

Inovasi Produk Minuman Sehat Berbahan Baku Lokal untuk Pemberdayaan Ekonomi Kelompok Wanita Tani Roay Lestari di Tasikmalaya

Innovation of Healthy Drinks Products from Local Ingredients for the Economic Empowerment of Roay Lestari Women Farmers Group in Tasikmalaya

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ABSTRAK. Kelompok Wanita Tani berperan strategis dalam memenuhi ketahanan pangan lokal dan pemberdayaan perempuan di sektor pertanian. Kegiatan pengabdian masyarakat ini bertujuan untuk memberdayakan Kelompok Wanita Tani (KWT) Roay Lestari di Tasikmalaya melalui inovasi produk minuman sehat berbahan baku lokal. Kegiatan ini dilaksanakan berdasarkan analisis situasi potensi yang belum dimanfaatkan secara optimal untuk meningkatkan kesejahteraan ekonomi anggotanya. Permasalahan utama yang dihadapi adalah keterbatasan pengetahuan tentang pengolahan hasil pertanian menjadi produk bernilai tambah, kurangnya akses pasar, serta rendahnya keterampilan wirausaha. Melalui pendekatan partisipatif, kegiatan ini menyelenggarakan pelatihan pembuatan minuman sehat dengan teknik *cold pressed juice*, pendampingan pengemasan produk, serta pembekalan kewirausahaan. Hasil kegiatan menunjukkan peningkatan signifikan dalam pengetahuan dan keterampilan anggota KWT tentang pengolahan produk minuman sehat. Tiga jenis minuman sehat yaitu green juice, yellow juice, dan orange juice tanpa bahan tambahan menjadi produk pilihan konsumen terlaris dan juga dua jenis minuman herbal yaitu teh lemon sereh dan kunyit asam. KWT Roay Lestari berhasil mengembangkan inovasi produk minuman kesehatan berbahan baku lokal termasuk produk turunan lainnya seperti teh rempah dan rimpang.

Kata kunci: inovasi minuman sehat, pengembangan produk, pemberdayaan berbasis komunitas

ABSTRACT. Women Farmers Groups play a strategic role in meeting local food security and empowering women in the agricultural sector. This community service activity aims to empower Kelompok Wanita Tani (KWT-Women Farmers Group) Roay Lestari in Tasikmalaya through innovative healthy beverage products made from local ingredients. This activity is carried out based on an analysis of potential situations that have not been optimally utilized to improve the economic welfare of its members. The main problems faced are limited knowledge about processing agricultural products into value-added products, lack of market access, and low entrepreneurial skills. Through a participatory approach, this activity provides training in making healthy beverages using cold-pressed juice techniques, product packaging assistance, and entrepreneurship training. The results of the activity showed a significant increase in the knowledge and skills of KWT members regarding the processing of healthy beverage products. Three types of healthy drinks, namely green juice, yellow juice, and orange juice without additives, became the best-selling consumer products, as well as two types of herbal drinks, namely lemongrass lemon tea and turmeric tamarind. KWT Roay Lestari has successfully developed innovative health drink products made from local ingredients, including other derivative products such as spiced tea and rhizomes.

Keywords: healthy drink innovation, product development, community-based empowerment

INTRODUCTION

Tasikmalaya City is one of the cities in West Java that has a wealth of good natural resources, especially in terms of local raw materials such as fruits, vegetables, and spices that can be processed into value-added products. Data shows that the agricultural sector in Tasikmalaya makes a significant contribution to the regional economy, with various superior commodities spread across various regions (Open Data Tasikmalaya, 2024). However, this potential has not been optimally utilized to improve the welfare of the community, especially women farmers who are one of the main pillars of family and community food security.

The Women Farmers Group (Kelompok Wanita Tani or KWT) is a form of farmer organization consisting of women involved in agricultural activities (DINPPKP, 2023). This is in accordance with Minister of Agriculture Regulation Number 67 of 2016 concerning the Development of Farmers' Institutions. The scope of Farmers' Institutional Development includes Farmers' Groups, Farmers' Group Associations, Agricultural Commodity Associations, and the National Agricultural Commodity Council. The KWT is a development of the Farmers' Group itself as a special forum for women. One of the KWT in Tasikmalaya is KWT Roay Lestari that has potential for business development.

Tasikmalaya is rich in natural resources, particularly local raw materials such as fruits, vegetables, and spices that can be processed into value-added products. However, the group's ability to process local raw materials into competitive products is still limited. Furthermore, knowledge of business management and digital marketing is still minimal, hampering broader business development. Several KWTs have attempted to empower communities through diversification, such as the Macenning KWT and the Salak Canning KWT, which produce Salak Chips and Dodol in Enrekang Regency (Yusuf et al., 2018). Furthermore, in Kulon Progo, there are also KWTs that have diversified local agricultural products, producing cassava chips and coconut chips (Suratna et al., 2021). Food security was also achieved in the Kawalu area of Tasikmalaya during the pandemic by producing herbal products in the form of capsules from Moringa leaves for health and as a business opportunity for the local community (Budiman et al., 2022).

The strategic role of women in agriculture and the rural economy has been recognized globally. Rural women serve not only as food producers but also as managers of household resources and agents of socio-economic change. Women's Farmers Groups (KWT), as women's organizations in the agricultural sector, have significant potential for capacity development in managing local food businesses. However, many KWTs face various challenges that hinder their business development. The main challenges include limited knowledge about processing agricultural products into value-added products, lack of market access, and low entrepreneurial skills (Radar Tasik, 2024). Agriculture plays a strategic role in achieving food security, increasing competitiveness, absorbing labor, and alleviating poverty. By 2024, the Global Food Security Index (GFSI) is expected to reach 69.8, with the utilization of agricultural technology and innovation reaching 80-95 percent (Kementerian Pertanian, 2021). Therefore, community economic empowerment through agriculture, utilizing various innovations and technologies, especially for women, is crucial.

The low added value of local agricultural products is a classic problem faced by farmers in Indonesia, including in Tasikmalaya. Many agricultural products are sold raw at relatively low prices, while processed products with high added value are dominated by large industrial products from outside the region. This phenomenon prevents micro and small businesses at the farmer level from maximizing the economic value chain of local agricultural products. However, with proper processing, local agricultural products can have a much higher selling value and compete in a wider market.

On the other hand, there is a shift in consumption trends in society, especially in urban areas, with increasing concern for health and a healthy lifestyle. Healthy drinks such as cold-pressed juice are currently trending among urbanites who are aware of the importance of consuming natural nutrients. Cold-pressed juice is juice made using a cold-pressing method that maximizes the nutrients, vitamins, and enzymes in fruits or vegetables (Times Indonesia, 2021). This method differs from conventional blenders, which use rapidly rotating blades that can generate heat and reduce the nutritional content of the raw materials. This trend of consuming healthy drinks opens up huge opportunities for the development of innovative products made from local ingredients that can meet the ever-increasing market demand.

The Tasikmalaya City Government has established a food security policy as a regional development priority, with a focus on improving human resource capacity and developing agriculture-based micro, small, and medium enterprises (MSMEs) (Perda Tasik Nomor 5 Tahun 2017). This policy aligns with community empowerment programs implemented by universities through the Tri Dharma Perguruan Tinggi (Three Pillars of Higher Education), particularly community service. University of Siliwangi, as one of the universities in West Java, is committed to contributing to community development through various community service programs that have a direct impact on improving community welfare.

Based on observations, this KWT Roay Lestari is strategically located because it has close access to several universities, schools, and community activity centers. In addition, Kahuripan Village is one of the areas with the lowest population density, namely 6,887 people/square kilometer, with an area of 47.10 percent in Tawang District in 2022 (BPS Kota Tasikmalaya, 2023). There is a big potential of KWT Roay Lestari to expand the product from the harvest to become more added value such as healthy drinks. As with community service that has been carried out previously in several cities such as in Enrekang Regency (Yusuf et al., 2018), Kulon Progo (Suratna et al., 2021), and Tasikmalaya (Budiman et al., 2022).

Community empowerment is a key focus in the implementation of the Tri Dharma of Higher Education, particularly community service. University of Siliwangi, as a university in West Java, is committed to contributing to community development through various community service programs. One effort that can be undertaken is through the economic empowerment of women's farming groups that have great potential but still need capacity building in managing their businesses. The Roay Lestari Women's Farmers Group (KWT) in Tasikmalaya is a group with potential for business development. Tasikmalaya has abundant natural resources, especially in terms of local raw materials such as fruits, vegetables, and spices that can be processed into value-added products. However, the group's ability to process local raw materials into competitive products is still limited. Furthermore, knowledge of business management and digital marketing is still minimal, thus hampering broader business development.

The use of spice plants, vegetables and fruit from KWT can also be utilized for health. The less-than-optimal utilization of plantation products is no longer due to inadequate technology and facilities, but rather because the community demands products with high practical value, healthy, and easy to consume. Vegetables and fruit are not directly sold but are used as a type of ready-to-drink beverage made from 100% pure vegetable and fruit juice, called cold-pressed juice. Cold-pressed juice is produced from the process of extracting fruit and vegetables using a special juicer. The difference from juice using a blender is that the blade or extractor uses steel that rotates quickly and crushes the vegetables and fruit to extract the fruit and vegetable juice, eliminating the need for additional food additives (BTP) such as sweeteners, flavors, colorings, preservatives, and flavor enhancers (Khaksar et al., 2019). Furthermore, the advantage of cold-pressed juice compared to regular juice is that 80% of the nutritional content of vegetables and fruit is maintained, compared to regular juice where only 40% of the nutritional content is still available (Baykus & Unluturk, 2024).

Innovative healthy beverage products made from locally sourced ingredients are one solution that can be developed to increase the economic value of local agricultural products. Healthy drinks such as cold-pressed juice are currently trending among health-conscious consumers. Cold-pressed juice is made using a cold-pressing method that maximizes the nutrients, vitamins, and enzymes in fruits and vegetables. This method differs from conventional blenders, which use rapidly rotating blades. Through this activity, the Roay Lestari Women's Farmers Group is expected to develop a sustainable and competitive healthy drinks business in the market, thereby improving the economic well-being of its members. The objective of this community service activity is to empower Kelompok Wanita Tani (KWT-Women Farmers Group) Roay Lestari in Tasikmalaya through innovative healthy beverage products made from local ingredients.

METHOD

This research was conducted using the Participatory Action Research (PAR) method, which involves the community in community service activities. This method enables a democratic and equitable process by providing experience and knowledge to those involved, thus educating them to think critically about existing problems (Siswadi & Syaifuddin, 2024).

This community service activity was carried out from June 14, 2025 to September 20, 2025 at the Roay Lestari Women Farmers Group, precisely located on Jalan Peta Gunung Roay RW 14, Kahuripan Village, Tawang District, Tasikmalaya City. Participants in this community service activity were 20 members of the Roay Lestari Women Farmers Group supported by various parties such as the Cipedes Agricultural Extension Center of Tasikmalaya City, the Field Agricultural Extension Workers of the Tawang District Assisted Area, and the Village as well as the Head of RW 14 and the Head of RT 05 of Kahuripan Village, Tawang District, Tasikmalaya City. The stages of implementing this community service program began with identifying problems and solutions, planning the service program, surveying and socializing the program implementation, implementing the service program and evaluating the program implementation.

On June 14, 2025, initial survey and program socialization are conducted. This agenda consists of site survey, program socialization, coordination with management, and data collection and recording of the initial conditions of the facilities to be used to ensure readiness for implementation of the community service activities for the Roay Lestari Tasikmalaya Women Farmers Group.



Figure 1. Initial Survey and Socialization of Activity Plan

After that, Focus Group Discussion (FGD) and counseling on 30 June 2025. It began with a Focus Group Discussion (FGD) on the potential for developing healthy drinks using local ingredients and raising awareness about the importance of agricultural product diversification in supporting family economic resilience. This is in line with Taufik et al. (2025) assertion that agricultural product diversification programs are necessary to improve food security and economic well-being. Therefore, this community service program also seeks to introduce various types of locally sourced crops that can be cultivated and later processed into products with higher economic value.



Figure 2. Focus Group Discussion and Product Diversification Counseling

RESULT AND DISCUSSION

Implementation of Community Service Program

1. Counseling on the Benefits of Health Drinks - 5 July 2025

This health drink outreach program focused on understanding the benefits of healthy

drinks made from local ingredients and the opportunities for developing processed products that can improve community health and well-being. Furthermore, the team provided guidance on processing local raw materials into nutritious beverages, packaging strategies, and marketing potential to strengthen the economy of farmer groups. Marzuki et al. (2023) reported that herbal drinks derived from spices and rhizomes such as turmeric and tamarind have been shown to contain nutrients and active compounds that can boost the body's immune system.



Figure 3. Counseling on the Benefits of Health Drinks

2. Handover and Planting of Seedlings - 10 July 2025

This activity supports the sustainable availability of local raw materials, strengthens the food security of farmer groups and teams by assisting in the planting process, providing technical guidance on seedling care, and encouraging the implementation of environmentally friendly agricultural systems.



Figure 4. Handover and Planting of Seedlings

3. Introduction and Training of the Machine and Workshop on Making Healthy Drinks - 13 July 2025

This activity focused on improving the skills of members of the Roay Teratai Women Farmers group in operating processing equipment, processing local raw materials into healthy, value-added beverage products, and providing direct assistance in beverage manufacturing practices, packaging techniques, and product development strategies for wider marketing. Participants were provided with training on how to use and clean the equipment. Furthermore, participants demonstrated high enthusiasm for processing fruit and vegetables into healthy drinks that can be enjoyed by the community through this empowerment program, thereby improving the economy sustainably.



Figure 5. Introduction to the Machine and Workshop for Making Healthy Drinks

Impact and Benefits for the Roay Lestari Women's Farmers Group

Based on the evaluation results through observation and a reflection session at the end of the activity, the Roay Lestari Women's Farmers Group responded very positively to this activity. The impacts and benefits experienced by the Roay Lestari Women's Farmers Group members include:

a. Impact on the Roay Lestari Women Farmers Group

1. Monitoring and Evaluation of Healthy Drink Innovation Production - 5 September 2025

This activity focused on monitoring and evaluating improvements in the quality of healthy beverage production, the efficiency of raw material use, and strategies for maintaining product consistency. In addition, raw material purchasing and Kale harvesting activities were carried out to support the availability of local ingredients while strengthening food security and the economic independence of farmer groups. This monitoring and evaluation process is crucial for providing constructive input and criticism for the business development of KWT Roay Lestari. These improvements include internal communication, financial and business management, product marketing, and effective production processes for greater hygiene and security.



Figure 6. Monitoring dan Evaluation

2. Routine Monitoring and Evaluation of Healthy Drink Production Business Management and Offline Store and Production Site Layout Plan - 14 September 2025

Activities focused on business sustainability, improving production quality, developing group business management strategies, and providing assistance in designing the layout of offline stores and production areas to be more effective, hygienic, and support the branding of healthy beverage products. Following monitoring and evaluation, the offline stores were cleaned and re-designed, and banners were installed to promote brand

awareness.



Figure 7. Monitoring dan Evaluation Production House

3. *Workshop of Business Management - 20 September 2025*

The workshop, titled "Build Confidence and Manage Business Finance," emphasized the importance of self-confidence as a key asset in starting a business. The second session introduced simple financial methods using Excel to facilitate monitoring of income and expenses. During the training, members of the KWT Roay Lestari demonstrated improved self-confidence and an understanding of the importance of product branding, in addition to the personal branding they have been pursuing. This workshop was held as part of a series of monitoring processes that revealed that KWT Roay Lestari needed training for business management and financial recording.



Figure 8. Workshop of Business Management

The majority of the Roay Lestari Women's Farmers Group has felt the positive impact of this community service program. This program is highly relevant to the Roay Lestari Women's Farmers Group's needs in developing their businesses. The Roay Lestari Women's Farmers Group has experienced direct economic empowerment through the innovation of cold-pressed juice and herbal drinks, which are considered innovative and have good market potential. Furthermore, the provision of agricultural product diversification and healthy beverage counseling, as well as workshops on business and financial management, have also been deemed highly beneficial for managing their businesses more professionally.



Figure 9. Sales of Healthy Drink Products from KWT Roay Lestari

In this community service program, participants also completed pre-test and post-tests, with results showing that 70% of participants achieved improved scores after the outreach. This demonstrates a greater understanding of the benefits of health drinks and various types of spices and rhizomes. This aligns with the program's goal of increasing literacy on the importance of consuming healthy drinks. It is hoped that members of the Roay Lestari KWT will have sufficient knowledge before starting to produce innovative healthy drinks.

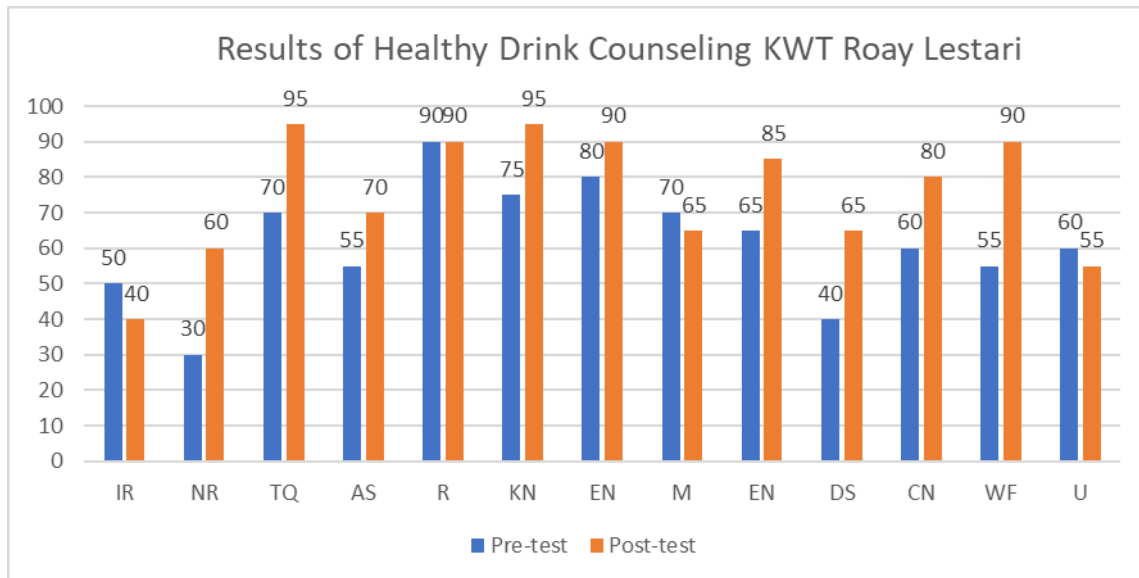


Figure 10. Pre-test and Post-test Results of Extension Material

Members of KWT Roay Lestari demonstrated an increased understanding of the importance of consuming healthy beverages. Furthermore, healthy beverages can be produced from locally available raw materials, such as vegetables, spices, and rhizomes. Maintaining a healthy lifestyle is essential for a sustainable lifestyle. Members of KWT Roay Lestari are beginning to experience the benefits of healthy beverages made from readily available raw materials and are also able to produce crops with greater economic value through the production of healthy beverages from this community service activity. The use of technological innovations such as slow juicers makes it easier for members to produce simple, healthy beverages that have high health benefits and can improve their well-being.

b. Benefits for Business Development

The Roay Lestari Women Farmers Group stated that this activity was very beneficial for the development of their business. With the knowledge and skills gained, the Roay Lestari Women Farmers Group feels more confident in developing healthy beverage products using local ingredients and managing the business more professionally. In addition, plans to expand the business with an offline store will also be carried out so that the business can produce daily. The members of the Roay Lestari Women Farmers Group feel the benefit of this community service program is that healthy drinks do not have to be in the form of traditional herbal medicine, but can also be produced and consumed in more modern forms and have flavors that suit today's tastes without reducing the quality of the nutritional content and nutrients in the fruits, vegetables, and herbs used in the production process. Through modern technology-based tools, healthy drinks can be packaged more attractively and increase public awareness of having a healthy lifestyle. The process of increasing awareness and branding of this product innovation has a positive impact on the development of the business being carried out.

Since the first production process on July 17 to September 8, 2025, at least 155 bottles of healthy beverage products have been produced and sold at various events such as Agricultural Service Day, the Tasikmalaya City Inflation Stabilization Stall (Wangsit), and also through the delivery order system. This realization has exceeded the initial target of service with 20 products sold in one month. The production of these healthy beverages must

guarantee freshness and cleanliness to maintain product quality so that the benefits of the product and its sales can be sustainable and provide increased impact and real benefits not only for KWT Roay Lestari members but also the surrounding community and consumers who buy the products.



Figure 11. Sustainable Production of Healthy Drinks by KWT Roay Lestari

CONCLUSION AND RECOMMENDATION

This community service program, implemented from June to September 2025, has had a significant positive impact on the Kelompok Wanita Tani (KWT-Woman's Farmers Group) Roay Lestari. This activity has succeeded in empowering KWT Roay Lestari in Tasikmalaya through the innovation of healthy drink products made from local ingredients. KWT Roay Lestari has successfully strengthened their capacity in diversifying agricultural products and processing them, improving financial management skills, and developing more effective business development strategies. This community service program not only increased product quantity and revenue but also raised public awareness of healthy beverage consumption while encouraging sustainable economic empowerment efforts.

Further community service activities are recommended to collaborate with local micro, small, and medium enterprises (MSMEs) and consistently utilize digital platforms such as marketplaces and social media to expand market reach and build a strong brand for KWT Roay Lestari members. Furthermore, efforts to manage halal certification, Home Industry Food (Pangan Industri Rumah Tangga/PIRT), and other legal requirements are also necessary. With support from various parties and a commitment from KWT Roay Lestari to develop the business, it is hoped that cold-pressed juice products and herbal drinks made from local ingredients can develop sustainably and have a positive impact on the economic empowerment of KWT Roay Lestari members and the general community in Tasikmalaya.

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