

Optimization of Banana Commodities in Sipora Jaya Village Based on Home Industry as a Banana Production Center in West Sumater
(*Pengoptimuman Komoditi Pisang di Kampung Sipora Jaya berasaskan Industri Rumah Tangga sebagai Pusat Pengeluaran Pisang di Sumatera Barat*)

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ABSTRACT

Home industry or household industry is a business unit that is not in the form of a legal entity and is carried out by several household members, with the activity of changing basic materials into finished or semi-finished goods with the aim of selling. The aim of this activity is to optimize the banana commodity in Sipora Jaya village based on a home industry as a banana production center in West Sumatra. The method used in this research is the community empowerment method using the participation method. The community will participate and be directly involved with students in the program implementation process. In this program, assistance will be provided in the processing of processed banana products from upstream to downstream which is divided into three subsystems, namely; (1) Product processing subsystem, which processes bananas into three processed derivative products with selling value; (2) Packaging and marketing subsystem, which consists of assistance in product packaging and marketing; (3) Institutional strengthening subsystem, to strengthen the institutional management of the PKK group. In this program, the fostered partners are 10 PKK women from Sipora Jaya village. So the result can be obtained that t_{count} is greater than t_{table} , namely $14.548 > 1.83311$ and $Sig. (2\text{ tailed}) = 0.000 < 0.05$, then H_0 is rejected and H_a is accepted. So it can be concluded that there is an influence between training and guidance on optimizing banana commodities based on the banana home industry on increasing knowledge in diversifying processed banana products with selling value.

Keywords – Home industry, Banana Commodity, Sipora Jaya

ABSTRAK

Industri rumah tangga atau industri rumah tangga adalah unit usaha yang tidak berbentuk badan hukum dan dilakukan oleh beberapa orang anggota rumah tangga, dengan kegiatan mengubah bahan dasar menjadi barang jadi atau setengah jadi dengan tujuan untuk menjual. Matlamat aktiviti ini adalah untuk mengoptimumkan komoditi pisang di kampung Sipora Jaya berasaskan industri rumah tangga sebagai pusat pengeluaran pisang di Sumatera Barat. Kaedah yang digunakan dalam penyelidikan ini ialah kaedah pemeraksanaan komuniti menggunakan kaedah penyertaan. Masyarakat akan turut serta dan terlibat secara langsung dengan pelajar dalam proses pelaksanaan program. Dalam program ini, bantuan akan diberikan dalam pemprosesan produk pisang dari hulu ke hilir yang terbahagi kepada tiga subsistem iaitu; (1) Subsistem pemprosesan produk, yang memproses pisang kepada tiga produk terbitan yang diproses dengan nilai jualan; (2) Subsistem pembungkusan dan pemasaran, yang terdiri daripada bantuan dalam pembungkusan dan pemasaran produk; (3) Subsistem pengukuhan institusi, untuk memantapkan pengurusan institusi kumpulan PKK. Dalam program ini, rakan angkat ialah 10 wanita PKK dari kampung Sipora Jaya. Maka keputusan dapat diperolehi bahawa $t_{bilangan}$ lebih besar daripada t_{tabel} iaitu $14.548 > 1.83311$ dan $Sig. (2\text{ ekor}) = 0.000 < 0.05$, maka H_0 ditolak dan H_a diterima. Maka dapat disimpulkan bahawa terdapat pengaruh antara latihan dan bimbingan terhadap pengoptimuman komoditi pisang berasaskan industri rumah tangga terhadap peningkatan pengetahuan dalam mempelbagaikan produk olahan pisang dengan nilai jualan.

Kata kunci – Industri rumah tangga, Komoditi Pisang, Sipora Jaya

BACKGROUND OF THE PROGRAM

Sipora Jaya Village is a village located in North Sipora District, Mentawai Islands Regency, West Sumatra Province (Mentawai, 2019). Most of the residents of Sipora Jaya Village are Mentawai, and there are a small number of immigrants. The Student Creativity Program in the field of Community Service collaborates with the PKK group in Sipora Jaya Village. This non-profit organization consists of a group of local mothers whose aim is to facilitate the main tasks and programs of the PKK (Family Welfare Development), with one of the program areas being the productive economy.

The majority of the people of Sipora Jaya Village work as fishermen and farmers. The leading sector in this village is the agricultural sector, this is supported by the condition of the land being fertile enough to plant various types of plants, especially dry land plants such as bananas, mangoes, soursops, papayas and taro. An average of 120 tons of bananas are produced in the Mentawai Islands every month, but this has not been managed well (Mentawai, 2022). North Sipora District is the banana center, the types of bananas in the plantation include Batu bananas, Medan super bananas and others. From the results of discussions with the Head of the Mentawai Islands Food Security and Agriculture Service, Mrs. Hatisama Hura on February 9 2023, currently the selling price of bananas to collectors is still low but outside the Mentawai Islands it is quite high which is usually sent to Padang, Pekanbaru, Medan to Malaysia by collectors.

The discussion was continued by the head of the Sipora Jaya Village PKK group, Mrs. Hartati, she said that most of the family heads of the PKK members of Sipora Jaya Village were banana farmers. He also added that the selling price of bananas to collectors is low, not commensurate with the very difficult process of harvesting bananas, because the roads to the plantation locations are not good so it is difficult to take them out and it is not uncommon for bananas to rot in the plantations. There are a lot of bananas produced, but this is hampered by several factors, such as insufficient transportation or mobilization outside the island to market bananas, for example the Pioneer Ship is unable to accommodate the banana produce in Sipora. Mrs. Hartati said that in fact there had been efforts by the local government to manage the banana produce, one of which was the idea of building a banana flour industrial factory, but this discourse had not been realized until now.

The Sipora Village PKK group itself has also made efforts to manage these bananas into processed products, but only limited to banana chips, and marketing them

only in the village area. There have been no efforts to diversify other processed products, because the lack of knowledge and skills of members makes it difficult to develop processed banana products. Based on these problems, efforts were made to empower PKK group mothers who act as family entrepreneurial cadres through training and mentoring activities in optimizing home industry-based banana processing. Sunardi (2011) states that a home industry or household industry is a business unit that is not a legal entity and is carried out by several household members, with the activity of changing basic materials into finished or semi-finished goods with the aim of selling. Home industry is very beneficial for society, especially the economically weak. The benefits of having a home industry are; (1) provide employment opportunities for residents who generally do not work fully; (2) provide additional income for other family members; (3) producing goods needed by local residents and the surrounding area cheaply (Afiah, 2019). In this program, assistance will be provided in the processing of processed banana products from upstream to downstream which is divided into three subsystems, namely; (1) Product processing subsystem, which processes bananas into three processed derivative products with selling value; (2) Packaging and marketing subsystem, which consists of assistance in product packaging and marketing; (3) Institutional strengthening subsystem, to strengthen the institutional management of the PKK group. From this program, it is hoped that a cadre of family entrepreneurs will be formed. Thus, producing a productive society and improving the economy based on the use of local resources.

MENTOR DAN MENTEE

Banana Commodity Optimization Activities in Sipora Jaya Village based on the Banana home industry as a West Sumatra Banana Production Center are mentored by the PKM Team from Padang State University, consisting of five people, consisting of one chairman and 4 team members with the target partners to be coached being the PKK women's group. Sipora Jaya Village, numbering 20 people.

Location selection

Optimizing the Banana Commodity in Sipora Jaya Village based on the Banana home industry as a West Sumatra Banana Production Center with the target partner of this program being the PKK group in Sipora Jaya Village located in Sipora Jaya Village, Kec. North

Sipora, Mentawai Islands Regency, West Sumatra. The distance between the campus location and the village location that will be targeted for this activity is 150.20 km. This distance measurement is based on the location of the nearest port.

(2) The selling price of bananas to collectors is still low, but outside the Mentawai Islands it is quite high, to the point where collectors even export them to Malaysia; (3) There are not enough pilot ships to accommodate the banana produce in Sipora, many bananas are not transported, so many bananas rot.

MODULE

Partners have the aim of realizing a productive economy in managing local resources. These goals are achieved by partners through coaching activity programs. However, the results of interviews show that there are challenges and obstacles in implementation, especially in the field of managing banana resources, namely: (1) Most of the family heads of PKK members in Sipora Jaya Village are banana farmers, but there has been no effort to diversify processed banana products. , due to lack of knowledge and skills of PKK members;

Local resources are essentially capital for villages in fulfilling development towards a prosperous and prosperous society. Endah (2020) said that with the existing potential and culture it should be an effort to deal with economic problems that exist in society. In developing the local potential of villages and growing a prosperous and prosperous society, direct participation from the community is required (Irawan et al., 2018). This is because community participation has an important influence on the success of a program implemented by village institutions or community empowerment institutions. Referring to Law Number 6 of 2014 concerning Villages, village community

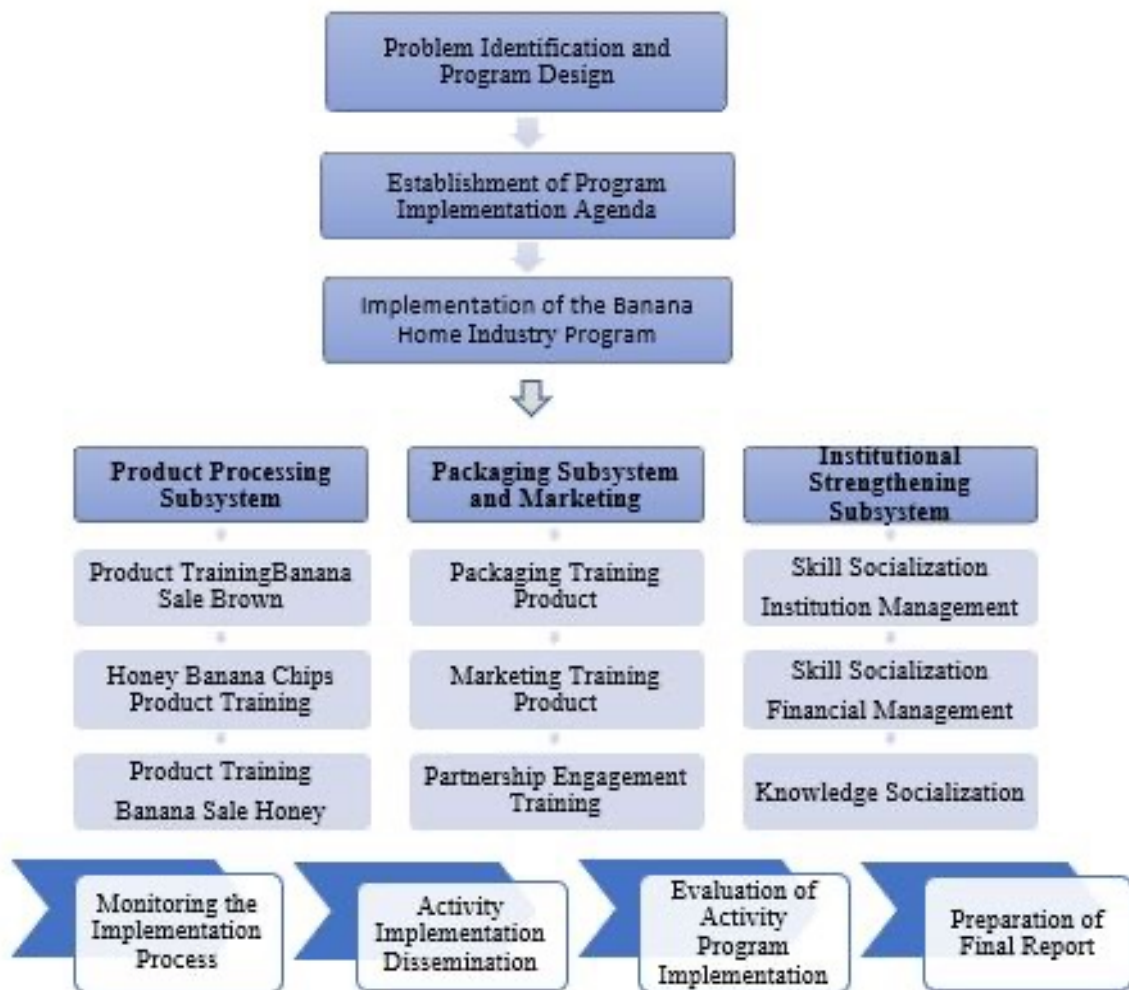


FIGURE 1. Flowchart of Program Implementation Methods

empowerment is an effort to develop community independence and welfare by increasing knowledge, attitudes, skills, behavior, abilities, awareness, as well as utilizing resources through establishing policies, programs, activities and assistance. which is in accordance with the essence and priority needs of village communities (Indonesia, 2014). An average of 120 tons of bananas are produced in the Mentawai Islands every month (Mentawai, 2022). North Sipora District is the banana center, the types of bananas in the plantation include Batu bananas, Medan super bananas and others. The local resource of bananas is a potential that exists in Sipora Jaya Village. However, so far there has been no processing of bananas into processed products to increase selling value.

Based on the problems faced and reviewing the things that the partners wanted to develop, a program was designed that played a role in strengthening the entrepreneurship of the Sipora Jaya Village PKK group through training and assistance in optimizing home industry-based banana processing. This program is expected to help partner communities in Sipora Jaya

Village in empowering potential and strengthening entrepreneurship.

ACTIVITIES

The community empowerment method uses the participation method. The community will participate and be directly involved with students in the program implementation process. Implementation is carried out in full in the field (offline) by observing health protocols. The flow of implementation of the Student Creativity Program in the field of Community Service with partners from the Sipora Jaya Village PKK group is depicted in Figure 1.

Program Socialization to Partner Communities

The implementation of the Home Industry-based Banana Optimization Program can be seen in the appendix table 1.

TABLE 1. Program Socialization to Partner Communities

No.	Activity Program	Activity description	Outputs
A	Product Processing Subsystem (Home Industry-Based Banana Processing Assistance)		
1.	Socialization and Training of Banana Sale Chocolate Products (August 18-21, 2023)	Preparation of socialization and training, Preparation of tools and materials, Chocolate Banana Sale Processing.	Processed food products from bananas, namely banana sale chocolate
2.	Socialization and Training of Honey Sale Banana Products (August 22-24, 2023)	Preparation of socialization and training, Preparation of tools and materials, Processing Banana Sale honey, plus original banana sale processed products	Processed food products from bananas are banana sale honey and banana sale original.
3.	Socialization and Training on Honey Banana Chips (25-28 August 2023)	Preparation of socialization and training, Preparation of tools and materials, Processing Banana Sale honey, plus chocolate banana chips processed products	Processed food products from bananas are honey banana chips and chocolate banana chips.
B	Packaging and Marketing Subsystem (Packaging, Marketing and Cooperation Assistance)		

1.	Product Packaging Socialization and Training (August 29-30, 2023)	Packaging design, packaging label elements, & product packaging practices	Trademark & 5 product packaging designs
2.	Product Marketing Socialization and Training (August 31, 2023)	Product photography, product catalog photo practice, & digital marketing	Product catalog photos & posts
3.	Socialization and Training on Partnership Cooperation (September 01, 2023)	Preparation of socialization and training on how to establish partnership cooperation for product marketing	Improved knowledge and skills on how to work with partnerships
C	Institutional Strengthening Subsystem (Institutional and Financial Strengthening Assistance)		
1.	Socialization of Institution Management Skills (September 02-05, 2023)	Institutional governance, product distribution license, business legality, partnership cooperation, UP2K & Koperas	UP2K/Cooperative Organigram, NIB, P-IRT, Halal, & Partnership

IMPACT PROGRAMS

The impact or impact of the program was measured by distributing pretest and posttest questions to PKK women in Sipora Jaya Village. The data analysis method was carried out using a quantitative approach, namely by comparing the results of the pretest and posttest before and after the PKK women carried out training and mentoring on Banana Commodity Optimization based on the Banana home industry. Data analysis was carried out using the t-test using spss-16 to determine

student improvement before and after training and mentoring activities. The result of this service activity with training and mentoring for Banana Commodity Optimization based on the Banana home industry is the formation of PKK women partners as family and community entrepreneurial cadres to increase family scale economic income and for the community, increased knowledge in diversifying processed banana products with selling value. This can be seen based on the average data on the pretest and posttest results of PKK mothers.

TABLE 2. Pretest and Posttest Data

No	Pretest	Posttest
1	7	20
2	6	20
3	6	19
4	9	20
5	7	20
6	4	20
7	5	19
8	8	20
9	5	19
10	6	20

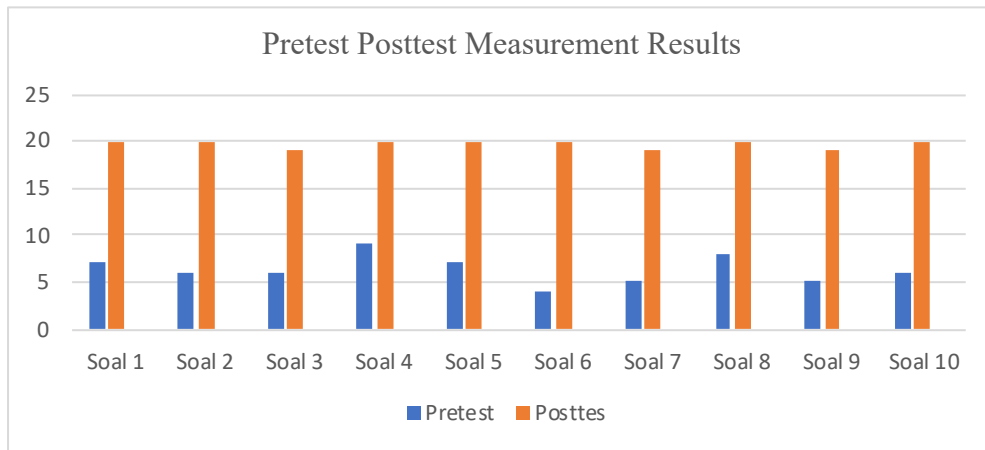


FIGURE 2. Diagram of Pretest Posttest Measurement Results

Based on the picture above, the questions consist of 10 pretest and posttest questions. The number of mothers who experienced an increase in knowledge in optimizing banana commodities, in question 1 increased from 7 to 20 people, in question 2 it increased from 6 to 20 people, in question 3 it increased from 6 to 19 people, in question 4 it increased from 9 to 20

people, in question 5 it increased from 7 to 20 people, in question 6 it increased from 4 to 20 people, in question 7 it increased from 5 to 19 people, in question 8 it increased from 8 to 20 people, in question 9 it increased from 5 to 19 people, in question 10 it increased from 6 to 20 people.

TABLE 3. Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Pretest	20	4	9	5	.789
Posttest	20	19	20	9.20	.699
Valid N (listwise)	20				

In Table 3 above, a significant increase was found before and after the coaching training activities were carried out. This is indicated by obtaining an average pre-test score of 5 with the lowest pre-test

score being 4 and post-test 8. After the training was carried out the average score increased to 9.2 with the lowest score being 6 and the highest being 10.

TABLE 4. Normality Test

	Kelompok	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Hasil	Pretest	.200	10	.200*	.832	10	.035
	Posttest	.245	10	.091	.820	10	.025

*. This is a lower bound of the true significance.

Lilliefors Significance Correction

From the results above in the Kolomogorov-Smirnov column, it can be seen that the significance value is

0.05; for the pre-test it was 0.035; and for the post-test it is 0.025. Because the significance for all variables is greater than 0.05, it can be concluded that the data on the variables is normally distributed.

TABLE 5. Homogeneity Test

		Levene Statistic	df1	df2	Sig.
Hasil	Based on Mean	.037	1	18	.850
	Based on Median	.000	1	18	1.000
	Based on Median and with adjusted df	.000	1	18.000	1.000
	Based on trimmed mean	.046	1	18	.832

From the results above, it can be seen that the significance is 0.832. Because the significance is more than 0.05, it can be concluded that the variances of two or more data groups are the same. So the data in this

research has the same variance (the data in the research does not have different data variances), so that one of the ANOVA assumptions is met or suitable for use, then the data above can be used for further tests.

TABLE 6. Paired Sample T-test

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	5.0	20	.789	.249
	Posttest	9.20	20	.789	.249

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error	95% Confidence Interval of the Difference				
		Mean	Std. Deviation	Std. Error	Lower	Upper			
Pair 1	Pretest - Posttest	-5.400	1.174	.371	-6.240	-4.560	-14.548	9	.000

The statistical hypothesis is as follows:

Ho: There is no influence between training and guidance on optimizing banana commodities based on the home banana industry on increasing knowledge in diversifying processed banana products with commercial value.

Ha: There is an influence between training and guidance on optimizing banana commodities based on the home banana industry on increasing knowledge in diversifying processed banana products with selling value

The basis for decision making is based on the tcount value with ttable

- If $t_{count} > t_{table}$, then H_0 is rejected and H_a is accepted
- If $t_{count} < t_{table}$, then H_0 is accepted and H_a is rejected

Based on Table 5 regarding the t test (paired sample t test) above, it shows that there is a significant difference between the results before and after being given training. To see the ttable value, it is based on the degrees of freedom (dk), the magnitude of which is $N-1$, namely $10-1 = 9$. The $dk = 9$ value at the 5% significance level produces $t_{table} = 1.83311$. Based on the results of the t test analysis (paired sample t-test), the results can be obtained that t_{count} is greater than t_{table} , namely $14,548 > 1.83311$ and $Sig. (2\text{ tailed}) = 0.000 < 0.05$, then H_0 is rejected and H_a is accepted. So it can be concluded that there is an influence between training and guidance on optimizing banana commodities based on the banana home industry on increasing knowledge in diversifying processed banana products with selling value.

CONCLUSIONS

From the activities that have been carried out, namely in the form of training, it can be concluded that guidance on optimizing the banana commodity based on the home banana industry for PKK women in Sipora Jaya village shows that there is a significant difference between the results before and after being given the training. To see the ttable value, it is based on the degrees of freedom (dk), the magnitude of which is $N-1$, namely $10-1 = 9$. The $dk = 9$ value at the 5% significance level produces $t_{table} = 1.83311$. Based on the results of the t test analysis (paired sample t-test), the results can be obtained that t_{count} is greater than t_{table} , namely $14,548 > 1.83311$ and $Sig. (2\text{ tailed}) = 0.000 < 0.05$, then H_0 is rejected and H_a is accepted. So it can be concluded that there is an influence between training and guidance on optimizing banana commodities based on the banana home industry on increasing knowledge in diversifying processed banana products with selling value.

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