

Corporate-Community Synergy: Empowering Traditional Essential Oil Production in Wayame Village, Ambon City

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1. PT Pertamina Patra Niaga Integrated Terminal Wayame, Indonesia

Abstract

This article examines the collaboration between PT Pertamina Patra Niaga Integrated Terminal Wayame (IT Wayame) and the traditional community of essential oil distillers, Bunga Tani, in Wayame village, Ambon City, Maluku Province. The study uses the Participatory Rural Appraisal (PRA) method to analyze how corporate involvement can transform traditional production methods, improve product quality, and create new market opportunities for rural communities. Through a five-year empowerment program, IT Wayame provided critical support, including the introduction of modern machinery, construction of permanent production facilities, and assistance with legal certifications, which enabled Bunga Tani to meet broader market demands. The partnership resulted in a 35% increase in production capacity and income within the first year, demonstrating the potential of business-community synergy to promote economic growth while preserving cultural heritage. This case study highlights the effectiveness of a bottom-up approach to community empowerment, ensuring that development initiatives are aligned with local needs and potential, ultimately contributing to sustainable economic development in rural areas.

Keywords: Corporate-Community Partnership, Traditional Essential Oils, Rural Economic Development

Introduction

The province of Maluku (known in English as the Moluccas), in Indonesia is well-known for its production of traditional essential oils such as, cajuput oil (*oleum cajuputi*), clove oil (*oleum caryophylli*), red lemongrass oil (*oleum citronellae*), and patchouli oil (*oleum pogostemonii*). Among these essential oils, cajuput oil is the best known and most widely used. These essential oils are traditionally used by the local people of Maluku and even many places in Indonesia to heal external injuries such as sprains, strains, bruises, and in some cases even bone fractures but excluding open wounds such as lacerations. A research done by Ningrum et. al (2020) shows that essential oil can be used for these type of injuries and even helps in relieving pain. Apart from outer injuries, the local people of Maluku and Indonesia usually inhale and or rub essential oils in order to relieve some mild symptoms such as nausea, dizziness, fever, and even cold (Nasution, Amranti, & Nusagita, 2019). Not only traditional essential oils are used for their medicinal properties, these oils are also a local heritage that has been passed down through many generations and thus making them a cultural value for the people of Maluku.

Although the use and benefits of essential oils are known nationally and not only contained among the people of Maluku, the rural communities and artisans who produce them still rely on traditional methods. Traditional methods such as chopping the raw material with hand tools, sourcing fresh water from nearby bodies of water rivers or lakes for distillation, and having a generally unsanitary working conditions are not only slow but also unreliable. Relying solely on traditional methods to produce essential oils not only results in low quantities of products but often results in products which have poor quality and questionable hygiene. These kind of traditionally produced essential oils usually cannot meet market demands in terms of quantity and quality.

There are many methods to transform the production of traditional initiatives in community, one of the methods is involving companies through community empowerment programs. The involvement of companies in community projects and business often has positive impact by providing financial support,

improved resources and tools, technical expertise, and market access. Furthermore, the involvement of companies through technical assistance would include direct investment, grants, or low-interest rate loans to producers to procure raw materials and equipment. Training programs for technical improvement of the production culture and extraction methods could increase yield and provide better qualities of certain oils. Equally important, the companies could easily open larger markets for such local producers by linking them with bigger buyers or distributors within and out of their countries. It does not simply mean better access to markets but also facilitates fair prices of products for producers. Sometimes, investment in infrastructure upgrades is also made by companies, such as building processing facilities or improving transportation networks, which further keeps the efficiency and profitability high for the essential oil production. Such comprehensive support strategies increase production, help in economic development, and empower rural communities and businesses (Pricilia, 2012) (Bhati, 2019).

One of many cases of synergy between rural communities and companies in transforming a traditionally produced essential oil is the relationship and cooperation between a local essential oil distiller community in Kerajang Hamlet, Wayame Village called Bunga Tani and PT Pertamina Patra Niaga Integrated Terminal Wayame (hereinafter shortened to IT Wayame). IT Wayame is a downstream business chain under the state-owned PT Pertamina (Persero) which focuses on the infrastructure to support the distribution and marketing of energy products such as gasoline and liquefied petroleum gas (LPG). Bunga Tani is an essential oil distiller community which is located in Wayame Village that is under the first ring area of IT Wayame. Bunga Tani has been producing essential oils traditionally since 2015. In the year 2023 IT Wayame established contact and initiated cooperation with Bunga Tani through a community empowerment program called “Atsiri Dusun Keranjang Wangi” and have invested in various aspect both materially and non-materially in order to modernize the production of the community of essential oil distiller without eliminating its cultural value. Bunga Tani produces four types of essential oils which were mentioned in the introduction section of this paper that comes at various bottle sizes. At the time of writing this article, the community empowerment program is in its second year out of the five year planned program. Together with various relevant stakeholders, IT Wayame will carry out assistances in order to maximize the production and market potential for locally produced essential oil. This paper aims to explore how a rural community can cooperate and synergize with businesses and corporations in order to empower themselves. This paper will describe what assistances has been provided by IT Wayame, explain the methods used, and also show the results of one year of said synergy and assistance.

Methods

This empowerment program which is conducted in Wayame village by IT Wayame adheres to the Participatory Rural Appraisal (PRA) method. PRA as a method is an approach for community empowerment which emphasizes involvement of the community in all of its activity (Lestari, Santoso, & Mulyana, 2020). Muhsin et. al (2018) adds that PRA take a holistic look at aspects in the community including, economic, socio-culture life of the community, education, health, and politics (Muhsin, Nafisah, & Siswanti, 2018). The aim of PRA usually results in these three main points:

1. Obtaining information related to living conditions in the area/village
2. Obtaining information related to the needs and problems that exist in the community
3. Obtaining information related to local potentials that can be used as a means to develop natural resources and human resources for the surrounding community

Using PRA method the community is no longer seen as an object that receives programs from aid providers (top down), it is seen more as the main subject of development who continuously design development programs from in a process of planning, determining priorities, budgeting, implementing, utilizing the outcomes of processes controlled at the community level, and also process of monitoring and evaluation (bottom-up) (Hudayana & et. al, 2019). According to Koralagama et. al (2007) there are three main actors in PRA methods: the community, facilitating institutes, and resource institutes. Here is a graph which can help in visualizing the relation between those three main components in PRA:

Figure 1 Three Main Actors of PRA



Source: Koralagama et.al, 2007

In the case of PRA methods which is applied in community empowerment initiatives in Wayame Village, the essential oil distiller group and the Wayame village community represents the community actor. The Community Development Officers (CDOs) from IT Wayame acts as the facilitating institutes, and IT Wayame represents the Resource Institution. This paper will breakdown the PRA method that is used in the case of community empowerment program of Bunga Tani into 4 phases: Planning, Implementation, Capacity Building, and Monitoring and Evaluation using the descriptive qualitative method.

Results

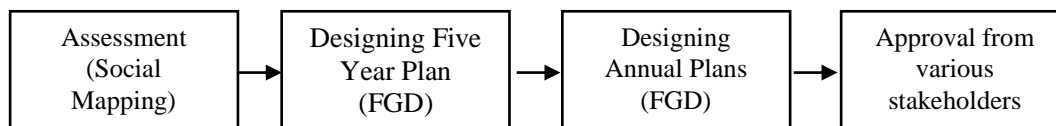
1. Planning Phase

The planning phase of community empowerment program is the first, and arguably one of the most important phase. In this phase every relevant stakeholders need to assess what issues and potential that lingers within the community; also what social capital and values that are present in the community. This is done to ensure that the design and goals of the community empowerment program addresses and are relevant to the actual conditions related to the needs and potentials of the community. A common method in assessing the actual conditions within the community is social mapping. IT Wayame invited a team of experts to live in within the community for two weeks in order to analyse and map every aspects in the community including natural resources, financial resources, environmental resources, human resources, and infrastructural resources. Adhering to the PRA method, IT Wayame whom acts as the resource institution and the expert team whom act as the facilitating institute involved the community directly in the assessment phase. The community's involvement includes data sharing, facilitating, evaluation of the assessment results, and so on. All of these results in one comprehensive social mapping report. It is based on this report that shows the potential and cultural value of essential oil production within the community, including all of their potential and issues they are facing. The report shows that Bunga Tani's potential lies on the production skills and their access for the raw materials. On the other hand Bunga Tani faced many of the issues commonly present in traditional production methods, resulting in lower quantity and quality of products.

The next step after social mapping is designing a five year strategic plan for the community empowerment program. The five year strategic plan includes the broad purpose and goals of the community, which translates to the goals of the community empowerment program in the coming five years. The five year plans is also designed while referring to assessment results and the social mapping report. The five year plan then gets broken down into a smaller annual work plan for a more detailed, specific, and concrete steps in order to reach that year's specific goals which is designed annually. These design phase of the five year and annual plan also directly involve the community and every relevant stakeholders. In the case of the plans for Bunga Tani's empowerment program, the designing phase involves multiple focussed group

discussions (FGDs) facilitated by IT Wayame while attended by the local government, various community figures, and also Dinas Koperasi dan UMKM Provinsi Maluku (Department of Cooperatives and Small to Medium Entrepreneurship for the Province of Maluku), and also Bunga Tani themselves. After reviewing the plans' designs, the plan then would be reviewed by every stakeholder that is involved in the community empowerment, mainly the three main actors of PRA before it is approved. The actual planning workflow can be better visualized using this figure below:

Figure 2 Planning Phase Actual Workflow



Source: Researcher's Own Documentation and Data Processing, 2024

It was then decided by every stakeholders that Bunga Tani's five year empowerment plan should aim to modernize the means of production, increasing the quantity and quality of products, and also develop a learning center for essential oil production. This is relevant to the needs and issues which was present in Bunga Tani's operation, but still attempting to conserve the essential oils' cultural value to the community. The plans for the first year was to in modernize the means of production and also the supporting facilities. This include the procurement of shredder machines to shred raw materials faster and all around more efficient. IT Wayame also helped Bunga Tani in building a more permanent structure for their production house. This was done to ensure the sanitary and hygienic quality of the end products. For the second year the focus will be shifted to maximizing market potential which will be concretely done by various certifications to legalize the product so it can legally enter consumer stores (both online and offline platforms) and redesigning the packaging to give the products a more appealing look. IT Wayame worked with Majelis Ulama Indonesia (MUI) (Indonesian Council of Ulama) to issue the halal certificate, and also Badan Pengawas Makanan dan Obat (BPOM) (National Agency of Drug and Food Control) to issue the distribution permit of products. These certificates are required to distribute the products to stores and distributors. Another concrete action that was planned in order to maximize the market potential is cooperation with various government and non-government sector to market the products in various events and public buildings or spaces.

2. Implementation Phase

a. The First Year

In the first year of the empowerment program, Bunga Tani already had the resource and knowledge to produce four different kinds of essential oil. The group leader already owned one hectare of red lemongrass field, and two hectare of patchouli field, both located still in Wayame Village area. Bunga Tani sourced the cloves from local markets around Ambon City and the cajuputi from his family's field in Buru Island. The group leader with Bunga Tani was still chopping and shredding those raw materials traditionally using hand tools such as machetes and knives. The process was slow, tiring, inefficient, unsafe, and unsanitary. A whole 200 Kg of raw material could take half a day to chop and shred into smaller pieces, while not fully extracting the oils inside the raw material. The chopped up raw materials also often be left on the floor for quite a long time, disregarding hygienic and sanitation aspects. This method also prone to result in accidents and injuries as the group leader and his team has to hold the blades near their hands almost all the time in order to chop the raw materials efficiently. Another thing to mention is in the first year, Bunga Tani did not have a permanent structure for their production house. Bunga Tani used the group leader's backyard area which was only roofed and didn't have a wall surrounding the production area. This often means that production had to slow down or even stop in particularly bad weather

The procurement of a shredder machine marks the first step towards the modernization of the essential oil producing method. With the shredder machine, chopping up raw materials became an easy and fast operation. It is also more efficient as raw materials with finer texture can extract more oils out of them. Not to mention that the shredding process becomes more safe and hygienic as the workers doesn't need to

directly use their sharp hand tools and also the machine provides a container to store the chopped up raw materials. Not only the shredding machine, IT Wayame also provided aid for Bunga Tani in constructing a more permanent building. Although it is still located in the group leader's backyard, the indoor space provides shelter from the weather, allowing production to continue regardless of the weather condition. The indoor space also provided shelter for the raw materials from rain, allowing safer storage. Every activities is fully paid by IT Wayame acting as the resource institution without charging a loan to Bunga Tani

b. The Second Year

At the time of writing this paper, the second year of cooperation between Bunga Tani and IT Wayame is still going on. After and FGD had been held earlier in the second year, it was then decided that IT Wayame, and Bunga Tani will focus on maximizing the market potential of the products. This was done by redesigning the whole packaging of the products which includes the bottles itself, the labels, and the outer cardboard packaging. Not only the products themselves, supporting design elements such as X-Banners, pamphlets, paper bags, and business card also got redesigned to give them a more modern and appealing look. This redesign process was done by involving of a Bandung-based professional graphic design agency. This year IT Wayame, and Bunga Tani will also focus on developing online stores in order to expand the reach of the essential oil products, but it will have to wait until the redesign process is done and the second step of the distribution permit from BPOM is issued. On the topic of distribution permit as the time of writing, every stakeholders involved including Bunga Tani, IT Wayame, and BPOM are still trying to work together in issuing the second step of the distribution permit. Another point that was decided in the FGD was another improvement in production efficiency, including the procurement of wood chopper for gathering firewood and the construction of water tower for a faster and more efficient essential oil production.

3. Capacity Building

IT Wayame also provided assistance in improving the skills capacity of Bunga Tani. According to the assessment and social mapping report Bunga Tani already had the required skill and knowledge to produce four types of essential oils. The capacity and skill that was lacking in Bunga Tani and their leader's is in the aspect of business itself, especially in marketing and business organization skills. In order to improve marketing skills of the group, IT Wayame together with Dinas Koperasi dan UMKM Provinsi Maluku as the main expert held a free consultation and training for Bunga Tani which was held in Wayame Village later on the first year. One of the many results from the consultation is the implementation of accountings and organization structure which were not present before the training. IT Wayame also provided technical training for the new procured machines and tools such as the shredder machine. In the future, IT Wayame will also give technical training for newly procured machines and equipment. This is done to ensure the safety of the workers and the efficiency while using the machine.

Another thing that is being done in order to build Bunga Tani's capacity is the establishment of connections with various governmental and non-governmental stakeholders. IT Wayame, and various stakeholders worked together to place and market the essential oil products in as many public places that it is allowed. Bunga Tani's essential oil products has been placed and marketed in places such as: The Ambon City Post Office, Kantor Badan Pertanahan Negara Kota Ambon (Ambon City State Land Agency Office), and various smaller souvenir shops. Bunga Tani's product had also participated in various community market events from various stakeholders including the Dinas Koperasi dan UMKM Provinsi Maluku, Bea Cukai Maluku, and other event organizers.

IT Wayame also provided assistance for Bunga Tani in terms of legality such as halal certification from the MUI. It was done so the products which Bunga Tani produces adhere to the regulation in which the group needs to comply in order to freely distribute their products to stores and distributors. Another goal of issuing the halal certification from MUI was to increase the buyer confidence in the final product; this is relevant considering the demographic of Indonesia that is dominantly consists of Muslims. Along with the halal certification from MUI, IT Wayame also provided assistance in issuing trademark certificate from Kementrian Hukum dan Hak Asasi Manusia (Ministry of Law and Human Rights). A trademark certificate is an official document issued by the Ministry of Law and Human Rights to the Bunga Tani group which legally stated and patented as owner of the essential oil trademark named DUSKAR. It was done so that Bunga Tani could carry out business activities and provide legal protection against unauthorized use or theft of trademarks by other parties. Regarding the distribution permit from BPOM, in the first year IT Wayame

and Bunga Tani could only complete the first certification step out of two which are needed in order to authorize Bunga Tani in distributing their product to stores and distributors freely.

4. Monitoring and Evaluation

Monitoring is carried out by IT Wayame for every two weeks or a month depending on the needs and activities of the distiller group. This is done to make sure that distilling activities continue to run without running into any issues. Monitoring is also done to ensure that empowerment program still aligns with the goals and needs of Bunga Tani Group, which were agreed in the planning phase. In the case of Bunga Tani empowerment program, monitoring often coincides with implementation activities. Another stakeholder that often monitors the development of Bunga Tani is BPOM. BPOM often conduct random monitoring of production condition and product quality to ensure the products still meets the hygienic and sanitary standards. All of these stakeholders work together to ensure that the program empowers Bunga Tani to create a quality product which meets the goals and needs of not only themselves but also Wayame Village community as a whole.

One of the method that is used in evaluating the empowerment program of Bunga Tani is using the Indeks Kepuasan Masyarakat (IKM) (Community Satisfaction Index). The IKM is done annually in the month of December in the form of quantitative and qualitative research methods which involves questionnaire and discussions regarding the evaluation of that years implementation of plans regarding the empowerment program. In the first year of implementation, the community satisfaction index of the empowerment program of Bunga Tani reached a score of 2.95 out of 4.00. The report shows that Bunga Tani and the community were satisfied with their involvement in every stages of the programs, but there were notes that some aspects could have been better. Those aspects were regarding the regeneration for new members of the distiller group and more improvement in production efficiency, especially in larger scale production. The detailed data for each category can be better viewed in table below:

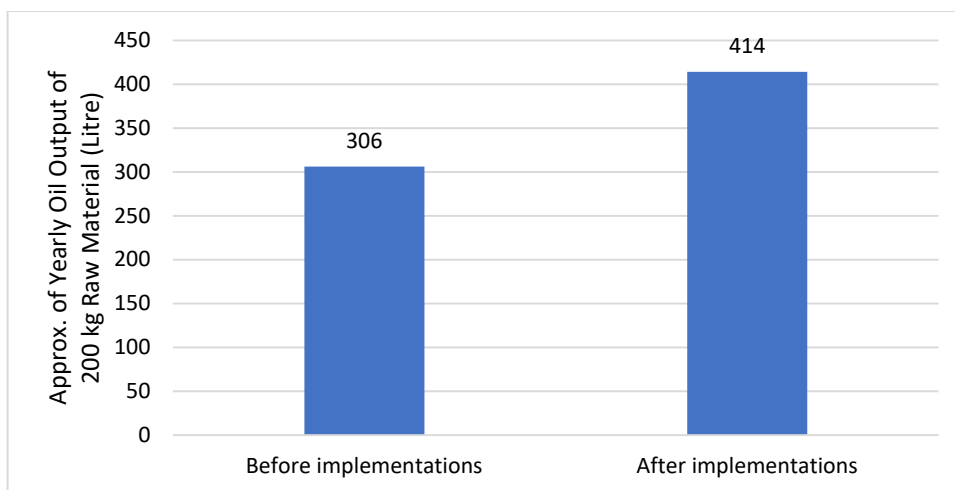
Table 1 Categories for Community Satisfaction Index

Community's satisfaction on planning	2.88	Good
Community's satisfaction on implementation	3.05	Good
Community's satisfaction on benefits	2.95	Good
Community's satisfaction on monitoring and evaluation	2.94	Good

Source: Community Satisfaction Index Report, 2023

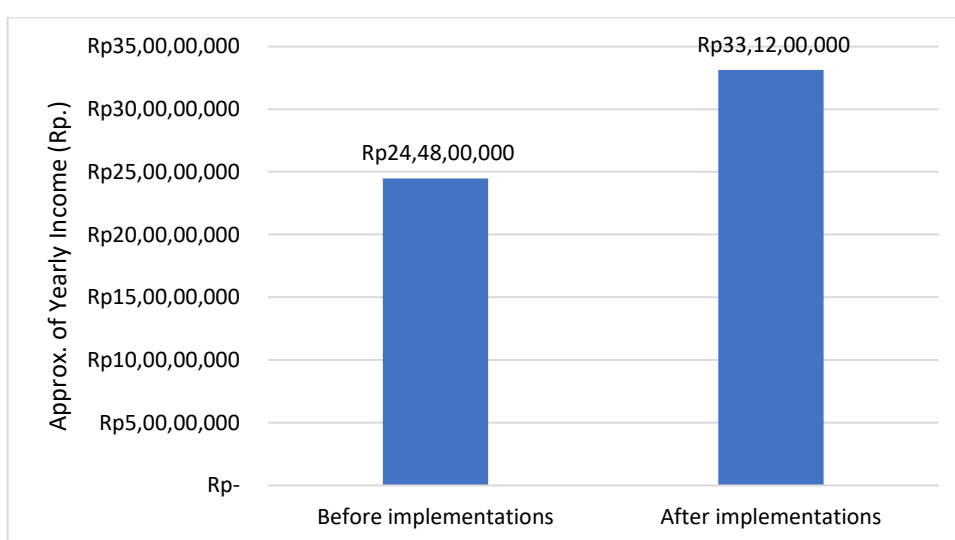
Another thing that was observed in the first year of implementation is an increase of production capacity which in return increases the group's income. Bunga Tani observed an approximately 35% increase in income and production capacity. This is true especially after implementations of planned actions, which were the procurement of the raw material shredder machine and the construction of a more permanent production house.

Figure 3 A Comparison of Bunga Tani's Yearly Oil Output Before and After Implementations



Source: Researcher's Own Documentation and Data Processing, 2024

Figure 4 A Comparison of Bunga Tani's Yearly Income Before and After Implementations



Source: Researcher's Own Documentation and Data Processing, 2024

The figures above approximate the change of production capacity and yearly income which were felt by Bunga Tani after the first year of empowerment program. The calculation above approximates that around 200 Kg of raw materials were needed to produce X amounts of oil which were priced around Rp. 800.000,- (Approx \$50,3)/ Litre of Oil. In the first year we can observe that there's approximately 35% of increase both in production capacity and income of Bunga Tani, while only implementing the procurement of shredding machine for raw materials and construction a permanent production house. This evaluation data became an insight in the annual planning for which aspects that can be improved upon in the next year. Based on this insight, for the second year it was planned to add wood-chopper machine for faster and more efficient way to fuel the boiler, the construction of a water tower as a way to store and efficiently add water to the distillation process, and the maximization of market potential.

Discussion

It is well established that the community empowerment program of Bunga Tani is a five year planned program using the PRA method. The involvement of the community as the main actor of empowerment, that is not only the main beneficiaries but also other relevant community actors becomes the hallmark of this method. The involvement of community as the main actor that is present in Bunga Tani's Empowerment is evidently in-line with Hudayana's statement which states that PRA is method which the empowerment of said community is a bottom up process. Furthermore, Hudayana also states that the benefits of a bottom-up model in community empowerment include a higher likelihood that the program's goals will cater to the needs and potentials of the community itself (Hudayana, et.al, 2019). This is especially true in the case of

Bunga Tani's empowerment program where the facilitator and resources instates let the community identify their own weaknesses and strengths in order to plan their own empowerment strategies.

We can also see how the three actors of PRA synergize in the case of empowerment program for Bunga Tani. We can observe that in Bunga Tani's empowerment program the resource institution, that is IT Wayame doesn't interfere much with the design and goals of the program. The main role of IT Wayame as the resource institution on this empowerment program is to provide financial support and technical knowledge regarding various aspects in the production of essential oils. In this case, IT Wayame provided the financial support for various activities, mainly procurement of operational machines and construction costs. IT Wayame also provides financial aid for other activities such as the process of issuing certificates. The CDOs as program facilitator helps in facilitating rooms and mediums for discussion regarding planning and evaluation such as facilitating FGDs and conducting Community Satisfaction Index Research. The CDOs also help in establishing a network of connections with various stakeholders to help with the community empowerment initiative. Finally Bunga Tani and some of the members of Wayame Village community members acts as the community itself. The community in the case of Bunga Tani's empowerment acts independently in identifying their needs and issues in the planning phase through social mapping. The community is also involved in the evaluation phase through the Community Satisfaction Index Research in order to help the community to reflect on their own empowerment program. All of these conditions aligns with Koralagama's statement which stated that in PRA community empowerment method, the community is the main actor of their own empowerment facilitated by the facilitating institution which are then resourced and supervised by the resource institution (Koralagama, Wijeratne, & De Silva, 2007).

Conclusion

In conclusion corporations play a big role in rural community development and empowerment initiatives, because corporations are more likely to hold resource and technical knowledge which can be important in empowerment initiatives. Although the corporations cannot act alone, the corporations also need to work with facilitators in order to be involved directly with the community, facilitating discussions, reporting, and helping in establishing connection between the community and the corporations and other stakeholders. Lastly adhering to the PRA method, the community needs to determine their own goals, needs, and identifying their own needs, and be involved in the evaluation process. This helps in creating an empowerment program which directly aligns to the community's goals and aspiration. In the case of Bunga Tani's empowerment program which uses the PRA Method, IT Wayame and Bunga Tani themselves have built synergy and acting each of their own roles in forming a comprehensive empowerment program related to the development of traditional essential oils in Wayame Village, Ambon City, Maluku Province.

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