



**Establishment and Operation of a Regional System of Fisheries Refugia in the
South China Sea and the Gulf of Thailand**

The Squid Eggs Processor In Sungai Liat District, Bangka Regency

**SOUTHEAST ASIAN FISHERIES DEVELOPMENT CENTER
TRAINING DEPARTMENT**

The Squid Eggs Processor In Sungai Liat District, Bangka Regency

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Introduction

Squid is a marine fishery commodity that has an important economic value from Bangka Regency. Squids from the Bangka sea are marketed throughout Indonesia and even exported to some countries in Asia. The squids are caught by squid jigging, lift net, and floating lift net almost throughout the year with the peak season around April – Mei and October- November. The abundance of squids in Bangka brings opportunities to the community and fishery industry to produce a variety of squid-based products. There are various products made from squids in Bangka and they become the famous Bangka specialties which marketed in Bangka Belitung Province and even outside Bangka. There is one famous squid-based product from Bangka, 'Kritcu' which is a squid chip. The continuity of the products relies on the availability of the squid's meat, hence, the stock squids in nature must be maintained. Therefore, the management of squid resources is crucial in order to maintain the sustainability of the fishery processing business in Bangka.

This report is the result of survey activities and interviews with squid processors in Sungai Liat District, Bangka Regency. This activity was conducted to gain information regarding the utilization of squid and their eggs and the market flow squid-based product. The survey and interviews were conducted on November 12, 2021 in Sungai Liat District, Bangka Regency.

Result

1. The Squid Processor and their products

In Bangka Regency, there are about 102 processors of fresh seafood including squid meat dan their eggs. Their products consist of fish crackers, squid chips, crispy squid, squid egg chips (known as 'kritcu'), squid crackers (kemplang, getas, and ampyang) (Table 1). These products are known as Bangka regional specialties. The most squid processing located in Pangkal Pinang, Sungailiat, Belinyu, Koba and Toboali. In Sungailiat, there are 3 processors, namely Mrs Yuliana Lanih with the trademark "Pak Umar", Mrs Erin with the trademark "Yu' Erin" and Mrs Halia. The survey to the Squid Egg Chips (kritcu) processor in Sungailiat Subdistrict, was on Friday, November 12, 2021. There are two processors of squid chips in Sungailiat Subdistrict, namely "Pak Umar" and Mrs. Erin ("Yu' Erin") under the guidance of KKP Fisheries Extension, Ibu Yuliana. Both processors are developed and assisted by the Ministry of Marine Affairs and Fisheries and PT Timah.

Table 1. Processed squid products in Sungailiat (Bangka Regency).

No.	Processed product name	Material	Price
1.	Kritcu	Squid eggs	Rp 120.000/kg
2.	Squid meat chips	Squid meat	Rp 500.000/kg
3.	Crispy squid	Squid meat	
4.	Squid Kemplang	Squid meat	
5.	Squid Getas	Squid meat	
6.	Squid Ampiang	Squid meat	

Processor: Yuliana Lanih (brand: Pak Umar)

Mrs Yuliana is the fourth generation of Mr Umar in terms of processed seafood products. Expertise in making processed products (other than lakso) is obtained from training held by the Ministry of Marine Affairs and Fisheries and PT Timah. In addition to often participating in training (outside the city), Bu Yuliani is also quite qualified as a trainer.

Initially, Mrs Yuliana continued the business of her father (Pak Umar) in 2006 to produce the marine fish product 'lakso' (a noodle with fish flavor) which still being their superior commodity until now. 'Kritcu' (the quid egg chips) began to be produced in 2013. Various types of processed fish/squid products are produced by Mrs Yuliana, where the recipe is hereditary comes from her mother and grandmother. Other processed products include 'lakso', 'kritcu', shrimp paste, shredded fish, fish stick, glutinous crispy, fish crackers, crispy anchovy, crispy squid. 'Kritcu' is made from squid eggs; some are original (yellow-cream colour) and inked squid (blackish colour); Another product from squid meat is squid cracker and chips (squid kemplang, squid getas, squid ampyang) and crispy squid.



Figure 1. Processing squid egg chips (kritcu) Mrs Yuliana "Pak Umar"

Raw materials for 'kritcu' consist of squid and also their eggs. These materials are obtained in Sungailiat derived from squid caught at lifting net, fishing, or trap. In addition, the squid and eggs also can be obtained from fishery product export company, PT. Sanjaya, Pangkal Pinang. The squid processors usually purchase the frozen squid eggs from PT. Sanjaya in 20 kg packages (@2kg packaging) for Rp. 115-150 thousand per kilogram. In 2016-2017, the price of squid eggs was higher because the raw material of squid eggs was difficult to obtain. Purchase to PT. Sanjaya is collective and usually through communication with squid egg processed entrepreneurs. The processor usually purchase squid eggs per package of 20 kg per month for their production, with the common standard 1 kg squid eggs is used for 1 recipe per day.

Yuliana has business capital from the bank of Rp. 10 million in 2009. Gross revenue per month is around Rp. 25-30 million with net income from this business averaging Rp. 10 million (50% of gross revenue). She gained around Rp. 1 million per day before the pandemic.

Making kritcu takes about 1-2 hours with a frying time of 15 minutes. Kritcu dough ingredients are squid eggs as much as 1/2 kg, flour 1 kg, and chicken eggs 8 grains. To make 1 'kritcu' recipe requires a cost of around Rp. 70 thousand. Yuliana sells her products by opening a small store at home and

collaborating with resellers in Sungailiat. There are about 20 resellers selling 'kritcu' and they get 20% profit from the selling price. The resellers sell about 5 packs (250 gram packaging) of 'kritcu' every day.

Processor: Yu Erin/Mrs. Saeni

Yu Erin has started her business on fishery processed products in 2011. Initially, the product were fish and shrimp crackers, while the squid-based product was newly developed in 2021. The initial capital at that time was as much as Rp. 100 thousand. The processed products are made from squid eggs, squid meat (large size), and fish. She produces 'Kritcu', which made from squid eggs and other products made from squid meat such as crackers and squid crispy and also product made from fish such as fish crackers, 'lakso', anchovy crispy

The raw material 'squid' is usually obtained at the fishing port (PPN) Sungailiat and Rebo Beach, while squid eggs are obtained from other processors (Mrs Nina, each time take 5-8 kg) who buy collectively small and medium enterprises (UKM) to companies (PT) in Pangkal Pinang with prices ranging from Rp. 130-135 thousand. Processed products made from squid eggs are easier in the production process than fish raw materials and squid meat. It is usually easy to obtain squid eggs in September because it coincides with the squid egg-laying season.





Figure 2. Processing squid egg chips (kritcu) "Yu' Erin"

The process of 'kritcu' takes about one hour. Yu erin usually requires 1/2 kg squid eggs, flour 1½ kg, and 5 chicken eggs for one recipe 'kritcu'. The capital is estimated at Rp. 230 thousand, varying depending on the price of raw materials, including cooking oil. Kritcu processed products are marketed for Rp. 160 thousand per kg and Rp. 20 thousand for 125 gram packaging. She sells the products in her own stores, and she gains around Rp. 24 million per month, with net profits ranging from Rp. 11-20 million. But during the pandemic, her income dropped to around Rp. 12 million with a net profit of around Rp. 4.5 million.

2. Market Flow of Squid-based product

The market flow of squid products is described in Figure 3. Demand for squid commodities in both fresh and processed products is expected to continue to increase in the future. It was indicated by the increasing diversification of squid processed products such as crackers in various forms (getas, kemplang), shredded fish, and squid.

To support the development of the egg and squid meat processing business, the market network, fishery facilities, infrastructure, and supporting service activities must be considered. It is to support the integration and continuity of the contribution of squid fisheries to occur well in the Bangka Regency. Positive empowerment and mentoring programs to fishers must continue so that the development of squid fisheries can benefit the welfare of the fishing community and the regional economy. One form of support from the Ministry of Marine Affairs and Fisheries for squid processors in Bangka is building permanent production houses.

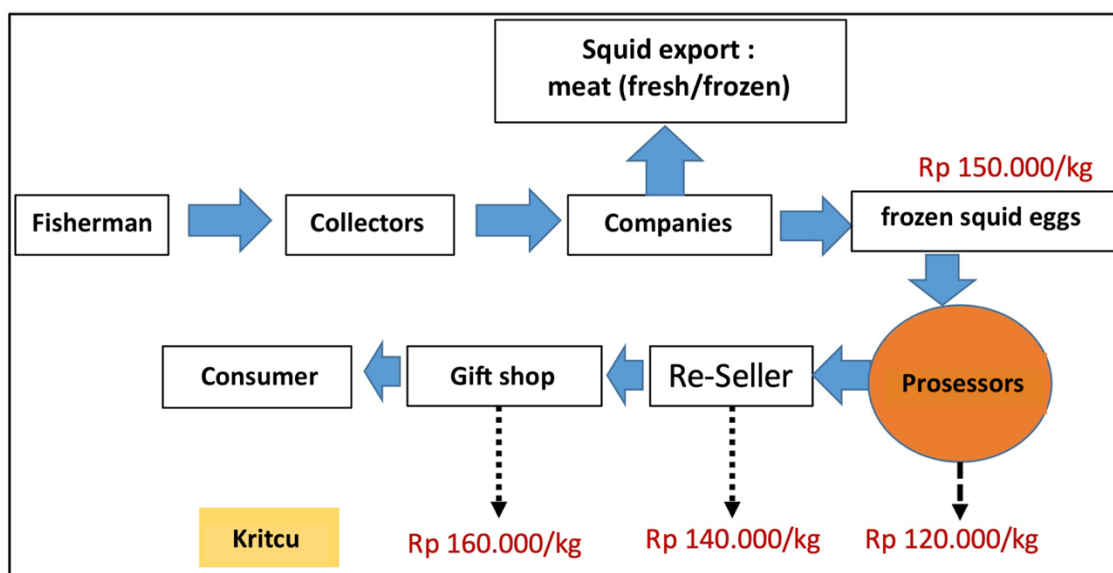


Figure 3. Marketing flow of squid in Sungailiat

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