

Implementation of Dago Barat Resik and Hejo (Dabaresih) Program Toward Increasing Public Awareness in Waste Management in RT 08 RW 05 Dago Urban Village Bandung City Bandung

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ABSTRACT

The Dago Barat Resik dan Hejo (Dabaresih) program in RT 08 RW 05, Dago Subdistrict, Bandung City is a community-based initiative aimed at increasing awareness and participation of residents in household waste management in an independent and sustainable manner. The theoretical framework used in this study includes concepts of waste management, program implementation, Bloom's Taxonomy, and community participation. This research aims to describe the implementation of the program, evaluate the results of waste management, and examine the improvement of community participation. The study employed a qualitative approach with observation, interview, and documentation techniques. The findings indicate an increasing involvement of residents in sorting, collecting, and processing waste, supported by continuous education, empowerment of environmental cadres, and economic incentives through waste savings schemes. The application of the 3R principles (Reduce, Reuse, Recycle) and innovations in waste processing, such as composting and maggot cultivation, also strengthen the program's success. Community participation has improved not only quantitatively but also in terms of attitudes and behavior. The program has become an effective model of community-based waste management capable of creating sustainable social and environmental change. Recommendations include strengthening education, utilizing digital technology for monitoring, and fostering cross-stakeholder collaboration.

Kata Kunci: Dabaresih; waste management; community participation; community; sustainability.

INTRODUCTION

Waste management in urban areas presents a complex and significant challenge in Indonesia, driven by the rapid growth of the population and changing consumption patterns. In 2024, Indonesia's national waste production reached approximately 34.3 million tons annually across 319 districts and cities, with 40.3% of this waste remaining inadequately managed (KLHK, 2024). The increasing domestic activities and population have led to a continuous rise in household waste volume. Improper waste management can cause various environmental issues, including air, soil, and water pollution, and poses health risks and discomfort to communities. This condition is particularly reflected in RT 08 RW 05, Kelurahan Dago Barat, Kecamatan Coblong, Kota Bandung. Despite the availability of some waste management facilities, the accumulation of domestic waste is frequently observed, and waste segregation practices remain inconsistent. Many residents still follow the

conventional collect-transport-dispose method. National data indicates that only around 59.7% of waste is properly managed, while the rest pollutes the environment (KLHK, 2024). Research also points to low awareness and capability among communities in separating and processing waste, due to limited education and infrastructure (Rahdriawan, 2017).

Theoretically, community-based waste management empowers residents as primary actors, supported by government and institutions acting as facilitators or motivators. This approach encourages collective responsibility, nurtures the 3R principles (Reduce, Reuse, Recycle), and opens local economic opportunities through waste banks and composting programs (Hadi, 2019). The Community Based Solid Waste Management (CBSWM) model further emphasizes community involvement to create a comprehensive waste management system from households to wider neighborhoods (Wahyono et al., 2019). Active community

participation promotes clean environments and enhances local economic empowerment by converting waste into valuable products (Rahdriawan, 2017). Regulatory frameworks include Indonesia's Law No. 18 of 2008 concerning Waste Management, highlighting the importance of waste segregation at the source, reduction, handling, and community participation. Further government regulations provide technical guidance and strengthen synergy between authorities, communities, and waste banks (Government Regulation No. 81 of 2012; Ministerial Regulation LHK No. 14 of 2021).

Empirically, the Dabaresih Program in RT 08 RW 05 is a concrete response focused on education and empowerment, managing not only waste itself but also the utilization of processed products such as compost and fish cultivation through "Budikdamber." Similar initiatives have proven effective in other regions like Samarinda and Jakarta, where social capital and government collaboration have created clean environments and new economic value via waste management (Krisda et al., 2023). The area currently faces challenges of suboptimal waste facilities and a community that requires increased awareness and motivation in waste sorting and processing. The ongoing habit of mixing waste hampers environmental efforts and leads to accumulation at waste processing sites, causing odor problems and attracting disease vectors such as flies and rats.

In response, the Dabaresih Program presents an innovative, community-based approach combining education, strengthening resident roles, and cross-institutional collaboration for integrated household waste management. Its focus on managing organic and inorganic waste also promotes economic empowerment and community solidarity. This aligns with the global zero waste paradigm striving for sustainable and environmentally friendly living (Makassar Waste Management Report, 2023). By mobilizing active community participation, Dabaresih aims to

become a replicable model for community-based waste management with positive environmental and social impacts in RT 08 RW 05.

METODE

This study uses a qualitative approach with descriptive methods, as it aims to gain an in-depth understanding of the implementation of the Dago Barat Resik dan Hejo (Dabaresih) Program and its impact on public awareness of waste management in RT 08 RW 05, Dago Village, Bandung City. A qualitative approach was chosen because it allows researchers to explore the meanings, attitudes, and experiences of residents that cannot be revealed through quantitative data alone (Sugiyono, 2013). Researchers were present in the field to conduct interviews, observations, and documentation to obtain natural and contextual data.

The research was conducted in RT 08 RW 05, Dago Village, Coblong District, Bandung City, which is one of the areas where the Dabaresih Program is implemented. This location was chosen purposively because it is the center of community-based waste management activities that are relevant to the research objectives. The research took place during July 2025, covering the stages of instrument development, data collection in the field, and research report writing.

The data sources consisted of informants, activities, documents, and literature. The informants included one program manager as an environmental cadre and two residents who were customers of the waste bank and regularly deposited waste. The events observed included residents depositing waste and the activities of managers in running the program. In addition, documents in the form of activity archives and posts on Instagram @dabaresih were also used as references, accompanied by supporting literature such as journals, e-books, and government regulations on household waste management (Nugrahani, 2014).

Data collection techniques were carried out in several ways. In-depth interviews were conducted with three key informants to explore the background, implementation, results, and community perceptions of the Dabaresih program. Non-participant observation was conducted to directly observe the environmental conditions, facilities, and community involvement without participating in the activities (Sugiyono, 2013). Documentation studies were obtained from program archives and online media publications, while literature studies were used to strengthen the analysis through previous theories and research.

The sampling technique used simple random sampling to select residents or program customers as informants, as all members of the population had an equal chance of being selected. This technique was chosen because the characteristics of the residents were relatively homogeneous in terms of the type of waste deposited, frequency of deposit, and motivation for participation. Meanwhile, program managers were selected purposively because of their essential role and limited number (Sugiyono, 2013).

The data were analyzed using the Miles and Huberman (2014, in Saleh, 2017) analysis model, which includes: data reduction, namely filtering and summarizing data from interviews, observations, and documentation; data presentation, in the form of narratives, quotations, and summary tables; and drawing conclusions and verification, which is giving meaning to field findings by relating them to relevant theories, research objectives, and problem formulations. This approach allows researchers to present systematic, factual, and in-depth results regarding the implementation of the Dabaresih Program.

DISCUSSION AND FINDINGS

The implementation of Dabaresih can be analyzed through the framework of community participation theories. Korten (1986) argued that development programs designed in line with community needs are

more likely to be sustainable. Similarly, Cohen and Uphoff (1980) highlighted that participation involves not only physical activities but also decision-making, monitoring, and benefit-sharing. This is evident in Dabaresih, where residents of RT 08 RW 05 act as both contributors and beneficiaries of the waste bank system. Arnstein's (1969) Ladder of Participation provides another analytical lens, dividing participation into eight rungs from manipulation to citizen control. Within this framework, community participation in Dabaresih can be positioned at the level of partnership to delegated power, since residents are not merely executors but also play a role in managing and sustaining the program.

In the context of community-based waste management, Fitriani and Nugroho (2022) identified three key components: education, supporting facilities, and the role of community leaders. All three can be observed in Dabaresih: education through awareness campaigns, supporting facilities through waste banks and recycling tools, and community leaders who mobilize citizen engagement. Several factors also influence participation. Marhum (2021) noted five determinants: education, age/gender, occupation/income, length of residence, and program comprehension. Field observations show that residents with higher education and longer residence tend to participate more actively, while time constraints among working groups often hinder their involvement.

Comparative studies from other regions reinforce this perspective. Waste banks in Padaawas (Bandung), Malang, and Banda Aceh reveal a similar pattern: active participation grows when economic incentives, continuous education, and community leadership are present. These parallels demonstrate that Dabaresih is consistent with broader national trends in community-based waste management. From an educational standpoint, behavioral changes can be examined through Bloom's Taxonomy (Bloom, 1956; Anderson & Krathwohl, 2010).

At the cognitive level, residents gain knowledge about waste sorting; at the affective level, they develop environmental concern and collective responsibility; and at the psychomotor level, these values are translated into concrete actions. Thus, Dabaresih serves as a medium of social learning that fosters awareness, attitudes, and skills.

Finally, evaluation plays a critical role in sustaining the program. In Dabaresih, evaluation is conducted through monitoring resident participation, measuring the volume of managed waste, and ensuring the continuity of the waste bank as a local institution. This evaluative process helps identify challenges—such as irregular participation—and design appropriate strategies, including incentives or capacity-building for community cadres. In conclusion, Dabaresih should be seen not merely as a cleanliness initiative but as a model of community empowerment through participation, aligned with the principles of 3R, environmental education, and the Sustainable Development Goals (SDGs).

The Dabaresih Waste Bank Program, an acronym for Dago Barat Resik Hejo, was launched in early 2020 in RW 05, Dago Village, Coblong District, Bandung City. Its establishment coincided with the COVID-19 pandemic, which served as a catalyst for raising collective awareness among the community about environmental cleanliness and the importance of household waste management. This initiative was pioneered by Agus Sukaryat together with a number of residents who were previously active in environmental movements such as Kang Pisman (Reduce, Separate, Utilize) and Buruan Sae. From small steps in the form of socialization and assistance, Dabaresih has developed into a structured, sustainable community movement and has now become one of the models for community-based waste banks in Bandung City.

Dabaresih's main vision is to make waste management an environmentally friendly activity that also has economic value. This mission is realized through the cultivation

of waste sorting at the household level and the creation of a circular economy. Residents are encouraged not only to dispose of waste, but also to sort it at the source, process organic waste into compost or maggot feed, and utilize inorganic waste into products with saleable value. Flagship programs such as Bata Terawang, Lorong Sesa Dapur (Loseda), Drum Komposter, and Wadah Sisa Makanan (Wasima) serve as both educational and processing tools. Another innovation is the gold savings program in collaboration with Pegadaian, which has proven effective in attracting residents' interest because each waste deposit has a direct value in the form of savings balance.

Operationally, Bank Sampah Dabaresih has designated Saturdays as the regular schedule for waste deposits. Inorganic waste such as plastic, metal, and cardboard is weighed and recorded in residents' savings books. Waste prices vary: around IDR 1,300/kg for dirty mixed waste, IDR 3,000/kg for clean waste, and up to IDR 8,000/kg for high-quality waste that can be directly reused. Organic waste is separated using special containers and then processed into compost or maggot feed. Currently, there are around 100 residents who are customers, with 40-50 of them actively depositing waste every week.

Interviews with residents show a positive response to this program. One customer said that he is now accustomed to sorting waste at home: "I have three trash bins, one for organic waste, one for inorganic waste, and one for oil residue. So every Saturday, I just drop off my waste." This statement confirms that a change in residents' behavior has taken root, from simply knowing the importance of sorting to actual involvement in daily practices. A similar response was shown by another informant who assessed that Dabaresih is not only about economic value, but also the pride of being part of a community that cares about the environment.

Resident participation has been strengthened by the involvement of environmental cadres, posyandu forums, and

routine community service activities. Children are also involved through light education at home and at school, so that the culture of sorting waste is instilled from an early age. The program chair emphasized that the main goal is not merely economic gain, but social and environmental value: “In terms of money, it may not be much, but the benefits are felt; the environment is cleaner, and residents are more caring.”

In terms of management, the system implemented is relatively simple but effective. Inorganic waste with economic value is channeled to the Bandung City Waste Bank, while organic waste is processed into compost or used in maggot cultivation. Although independent recycling facilities are still limited, the management has explored cooperation with the Get Plastic community to convert plastic residue into alternative fuel through pyrolysis technology, which can produce about one liter of diesel from one kilogram of plastic. This innovation, along with the use of maggots as organic waste decomposers, shows the direction of Dabaresih's development towards sustainable waste management based on environmentally friendly technology.

The findings of this study also show a real change in environmental conditions. The environment of RT 08 RW 05 now looks cleaner, the volume of waste to the landfill has decreased, and residents are becoming more accustomed to viewing waste as a resource. The paradigm shift from “throw everything away” to “sort and utilize” is beginning to take root. Although there are still obstacles to participation due to time constraints or a lack of understanding among some residents, in general, this program has succeeded in fostering a new positive culture in community-based waste management.

The Dabaresih Program in RT 08 RW 05, Bandung, has significantly increased community involvement in waste management. Initially limited to environmentally motivated residents, participation grew through ongoing education,

socialization, and personal outreach by environmental cadres and community leaders. Households actively sort and submit organic and inorganic waste regularly to the waste bank. The program engages diverse groups—from mothers' forums and elderly residents to school children—forming a strong participatory ecosystem. Informal activities like communal work and environmental exercise complement formal education, while digital tools such as WhatsApp groups enhance coordination and communication.

Participation has developed across knowledge, attitude, and practice dimensions, reflecting a shift from symbolic to empowered community roles. Incentives like gold saving programs, entrepreneurship training, and awards further boost sustained engagement. Overall, Dabaresih manifests as a successful model where education, community leadership, facilities, and socio-economic incentives combine to foster sustainable waste behavior change.

Waste Management Results after the Dabaresih Program

Cognitive Domain (Knowledge)

The results of the study show that residents of RT 08 RW 05 have a better understanding of sorting organic, inorganic, and residual waste. This awareness is in line with the cognitive dimension in Bloom's Taxonomy, starting from the level of knowledge, comprehension, to application. Residents not only know basic information about waste sorting, but are also able to explain its benefits and apply it in their daily lives. As shown in interviews, residents have provided separate trash bins in their homes and regularly deposit waste at waste banks. This is in line with the research by Putra et al. (2024) that improvements in the cognitive domain in environmental education can encourage more responsible behavior towards the ecosystem.

Affective Domain (Attitude)

The affective domain is reflected in the increased emotional involvement and concern of residents towards the Dabaresih program. Based on Bloom's affective domain categories

(Anderson, 2010), residents demonstrate receiving (acceptance of information), responding (involvement in activities), and valuing (appreciation of environmental values). The sense of pride and satisfaction that comes with being part of the Dabaresih movement shows that social and environmental values have been internalized. In fact, the involvement of mothers as the driving force strengthens the consistency of community participation. This is in line with Nurdin's (2020) opinion that collective attitude change is an important indicator of the success of community-based environmental empowerment programs.

Psychomotor Domain (Skills)

In the psychomotor domain, residents demonstrate practical skills in waste management. Activities such as routine sorting, composting, eco-enzyme processing, and maggot cultivation reflect achievements in manipulation (use of skills), precision, and adaptation in Bloom's psychomotor domain. Children have also been involved in simple waste sorting practices at home, demonstrating the transfer of skills across generations. According to Nafiati (2021), such psychomotor achievements are important for fostering a sustainable environmental culture, as real behavior is more likely to endure in the long term than mere knowledge or attitude.

Community-Based Waste Management

In terms of management, Dabaresih has developed a simple yet effective system, with a routine deposit mechanism, economic value recording, and cooperation with the Bandung City Waste Bank. Although recycling facilities are still limited, innovations such as cooperation with the Get Plastic community for pyrolysis technology and maggot utilization show a progressive direction of development. This is in line with the Circular Economy concept, which emphasizes waste reduction and optimization of resource value (Ellen MacArthur Foundation, 2019). In addition, the involvement of environmental cadres and community leaders demonstrates the principle

of community-based waste management, where the success of waste management is largely determined by citizen participation, not just by formal government policies.

Social and Environmental Change

The change in the behavior of the RT 08 RW 05 community from the "throw everything away" paradigm to "sort and utilize" is proof that the Dabaresih program not only has an impact on the technical aspects of waste management but also creates social transformation. The environment has become cleaner, the volume of waste sent to landfills has decreased, and a new culture of community-based waste management has begun to take shape. This supports Apple's (2004) view that social change can be built through a process of critical education and active community participation. Thus, Dabaresih is not just an environmental program, but also a means of empowering residents to internalize the values of sustainability.

CONCLUSION

The Dago Barat Resik dan Hejo (Dabaresih) Program in RT 08 RW 05, Kelurahan Dago, successfully implemented community-based waste management through a participatory, bottom-up approach. Originating from addressing concrete household waste issues, the program grew from small neighborhood efforts. It applies the 3R principles by managing organic and inorganic waste, supporting greening activities, and conducting socialization with active community involvement, especially driven by the influential role of local mothers. Educational activities include composting, eco-enzyme production, and maggot cultivation, while evaluations show positive impacts like cleaner environments, reduced landfill waste, and expanding cooperation networks.

Dabaresih has raised public awareness and community engagement in waste management by improving sorting habits and fostering positive environmental attitudes and

behavior. Through continuous education, routine activities such as waste banking and communal clean-ups, residents increasingly apply the 3R principles in daily life. The program's success is evident in enhanced knowledge, affective commitment, and practical skills among community members, establishing a culture of sustainable waste management at the local level.

To ensure sustainability, it is recommended that program managers conduct formal, scheduled evaluations with measurable indicators and adopt digital tools for efficient monitoring, record-keeping, and communication. Local government support is crucial for replicating this community empowerment model, including training environmental cadres, providing incentives, and improving waste facilities at neighborhood levels. Strengthening education, transparent incentives, active roles for community leaders, and expanding collaborations with schools will further enhance participation and program responsiveness based on data-driven monitoring and

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