West Java Snack Mapping based on Snack Types, Main Ingredients, and Processing Techniques

A S Nurani*, S Subekti and Ana
Home Economics Department
Universitas Pendidikan Indonesia
Jl. Dr. Setiabudi 207 Bandung 40154, West Java, Indonesia

*Corresponding author: atatsiti@upi.edu

Abstract. The research was motivated by lack of literature on archipelago snack especially from West Java. It aims to explore the snack types, the processing techniques, and the main ingredients by planning a learning material on archipelago cake especially from West Java. The research methods used are descriptive observations and interviews. The samples were randomly chosen from all regions in West Java. The findings show the identification of traditional snack from West Java including: 1. snack types which are similar in all regions as research sample namely: opak, rangginang, nagasari, aliagrem, cuhcur, keripik, semprong, wajit, dodol, kecimpring, combro, tape ketan, and surabi. The typical snack types involve burayot (Garut), simping kaum (Purwakarta), surabi hejo (Karawang), papais cisaat (Subang), Papais moyong, opak bakar (Kuningan), opak oded, ranggesing (Sukabumi), tapel (Cirebon), gulampo, kue aci (Tasikmalaya), wajit cililin, gurilem (West Bandung), and borondong (Bandung); 2. various processing techniques namely: steaming, boiling, frying, caramelizing, baking, grilling, roaster, sugaring; 3. various main ingredients namely rice, local glutinous rice, rice flour, glutinous rice flour, starch, wheat flour, hunkue flour, cassava, sweet potato, banana, nuts, and corn; 4. snack classification in West Java namely (1) traditional snack, (2) creation-snack, (3) modification-snack, (4) outside influence-snack.

1. Introduction
The research was motivated by lack of literature on West Java traditional snack. West Java traditional snack is hereditary and becomes a valuable cultural asset of our nation, a liason between generations, an identity and a characteristic of each region. Therefore, it needs to be explored and preserved. Several attempts to achieve those goals are by making inventory and documentation which had been done by department of education and culture. [1] The document discusses daily foods for various age and special foods for cultural ceremony in West Java. It includes name, place, and function. Previous studies on the documentation of West Java traditional foods were conducted by Alim A. [2] who discussed rengginang (a type of cracker from glutinous rice) and Herminiati [3] who discussed opak (also a type of cracker from glutinous rice but threshed and has different flavor).

Through this research, the inventory and documentation of West Java traditional snacks were realized. The documented snacks are classified into traditional snack, snack which got outside influence, creation-snack, and modification-snack. The documentation includes names, ingredients, processing techniques, servings, and the cake functions in daily life. The documentation of traditional snack is very important since the existed inventory should be renewed along with its progress and...
development [4][5]. Thus, this research intends to document the more accurate and up-to-date data and information. Sundanese is well-known as a much opened and positively responsive ethnic to any progressive transformation [6]. Therefore, we can easily find and eat snacks which get influenced from outside. Hopefully, the research is able to significantly document various traditional snack types from West Java and also the social and cultural review. The research is also a real effort in preserving traditional snack which becomes a valuable nation’s cultural asset.

2. Research Method

The research was conducted in West Java which totally has 27 counties and cities. The researchers took a random sample from northern West Java, central West Java, and southern West Java. Specifically, the research was conducted in 10 counties namely Garut, Sumedang, Kuningan, Cirebon, Purwakarta, Karawang, Bandung, West Bandung, and Subang. The subjects were preferred from government elements namely Department of Industry and Trade, Department of Tourism, home industry entrepreneurs, and West Java traditional food lovers and observers. Furthermore, the snacks as sample are traditional ones which are consumed daily. The researchers explored the snack names, the types, the main ingredients, the processing techniques, and the serving functions. The primary data was collected by observations, interviews, and document collection. Observations were utilized to investigate the data of various traditional snacks from home industry entrepreneurs who produce West Java traditional snack. Besides, interviews were also conducted to government elements namely Department of Industry and Trade and Department of Tourism, local traditional food lovers and observers, public figures, elders, and other elements considered having a sufficient knowledge of local traditional foods.

The data was analyzed by using descriptive qualitative method in which qualitative analysis of various traditional foods from 10 counties including snack names, ingredients and taste, processing and serving techniques was resulted. The factor of food production and culture of each region were also described as they influence the existence of traditional snack.

3. Result and Discussion

The areas of West Java snack mapping are divided into three regions: northern, central, and southern. The northern includes 4 districts namely Karawang, Purwakarta, Subang and Cirebon. The central also involves 4 districts namely Sumedang, Bandung, West Bandung, and Kuningan. Meanwhile, the southern involves 2 counties namely Garut and Tasikmalaya. The archipelago snacks typically from West Java regions, specifically from Garut and Subang, were described based on names, types, main ingredients, processing techniques, servings, and functions. The following is picture 1 mapping of traditional food of West Java.

3.1. The Analysis of Snack Types from West Java

According to picture 1; the research on snacks typically from West Java includes snack types, ingredients, and processing techniques. The snack types from West Java are classified into four groups: (1) traditional snack, (2) popular snack (from outside influence), (3) modification snack, and (4) creation snack.

The traditional cakes are made from local comestibles, hereditary, use local tools and local cooking techniques, and relate to traditional ceremony and thanksgiving. In general, traditional snacks such as cucur, ali agrem, ongol-ongol, combro, and misro from all regions have similarity, making difficult to search for the origin. The researchers found a snack which has same name but different ingredients and processing technique. It names gemblong which in Bandung and other regions is made from glutinous rice flour and coconut, formed oval, fried then caramelized with brown sugar. However in Kuningan, gemblong is made from grated cassava and sweet potato which is formed then fried, so the texture becomes solid and crispy. Nevertheless, some snacks are the same but have different names such as the so-called apem in Bandung but in Kuningan, Cirebon, Karawang it is called cimplo which
is served for rebo wekasan tradition. Other examples are kicimpring and bandros. Bandung and Garut
calls kicimpring (a kind of cracker made from cassava), but Tasikmalaya names it beca. Bandros (a
baked snack made from rice flour and grated coconut) is well-known in Bandung and Garut, but in
Karawang and Cirebon it is called gonjin.

The popular snacks got influenced from outsiders such as Europe, China, Japan, Korea, and other
Indonesian areas. The fact makes West Java snacks more various such as risoles, croquette, cake,
cookies (European influence), kue mangkok, moci, moho, lumpia, siomay, kue ku, bakpau (Chinese
influence), putu, getuk, carabikang, lempers, sosis solo (Javanese influence), dorayaki, moci (jepang),
and toek (Korea).

The modification snack is an alteration of traditional one by adding or lessening the form, some
ingredients, and color so the new snack is created and usually to targeting market. For example,
initially serabi just has oncom (by-product of processed soybean production such as tempe and tofu)
and egg as the topping, but currently it has hundred topping variations. In addition, simping (a flat
 cracker made from rice flour) initially just has one flavor – kencur (one of aromatic tropical rhizomes),
but now it has cheese and sesame flavor too. Cireng (a half-fried starch snack) in the past was not
popular, but now it has many variations including cireng rujak and cireng with various fillings.

Furthermore, the examples of snack as our people creativity in creating new recipes and developing
foods are batagor, gehu, bala-bala, cilok, comet, moring, tahu pedas (spicy fried tofu), seblak, and
cipuk.

3.2. The Analysis of West Java Snacks

According to picture 1; to make West Java snacks, various glutinous rice types are used as the main
ingredient in each region. Citra, Jengkol, and Lusi glutinous rice are used to make opak, while
Ranggeuyan, Lusi, Paris, Bangreng, Galuh, and Seungit glutinous rice are stored for 3 to 6 months to
make rengginang. Freshly grounded Paris or Lusi glutinous rice is good to make cake such as ulen and
lempers. The main ingredient of cakes ali agrem, cuhcur, burayot, and awug is freshly grounded
Torondol, Pandan Wangi, Cianjur, or Rojolele rice, so cake that is fragrant, soft, and sticky can be
resulted. Similarly, to make kelepon, bugis, gemblong, jalabria, and others better use freshly grounded
glutinous rice. However, ready glutinous rice flour on the market less results on optimal quality
because of some additives such as whitening, anticaking agent, and flour treatment agent impacting on
cake texture and taste.

Chip making in each region uses various bananas such as kastroli, tanduk, bawel dan nangka muda,
resulting on crispy, tasty, and yellowish product. Meanwhile, ambon banana and ripe siam banana are
used to make sale pisang. Singkong mentega (a kind of cassava) is used to make combro and misro.
Furthermore, to make kue obi, ripe sweet potato and cilembu sweet potato can be used.

Archipelago snacks use a mixture of palm sugar, coconut sugar, granulated sugar, and a little bit
salt to get a sticky and delicious taste.
Figure. 1. Mapping of traditional food of West Java
3.3. The Analysis of Processing Techniques of West Java Snacks

According to Figure 1, analysis of processing techniques of west java, firstly, frying is one of processing techniques of West Java snacks. It is also specifically based on the dough. For example, in making cuhcur, when the dough is put into the pan filled with hot oil, bamboo chopsticks are stick into the dough while flushing the oil onto it. Frying burayot needs dexterity and eye sharpness. After 10 seconds the dough is put into the pan filled with hot oil, it must be inverted while stick by bamboo chopsticks in order to form gelanyut (clinging form). In kremes making, when sweet potato is put into the frying pan and being 80% cooked, the sliced brown sugar is added while stirring the ingredients. The admixture is taken up soon then shaped. Furthermore, rengginang is fried within very much hot oil then the oil is flushed onto its surface. Thus, the glutinous rice cracker becomes extended. Meanwhile, frying endog londok or telur gabus is different. Before heating the oil, the dough should be put into it. If the dough is first put into the boiling oil, it will explode and the hot oil will spatter.
Steaming technique is used in making kue mangkok (Eng. bowl cake), bolu kukus (Eng. steamed cake), and kue moho. By steaming, the cakes can be extended. The steamer lid should be covered by cloth; thus, the fumes would not drop onto the cakes. Moreover, it should not be opened along the steaming process and the fire must be large. On the opposite, when steaming bugis the steamer lid should be opened occasionally in order to avoid the shape extended.

In boiling technique, duration should be noted. For example, boiling kelepon dough has no exact time but the indication of being cooked is the floating dough. If it is too long neglected, kelepon will be broken.

In caramelizing technique (Ina. membesta), sugar thickness should be noted starting from it being cooked until hairy. It means when sugar is run down, it is not broken off. In the case of making surabi, apem, kue mangkok, and carabikang, the admixture must be tapped 20 times in order to make them stringy and hollow. Furthermore, roaster technique has two ways: (1) by using sand as in making kerupuk melarat (Eng. slummy cracker) and kolontong, and (2) by direct roasting using pan or crock as in making kelapa sangan (roaster coconut), kacang sangan (roaster peanut), and borondong putih (white popcorn).

According to picture 2; each region of West Java has typical snack. Karawang has surabi hejo which is aromatic as the result of rice flour-pandan leaves-sweet coconut milk and durian sauce mixture. Opak cibuaya and opak rawa gede are rounded, puffed-up, crunchy, and tasty. Dodol is made from glutinous rice flour mixed with sesame and Kawista fruit, formed as cylinder with 15 cm long and the ends are tied.

Purwakarta has simping kaum and peuyeun bendul. The so-called simping kaum comes from Kaum area and Purwakarta square. The recipe, taste, and packing are passed down from generation to generation. Simping kaum has 10 cm diameter, 3 mm thickness, kencur herb and coconut milk aroma, and savory crunchy texture. Peuyeun bendul is resulted from fermented cassava originally produced in Bendul village. It is solid, white, sweet, and sold by hanging.

The most popular snack from Subang is papais Cisaat. It comes from Cisaat area and is inherited from Dutch colonialism era. Pais Cisaat is unique. It is made from rice flour, coconut, and sugar, has sticky texture like dodol and sweet-savory flavor, and is covered with bamban leaves. It is not sold daily but can be ordered.

Cirebon has many typical snacks; one of them is kue tapel. Kue tapel is also inherited. It is made from glutinous rice flour which is added with grated coconut. Then, it is flattened on a thick pan, added with grated coconut and pisang raja (a type of banana) which is finely mixed with the dough, dried, taken up, and folded in a half just like crepes. Another typical snack is kerupuk melarat (Eng. slummy cracker) made from starch which is kneaded, steamed, sun-dried, and then roasted by using sand.

One of the most popular snacks from Sumedang is tahu Sumedang (Sumedang tofu). It is a product of processed soybeans, which is molded and crispy fried. The characteristic of the delicious tahu Sumedang is that the inside is empty and the outside is crispy. Besides, peuyeun Cigendel is another popular snack from Sumedang. It is made from fermented cassava, solid in the outside but soft in the inside, white, and sweet. Usually it is sold by hanging. Furthermore, Sumedang has two kinds of opak – opak cimanggu and opak oded. Opak Cimanggu has 5 cm diameter; it is puffed-up and tasty. Meanwhile, opak oded has 3 cm diameter, 0.5 cm thickness, crunchy texture, tasty flavor, and is grilled. Carag gesing is made from pisang ambon (Eng. ambon banana), added with wheat flour and coconut milk, covered by leaves, and then steamed. It is better served together with bajigur (a West Java traditional drinking made from palm sugar and coconut milk) or bandrek (a West Java traditional drinking made from ginger extract and palm sugar).

Kuningan also has many traditional snacks. Hadas is similar with awug. It is made from rice flour, grated coconut, and sugar; thus, it has sweet and savory flavor with soft texture. It is made by overlaying the admixture onto pan, given food coloring (green, red), steamed, and then cut. Commonly, it is served in a wedding ceremony. Tape ketan (fermented glutinous rice) from Kuningan is green, resulted from katuk leaves extract. Glutinous rice is fermented along one week; then, it is
covered with rose apple leaves. The flavor is sweet and fresh. Tape ketan is commonly packed and sold in a black bucket. Kue cang is similar with bacang. It is made from selected glutinous rice branded Lusi or Citra but has no filling. Then, it is wrapped with bamboo leaves and served with grated coconut and sugar or kinca (palm sugar sauce). Papais monyong is made from glutinous rice flour, filled by crushed green beans or enten (a mixture of palm sugar and grated coconut) then covered with banana leaves in pyramid shape. The taste is sweet and tasty. Leupeut ketan can only be found in Kuningan. It is made from the mixture of glutinous rice and green beans poured into coconut leaf wrap then boiled. Tit has a long shape and tasty flavor.

The snacks typically from West Bandung are wajit Cililin dan gurilem. Wajit cililin is made from glutinous rice, brown sugar, and grated coconut. They are processed until well-cooked, wrapped by using corn leaves in pyramid shape. Meanwhile, gurilem is a type of cracker made from starch by roasting it with sand and formed in a long cylinder shape.

The typical snacks from Bandung District are borondong garing and borondong enten. Borondong garing is made from roasted rice mixed with thick palm sugar then molded soon after the mixture is taking up from the pan. Meanwhile, borondong enten is made from popcorn stick on enten. Another snack is kaluwa jeruk (kaluwa orange). It is made from grapefruit peeled skin which is soaked into whiting solution then boiled with sugar until the water disappears and finally sun-dried.

One of typical snacks from Garut is burayot. The snack is called burayot because of the clinging shape in which the top part is thin while the bottom is thick in a cone shape. It is made from rice flour and palm sugar sauce then fried. Another snack is the popular dodol garut which is droughty outside but watery inside. It is made from glutinous rice flour and sugar. Kue bantal (Eng. pillow cake) is made from glutinous rice flour which is directly sieved above hot pan then filled with enten and folded as pillow. Unfortunately, the snack is almost extinct. Endog lewo is made from grated cassava formed in a round shape just like marbles then fried. It is tasty and solid. Nowadays, the dough is mixed with starch in order to get crunchy texture. Lalu is originally from Malangbong area. It is made from roasted glutinous rice and added with sugar and enten (a mixture of grated coconut and brown sugar). All ingredients are cooked, molded, and then rolled into roasted glutinous rice flour so the shape is long. Angleng is another typical snack from Garut. It is similar with wajit but the main ingredient is different. Angleng is made from rice flour and wrapped with corn leaves in a pretty puffed square shape. Ceprus is produced in palm sugar producer areas. It is made by adding peeled cassava into cooked palm sugar liquid. In Sumedang, it is called wedang sampeu.

The typical snack from Tasik is gulampo which specifically comes from Cikalong area. It has a unique shape; it is small and wrapped with barangbang leaves in a square shape then tied up per 10 pieces. Gulampo is made from grated coconut and sugar. All ingredients are cooked until becoming like hair then tiny molded. The flavor is savory and sweet.

4. Conclusions
Besides the typical type of each region, the traditional snack types from West Java have similarity. They can be classified into four groups: (1) traditional snack, (2) snack which got influenced from Central Java, China, Europe, Japan, Korea, and the middle east, (3) modification snack, and (4) creation snack. The ingredients used are local agricultural products including rice, local glutinous rice such as Lusi, Bangreng, Jengkol, Citra, Paris, and Galuh, rice flour, glutinous rice flour, hunkue flour, tapioca flour, cassava, sweet potato, many kinds of banana (roid, kastroli, ambon, siam, nangka), peanut, soybean, green bean, red bean, gadung, taro, corn, palm sugar, coconut sugar, sugar, coconut, coconut milk, and other additional ingredients. The processing techniques include frying with some specific steps, steaming, grilling, roaster, sautéing, caramelizing, and boiling.

Acknowledgment
The authors would like to thank the Directorate of Higher Education, Ministry of Education and Culture of the Republic Indonesia, which has provided funding of this research.
References

[1] Department of Education and Culture. (1985). Makanan: Wujud, Variasi dan Fungsinya serta Cara Penyajianya daerah Jawa Barat: Proyek Inventarisasi dan Dokumentasi Kebudayaan Daerah Departemen Pendidikan dan Kebudayaan.

[2] Alim A. (2004). Mutu citra rengginang berbasis beras aromatic dengan metoda pengeringan berbeda. FT IPB.

[3] Herminiati, A.(2009). Inovasi teknologi proses pembuatan opak dari beras ketan di Jawa barat. A proceeding of workshop of grassroot innovation.

[4] Juwaedah, A. (2013). Model pembelajaran transmisi makanan tradisi berbasis indigenous learning. A Research Report of Food and Nutrition Education Study Program of FPTK UPI.

[5] Sari, N. (2012). Alat Makan Orang Sunda Masa Kini. The Journal of Sundanese Study Center Bandung.

[6] Sari, N. (1997). Aku Cinta Makanan Indonesia. Jakarta: PT Gramedia Pustaka Utama.