

CHAPTER II

LITERATURE REVIEW

In this chapter the writer presents about the information of tourism culinary, traditional food, sorghum flour and *kue maksuba*.

2.1. Tourism Culinary

Tourism culinary is one aspect that can attract tourist. With tourism culinary tourist can inflict the uniqueness of each other countries. This can be one of the characteristic owned by the state. According to Leheup (2011) culinary tourism includes any tourism experience in which one learns about, appreciates, and/or consumes food and drink that reflects the local, regional, or national cuisine, heritage, culture, tradition or culinary techniques. It is also proved that with tourism culinary tourist will learn to appreciate and consume that culinary.

Suryadana states (2009) that tourism culinary is facilities that provide a variety of services and culinary activities are integrated to fill necessary of tourist who are built for recreation, relaxation, education and health. Therefore, tourist who come can enjoy nature tourism and at the same time we can present the tourism culinary. After that it also can help promote our tourism to tourist.

Virna (2007) says tourism culinary put food as well as the subject and the media, as a destination and a tool for tourism development.

So, it can be concluded that tourism culinary is one of the aspect in tourism which attract the tourist with the variety of food from each place.

2.2. Traditional Food

Food helps shape and define cultures around the world. Learn about the historical and traditional dishes that have fed civilizations both past and present. Every country have their peculiarities that can definitely make a country different from other countries. Soekarto (1990) defines that these food is grown at this place and called the traditional food. Traditional foods (including snacks) and

drinks as well as a mixture of materials (ingredient) that are traditional has been used and developed in the area or local community.

Traditional foods that have a wide range of herbs and spices can be expected to be potential difficult to emulate other countries. Also Lestari states (2014) that traditional foods are foods and beverages commonly consumed by a particular community, with a distinctive flavor that is accepted by the community.

2.3. Sorghum

Suprpto and Mudjisihene (1987) states that Sorghum (*Sorghum bicolor* L. Moench) is a plant included in the Graminae family along with rice, corn, surgarance, wheat, and others. *Sorghumbicolor* L. Moench belongs in the genus *Sorghum*, ordo *Cyperales*, class *Liliopsidal Monokotiledon*, Division *Magnoliophyta*, superdivis *Spermafophyta*, subkingdom *Traechobionta* and the kingdom *Plantae*. Sorghum has a name that is different for each region. For example, sorgum is known by the name “*Cantel*” in Central Java and East Java. “*jagung cantrik*” in West Java and “*Batara Tojeng*” in South Sulawesi.

According to Rufaizah (2011) sorghum has a different name in some areas such as *cantel* in Central Java, *jagung cantrik* in West Java and *batara tojeng* in South Sulawesi. Sorghum grown well since 1973, especially in Demak, Grobogan, Kudus, Purwodadi, Lamongan and Bojonegoro.

Ahza (1998) defines that the seeds of sorghum can be processed into flour or rice and rewarding as material substitution flour. The volume of imports of wheat and rice is quite large with a big enough price with prices that continue to rise. Therefore the development of sorghum prospective enough in an attempt to provide a local source of carbohydrates, as a raw material the company pizzas and noodles have not evolved since stripping the seeds of sorghum is hard enough. In Indonesia, sorghum seed used as ingredients of food substitution the rice, but the content of tannin is quite hight (0.40-3.60). Oxidation of tannins can cause to appear less attractive and cause bitter taste. In addition, tannin can form

complexes with proteins and minerals that causes protein and minerals can not digest

Furthermore, Suarni (2004) states that in Indonesia, sorghum and its utilization is still not popular even though sorghum has many advantages such as a high resilience in condition, short planting age (100-110 days), adaptation to land high and low costs production. In addition, sorghum seed starch contains quite high, which is about 82% fat, 0.5% and 6% protein. It shows that the composition of these three nutrients (proteins, fats, starches) in sorghum rice equivalent, even better. In addition to the content of nutrients equivalent to rice, sorghum also contains a variety of other substances that play a role in the body as an antioxidant, phytosterol and tannin (Suprpto and Mudjisihene, 1987).

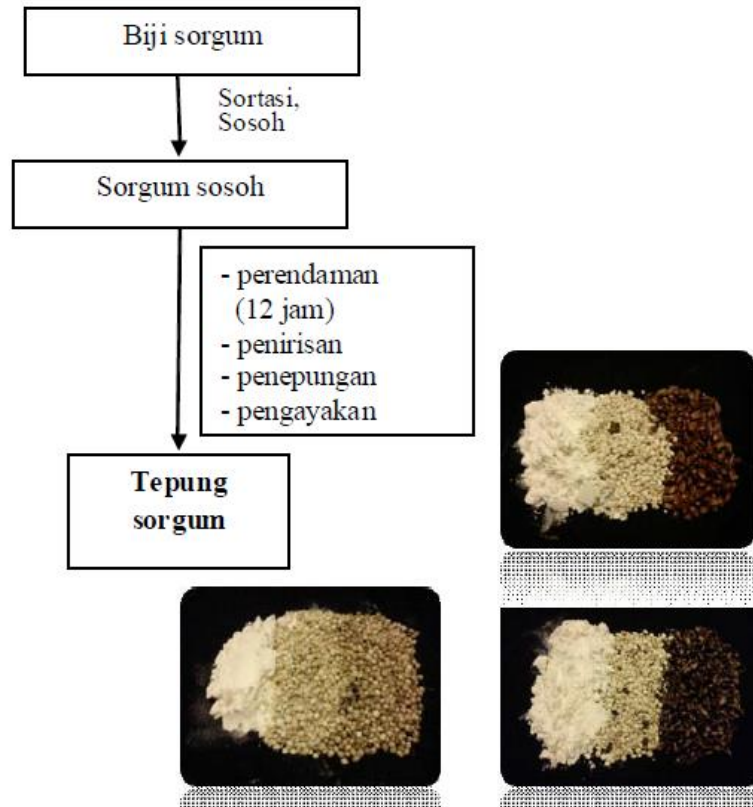
In conclusion, sorghum is one of cereal crops that have a high nutrient content, extensive adaptation, high productivity, and resistant to pests and diseases compared with other food crops, resistant to dry condition, planting age is short (100-110 days), and low cost of production and also has extensive benefits among others such as for feed, food and industrial ingredients.

2.3.1. Sorghum Flour

Suarni (1999) states sorghum flour is flour that comes from seeds of sorghum. The process of making flour from grains such as sorghum and corn is similar to the process of making rice flour. Begins with *penyosohan*, then soaking the seeds in the water until quite soft, continue with *penirisan*, *penepungan* and *pengayakan*.

With *penepungan*, protein and other nutrients will decrease. The content of tannins (antinutrients) in sorghum seeds down over 60%. Flour obtained by dry method produces low tannin levels. With the wet method, the content of tannins is not measurable. According to Winarno (2002) Compounds of tannins (polyphenols) is antinutrients in foodstuffs of sorghum, which can inhibit the absorption of nutrients, such as protein in the process of enzymatic.

Picture 1. The making of Sorghum flour



The utilization of sorghum in the form of flour more lucrative, because it can be make many variative food. The weakness of the final product is in the taste, the final taste will be osphronemidae. Taste of the osphronemidae difficult removed in flour making process, because the tannin escapes in the filtering. The chemical compound is the unwanted antinutrients in food (Patong and Suarni, 2002).

In conclusion, sorghum flour made with *penggilingan*, soaking in the water until the ingredients are soft enough, continued with the process of *penirisan*, *penepungan*, and *pengayakan*. *Penepungan* caused the content of protein and other nutrition decrease, tannins in sorghum seeds down over 60%.

2.3.2. Composition of Sorghum Seeds Nutrient

The content of nutrients in sorghum seeds consist of 70-80% carbohydrates, proteins, 11-13%, 2-5% fat, 1-3% fiber and ash 1-2. Protein content in sorghum was higher than corn and similar with wheat, but the nutrient of sorghum is free gluten. The fat composition is lower than corn but higher than wheat.

Table 1. Nutrient composition in sorghum; Source : suarni (2004)

No	Zat gizi	Jumlah
1	Vitamin B1	4,4 mg
2	Protein	11 g
3	Zat besi	0,38 mg
4	Kalsium	28 mg
5	Fosfor	287 mg
6	Lemak	3,3 mg
7	Karbohidrat	73 g

Table 2. The chemical composition of sorghum and other grains types every 100 gram which can be eat

Zat Gizi	Sorghum	Beras	Gandum	Jagung	Millet
Protein (g)	10,40	7,90	11,60	9,20	11,80
Lemak (g)	3,10	2,70	2,00	4,60	4,80
Kadar abu (g)	1,60	1,30	1,60	1,20	2,20
Serat kasar (g)	2,00	1,00	2,00	2,80	2,30
Karbohidrat (g)	70,70	76,00	71,00	73,00	67,00
Kalori (kcal)	329,00	362,00	348,00	358,00	363,00
Kalsium (mg)	25,00	33,00	30,00	26,00	42,00
Fe (mg)	5,40	1,80	3,50	2,70	11,00
Thiamin (mg)	0,38	0,41	0,41	0,38	0,38
Riboflavin (mg)	0,15	0,04	0,10	0,20	0,21
Niacin (mg)	4,30	4,30	5,10	3,60	2,80

Sorghum has a high nutrition value especially the content of carbohydrates. Sorghum seeds contain three types of carbohydrates there are starch, sugar dissolved and fiber. The content of dissolved sugar in sorghum consisting of sucrose, glucose, fructose and maltose. Kent and Evers (1994)

states that the content of dissolved sugar in sorghum seeds decreased when physiological ripening and ranged between 2.2%-3.8%.

Other types of carbohydrates that contained in sorghum is starch. The starch content in endosperma part is generally around 83%, in the institution 13,4% and parikarp 34,6%. The starch of sorghum consisted of 70%-80% amylopectin and 20%-30% amylose. Type of sorghum rice (non-waxy sorghum) which has content of amylose is 21-28% and the type of glutinous sorghum (waxy sorghum) has amylose levels around 1-2%.

According to Rooney and Saldivar (2000) amino acids consists of 4.1% lysine, 3.4% threonin, 1.5% methionine and cysteine 1.0%. These amino acids which contained in endosperma is 1.1% lysine, 2.8% threonin, 1.0 methionine and 0.8% cysteine. Soeranto (2002) states that the quality of sorghum seed protein is almost the same with rice, but the content of vitamin and minerals is higher.

So the writer concluded that, sorghum has a high nutrient content covering carbohydrates 70-8-%, protein 11-13%, fat 2-5%, fiber 1-3% and ash 1-2%. Protein content in sorghum are higher than corn and almost the same with wheat and rice, but sorgum protein is free glutein and vitamins of mineral is higher.

2.4. Kue Maksuba

Palembang has many kinds of famous cake such as *Delapan jam*, *Kojo*, *Srikaya*, *Gandos* and *Kue Maksuba*. Aminah (2015) defines that *Kue Maksuba* is traditional food or cake of Indonesia especially from Palembang. *Kue Maksuba* has many layers with colours brown. The process of making *Kue Maksuba* needs a patience to make every layers. *Kue Maksuba* is easy to find in Palembang when the time of the celebration of certain days, such as Chinese New Year and Eid.

Aminah (2015) said that making *Kue Maksuba* tests your patience. Because it is a long process and need full attention, so that's why young people

often can't wait to cook properly. Long time ago, they use round grill called *Gendok*. Currently, the roasting process is more practical with a modern gas-burning oven.

According to Romlah (2008), the history of *Kue Maksuba* not really known but she know that *Maksuba Cake* derived from *Mak Zubaedah* which cooking cakes with ingredients potluck . Luckily, the taste of the cake is very good.

In addition, Kue Maksuba is one kind of Palembang famous cake in Palembang that has long process to make it. It is because the cake has many layers. Furthermore, Kue Maksuba is usually found in a certain days, like Eid.

2.5. Durian Fruit

Ashari (1995) says that durian (*Durio zibethinus* Murray) is one of the native plants of Southeast Asia which tropical wet, such as Indonesia, Thailand and Malaysia. Durian in Indonesia has a range of varieties. There are 21 superior durian cultivars were released by the Department of agriculture, namely : *Petruk*, *Breadfruit sitokong*, *Kani*, *Otong Simas*, *Sunan*, *Sihijau*, *Sijapang*, *Siriwig* and *Likewise*.

Durian which dubbed as *The King of Fruits* is one of the popular fruits in Indonesia. The fruit has typical flavor and aroma is loved by most people. Taste of the fruit is sweet and the aroma of fragrant fruit becomes attraction for durian lover's. Colour of the flesh fruit is varieties, there are white, yellow and orange and this fruit also rich with the calories, fat, vitamins, and proteins (Purnomosidhi, 2007).

2.6. Innovation

Rajnish (2008) states that an innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations. The minimum requirement for an innovation is that the product, process, marketing method or organizational method must be

new (or significantly improved) to the firm. Innovation activities are all scientific, technological, organizational, financial and commercial steps which actually, or are intended to, lead to the implementation of innovations. Innovation activities also include R&D that is not directly related to the development of a specific innovation.

Brown and Teisberg (2003) stated that innovation is the lifeblood of successful businesses. It has become every firm's imperative as the pace of change accelerates. The challenges of this imperative increasingly require leaders to manage uncertainty and pursue learning and innovation across the boundaries of firms