CHAPTER I INTRODUCTION

This chapter contains the background of the research, problem formulation, research objectives, problem limitations, and outline of the final project.

1.1 Research Background

Rendang is one of the traditional Minangkabau foods originating from West Sumatra Province. Rendang as shown in **Figure 1.1** in the form of processed meat cooked for a long time using coconut milk and special spices so that it has a special and very delicious taste. As proof, CNN has always included rendang in CNN's 50 best foods in the world both in 2017 at number 1 and in 2021 at number 11. Moreover, on April 9, 2018, the Indonesian Ministry of Tourism (Kemenpar) included rendang as one of the 5 national typical foods along with soto, fried rice, satay, and gado-gado. Rendang is not only loved by the people of West Sumatra, but also by almost all Indonesians. Rendang can be cooked or purchased at various Padang restaurants in almost all parts of Indonesia.



Figure 1.1 Rendang (Source: https://www.inews.id/travel/kuliner/bumbu-rendang-daging-sapi-yangbikin-ketagihan, accessed on January 21, 2023)

Rendang from West Sumatra has its own loyal fans who buy rendang directly to restaurants or buy online. When buying directly from restaurants, customers will usually only get rendang in kilo plastic packaging. This packaging is not very resistant and impermeable so it is common for the oil from the rendang to spill everywhere. This will not be a problem as customers usually eat the rendang directly from the restaurant. The concern is the packaging used for rendang shipped long distances and needs extra attention in the shipping process, especially since rendang will not be eaten immediately and needs time to reach its destination. Ordinary plastic packaging would not work in such cases. For shipping rendang to other regions, a more impermeable, resistant, and capable packaging is required to maintain the quality of rendang during the transportation. Food packaging has a function as a product protector, both from external and internal influences. Usually the packaging must be able to protect the product from excess sunlight, moisture, and the influence of improper handling. Packaging also has a role as a transfer tool, namely as a container for products and a means of transferring from one place to another in a certain amount of weight or amount of content (Sucipta et al., 2017). This should be a concern when creating packaging for a product. The functions of the packaging must be fulfilled so that it can maintain the condition of the product in good condition. Each type and appearance of packaging certainly has an impact on the product inside. Angipora (in (Resmi and Wismiarsi, 2015) stated that packaging functions as product protector, provides convenience for using the product, and marketing media. The main role of packaging in the food industry is to protect products from external contamination, including ensuring food safety, maintaining quality, and increasing shelf life. Packaging can be intended to meet consumer desires, expand market share, increase selling value, provide uniqueness to a product, and facilitate distribution and transportation (Badan POM, 2020).

Rumah Makan Selamat is one of the legendary restaurants in Bukittinggi, West Sumatra that has been operating since 1936. Rumah Makan Selamat is a family business that has grown over the years and has been managed by three family members (grandchildren of the family). Rumah Makan Selamat is located on Jalan Ahmad Yani, Benteng Pasar Atas, Guguk Panjang, Bukittinggi City, West Sumatra. Additionally, the restaurant also has a branch in Padang. There are currently 19 employees working at Rumah Makan Selamat. Rumah Makan Selamat is very famous for its delicious and distinctive rendang and is in great demand to be sent to various regions, almost evenly distributed throughout Indonesia and even overseas in the Selangor area. Rumah Makan Selamat produces a large amount of rendang as shown in **Table 1.1**. The amount produced by Rumah Makan Selamat always runs out every day.

Day	Total Production (kg/day)	
Monday	20	NDALAS
Tuesday	20	
Wednesday	20	
Thursday	20	
Friday	20	5-2-2-
Saturday	40	2 22
Sunday	40	

 Table 1.1 Rendang Production Data

There are two types of packaging that are now used: clear plastic kilos tied with rubber and clear plastic packaging that is vacuumed, then zipped with a small sticker containing the name, logo, phone number, and Instagram account of Rumah Makan Selamat. The packaging used is already able to wrap rendang, but if you look back there are some shortcomings based on 8 dimensions of product quality of the packaging currently used by Rumah Makan Selamat. These are outlined in **Table 1.2** and **Table 1.3** below:

Table 1.2 Weaknesses of Flashe Flackaging with Rubber Fles		
Product Quality	Weakness	
Dimensions		
Performance	 Unable to protect the product from bacteria, changes in odor, taste, and appearance due to aerobic bacteria that grow in relatively larger numbers because they are not vacuumed (Adawiyah et al., 2016). Packaging is easy to spill as it is not very tight. This is important because packaging can make users comfortable if it is strong enough to protect the product from being spilled or damaged, the shape of the packaging is 	

Table 1.2 Weaknesses of Plastic Packaging with Rubber Ties

Feature	 attractive, the packaging is not deceptive, and it is easy to open (Clara, 2021). 3. Lack of information provided. Among the various information about consumer goods or services that consumers need, it seems that the most influential at this time is information sourced from businesses, especially in the form of advertisements and labels, without reducing the influence of various other forms of business information (Pratiwi, 2019) 1. There are no additional features that can add value to the package. Generally, consumers will buy a product after seeing the features and elements in the product packaging (Pramesti and Susilawati, 2021). 2. The absence of images, colors, or anything else that can enhance the appearance of the packaging. Therefore, in designing a package, it should be made with interesting and unique shapes, colors, and writing so that it looks different from the others (Widiati, 2019)
Reliability	Packaging that is immediately clear is directly exposed to
Conformance	 light. Light transmission into the package is necessary so that we can see the contents of the package. But for light-sensitive products, the presence of light causes the fat to oxidize, damaging ribofl avin and natural pigments. Therefore, opaq (dark-colored) packaging should be used so that light cannot pass through (Nugraheni, 2018) Lack of standard details and clear information on the outside of the packaging. Among the various information about consumer goods or services that consumers need, it seems that the most influential at this time is information sourced from businesses, especially in the form of advertisements and labels, without reducing the influence of various other forms of business information (Pratiwi, 2019). The lid is not very tight and is only tied with rubber, so there is leakage of rendang oil, making the packaging slippery and
	dirty. This is important because packaging can make users comfortable if it is strong enough to protect the product from being spilled or damaged, the shape of the packaging is attractive, the packaging is not deceptive, and it is easy to open (Clara, 2021).
Serviceability	 Possible spillage and impermeable packaging. This is important because packaging can make users comfortable if it is strong enough to protect the product from being spilled or damaged, the shape of the packaging is attractive, the packaging is not deceptive, and it is easy to open (Clara, 2021). No phone number or contact information for complaints, opinions, or suggestions. Nowadays, packaging serves as a communication medium. For example, milk or baby food

	packaging is often affixed with a toll-free telephone	
	number. This number can be contacted by consumers not	
	only to complain, but also as an information center to ask	
	about everything related to the product (Mudra, 2010).	
Aesthetics	Plain view. The packaging is still packed with ordinary and	
	plain plastic without any logo and color so that the appearance	
	of the packaging is not attractive, less valuable and less	
	appetizing (Umar et al., 2022).	
Perceived Quality	There is no special look or packaging that characterizes	
	Selamat rendang, it's just like any other side dish in a	
	restaurant. Packaging without a brand so that the identity is	
	not well recognized (Umar et al., 2022).	

Table 1.3 Weaknesses of Vacuum Plastic Packaging with Zip Plastic Layer

Product Qualit	y Weakness
Dimensions	
Performance	The information provided is not very complete. Among the
	various information about consumer goods or services that
	consumers need, it seems that the most influential at this time
	is information sourced from businesses, especially in the form
	of advertisements and labels, without reducing the influence
	of various other forms of business information (Pratiwi,
	2019).
Feature	1. The absence of images, colors, or anything else that can
	enhance the appearance of the packaging. Therefore, in
	designing a package, it should be made with interesting
	and unique shapes, colors, and writing so that it looks
	different from the others (Widiati, 2019).
	2. The zip plastic size is only one size. Create packaging of
14	various sizes and shapes, the goal is to make it easy for consumers, to buy products according to their needs
<	(Widiati, 2019).
Reliability	Plastic cannot protect products from light. Plastic is a poor
Rendomity	light reflector, this is due to the slow movement of electrons
	in polymeric materials that more easily adjust their vibrations
	to light, so they cannot absorb light beams (Sucipta et al.,
	2017).
Conformance	Lack of standard details and clear information on the outside
	of the packaging. Among the various information about
	consumer goods or services that consumers need, it seems that
	the most influential at this time is information sourced from
	businesses, especially in the form of advertisements and
	labels, without reducing the influence of various other forms
	of business information (Pratiwi, 2019).
Durability	Packaging that is immediately clear is directly exposed to
	light. Light transmission into the package is necessary so that

	we can see the contents of the package. But for light-sensitive products, the presence of light causes the fat to oxidize, damaging ribofl avin and natural pigments. Therefore, opaq (dark-colored) packaging should be used so that light cannot pass through (Nugraheni, 2018).
Serviceability	The plastic zip is only one size and cannot adjust to the different requests for rendang. Create packaging of various
	sizes and shapes, the goal is to make it easy for consumers to
	buy products according to their needs (Widiati, 2019).
Aesthetics	The packaging is still packed with ordinary and plain plastic
	with only a sticker, so that the appearance of the packaging is
	not attractive, less valuable and less appetizing (Umar et al.,
	2022)
Perceived Quality	There is no special look or packaging that characterizes
	Selamat's rendang. Packaging without a brand so that the
	identity is not well recognized (Umar et al., 2022).

After being seen based on the dimensions of product quality, there are several shortcomings of the packaging currently used by Rumah Makan Selamat. This can be a long-term problem if not properly considered. The quality dimension plays an important role for a product. A new packaging design that can fulfill all dimensions of product quality needs to be created. The main drawbacks of the packaging currently used by Rendang Selamat are the lack of information and the plain appearance without colors, images, and unattractiveness. The shape, size, color and information displayed on the packaging can cause attraction. This is what Rendang Selamat's packaging lacks compared to similar product packaging. Packaging as an indirect promotion, indirectly, the appearance of a package can be a free advertisement/ disguised promotion when displayed in a storefront or during distribution. Therefore, it is important to have information and attractive appearance on the product packaging. Packaging as a brand image. Packaging is a medium for embedding a brand image to consumers so that consumers easily remember and are fanatical about choosing products. Therefore, it is important that the appearance of the packaging is something that must be highly considered and this is what is lacking from the packaging of Rendang Selamat.

In order to get an overview of the rendang packaging of Rumah Makan Selamat, preliminary survey was conducted with 25 respondents through google form who are customers of Selamat Restaurant and have eaten and seen the Rendang Selamat package. Everyone's results and opinions vary. Some felt that the current packaging was sufficient and others felt that the packaging could be improved. Respondents' full answers to the questions on the google form are in **Appendix A**. Many suggestions were given for designing the rendang packaging. Based on this survey of customer opinions, it appears that it is very important to make the packaging more attractive and still be able to maintain the quality of rendang. The results of the question on the need for rendang packaging design is shown in the pie chart in **Figure 1.2** below:

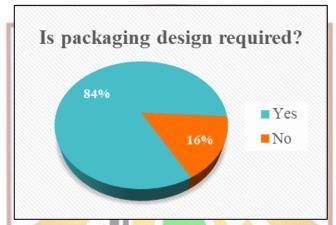


Figure 1.2 Pie Chart of Survey Results (Source: Processed by the Author)

Based on **Figure 1.2**, it can be seen that out of 25 respondents, the last question that was asked was whether or not the packaging that is currently used by Rumah Makan Selamat needs to be redesigned. As a result, as many as 21 respondents were of the opinion that there is a need to redesign the packaging and 4 people were of the opinion that there is no need to redesign the packaging. This shows the need to design rendang packaging for Rumah Makan Selamat. There are a lot of things that are important in the design of a package, especially food product packaging. Food products require special care and packaging. In packing food, you are not allowed to choose wrongly and carelessly. This will result in messy results as well. To pack food requires an airtight packaging machine (vacuum) so that bacteria that will enter the food can be avoided (Sucipta et al., 2017). There are many new types of packaging used in rendang products, for example in **Figure 1.3**. The packaging can be vacuum packed into a standing pouch or canned type of packaging.



Figure 1.3 Examples of Rendang Packaging (Source: https://flexypack.com/news/inspirasi-kemasan-rendang-menarik, accessed on January 21, 2023)

As shown in **Figure 1.3**, there are many types and materials used in packaging rendang products. There are standing pouches, cans, etc. Besides the examples shown, there are several types of packaging for food which are shown on the following **Table 1.4** (Winarno and Octaria, 2020):

Packaging Types	Characteristics
Sachet and pouch	Flexible
plastic	Waterproof
20	Lightweight
< UNTU	
	Material substances that can transfer to the food
	Non-biodegradable
	Raw material depletion
Metal can	Safely protects from sunlight, water vapor, oxygen
	Price tends to be higher
	Purchase must be in bulk
Cup or glass	Does not react with the packaged material
	Resistant to acidic and alkaline products
	Easy to break
	Heavier
Paper/cardboard box	Resistant to odors
	Permeability to water

Table 1.4 Packaging Types and Characteristics

	Fat and oil resistance
	Easy to mold
Aluminum foil	High shelf life
	Not easily damaged
	Easy closure technique
	High sterilization temperature resistance

The information in **Table 1.4** can be used as a reference in choosing the type and material to be used in designing food packaging, especially rendang. In addition to packaging type and material, the external appearance of a package is an important point in packaging design. Kottler and Armstrong (in (Mufreni, 2016) suggest "packaging involves designing and producing the container or wrapper for a product" which means, packaging includes designing and producing activities, to protect the product. Packaging always involves design so that the product message is conveyed to customers, the function of packaging itself at this time (Mufreni, 2016). The importance of the role of packaging for a product needs to be considered in a business. The weaknesses of the packaging that has been used by Rumah Makan Selamat can be improved and better packaging can be redesigned, which can increase the value of the product quality dimensions of the packaging and adapt to the wishes of customers because it is the customers who will receive the product. Based on the packaging problems owned by Rumah Makan Selamat and the solutions developed, the final project research title "RENDANG PACKAGING **DESIGN AT RUMAH MAKAN SELAMAT**" was raised. The packaging design of rendang from Rumah Makan Selamat is expected to fulfill the eight dimensions of product quality so that it can be well received by customers even though it is sent directly from Bukittinggi City, West Sumatra to various regions. The packaging design uses a qualitative approach in the form of grounded theory.

1.2 Problem Formulation

Based on the background discussed, the problem formulation in this research is what is the design of rendang packaging for Rumah Makan Selamat that is in accordance with customer expectations?

1.3 Research Objective

Based on the problem formulation determined previously, the objectives of this research is the design of rendang packaging for Rumah Makan Selamat that is in accordance with customer expectations.

1.4 Problem Limitations

This research has several problem limitations so that the research can be focused on solving existing problems, namely as follows:

- 1. The research was conducted until the packaging design stage.
- 2. The packaging design considers the type and cost of packaging to be used.

1.5 Outline of Final Project

The outline of the final project is as follows:

CHAPTER I INTRODUCTION

This chapter contains the background of the research, problem formulation, research objectives, problem limitations, and outline

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of the final project. CHAPTER II LITERATURE REVIEW

This chapter contains theories related to the design and methods used in research that are directly related to the problems discussed. The theoretical underpinnings used include packaging, product quality, grounded theory, coding in grounded theory, and previous research.

CHAPTER III RESEARCH METHODOLOGY

This chapter contains systematic steps of the stages carried out during the research, including preliminary studies, problem identification, problem formulation, method selection, data collecting, data processing, packaging design, discussion, conclusion, and research methodology flowchart.

CHAPTER IV DATA COLLECTING AND PROCESSING

This chapter contains the process of collecting primary and secondary data needed during the research, followed by data processing using the grounded theory method with three stages of coding, namely open coding, axial coding, and selective coding, as well as the process of packaging design stages.

CHAPTER V DISCUSSION

This chapter contains an analysis of the results of data processing related to packaging variables and conceptual model, the packaging design result, and the cost estimation according to the packaging design results.

CHAPTER VI CONCLUSION

This chapter contains a summary of the research results and suggestions given for further research.

