

Implementation of Banana Chip "Nabila" MSME to Support Village Economic Self-Sufficiency

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Abstract

Community empowerment is one of the important strategies for encouraging sustainable development in rural areas. This article examines the implementation of the *Nabila* banana chip processed MSME program in *Tanjung Anom* Village, *Terusan Nunyai* District, Central *Lampung* Regency, as a form of Corporate Social Responsibility (CSR) initiative by PT *Great Giant Pineapple*. The objective of this research is to analyze the effectiveness of the community empowerment program through *Nabila* banana chip MSMEs in addressing two main problems: the high unemployment rate in the community around the company and the problem of food loss from *Cavendish* bananas that do not meet market standards[A1]. This study uses a qualitative descriptive approach with secondary data in the form of community empowerment program reports since 2019. The data were analyzed using content analysis techniques to assess the program's achievements in social, economic, and environmental aspects. The results of the study show that *Nabila* MSMEs have a positive impact. From the economic aspect, business income increased sharply, especially post-pandemic, and opened up new jobs for the community. From the social aspect, the program improves skills, independence, and strengthens social networks through farmer women's groups. From an environmental aspect, the use of rejected bananas of up to 100 tons per year has succeeded in reducing the potential for organic waste while encouraging public awareness of environmental management. Program evaluations also show a decrease in dependence on material assistance from companies along with the increasing independence of business groups.

Keywords: community empowerment, MSMEs, banana chips, CSR, sustainable development

INTRODUCTION

Community empowerment is one of the strategic approaches in supporting sustainable development, especially in rural areas that serve as a buffer for industrial activities (Mayasari & Chandra, 2020). Building and empowering a community involves social processes and actions in which the inhabitants of a community organize themselves in making plans and collective actions to solve social problems or meet social needs according to their abilities and resources (Adi, 2018; Isbandi Rukminto Adi, 2018; Witono, 2020; Yuniasari et al., 2018). In addition, the main goal of empowerment is to make the community more capable and able to develop communication among themselves so that in the end they can discuss constructively with each other and solve existing problems (I.R., 2013).

One of the main problems faced by the village community around PT *Great Giant Pineapple* is the limited access to formal employment, which results in an increase in the unemployment rate. Based on data on the unemployment rate in Central *Lampung* Regency presented by BPS in 2024, there are 28,686 workforce residents who are still unemployed, indicating a significant dependency of local communities on employment opportunities provided by PT *Great Giant Pineapple* and surrounding industrial companies (BPS, 2025). This happens because the community around the company tends to depend on the jobs provided by PT *Great Giant Pineapple* or surrounding companies. On the other hand, the number of jobs needed by companies has a lower ratio than the number of people who need jobs. In the end, people who are not absorbed tend to wait for the absorption of labor from the company. This condition can trigger the emergence of other social problems, such as low levels of family

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welfare, reduced community productivity, and increased dependence on companies as the main provider of employment.

On the other hand, company operations related to production can cause problems, namely food loss and waste, or in other terms what companies usually call "*Banana reject*." The rejected bananas here come from *Cavendish* bananas produced by the company that do not meet market quality standards, both due to damage during harvest and sizes that do not meet specifications. The rejected bananas are basically still edible, but without proper management, they will become organic waste that has the potential to cause environmental problems. One of the problems of food loss has also been explained in a research study by (Courtesy of Derosya, 2024). The results show that food loss causes a domino effect of disrupting the overall economic and environmental balance. One small act of wasting food can eventually lead to a concerted attack on food safety, raising many ethical, economic, and environmental problems.

The phenomenon of banana rejection is particularly concerning when viewed within the context of global food waste issues. According to the United Nations Environment Programme (UNEP) 2021 Global Food Loss Index report, this problem has reached critical proportions globally, with Indonesia ranking as the country with the second-largest food loss rate in the world at 20.93 million tons per year (Zahrah, 2024). This is proof that Indonesia needs to overcome these problems so that food loss does not become one of the causes of Indonesia's economic losses. Therefore, there needs to be optimal utilization that needs to be carried out by several food supply companies. In addition, it would be better if the food loss could be maximized into finished goods that can generate profits for the surrounding community.

Addressing these two problems, namely the high unemployment rate and the problem of food loss in production, PT *Great Giant Pineapple* initiated a community development program based on the use of rejected bananas to create value-added processed products, namely banana chips. This program is carried out so that CSR is able to apply community empowerment, which is supported by the elements of empowerment in the area (Bartle, 2008; Yáñez-Araque et al., 2021). In this case, the empowerment element used is the raw material for unused production from PT *Great Giant Pineapple*, namely rejected bananas. The community development program initiated will achieve maximum benefits to realize the welfare of the community (Aulia et al., 2023; Yáñez-Araque et al., 2021).

This program was initiated in 2019 and developed through the formation of MSMEs "*Nabila*," which was driven by the Women Farmers Group (*KWT*) in *Tanjung Anom* Village. The program is one of the proofs that in addition to focusing on the economy, PT *Great Giant Pineapple* also cares about the health of the surrounding environment in *Tanjung Anom* Village. In addition, this program not only provides alternative economic solutions for the surrounding community but also encourages social transformation through skill building, women's empowerment, and strengthening community-based business networks.

Therefore, the community empowerment program through MSMEs processed "*Nabila*" banana chips is important to be implemented. This article highlights how the implementation of PT *Great Giant Pineapple*'s CSR program moves towards community independence. It is expected to make an academic contribution to the development of literature on community development based on the processing of rejected agricultural products, as well as provide practical recommendations for efforts to strengthen the sustainable local economy in rural areas

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using the principles of sustainable development. In accordance with the opinion of (Ife & Tesoriero, 2024), sustainability demands that the structures developed are those that can be maintained in the long term by minimizing the level of dependency.

This research aims to evaluate the effectiveness of the *Nabila* banana chip MSME program in achieving community empowerment objectives, specifically analyzing its social, economic, and environmental impacts on *Tanjung Anom* Village. The benefits of this study include providing empirical evidence of successful CSR implementation in rural community development, offering a replicable model for sustainable MSME development using agricultural waste, and contributing to the academic literature on community-based economic empowerment strategies that align with sustainable development principles.

RESEARCH METHOD

This study employs a descriptive qualitative research approach utilizing secondary data as the primary source. The research population consists of all community empowerment activities and outcomes documented in PT *Great Giant Pineapple's* program reports from 2019-2024. A purposive sampling technique was used to select relevant data related to the *Nabila* banana chip MSME program implementation. The research location is *Tanjung Anom* Village, *Terusan Nunyai* District, Central *Lampung* Regency, Indonesia. Data were obtained from the Community Empowerment Program Report implemented by PT *Great Giant Pineapple* since 2019 through efforts to develop community-based MSMEs processing "Nabila" banana chips in *Tanjung Anom* Village, *Terusan Nunyai* District, Central *Lampung* Regency. The report contains information related to the profile, background, objectives, goals, stages, and program achievements that serve as the basis for analysis in this study.

The data collection technique employs documentation studies, which involve systematically collecting, documenting, and recording program-related information and achievements (Ismiati et al., 2024). The data sources include primary documentation from PT *Great Giant Pineapple's* community development reports, program implementation records, financial data, and beneficiary information covering the period 2019-2024. Data analysis utilizes qualitative content analysis techniques performed descriptively. The analysis process was carried out by reducing, grouping, and interpreting data to assess the impact of the program on community empowerment, food loss reduction, and the development of new economic nodes in *Tanjung Anom* Village.

RESULTS AND DISCUSSION

Based on the data obtained, the MSME Community Empowerment program processed by "Nabila" Banana Chips by PT Great Giant Pineapple shows good results for the community, both socially, economically, and environmentally. The discussion of the results of the program that has been carried out is described as follows.

Community Empowerment Program

The MSME Community Empowerment Program for processed Banana Chips "Nabila" initiated by PT Great Giant Pineapple is carried out in stages and responsive to the circumstances faced by the beneficiaries. Based on data from existing reports, the

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implementation of the program lasted from 2019 to 2023, where the implementation of this program can be divided into several main phases of interrelated activities.

1. Training and Institutional Formation

The initial stage of the program begins with community scouting which aims to identify potential community partners. The results of this exploration process resulted in the program target where Mrs. Sami was selected as one of the people who were considered to have the potential and ability to run the program. This initial stage is focused on training in banana chips making skills made from cavendish reject bananas produced by the company that do not meet market specifications, but are still suitable for consumption. This training is an effort by the company to utilize its resources (food loss) to create added value. Furthermore, assistance was provided to continue to develop the business by involving other women, so that the Women Farmers Group (KWT) was formed which all worked in the "Nabila" Banana Chips Processed MSMEs.



Figure 1. Training Activities and Establishment of the "Nabila" Banana Chips Processing Institution

2. Provision of Production Kitchen Assistance

Seeing that the business developed shows good progress by KWT, the company provided additional assistance for the development of the first phase of production kitchens in 2021. This assistance is given for the achievement of KWT which shows positive development, where this assistance aims to increase the maximum impact on the community.



Figure 2. Kitchen Production Phase 1 and Initial Packaging of Processed Banana Chips "Nabila"

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3. Packaging Assistance

In 2022, the COVID-19 pandemic became a considerable challenge that disrupted the tourism sector as the main distribution channel for sales. The strategy carried out by the group at that time was to sell directly and utilize e-commerce platforms. In response to this, the company provides targeted assistance in the form of proper packaging development assistance and eye-catching. This assistance is very strategic in the digital market, where packaging is a critical element to increase product competitiveness. This assistance has a good impact on being able to compete with similar products in e-commerce.



Figure 3. Development of New Packaging for "Nabila" Banana Processed MSMEs

4. Kitchen Development Assistance Phase 2

After the group successfully passed and recovered from the COVID-19 crisis, PT Great Giant Pineapple provided follow-up assistance in the form of the development of the second phase of production kitchens in 2023. This assistance aims to have an impact on the development of the production capacity of this business so that it continues to grow bigger. The sustainability of this support reflects that the company has a long-term commitment to community empowerment programs.



Figure 4. Condition of the Production Kitchen after Phase 2 Renovation

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Program Achievements

The "Nabila" Processed Chips MSME Community Development Program began with food loss. To reduce this, the company runs a mentoring program to the community by providing training, assistance with production tools, and kitchen development that have been discussed earlier. From this process, program achievements are obtained which are measured through quantitative indicators that show positive growth trends which can be seen in Table 1.

Table 1. Performance Achievements of the "Nabila" Banana Chips Processing Partnership Program (2020-2024)

Indicator Description	Unit	Absolute Results				
		2020	2021	2022	2023	2024
Total Annual Revenue generated from business activities	Rp/Year/MSME	IDR 199.225.000	IDR 64,905,000	IDR 199.225.000	IDR 92,787,500	IDR 683,962,500
Number of rejected fruits managed each year	Kg/Year	30.650	9.990	30.650	14.280	105.230
Number of products produced	Kg/Year	6.130	1.998	6.130	2.856	21.046
Total marketing partners served from business activities	Entity/year	7	8	4	4	8
Number of beneficiaries	Person	3	7	8	3	11

Source: Data processed

Based on the data in Table 1, it can be seen that the implementation of MSMEs processed with Nabila banana chips shows fluctuating developments in the period 2020–2024. From the economic side, annual income had decreased in 2021 due to the COVID-19 pandemic, from IDR 199,225,000 to IDR 64,905,000. However, this condition has been successfully overcome with an adaptation strategy through digital marketing and the development of new packaging, so that in 2022 revenue will increase again to equal the achievement in 2020, which is IDR 199,225,000. Although in 2023 revenue fell again to IDR 92,787,500, a positive trend emerged in 2024 with the highest achievement of IDR 683,962,500. This shows that Nabila MSMEs are able to survive and grow resiliently despite facing external challenges. The following is a graph of annual revenue growth.

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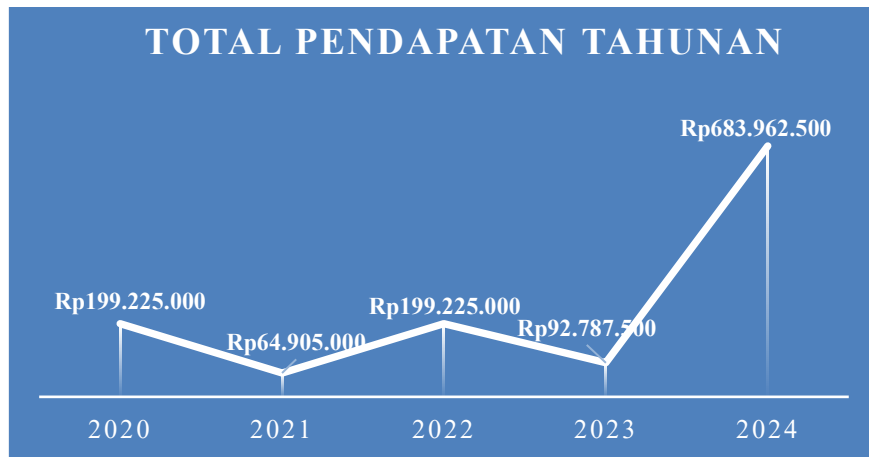


Figure 5. Annual Revenue Growth Graph

In addition to revenue growth, the program's achievements can also be seen from the management of rejected bananas. The number of rejected bananas managed at the beginning of the 2020 program of 30,650 kg had decreased in 2021 to only 9,990 kg. After that, the number rose again to 30,650 kg in 2022, then dropped in 2023 to 14,280 kg, and jumped sharply in 2024 to reach 105,230 kg. The same can be seen in the number of products produced, which was 6,130 kg in 2020, decreased to 1,998 kg in 2021, stabilized again in 2022, decreased to 2,856 kg in 2023, and increased significantly in 2024 to 21,046 kg. The ratio between inputs (rejected fruits) and outputs (chip products) indicates an increase in production capacity in 2024, although in previous years it has fluctuated. This indicates that business groups are increasingly skilled in managing raw materials on a large scale and showing the ability to adapt to changing situations. The following is a graph between the number of rejected fruits and the amount of production produced.

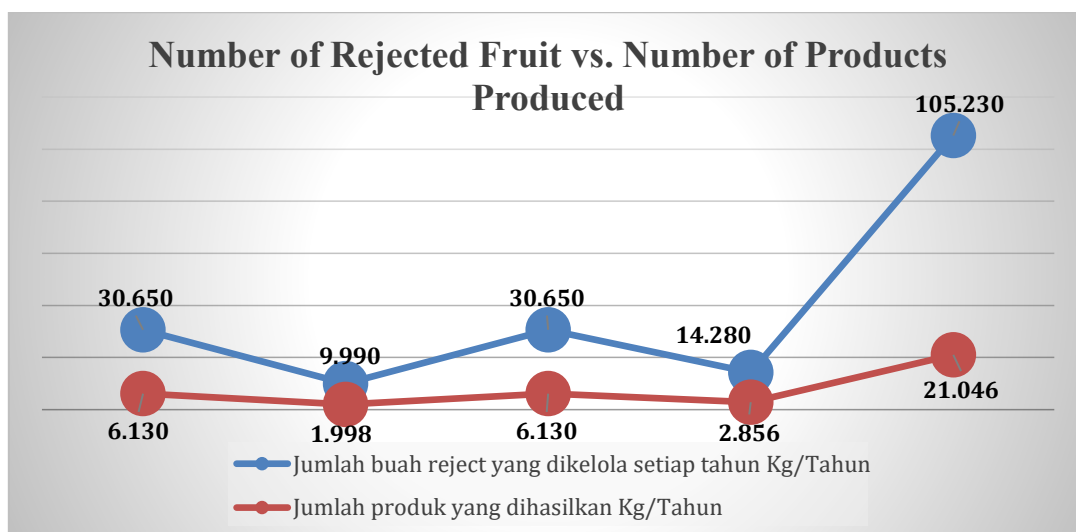


Figure 6. Graph between Number of Rejected Fruits vs Number of Products Produced

From the aspect of partnerships, the number of entities that collaborate with Nabila MSMEs shows an unstable but still significant pattern. In 2020 there were 7 partners, increasing to 8 in 2021, then decreasing to 4 partners in 2022 and 2023, before increasing again

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to 8 partners in 2024. Despite fluctuations, this data shows that Nabila MSMEs are still able to maintain their marketing network, while expanding market confidence in the past year. This condition shows the resilience of business groups in maintaining the existence of products in the market, both offline and through digital platforms.

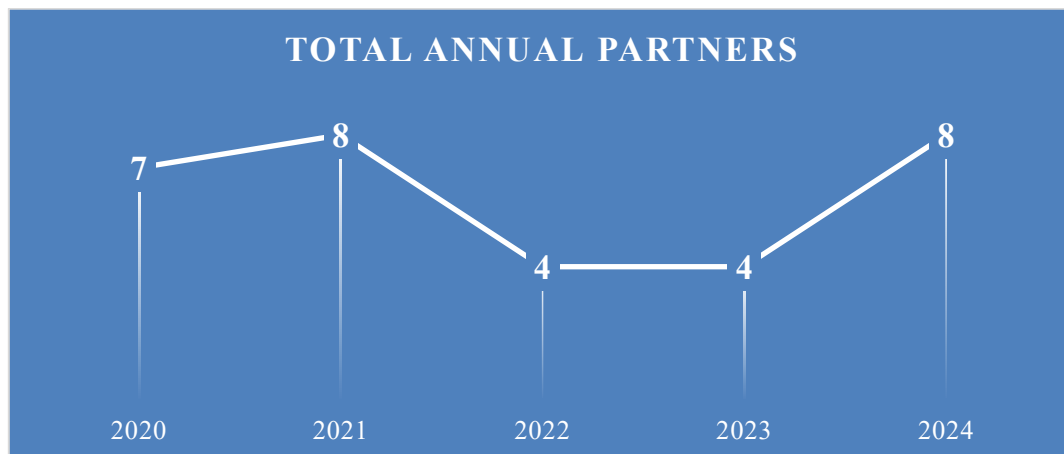


Figure 7. Partner Growth Chart Every Year

Another important achievement is the number of beneficiaries who participate in the program. At the beginning of the program in 2020 there were 3 beneficiaries, this number increased to 7 people in 2021, then 8 people in 2022. However, in 2023 the number decreased again to 3 people, before finally increasing significantly to 11 people in 2024. These fluctuations show the dynamics of community participation, but overall the five-year trend shows an improvement compared to the initial conditions. This proves that the program continues to have a real social impact, especially in creating new jobs, increasing skills, and strengthening the role of village women through the Women Farmers Group (KWT).

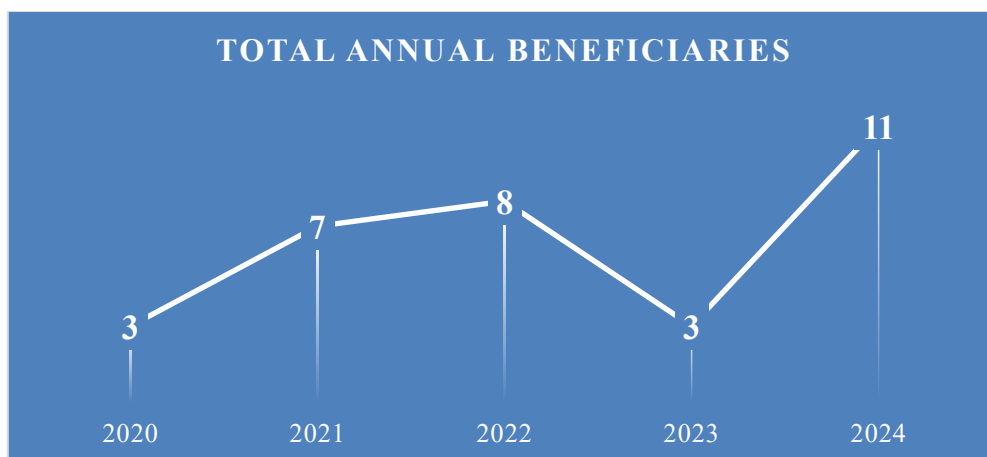


Figure 8. Beneficiary Growth Graph Every Year

Program Impact

The quantitative achievements described above reflect economic success and produce a better qualitative impact on the social life of the community in terms of social, economic, and environmental aspects. From a social perspective, this program has been proven to be able to

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improve the quality of life of the community through the training provided, both in terms of production, packaging, and marketing. In addition to adding technical skills, it also fosters awareness of the importance of innovation and product quality standards. This is in line with capacity building theory which emphasizes that sustainable development starts from strengthening human capacity as the main actor (Suharto, 2014). The active participation of the community in MSME activities increases confidence and independence, especially for groups of housewives and village youth. Those who previously only played the role of consumers or informal workers are now transformed into producers as well as business managers. This change in role shows a social shift towards a more independent and empowered society, in accordance with the concept of empowerment put forward (Ife & Tesoriero, 2024) that is, the community is able to control existing resources for their own benefit. The formation of the Women Farmers Group (KWT) and the strengthening of business networks through cooperatives or joint MSMEs are also important impacts of this program. The network not only serves as a production and marketing forum, but also strengthens social solidarity, fosters a sense of community, and creates a help-to-help mechanism between members. This is in line with the concept of social capital which states that beliefs, norms, and social networks can be important capital to encourage collective well-being (Mayasari & Chandra, 2020).

In addition to generating social change, Nabila's processed banana chips MSME program also has an economic impact on the people of Tanjung Anom Village. First, this program has succeeded in opening new jobs for the community around the company (PT Great Giant Pineapple). The involvement of housewives and village youth in production, packaging, and marketing activities shows that MSMEs are able to become an alternative source of livelihood. This supports the goal of community empowerment as affirmed by (Suharto, 2014), that local economic development can be a solution to reduce dependence on large industrial sectors. Second, the increase in community income from the sale of banana chips shows the success of the program in creating a direct economic impact. Program achievement data shows a significant surge in MSMEs' annual income, especially post-pandemic, which indicates the success of the business adaptation strategy. This condition also illustrates how MSMEs can play a role as a microeconomic driver that makes a real contribution to family welfare. Third, this program encourages the growth of MSMEs and village superior products. The presence of Nabila banana chips is not only a solution for the use of rejected bananas, but also develops into a typical regional product that has a competitive selling value. The transformation of local products into superior products strengthens the competitiveness of the village while supporting the concept of local economic development, where local potential is maximized for economic independence. Fourth, the opening of wider marketing opportunities through regional souvenir centers, modern markets, and e-commerce platforms indicates the diversification of strategic distribution channels. This condition shows that Nabila MSMEs have been able to adapt to the dynamics of the digital market while expanding the consumer base.

This is important because sustainability issues are not only about the welfare of the community, but also about how natural resources can be managed wisely so as not to cause new problems in the future. One of the biggest contributions of this program is the utilization of food loss which reaches 100 tons per year. Cavendish bananas, which previously had the potential to become organic waste, are now successfully processed into products with economic

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value. This is in line with the concept of a circular economy, where resources that are considered "leftovers" are returned to the production cycle to create new added value (Afrilia, 2022; Sarah et al., 2016). In addition, there is the potential for the use of banana peel waste as animal feed, organic fertilizer, or compost. This opens up opportunities for eco-innovation that can extend the benefits of the program to other sectors, such as agriculture and livestock. If this potential can be optimized, then the economic turnover of the village community will be stronger because waste is really used holistically, supporting the sustainability of the village ecosystem. Another impact is increasing public awareness of the importance of organic waste management. The active participation of residents in processing rejected bananas into chips, as well as the discourse on the use of banana peel waste, shows a change in behavior towards a more environmentally friendly lifestyle. This condition is in accordance with the sustainable development goals (SDGs), especially point 12 on responsible consumption and production, which is to ensure sustainable production and consumption patterns.

Program Evaluation

Program evaluation provides an overview of the relationship between the amount of company support and the achievements obtained by the community. Through evaluation, it can be seen whether the program is really able to encourage independence, or even still creates dependence on external assistance.

Table 2. Program Evaluation Annually

Program	Location	2020		2021		2022		2023		2024	
		Beneficiaries	Program Funds	Beneficiaries	Program Funds	Beneficiaries	Program Funds	Beneficiaries	Program Funds	Beneficiaries	Program Funds
Banana Chips Processing Partners hip	Tanjung Anom Village	5 people	IDR 25,000,000	5	IDR 15,000,000	10	IDR 10,000,000	10	IDR 7,500,000	10	IDR 5,000,000

Based on Table 2, there is a shift in the pattern of support and program achievements from 2020 to 2024. In the first year, the number of beneficiaries was 5 people with the support of company funds of IDR 25,000,000. The number of beneficiaries remained the same in 2021, but the funds provided were reduced to IDR 15,000,000. Starting in 2022, the number of beneficiaries will increase to 10 people and last until 2024, while program funds continue to decrease gradually from IDR 10,000,000 in 2022, IDR 7,500,000 in 2023, to IDR 5,000,000 in 2024.

This pattern indicates two important things. First, the number of beneficiaries has doubled from the program's initial year, which means the business is increasingly able to reach more people. Second, even though the company's funds continue to decrease, the business group is still able to maintain the number of beneficiaries at a higher level than at the beginning of the program. This indicates that the program has run more efficiently and the community is starting to be independent in managing businesses.

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CONCLUSION

The results of the implementation of the empowerment program through MSMEs processing *Nabila* banana chips show a real contribution to improving the welfare of the people of *Tanjung Anom* Village. This program has succeeded in increasing family income, creating new jobs, and strengthening the local economy through the growth of community-based business networks. From an environmental perspective, the sustainable use of rejected bananas is able to reduce the potential for organic waste while opening up opportunities for innovation in the use of waste to create other derivative products that have useful value. On the social side, the active participation of the community, especially women's and youth groups, shows an increase in skills, confidence, and community solidarity. Program evaluations also show that corporate support is decreasing as the business group's independence increases, which indicates the success of the empowerment process. Thus, *Nabila's* MSME program can be seen as a model of Corporate Social Responsibility (CSR) practices that not only focus on economic impact but also create social and environmental synergy in a sustainable manner. This model has the potential to be replicated in other regions as a local economic development strategy that is aligned with the principles of sustainable development.

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