

Women's Economic Empowerment Based on Waste Bank Management to Improve Economic and Psychological Well-Being in Tourist Alleys

Pemberdayaan Ekonomi Perempuan Berbasis Manajemen Bank Sampah Untuk Meningkatkan Ekonomi dan Psikologis Well Being pada Lorong Wisata

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Abstract

This community service programme aims to empower Women Farmers Groups (KWT) through creative economy training and improving the professionalism of waste bank management in tourist alley areas. The background to this is the low income of KWT due to the sale of raw waste without added value and unstructured waste bank management, resulting in a lack of financial transparency. The programme aims to improve the welfare of KWT members while promoting sustainable waste management. The implementation method consists of three main stages: 1) Waste Bank Management Training, 2) Waste-Based Creative Economy Training, and 3) Digital Marketing and Partnerships. The programme lasts for six months, combining intensive training with mentoring. The expected outcomes are an increase in KWT members' income, a reduction in the volume of waste in tourist alleys, and the establishment of independent and professional waste banks. Long-term impacts include improved family economics, cleaner and more attractive tourist lanes to support eco-tourism, and KWT independence in managing the environment and creating business opportunities. With a participatory approach, this programme creates green jobs and aligns with several Sustainable Development Goals (SDGs).

Abstrak

Program layanan masyarakat ini bertujuan untuk memberdayakan Kelompok Wanita Tani (KWT) melalui pelatihan ekonomi kreatif dan meningkatkan profesionalisme pengelolaan bank sampah di kawasan lorong wisata. Latar belakang program ini adalah pendapatan rendah KWT akibat penjualan limbah mentah tanpa nilai tambah dan pengelolaan bank sampah yang tidak terstruktur, yang mengakibatkan kurangnya transparansi keuangan. Program ini bertujuan untuk meningkatkan kesejahteraan anggota KWT sambil mempromosikan pengelolaan limbah yang berkelanjutan. Metode implementasi terdiri dari tiga tahap utama: 1) Pelatihan Pengelolaan Bank Sampah, 2) Pelatihan Ekonomi Kreatif Berbasis Sampah, dan 3) Pemasaran Digital dan Kemitraan. Program ini berlangsung selama enam bulan, menggabungkan pelatihan intensif dengan pembimbingan. Hasil yang diharapkan meliputi peningkatan pendapatan anggota KWT, pengurangan volume sampah di lorong-lorong wisata, dan pembentukan bank sampah yang mandiri dan profesional. Dampak jangka panjang meliputi perbaikan ekonomi keluarga, lorong-lorong wisata yang lebih bersih dan menarik untuk mendukung ekowisata, serta kemandirian KWT dalam mengelola lingkungan dan menciptakan peluang bisnis. Dengan pendekatan partisipatif, program ini menciptakan lapangan kerja hijau dan sejalan dengan beberapa Tujuan Pembangunan Berkelanjutan (SDGs).

Keywords: Women's Empowerment; Waste Bank; Creative Economy; Tourist Alley; Community Welfare

1. Introduction

An analysis of the situation in Karunrung Village, a village in Rappocini Subdistrict, Makassar City, South Sulawesi Province. Karunrung Village has an area of approximately 152.07 hectares (1.52 km²) and is one of 11 villages in

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Rappocini Subdistrict. Karunrung Village has a population density of 13,761 people with a density level of 8,838 people/km² based on data from the Central Statistics Agency in 2024. The daily life of the people of Karunrung Village is characterised by a fairly high population density with a wide variety of occupations, resulting in a very high density in each area. The density of residential houses forms alleys that are passed by the surrounding community. The utilisation of these alleys by the Makassar City Government is considered quite successful because it has turned the alleys into a new tourist destination called tourist alleys (*longwis*).

The current problem with tourist alleys as the target of this empowerment programme is that they are areas that have community-based tourism potential but have not been optimally managed. This area is inhabited by a group of women, most of whom are housewives. The main potential identified in this area is household waste that has not been properly managed, which has the potential to be used as raw material for recycling. However, limited skills in waste processing and product marketing, as well as minimal access to technology for waste bank management and digital marketing, are the main obstacles faced (1).

The current situation of the partners can be seen from three aspects. From an economic perspective, the low income of women is caused by the absence of organised waste-based productive businesses. Data shows that none of the partners have a structured waste management system. From an environmental perspective, the piles of waste in the tourist alley reduce the attractiveness of the area, with 60% of residents still disposing of waste directly to the final disposal site without recycling. Meanwhile, from a psychological perspective, the economic burden and stigma attached to informal work cause stress for 70% of women who feel insecure, based on studies and direct discussions with groups of women farmers who are potential target partners.



Figure 1. Initial Observations

Based on initial observations, the target partners are located in Lorong Wisata KWT KARYA 2, Karunrung Village, Makassar City, with a target of 24 female group members located in the tourist alley. Supporting data shows the actual conditions through existing photographs of piles of rubbish and the tourist alley. From a marketing perspective, product distribution relies solely on direct sales at the tourist location without an adequate marketing strategy. The lack of social media or digital platforms for marketing is a major obstacle, compounded by the lack of supporting facilities such as shredders or computers to manage the business.

Management aspects also pose a serious challenge, as partners do not have good financial records and their knowledge of entrepreneurship is still very limited. Quantitative data shows that only 5% of waste is successfully recycled, while 90% of women have never received waste management training. This programme will be managed by the Karunrung Raya 2 Women Farmers Group (KWT KARYA 2), which is a group of women engaged in agricultural activities based on harmony, familiarity and shared use of agricultural resources in order to increase the productivity of farming businesses and the welfare of its members. The empowerment of women through farmer groups aims to help achieve food security, reduce hunger, and increase the efficiency of policy interventions.

2. Methods

The approach offered in the effort to realise the Community Empowerment Partnership (PKM) programme with a focus on two problem areas, namely waste management and management & technology, is as follows:

Waste Management in Tourist Alleys

1. Low community participation in maintaining cleanliness in tourist alleys.

Community participation in maintaining the cleanliness of tourist alleys requires a collaborative approach involving education, incentives, and empowerment.

Method of implementation:

- a. Review of documents and observations related to the potential of the alleys in Karunrung Village.
- b. Preparation of a draft of the potential of the alleys in Karunrung Village.
- c. Socialising the draft results of observations and assessments of the potential of community alleys to Karunrung Village and the surrounding community.
- d. Socialisation was carried out using lectures, question and answer sessions, and discussions.

The combination of these various implementation methods is expected to increase community understanding and awareness of the potential use of alleys as tourist destinations and the importance of maintaining cleanliness in their management.

Suboptimal waste sorting by households.

The effectiveness of household-based waste sorting requires the implementation of comprehensive strategies that are participatory and sustainable. This solution is designed as an integrated system that covers technical, educational, and motivational aspects through a community-based approach.

Method of implementation:

- a. Prepare a draft of strategic steps for optimal household waste sorting in tourist alleys based on the results of previous research.
- b. Hold live demonstrations of door-to-door household waste sorting to provide direct insight to the community. Conduct socialisation through lectures, question and answer sessions, and discussions.

By implementing these various implementation methods, it is hoped that understanding and awareness of waste sorting measures can be effectively achieved.

Lack of education on how to sort waste properly, especially at the household level.

This programme focuses on establishing a culture of waste sorting through participatory learning methods that target all family members, with a special emphasis on housewives as the main managers of domestic waste (3).

Implementation methods:

- a. Holding discussions with groups of mothers in an effort to educate family members about waste management.
- b. Providing assistance to community groups regarding obstacles and constraints in implementing education.
- c. By implementing these various implementation methods, it is hoped that domestic waste sorting will be carried out by all family members in maintaining the initial cleanliness of tourist corridors and providing economic value to waste that enters the waste bank.

Participation of the Karunrung Raya 2 Women Farmers Group (KWT KARYA 2) in Community Partnership Empowerment (PKM) includes:

- a. The Partner Group (KWT KARYA 2) is willing to cooperate in the implementation of Community Partnership Empowerment (PKM).
- b. The Partner Group (KWT KARYA 2) is willing to assist in managing the waste bank in the tourist alley.
- c. The Partner Group (KWT KARYA 2) is willing to establish a structured waste bank management system.
- d. The Partner Group (KWT KARYA 2) is willing to conduct outreach on the waste management system that has been developed.
- e. The Partner Group (KWT KARYA 2) is willing to assist in preparing documents for the management of the waste bank in the tourist alley.

3. Result and Discussion

Waste Bank Management-Based Management to Improve Economic and Psychological Well-Being in Tourist Alleys has been implemented through several comprehensive and participatory stages. These stages were designed to ensure not only the transfer of technology, but also understanding, adoption, and long-term maintenance capacity by the partners, namely the Women Farmers Group in Karunrung Village. Overall, the enthusiasm and active involvement of the partners were key to the success of each stage of the activities carried out.



Figure 2. Partner Visits and Assistance

The first stage of the activity began with trust building. The community service team made regular visits, not with a formal agenda, but to chat, listen to complaints, hopes and aspirations of women regarding their environment and economic conditions. This humanistic approach succeeded in creating a friendly atmosphere and dispelling suspicion. From these dialogues, the need for a forum for productive activities and solutions to the problem of rubbish that was spoiling the aesthetics of the tourist alley became increasingly apparent. This desire for change was then crystallised through the Socialisation of the Integrated Waste Bank Concept. The socialisation not only explained the theory, but also showed examples of success stories and inspirational videos from other regions, and most importantly, simulated the potential income from waste that had previously been ignored. The participants' eyes lit up when they realised that 'waste' could be 'gold'.

The tangible result of this phase was the formation of the 'KWT Karya II' Women's Group, consisting of 25 members. The formation of this group was a significant social achievement. They agreed to establish a simple management structure consisting of a chairperson, secretary, treasurer, and operational divisions. They chose the name 'Srikandi' themselves as a symbol of strong women who contribute to their environment. The democratic process of choosing a name and management was their first exercise in joint decision-making.

The second stage focused on capacity building. Intensive training was provided in several modules. The Waste Bank Management Training taught a simple but accountable administrative system, ranging from waste savings books, transaction records, to basic financial reports. They were taught how to weigh and classify types of waste (PET plastic, PP, HD, paper, cardboard) and learn their respective market prices. The Upcycling Skills Training was the most anticipated module. Here, they are not only taught how to sell raw waste, but also how to turn it into products with higher selling value. Training in making products from plastic packaging and old newspapers into crafts and ecobricks has been met with great enthusiasm. This process is not just about teaching manual skills, but also stimulating their creativity and confidence that they are capable of creating something of value.

In addition to technical training, psycho-social and entrepreneurial mentoring are also key components. Group sessions are facilitated to build confidence, communication skills, and teamwork. Participants are encouraged to speak up, express their opinions, and solve problems together. Entrepreneurial values such as independence, perseverance, and quality orientation are also continuously instilled. The third stage is implementation and operationalisation. A small space at the end of the alley was agreed upon and revitalised into the 'Tabungan Bumi' Waste Bank. This space was designed participatively by group members with colourful paint and ornamental plants, reflecting the spirit of the tourist alley. The operational system is simple: every Tuesday and Friday, members can deposit their sorted waste. Officers will record this in individual and collective savings books. At the end of each month, the proceeds from the sale of waste to collectors are distributed according to each person's savings. In addition, a small display case is set up to sell handicraft products made during upcycling training.



Figure 3. Planting in Pots and Waste Management Training

1. The impact of this activity has begun to be seen and measured in several aspects:

Economic Impact:

Financially, there has been a significant increase in additional income for members. On average, each member is able to earn an additional £5 - £10 per month just from saving rubbish. Sales of upcycled handicraft products are still incidental but have successfully penetrated the tourist market, with a turnover of around £70 in the first three months. More importantly, their financial literacy has improved. They are now accustomed to record-keeping, understand cash flow, and have personal savings from their own hard work. This money is generally used for children's education, additional daily expenses, or saved for emergencies.

Impact on Psychological Health and Well-Being:

The changes in this area are even more profound. There has been a noticeable increase in confidence and self-esteem. They no longer introduce themselves only as 'housewives', but also as 'waste bank managers' or 'craft entrepreneurs'. They are more courageous in voicing their opinions in group discussions and community meetings. Their agency has increased; they feel they have control and the ability to change circumstances. Social networks and social support have also strengthened. The 'KWT Karya II' group has become a safe space for sharing, not only about waste, but also about personal and family issues, reducing psychological burdens and feelings of isolation. Joint activities have fostered a strong sense of pride and belonging to their neighbourhood.

Environmental Impact:

The tourist alley has become cleaner and more organised. The volume of waste ultimately disposed of at the landfill has been significantly reduced by up to 40% because it has been sorted and recycled. Awareness of sorting waste at source (households) has become a new habit, not only for group members, but also slowly influencing neighbours. The 'Tabungan Bumi' Waste Bank has become a living lab for environmental education for residents and even schools in the surrounding area.

Impact on Tourist Corridors:

The existence of waste banks and their handicraft products has become a new tourist attraction. Many tourists are interested in visiting, taking photos, and buying handicraft products as souvenirs. This adds educational value to the alley. Women's groups have now become new actors in the management of the tourist alley, and their voices are being heard more in tourism planning because of their tangible contributions.

Overall, the implementation of this activity has succeeded in laying a strong foundation for a sustainable empowerment model. Change does not happen instantly, but through a consistent and participatory assistance process. Challenges such as maintaining consistency in waste sorting and developing the marketing of handicraft products still exist, but the collective spirit and capacity that has been built are valuable social capital for addressing them. This programme proves that with the right approach, waste can be transformed into a tool for empowerment that brings double benefits: better economic conditions and higher psychological well-being for women.

Table 1. Results of Activity Implementation

Impact Aspects	Concrete Results & Achievements
Economic Impact	<ul style="list-style-type: none"> a. Increased Income: Members earn an average of £5–£10 per month from waste savings. b. Product Sales: Recycled handicraft products successfully penetrated the tourist market with a turnover of around £70 in the first three months. c. Financial Literacy: Members are accustomed to bookkeeping, understanding cash flow, and having personal savings. d. Fund Utilisation: Proceeds from activities are used for children's education, additional daily expenses, and emergency funds.
Psychological Impact & Well-being	<ul style="list-style-type: none"> a. Identity & Self-Confidence: A shift in perspective from simply being a ‘housewife’ to becoming a ‘waste bank manager’ or ‘craft entrepreneur’. b. Courage to Express Opinions: More courage to speak up in group discussions and community meetings. c. Self-Control (Agency): Feeling in control and capable of changing circumstances. d. Social Support: The “KWT Karya II” group has become a safe space for sharing personal/family problems, reducing psychological burdens and isolation. e. Sense of Belonging: A growing sense of pride and strong sense of belonging to the neighbourhood.
Environmental Impact	<ul style="list-style-type: none"> a. Area Cleanliness: Tourist corridors are cleaner and tidier. b. Waste Reduction: The volume of waste disposed of in landfills has been significantly reduced by up to 40% due to sorting and recycling. c. Behavioural Change: Sorting waste at source (households) has become a new habit that is beginning to spread to neighbouring communities. d. Education: The “Tabungan Bumi” Waste Bank has become a living laboratory for environmental education for local residents and schools.

4. Conclusion

The Women's Economic Empowerment Programme Based on Waste Bank Management in Lorong Wisata has proven itself to be an effective, holistic and sustainable intervention model. This programme has successfully transformed two classic problems—waste and low economic participation of women—into a synergistic opportunity that produces a double impact. Economically, the programme not only provides additional income for women group members but also builds a solid foundation of financial literacy and entrepreneurship. Socially and psychologically, the programme has become a catalyst that strengthens confidence, self-esteem, pride, and social support networks among women, which ultimately significantly improves their psychological well-being. From an environmental perspective, the programme has succeeded in significantly reducing the volume of waste ending up in landfills while instilling a culture of responsible waste sorting and management at the household level. This success is inseparable from the participatory approach that involves the community as subjects from the outset, as well as the careful integration of simple technology (hard technology) and empowerment methodologies (soft technology) that are relevant to the local context and needs. Thus, this programme has laid a strong foundation for the creation of a sustainable community-centred empowerment model.

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