TRAINING ON UTILIZATION AND PRODUCTION OF BANANA STEM CHIPS AS AN UMKM IDEA

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Abstract

Gampong Pase Sentausa, Simpang Keuramat District, North Aceh Regency is a village with approximately 500 people, with most of them working as farmers. Gampong Pase Sentausa also has various potential natural resources that are quite potential to be developed such as banana plants. Banana plants are a potential garden crop of the Gampong Pase Sentausa community, but until now the Gampong Pase Sentausa community knows bananas which are used as snacks or sold in bunches while the leaves are used for wrapping containers for making cakes and so on, while the use of banana stems has so far only been used as animal feed. In fact, if seen from its benefits, banana stems have many benefits for human health, namely they can treat and cure various diseases including: as a detoxification of the digestive system, losing weight, controlling cholesterol and blood pressure, curing stomach acid, curing stomach acid, stabilizing blood sugar, and there are still many benefits of banana stems for health. On the other hand, the people of Gampong Pase Sentausa underestimate banana stems and have no economic value at all, so through the 2022 KKN-LPPM, Malikussaleh University students took the initiative to provide innovation training in the use and manufacture of Banana Stems into Banana Stem Chips (Gedebog Chips) so that banana stem stalks which so far have no economic value can be increased through innovation in making and processing Banana Stem stalks into Gedebog Chips as a snack food for children and adults. The innovation in making banana gedebog chips will provide added economic value for the Pase Sentausa Village Community. The materials and tools used to make banana gedebog chips are easy to obtain and the manufacturing process is very easy and can be done individually or in community groups, which can be used as one of the entrepreneurial activities for the people of Gampong Pase Sentausa, Simpang Keuramat District, North Aceh Regency.

Keywords: UMKM, Banana Stem, Added Value

INTRODUCTION

In early 2020, Covid-19 hit the world, including Indonesia. The Covid-19 pandemic has in fact affected many sectors in Indonesia. The economic sector is no exception, also feeling the impact of Covid-19. One of those affected by Covid-19 is Gampong Pase Sentosa, Simpang Keuramat District, North Aceh Regency. Seeing the potential of the community to improve the economy, hydroponic socialization was carried out, making chips from banana stems. Empowerment of natural resources is one way to improve the community's economy. Banana plants have so far only been utilized by the community only for the leaves, fruit, heart and stem. While there are still parts of the banana plant that have not been optimally utilized, namely the banana stem (Yuanita & Rahmawati, 2008).

Entrepreneurship in the agricultural sector, such as increasing the economic value of abundant banana stems, can be the spearhead for improving the community's economy. There are many economic benefits that can be obtained from banana trees, including as a snack "kedebok taro" (Hiden & Ningsih, 2021). Regional development is expected to be carried out by utilizing the

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potential in the region, including economic sectors that can be driving sectors and triggers for economic growth in order to increase community income (Sagajoka & Luciany, 2020). In addition to the potential of natural resources in the region, aspects of regional characteristics, both production, consumption and entrepreneurship, are also important aspects in regional development planning (Nona & Juniasih, 2020). Banana stem chips are currently not widely known by the public, even though with the right cooking method and seasoning, delicious crackers will be created and prospectively developed as an alternative new food product.

The activity of making chips from banana stems will provide positive results for the community and the surrounding environment in utilizing banana stems in the surrounding environment. Products in the form of chips are chosen because they have good prospects for entrepreneurship. In addition, banana stem chips can be used as a profitable business opportunity because they can help improve nutrition, considering the benefits and content in banana stems have many uses to be processed into dishes in various ways, flavors, and ways of serving or various foods. Banana trees have so far only been used in the form of fruit, or leaves. And usually the leaves are sold to be used as a substitute for food wrapping and the fruit is used as fried bananas, chips, or a mixture of other processed food ingredients. While the stems are left to rot or are usually used as cattle feed without being able to be processed again.

So far, Indonesian people have not optimized the potential of banana plants because their use is limited to the fruit and heart. Banana stems are one of the parts that are least used for consumption. People often use them as animal feed or just throw them away. In fact, banana stems have high fiber and calcium content so they can be used as alternative sources of fiber and calcium. The high carbohydrate content is an advantage of banana stems because they can be used as a substitute food for rice and even as a source of energy for those who consume them. One of the uses of banana stems for public consumption is to process them into chips. One effort to provide added value to banana commodities is to process bananas into more varied food products that are not only from the fruit. To achieve this goal, the team provides guidance to the community through assistance in the production process. Increasing the creativity of banana-based foods is expected to open up new business opportunities for the community.



Figure 1, Students and Community Carrying Out Production

Through the Real Work Lecture (KKN) program, Malikussaleh University, which is a community service program for students, carried out the activity "Training in the Utilization and Production of Banana Stem Chips as an UMKM Idea" targeting the community in Gampong Pase Sentosa, which can improve the community's economy.

Research purposes

- 1. To improve community skills in processing agricultural products into new food products using simple technology.
- 2. increasing the utility value and economic value of banana plant stems as a source of new processed food ingredients, from being uncommonly used as raw materials for processed foods to raw materials for making chips in Gampong Pase Sentosa, Simpang Keuramat District, North Aceh Regency.

Benefits of research

The benefits obtained from this research are as follows:

- 1. Reducing waste pollution
- 2. Protecting natural resources.
- 3. Increase knowledge about waste utilization.
- 4. Sharpen your creativity.
- 5. Increase income.

RESEARCH METHODS

Implementation of community service activities in Borani Village is carried out using the following approaches:

- 1. Persuasive, namely an approach that is in the form of an appeal and support without any element of coercion for local mothers to play an active role in this activity.
- 2. The Participatory Rural Appraisal (PRA) model emphasizes community involvement in all activities, from planning, implementation and evaluation of program activities.
- 3. The Community Development Model is an approach that directly involves the community as the subject and object of implementing community service activities.

RESULTS AND DISCUSSION

There are many interesting things that they did not know before that they have been using banana stems and how to reuse them. As one form of effort in reducing banana stem waste, we held a training on making chips from banana stem sheaths. The work program to build entrepreneurship in housewives aims to provide an understanding to the mothers of Pase Sentosa village on how to utilize banana stems (banana sheaths) to be used as food ingredients that can provide added economic value and can provide entrepreneurial opportunities by utilizing banana stems and processing them into healthy snacks for children and adults by utilizing local materials that have never been used and have no economic value.



Figure 2. Students and Community Carrying Out Production

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The utilization of banana tree plants that has not been maximized, and only the fruit is used, is really a shame if only the fruit is taken while the stem is just thrown away. So through the 2022 KKN-LPPM, Malikussaleh University students took the initiative to provide training in processing chips from banana stem stalks which have great potential to be developed among housewives and can also be used to become products that have high economic value. If the banana tree is processed into high-value food and can be marketed or sold, it will be able to increase the income of housewives. The process of making banana stem chips is very simple and does not require a lot of capital. The process of processing this simple food ingredient can be obtained around the village environment because the condition of this village has many banana plants. In addition, housewives can also find out how to process banana stem chips (banana stems) food ingredients. The results of this banana stem chip (banana stem) making activity can be used by the younger generation in Pase Sentausa Village to generate personal income and can be used as a group business. This banana stem (banana stem) chips making program for housewives or the community certainly has several supporting and inhibiting factors in its implementation.

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Figure 3. Group photo of PKK mothers from Gampong Pase Sentausa

By holding this activity, the community can utilize banana tree waste, namely banana stem stalks, to be made into processed pagan materials that have added value as a creative activity. Processing banana stem stalk chips into savory, crispy, delicious and healthy food can be done by housewives for entrepreneurial interests so that they can increase income and become a new business. In accordance with one of the objectives of banana tree waste is to provide motivation to the community, especially housewives and can increase income and become a new business for mothers.

The results achieved from making banana stem chips are increased knowledge for the PKK mothers of Gampong Pase Sentausa that they can finally utilize banana stems (banana stems) and process them into healthy snacks that have nutritional value and can be marketed.

The ingredients for making banana stem chips include: Banana stems (banana stems), rice flour, tapioca flour, seasoned flour, wheat flour, salt, flavoring, pepper powder, lime, baking soda, cooking oil and mineral water.

The process of making banana chips is as follows:

- 1. Prepare about 4 or more pieces of banana stem (banana stem) in the prepared container. Add salt and whiting solution then stir well and set aside
- 2. Take the best banana stem (banana frond) from the kapok banana variety that has borne fruit. It is better to avoid using Ambon banana stems because the results are prone to being bitter. Take the banana stem (banana frond) about half the tree down. That is from the base of the banana up enough to half the stem of the height of the banana tree.







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- Take the banana stem stem from the sixth or seventh layer from the outside, so avoid using the old outer part.
- 4. Take a piece of banana stem, remove both sides. So just take the middle part. Then cut it lengthwise into two or three parts, with a width of about three to four cm. Peel the outer skin of the banana stem by scraping it with a sharp knife until the banana core sheet is
- 5. If the core is too thick, we can split it again into 2 or 3 parts, until it becomes a thin banana core sheet. Then cut it into pieces according to your desired length. Once cut, it should be immediately put into the soaking water that we made earlier so that it is not prone to blackening. Set the rest until finished.
- The function of soaking with salt water is to remove toxins from the banana stem (banana stem), while the content of the betel solution is so that the sap can be removed so that it is free from bitter and astringent taste. In addition, it is also so that the texture becomes firmer with a more savory taste, so that when fried later it becomes crispier.
- 7. After soaking, wash thoroughly with running water. Rinse 3 to 4 times. Wash gently so that the texture does not crumble. Wash until the water becomes clear and free from lime. Then squeeze and discard the water, set aside.
- 8. After washing, prepare the marinade by mixing all the marinade ingredients, then stir well. Put the banana stem pieces (banana stem) into the marinade solution that we have made. Stir well slowly. Let stand for about 30 minutes for the spices to soak in. While waiting, next prepare the coating ingredients for the chips. Mix all the coating ingredients. Stir well. Set aside.
- 9. After 30 minutes of marinating, now separate the banana stem pieces from the marinade water, by draining them, and squeezing them in one direction, so that they don't break. Squeeze them until they are dry so that they are not prone to clumping during the flouring process. Once dry, drain them.
- 10. Heat cooking oil. Roll the banana stem pieces in the flour coating one by one so that they are not prone to sticking. Stir until all the banana stem pieces are coated in flour. Then, fry in hot oil over medium to high heat at the beginning. Do the rest until the pan is full. Once stiff, move to medium to low heat until the oil is calm. Once the chips are almost cooked, increase the heat again. Fry over high heat in the last minute for 1 to 2 minutes. Remove, drain

Case Analysis

- 1. The community is more skilled in making banana chips from banana stem stems and has skills in utilizing banana tree waste.
- 2. The community can develop their creativity in processing banana tree waste into chips, thereby increasing entrepreneurial interest.
- 3. People are aware of the benefits of banana tree waste so they can minimize the negative impacts of environmental pollution.
- 4. The community can use this training as a means to increase sales value and creativity.

CLOSING

Banana tree is a tree where the fruit, heart, leaves to the trunk are often utilized. Banana stems themselves are more often used for fertilizer/compost or other human needs but are never used as food ingredients. KKN group 49 students found a way to utilize banana stems to be processed into chips which will later support the economy of the Pasee Sentosa Village community. KKN group 49 students conducted socialization to the PKK mothers of Pasee Sentosa Village to introduce how to process banana stems into chips. Then also gave direction that from these banana stem chips, they could later be used as a business to improve the economy of the

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Pasee Sentosa Village community. The Banana Stem Chip Making Training Activity in Gampong Pase Sentausa was carried out for 1 day according to plan and received a response from the community and also the PKK mothers. Because with this training activity, it provides additional knowledge, opens up insights to open a business by utilizing local materials that are not useful to be useful and can provide added economic value for community groups, as well as the PKK group of Gampong Pase Sentausa.

REFERENCES

- Yuanita N, Raqhmawati Y. (2008). Pabrik Sorbitol dari Bonggol Pisang (Musa Paradisiaca) dengan Proses Hidrogenasi Katalitik. [Tesis]. Surabaya (ID) Institut Teknologi Sepuluh November
- Hiden, H., & Ningsih, V. (2021). Inovasi Pemanfaatan Limbah Batang Pisang Menjadi Camilan "Kedebong Taro" Bernilai Ekonomis Di Desa Bagik Polak BaraT.Jurnal Bakti Nusa,2(2), 39-46.
- Nona, R.V., & Juniasih, I.A.K.(2020). Analisis Kepuasan Petani Terhadap Kinerja Penyelenggaraan Penyuluhan Pertanian Di Kabupaten Ende Provinsi Nusa Tenggara Timur. Jurnal Pengkajian dan Pengembangan Teknologi Pertanian, 23 (2), 151-162.
- Sagajoka, E.,& Luciany, Y.P.(2020). Classification of Sector That Tiggers Economic Growth in Ende District during 2015-2019 Period. Advances in Economics, Business and Management Rsearch, Volume 169, 26-28.
- Sagajoka, Nona, & Antonia, D.G (2021). Peningkatan Ekonomi Masyarakat Desa BoraniMelalui Inovasi Pengolahan Keripik Batang Pisang(BAPIS), 26 (10), 137-138.