



## **Socialization Of Selection Of Gonggong Shell And Shell Waste As Materials For Handcrafts In Serip Mangrove Village**

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### **Abstract**

*This community service activity aims to provide education and training to the people of Kampung Tua Bakau Serip regarding the utilization of gonggong and clam shell waste as basic materials for handicrafts. This abundant but not optimally utilized marine waste has high economic potential if processed with the right techniques. The method of implementing the activity includes socialization, demonstration of making crafts, and technical assistance. The results of this activity show an increase in community knowledge and skills in processing shell waste into products with sales value such as wall hangings, key chains, and home accessories. This activity also opens up new business opportunities that can support the local economy and preserve the environment.*

**Keywords:** Socialization, shell waste, gonggong, shells, handicrafts, community empowerment

### **INTRODUCTION**

Kampung Tua Bakau Serip, located in Nongsa District, Batam City, is one of the coastal areas that has quite large potential for natural and culinary tourism. One of the typical foods of this area is gonggong, a type of sea snail that is a culinary icon of the Riau Islands. Tourism and culinary activities that continue to grow have resulted in increased consumption of seafood, especially gonggong and shellfish, which indirectly causes environmental problems in the form of shell waste. Gonggong and shellfish shell waste is generally thrown away without being processed, causing the accumulation of organic and inorganic waste around the coast. If left alone, this will not only pollute the environment but also damage the aesthetics of tourist areas. Ironically, this waste actually has economic and aesthetic potential if processed into handicraft products. In several other areas in Indonesia, shellfish and snail shells have been widely used as basic materials for home decorations, key chains, photo frames, and other accessories. The shells used as the basic material have a very good texture for being made into various handicrafts. (Abubakar et al., 2021)

However, in Kampung Tua Bakau Serip, the utilization of shell waste has not been carried out optimally due to lack of knowledge, skills, and the absence of integrated initiatives from the community or local government in utilizing this potential. Research from (Mahendra et al., 2023) stated that shellfish waste can be made into various creative products with high selling value. In the coastal areas of Banten, similar activities have succeeded in increasing the income of housewives.





Therefore, community service activities are needed in the form of socialization and training in sorting and utilizing gonggong and clam shell waste into handicraft products. In addition to helping overcome environmental problems, this activity also opens up creative economic opportunities for the community, especially housewives and local youth (Sianipar et al., 2024).

This community service activity aims to provide education to the people of Kampung Tua Bakau Serip in utilizing Gonggong and Shell skin/shell waste to be processed into handicrafts for the surrounding community. In the Kampung Tua Bakau Serip tourist village area, there is a Pokdarwis that manages tourism activities around the area, including tourism training activities, souvenir shops, tourism activities, and others. From (Maspaiteella & Rahakbauwi, 2014), Community empowerment is a process to build community power so that they can access, control, and utilize resources to improve their welfare. In this context, the utilization of waste as a craft is a form of empowerment based on local potential (Silitonga et al., 2025).

The place or shop selling souvenirs is managed directly by the wife of the manager of the Bakau Serip area. The place sells various kinds of souvenirs or handicrafts typical of the Bakau Serip community. This place is useful for the surrounding community in managing and organizing the activities of the Kampung Tua community. Creative economy is an economic approach that focuses on creating value from human creativity and skills. Shell waste becomes a medium for creating creative products with sales value. According to Howkins, the creative economy is based on ideas, knowledge, and innovation as the main production factors.



**Picture 1:** Handicraft Sales Place

This Pokdarwis activity is a positive activity for the community around the tourist village in channeling their ideas and concepts and utilizing the resources around the area in order to increase the tourist attraction of Kampung Tua Bakau Serip and attract tourists to visit,



The focus of the socialization activity is based on the current trend, where entrepreneurship is considered as one of the important keys to improving the economic welfare of the community. Providing understanding and skills about entrepreneurship to residents, especially in products that have been pioneered, is a very important first step.

Through this activity, it is hoped that they can gain a better understanding of the basic concepts of entrepreneurship and marketing strategies, and encourage them to develop creative and innovative ideas in running other businesses in the future.

## COMMUNITY OVERVIEW

### Profile of Serip Mangrove Old Village

Old Bakau Serip Village Tourism Village (Pokdarwis Mangrove Pandang Tak Jemu) is located in Old Bakau Serip Village, Sambau Village, Nongsa District, Batam City, Riau Islands. This tourist village is approximately + 30 kilometers from the center of Batam City. Old Bakau Serip Village Tourism Village is a lowland that includes land and coastal / beach, the location is not far from the urban center area in Batam City, only + 45 minutes drive from the center of Batam City, 15 minutes from Hang Nadim International Airport and 5 minutes drive from Nongsa Pura International.



*Picture 2: Entrance to the Area and Mangrove Forest Area Gate*

### History of the Old Mangrove Village of Serip

A brief history of the Kampung Tua Bakau Serip tourist village, its existence is related to Teluk Mata Ikan which is also close to the tomb of Nong Isa. Based on several references, Kampung Tua is one of the oldest villages in Batam which is also the first center of government in this area. Kampung Tua Bakau Serip Tourist Village is part of the government area in Nongsa which is officially under the leadership of Nong Isa (Malay King) whose government area also oversees other villages. The results of excise levies from the surrounding village crops are first collected in Nongsa before being taken to the capital, Penyengat.





Kampung Tua Bakau Serip Tourist Village is an old village that has been established since the 17th century. This village was originally a place of residence for local residents of Batam Island. In 2017, this village began to be developed into a tourist village by the coastal community, namely (Pokdarwis Mangrove Pandang Tak Jemu) and supported by the Batam City government. This development aims to improve the economy of the tourist village community and promote tourism potential in the tourist village as well as maintain and preserve the Mangrove.

### **Natural Tourism Potential**

The natural tourism potential in the Kampung Tua Bakau Serip Tourism Village is its vast and pristine mangrove forest that is tens to hundreds of years old. This mangrove forest is a habitat for various types of flora and fauna, such as mangroves, birds, and fish. Tourists can enjoy the beauty of the mangrove forest by exploring the canals in it. Visitors can also do various other interesting activities, such as Mangrove Education Activities, kayaking, fishing, and taking pictures.

In addition to the mangrove forest, the Kampung Tua Bakau Serip Tourism Village also has a beautiful beach. This beach has soft white sand and clear sea water. Tourists can swim, play in the sand, or just relax on this beach. This beach is also a great place to watch the sunset.

### **Cultural Tourism Potential**

Kampung Tua Bakau Serip Tourism Village has a cultural richness that is still preserved to this day. The village community still maintains the customs and traditions of their ancestors. Tourists can learn about the local culture by participating in various activities organized by the village, such as traditional ceremonies, art and cultural performances, and culinary tours. Kampung Tua Bakau Serip Tourism Village has various adequate facilities for tourists. These facilities include:

1. Homestay
2. Restaurant
3. Village souvenir shop
4. Parking lot
5. Toilet
6. Tourist information center

Accessibility Kampung Tua Bakau Serip Tourism Village can be accessed by private vehicles or public transportation. If using private vehicles, tourists can take the route to Jalan Hang Lekiu, Sambau Village, Nongsa District. If using public transportation, tourists can take the Trans Batam bus to Nongsa Terminal. After that,







tourists can continue their journey by motorcycle taxi or motorized rickshaw to Kampung Tua Bakau Serip Tourism Village. Here are some tourist activities that can be done in Kampung Tua Bakau Serip Tourism Village:

1. Mangrove tracking
2. Mangrove education
3. Planting mangroves
4. Kayaking
5. Fishing
6. Taking pictures
7. Swimming
8. Playing in the sand
9. Enjoying the sunset
10. Participating in traditional ceremonies
11. Watching art and cultural performances
12. Trying Batam's culinary specialties

## METHODOLOGY

The Community Service Program through this activity provides alternative solutions in the creation of souvenir making both in terms of form and manufacturing techniques related to innovations in handicrafts. In addition, the expected benefits of this community service activity are that this activity will provide an understanding of the recycling of gonggong and shellfish waste products into souvenirs used in attracting market share.



**Picture 3:** Community Service Activities at Bakau Serip Mangrove Village Tourism Village



Therefore, a mentoring program is needed that not only focuses on the work skills aspect, but also includes digital marketing elements as an integral part of the MSME development strategy (Maak et al., 2023).

The method of implementing community service activities is carried out in a participatory, educational, and applicative manner. A participatory approach is used to encourage active community involvement in all stages of the activity, while an educational and applicative approach is used to ensure that the transfer of knowledge and skills can be applied directly by the community.

The implementation methods include:

1. Socialization

Providing information about environmental problems caused by marine waste, the economic potential of shell waste, and the importance of environmentally-based innovation.

2. Technical Training, providing practical skills, such as:

- Shell sorting and cleaning techniques.
- Simple drying and sterilization techniques.
- Making basic craft products (key chains, frames, decorative miniatures).
- Introduction to simple tools and natural coloring.

3. Mentoring and Evaluation

Mentoring during the product creation process, group discussions for initial design and marketing development, and evaluation of training success based on participants' interests and work results.



**Picture 5:** *The shellfish have gone through a cleaning and sorting process*



This community service activity targets residents of Kampung Tua Bakau Serip, Nongsa District, Batam City, especially:

- Housewives, who have free time and are interested in productive skills-based activities.
- Youth of the Karang Taruna, who are active in social, arts, and youth activities.
- Local MSME actors in the culinary and tourism sectors, who can utilize crafts as a complement to their businesses (such as souvenirs).
- Tourism management communities, who are responsible for cleanliness, education, and development of the potential of tourist villages.

The target audience is selected based on their involvement in local economic activities, potential time availability, and access to shell waste directly as a result of local culinary activities. The instructors and resource persons in this activity are lecturers from the Culinary Management Study Program.

The method of implementing the activity carried out in this socialization is using face-to-face socialization, where the community service provides material and training on methods of processing/making gonggong shells and mussels into various kinds of souvenirs. Basically, this socialization activity provides knowledge to the community and Pokdarwis Kampung Tua Bakau Serip about the selection of gonggong and mussel shell waste as materials for handicrafts or souvenirs. Throughout the demonstration, the lecturer gave participants the opportunity to ask questions according to the material.

This activity was carried out for held for several days between May and June 2025. Taking place in the Meeting Hall of Kampung Tua Bakau Serip, Batam. The implementation of this PKM activity was carried out by 4 (four) service teams Tourism Polytechnic, Culinary Management study program and support from PUSLITABMAS, Batam Tourism Polytechnic.

Based on the evaluation of the implementation and results of the activities, supporting and inhibiting factors can be identified in implementing this community service program. In general, the supporting and inhibiting factors are as follows:

#### Supporting Factors

- Availability of raw materials: Gonggong shell and clam waste is very abundant due to local culinary activities.
- Community enthusiasm: Residents show interest in skills-based activities and economic development.





- Local community support: Youth organizations and tourism managers are active in environmental empowerment and conservation activities.
- The existence of tourist locations: Craft products have direct market potential through tourists.

#### Inhibiting Factors

- Limited tools and supporting materials: There is no availability of simple processing tools such as cutters, glue guns, and dyes.
- Lack of initial experience: Participants are not yet accustomed to creative waste-based activities, so more intensive assistance is needed.
- Limited time: Some residents are busy as fishermen or culinary entrepreneurs.
- Unorganized marketing: Limited knowledge and access to digital marketing among the community.

### SUSTAINABLE RESULT AND POTENSIAL

Community service activities carried out in Kampung Tua Bakau Serip resulted in several positive achievements, both quantitatively and qualitatively, which can be described as follows:

#### a. Increasing Community Knowledge

Through socialization sessions, the community gained new knowledge regarding the negative impacts of shell waste on the coastal environment and they understood the economic potential of innovations in utilizing marine waste as sustainable handicrafts.



**Picture 6:** socialization activities carried out in the meeting area





Most participants stated that the information provided during the socialization was new insight that they had never received before.

#### **b. Technical Skills Development**

Through the training sessions, participants successfully practiced basic techniques in:

- Sorting and cleaning shell waste.
- Drying, sterilization, and natural coloring.
- Making craft products such as key chains, wall hangings, and marine animal miniatures.

As many as 80% of participants were able to produce at least one type of simple craft product independently after the training.

#### **c. Increasing Community Participation and Collaboration**

This activity encourages the emergence of community groups interested in continuing activities sustainably. The local *Pokdarwis* together with representatives of housewives formed a small team to explore the design and record the stock of waste materials..

#### **d. Initial Product Results**

Some of the products successfully created during the activity include:

- Shell-shaped key chains with raffia rope and beads.
- Simple photo frames from gonggong shells glued to thick cardboard.
- Miniature sea animals from a combination of shell fragments.

These products are concrete evidence that marine waste can be created into items that are worth selling and have aesthetic value. With the increasing number of tourist visits to Kampung Tua Bakau Serip, craft products from marine waste have a potential market share. Products can be sold as tourist souvenirs, both at tourist locations and through online platforms.



**Picture 8:** *several types of processed shellfish sold in shops*





## CONCLUSION

Community service activities carried out in Kampung Tua Bakau Serip have succeeded in providing positive contributions in the aspects of environmental education, creative skills, and community economic empowerment. The socialization provided has been able to increase public awareness of the importance of managing gonggong and mussel shell waste that has not been utilized so far. The technical training successfully equipped participants with basic skills in processing and utilizing waste into simple craft products. The results of this activity show that the community is able to create useful products, while strengthening environmental conservation efforts and local tourism potential. In addition, this activity fosters a spirit of collaboration between residents and opens up opportunities for sustainability through the development of craft business groups. Thus, this service is not only informative but also transformative for the local community.

## SUGGESTION

In order for this shell waste management program to be sustainable and provide long-term impacts, here are some suggestions to consider:

1. Continued Mentoring

Further guidance is needed from universities or training institutions to develop more complex technical skills and simple business management.

2. Provision of Supporting Tools and Materials

Local governments or corporate CSR partners can support by providing craft tools such as glue guns, mini drills, cutting tools, and other supporting materials.

3. Product Marketing

Special training is needed related to marketing, both offline (through local tourist galleries) and online (through social media, marketplaces, or e-commerce).

4. Integration with Local Tourism

Craft products from shell waste can be used as part of educational tourism attractions, for example by creating a craft corner in the Kampung Tua Bakau Serip tourist area.

5. Policy Support

Synergy is needed with local government policies related to waste management, creative economic development, and coastal community empowerment programs.





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