the production process at the factory of the food processing plant (Syarief, 1993). The following description of the results of community service activities conducted through 3 stages in accordance with table 1.

Table 1. Activity Stages

No.	Program/Activities	Time Monitoring	Time Monitoring & Evaluation	Note Development Activities	Final Status Monitoring and Information
1.	Counseling (Provide samples of similar product packaging as an initial description and identification of competitors)	September 2017	Add knowledge about the design of similar product packaging	Add knowledge about packaging	
2.	Training (Teach how to design the packaging according to each product)	October 2017	Add knowledge of how to run the computer program making packaging design	Produced several product packaging designs	Packaging design technique with computer program (Corel Draw)

1. Counseling

Counseling was held on September 15, 2017 at Balai Desa Tambak Oso Sidoarjo. Participants in attendance consisted of 6 UKM (small and medium enterprises) and several housewives. At the time of counseling was given material about various kinds of packaging as well as some samples of packaging. Some UKM bring their products to be consulted. The enthusiasm of extension participants is very high seen from the many questions surrounding the packaging related to their respective products. Subsequently, the participants were given a questionnaire/form related to their respective products as data for training (figure 1).



Figure 1. The atmosphere of counseling and training on the packaging process of processed products of tambak in Tambak Oso Sidoarjo Village

2. Training

In the training process conducted in each respective place UKM. They are given intensive assistance on building branding, redesigning packaging for those who already have packaging and new design for those who do not have packaging. Several small and medium enterprises that exist are processed milkfish and crackers.

3. Result Packaging

A. Processed Milk

Products There are several processed products of milkfish in the village Tambak Oso Sidoarjo. One of them is Krishna. Actually the taste of the resulting product is enough to compete with similar products, but on Krishna has a weakness that causes stagnant micro industrial products, one of which is the packaging design side. Today consumers prefer and also consider purchasing products based on packaging first. With attractive colors, good brand and familiar logos and marks will be useful as shaping the hallmark of the product (figure 2).



Figure 2. Old packaging of Krishna Milkfish processed products

The creative program undertaken in redesigning this packaging is to produce packaging that not only serves to protect the product but can also:

- a. Displays the power of the Krishna brand
- b. Conveying information on how to store and warm up products required by consumers.
- c. Processed practically when packaging the product at purchase

Packaging on processed milkfish consists of 3 types:

- a. Primary packaging (primary pack) (figure 3)



Figure 3. Primary packaging (primary pack)

Namely the plastic packaging that is in vacuum with an oil paper. After that in the press to be guaranteed durability.

b. Secondary packaging (secondary pack)

The single pack base pattern is rectangular. The advantage of this shape is that it is easier and comfortable to pocket, the upper part strong enough to hold the shape when it gets strong pressure (figure 4).



Figure 4. New Secondary packaging

The addition of the tongue on the inside of the package is functioned like a spring that helps hold the fish. Milkfish have different sizes, the function of the tongue can help keep the smaller fish less torn when placed in the package.

c. Tertiary packaging (tertiary pack)

For tertiary pack there are 2 kinds, the first shaped bag made of paper. This bag can accommodate a maximum of 3 pieces of secondary pack. The second package is a pack containing 10 single packs. This package is specially made for distributed or taken traveling out of town or outside the island, therefore the packaging is made of cardboard that is thick and more resistant to pressure (figure 5).



Figure 5. Form of tertiary packaging contains of 3 secondary pack and 10 single pack

Material

Packaging uses the three packaging classifications of primary, secondary, and tertiary. In the primary part will continue to use as in the current packaging that is the use of plastic with vacuum techniques and dialed with oil paper so that spice from milkfish is not directly touched and absorbed by the secondary packaging. In the secondary part will use material from art carton laminate doff on the outside and laminate glossy on the inside so that spices and oil from the product is not absorbed by the packaging. Art carton material is strong enough to withstand the pressure and color of the white paper makes the packaging look cleaner.

Color

Color packaging will use a blend of brown, yellow gold and white. Brown color describes the color of the soil where in Tambak Village Oso milkfish cultivation in the media of ponds. The color of chocolate also shows the impression of traditional, natural and friendly.

Packaging Costs

- a. Secondary Pack

Size	: 30 cm x 10 cm x 5 cm
Material	Digital printing paper that can be used is Art Carton 310 gsm. Offset printing, can use thicker Art Paper Carton 350 gsm
Number of finished packaging	: 1,000 pieces
Cutting cost	: Rp 100,000,00
Cost and printing	: Rp 800,000,00
Paper cost of doff lamination (outside)	: Rp 600,000,00
Total cost (with laminate doff)	: Rp 1,500,000,00
Price per unit of packaging(with laminate doff)	: Rp 1,500,00

- b. Tertiary Pack

Bag contents maximum 3 pieces of secondary pack size (plt)	: 32 cm x 12.5 cm x 27 cm
Material	: Art Carton 310 gsm
Cutting cost	: Rp 200.000,00
Glue cost	: Rp 100,000,00
Rope	: Rp 500,000,00
The cost of sticker printing	: Rp 150,000,00

Print cost	: Rp 2,000,000,00
Total cost	: Rp 2,950,000,00
Total packing quantities	: 1,000 pieces
Price per unit of packaging	: Rp 2,950,00

B. Processed Cracker Products

Crackers are a very popular food ingredient of the community from all circles and the price is also relatively cheap so that the business of this cracker has the potential to be more developed. If this business can grow will greatly help improve the economy of cracker entrepreneurs and surrounding communities. And if this business can grow will be one of the excellent products in the village Tambak Oso Sidoarjo. One of the processed fish crackers in Tambak Oso village is Khafidz Jaya. Some types of crackers that have been produced Khafidz Jaya include shrimp crackers, milkfish crackers, fish crisp crackers, and fish crackers. Khafidz Jaya has been producing only raw crackers and packaged in thin plastic and less interesting information and logos. After the packaging design training activities are finally produced, the designs can be produced in accordance with the character of Khafidz Jaya featuring various types of processed fish crackers (figure 6).



Figure 6. Package of crude oil crackers



Figure 7. Package of raw crackers and new matures

The use of plastics as a cracker packing material both raw and mature raises many variations and versatile such as protecting, preserving, storing and exhibiting results. In addition, the plastic of cracker packs should be able to maintain the quality of crackers during storage so there is no need for drying before the fryers and mature crackers have a maximum development volume, maximum crispness and no flavor or flavor distortion (figure 7).

C. Chips

Other processed products of ponds in Desa Tambak Oso are chips. While the producing place is Krishna. Chips produced include baby fish, crispy shellfish and abon patin. During this time Krishna sells these chips with a simple packaging of thin plastic materials, so it looks less attractive (figure 8).



Figure 8. Package of baby fish and old crispy shells and bars

4. Package Trials

From the packaging that has been produced conducted a trial market by spreading some questionnaires to users/consumers who used to buy previous products as well as some new customers. From the results obtained for packaging about 90% milkfish liked the new packaging design because it looks more attractive. According to their old milkfish packaging design the composition of the color is less interesting, the design is too crowded so it can't focus visible photos sold milkfish. While in the packaging of tertiary almost 100% like the new packaging design because it is more elegant and suitable for use by compared to old packaging that only use plastic crackle. In cracker products almost 82% liked the new cracker packaging design because more visible photos of fish species used than the old ones. In addition, the old packaging is still wearing a thin plastic with a logo while the new design uses thicker plastic and the use of colored logos.

CONCLUSION

Packaging is a method applied to maintain the quality or basic ingredients of a product. Packaging is also useful to put the product to facilitate the distribution to consumers. In terms of marketing, the role of packaging/packaging is very important role to improve the sales process. Factors that affect the packaging design include colors, shapes, and materials used.

While the characteristics of processed products of ponds products related to the packaging are as follows:

a. Cracker products

Easy to crumble, easily moldy so that required packing tight, airtight and water, and not leak. Suitable packaging material is plastic.

b. Processed products of milkfish

Soft, stale product that requires rigid, airtight and non-translucent packaging. Suitable packaging materials are ivory paper/paperboard + kraft paper + plastic paper for hygienic/clean.

c. Chips products and processed mackerel crackers

Easy to crumble, easily moldy, not directly consumed in a single consumption so that the packaging is tight, not leaking, and there is a zipper lock. Suitable packaging material is plastic.

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