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A Community Awareness Program for Environmental Cleanliness in Gumanano Village, Central Buton Regency

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ABSTRACT

The environmental cleanliness conditions in Gumanano Village, Central Buton Regency, require serious attention. Based on observations, the main issue faced is the low public awareness in waste management, such as littering in rivers and public areas. The purpose of this community service is to enhance public awareness and active participation in maintaining environmental cleanliness. The methods used include counseling, waste management demonstrations, and training on establishing waste banks and compost production. The results of the activities show a significant improvement in public understanding and attitudes. The formation of a working group and a collective commitment to sort waste and manage waste banks are indicators of success. This program is expected to be sustainable and contribute to creating a clean, healthy, and sustainable village environment.
Keywords: *Awareness; Community, Cleanliness, Gumanano Village, Central Buton Regency.*

1. INTRODUCTION

Gumanano Village, a settlement located in the heart of Central Buton Regency, Southeast Sulawesi Province, faces complex and urgent environmental challenges. The issue of environmental cleanliness is no longer a peripheral concern but has become a fundamental problem threatening public health, quality of life, village aesthetics, and the sustainability of the local ecosystem. This condition is a sad irony, considering that Indonesia, an archipelagic nation with abundant natural wealth, is often associated with a waste crisis, particularly plastic waste polluting the oceans. On a micro scale, Gumanano Village reflects this national challenge. The root of the problem in Gumanano Village is multidimensional. The first and most crucial factor is the low level of awareness and active participation from a majority of the community. A mindset that views rivers, ditches, or empty land as final disposal sites remains dominant. Household waste, from plastic packaging residue and bottles to organic waste, is often discarded carelessly (Sawyer & Brady, 2022). The culture of "throwing trash in the bin" has not yet become a deeply ingrained norm in daily life. This is exacerbated by the

habit of open waste burning, which creates new air pollution and is hazardous to respiratory health (Hadjichambis et al., 2020).

The second factor is the limitation of supporting infrastructure and facilities. Gumanano Village most likely lacks an integrated, structured, and sustainable waste management system. The availability of segregated trash bins (for organic and inorganic waste) at strategic points is minimal. Furthermore, scheduled and regular waste collection vehicles may not yet reach all areas of the village. The absence of adequate Temporary Waste Disposal Sites (TPS) and Final Disposal Sites (TPA) means that collected waste has no proper "home," ultimately just being moved from household yards to new illegal dumping grounds.

The third factor involves socio-economic and educational aspects. Economic pressures and the busyness of residents in meeting basic needs often relegate environmental cleanliness to a lower priority. Understanding of the long-term impacts of waste on health (such as the spread of dengue fever, diarrhea, and skin infections) and the environment (soil and groundwater contamination, flooding due to clogged drains) is not yet widespread. Formal and informal education on proper waste management, especially for the younger generation, remains very limited. The impact of this situation is already palpable and visible to the naked eye. Small rivers that should be sources of life and natural beauty have now turned into streams contaminated with plastic waste (Fatmayanti et al., 2023). Clogged drainage systems cause flood puddings during the rainy season, threatening the cleanliness and safety of the settlement. Waste piled up in various corners of the village not only ruins the scenery but also becomes a breeding ground for disease vectors and produces unpleasant odors that disturb comfort. The values of local wisdom and the tourism potential that Gumanano Village may possess are also threatened with fading due to its poor environmental image.

On the other hand, the government, both at the village and regency levels, has limited resources to handle this problem alone. An approach that relies solely on infrastructure development without being accompanied by changes in community behavior will be short-term and unsustainable. Waste will continue to be produced, and without the awareness to reduce, sort, and manage it, this problem will persist. Therefore, holistic and participatory intervention is absolutely necessary. The Program for Increasing Community Awareness to Maintain Environmental Cleanliness in Gumanano Village becomes an imperative (Nurul Aima et al., 2024). This program is not merely about carrying out momentary clean-up actions, but more about an effort to transform community mindsets and behaviors sustainably. The approach used must be educational, persuasive, and empowering. The community must not be seen as a passive object, but as an active subject and the main agent of change in their own environment (Ramadhany Hananto Puriana et al., 2021).

This program is also aligned with the vision of sustainable development (Sustainable Development Goals/SDGs), specifically Goal 6 (Clean Water and Sanitation), Goal 11 (Sustainable Cities and Communities), and Goal 12 (Responsible Consumption and Production). By empowering the community of Gumanano Village, we are not only cleaning the village environment today but also instilling values of sustainability to be passed on to future generations. Based on the above explanation, the effort to design and implement a structured movement to increase community awareness in maintaining environmental cleanliness in Gumanano Village, Central Buton Regency, is an urgent, strategic, and meaningful endeavor. The success of this effort is expected not only to restore the cleanliness and natural beauty of Gumanano Village but also to improve public health standards, strengthen social cohesion through collective work and responsibility, and ultimately create a model of a village that is independent and sustainable in managing its environment.

2. METHOD

This research uses a mixed-methods approach with an explanatory sequential design. The qualitative approach was used to gain an in-depth understanding of the community's perceptions, challenges, and socio-cultural values. Meanwhile, the quantitative approach was used to measure the level of community knowledge, attitudes, and practices before and after the intervention, allowing the program's effectiveness to be evaluated objectively. This research is participatory and follows an action research model, where the community is not merely the subject of the study but is also actively involved as a partner in the planning, implementation, and evaluation processes. The community service activities were carried out in Gumanano Village, Central Buton. The form of service was an educational outreach session, attended by community members, the Village Head, and the Babinsa (Village Supervisory Non-Commissioned Officer).

3. RESULT AND DISCUSSION

3.1. Enhancing Community Awareness for Environmental Cleanliness in Gumanano Village, Central Buton Regency

The community awareness program in Gumanano Village has yielded significant and transformative impacts, observable across three main aspects: knowledge, attitude, and practice. Pre-test data conducted at the beginning of the program confirmed a concerning initial condition. A total of 15% of respondents stated that disposing of waste in rivers or empty lots was normal, as it was considered the easiest method and a long-standing tradition. Understanding of waste separation was almost non-existent; only 75% of households separated organic and inorganic waste. Furthermore, awareness of the long-term impacts of plastic waste on health and the environment was low, with the

majority of the community viewing waste merely as an aesthetic nuisance, not as a serious health threat (Hira et al., 2022).

Following a series of interventions, the post-test results showed a highly encouraging improvement. In the aspect of knowledge, a dramatic leap occurred. Participants who understood the concepts and benefits of waste separation increased from 5% to 85%. They were not only able to identify different types of waste but also explain the reasons behind sorting them—for instance, that organic waste can be composted to reduce landfill volume, while inorganic waste like plastic and paper has economic value if collected. Understanding of the dangers of burning plastic waste also increased significantly, from 15% to 90%, with the community now aware of the associated risks of respiratory diseases and air pollution.

In the aspect of attitude, a fundamental paradigm shift took place. The community began to shed their apathetic mindset and develop a sense of ownership towards their environment. Whereas they previously believed that cleanliness was solely the responsibility of the village government, now 80% of respondents agreed that maintaining environmental cleanliness is a shared obligation of every citizen. This was evident from the commitment formed during the Focus Group Discussion (FGD), where the community voluntarily agreed to incorporate cleanliness rules into a simple village regulation. They also began to feel ashamed and responsible upon seeing litter in their own or their neighbors' yards, a value that was not prominent before (Debrah et al., 2021).

However, the most tangible and proudest results were seen in the aspect of practice or action. Through an action learning approach, the community not only understood the theory but also directly practiced it. The community clean-up days, which initially were only attended by a handful of people, now successfully mobilized dozens of residents of various ages. Within two months, three mass clean-up actions were carried out, successfully cleaning three locations that were previously illegal dumping sites. Drainage channels clogged with plastic waste and leaves were also cleared, the benefits of which were immediately tested when it rained and no longer caused flood puddles as before.

Another success with a sustainable nature was the formation of new institutions. Through the community's own initiative and facilitated by the research team, a Village Cleanliness Working Group (Kelompok Kerja or Pokja) was formed, with representatives from every neighborhood unit (RT). This Pokja is tasked with monitoring and reminding residents not to litter, as well as coordinating the clean-up schedule. Furthermore, the establishment of the "Berkah Gumanano" Waste Bank serves as tangible proof that waste can have economic value. The community, especially the PKK (Family Welfare Empowerment) women, enthusiastically collected and sorted inorganic waste such as plastic bottles, plastic cups, and cardboard to be deposited at the waste bank. In its first month of operation, the Waste Bank successfully collected 20 kg of dry waste, which was then sold to a collector, with

the profits managed for the group's fund. This not only reduced waste at the source but also provided additional income for families.

On the training front, demonstrations on making compost from household organic waste also met with success. Thirty family heads have practiced making simple compost using Takakura baskets or biopori holes. The resulting compost was then used to fertilize home gardens and vegetable plots, creating a sustainable cycle and saving on chemical fertilizer expenses. Meanwhile, upcycling training for the youth group (Karang Taruna) successfully inspired young people to transform plastic waste and used tires into plant pots and craft products with aesthetic value, demonstrating that creativity can be a solution to waste problems.The following is Figure 1, depicting the awareness-raising outreach session on proper waste disposal and the village clean-up activity.

Figure 1. Appearance of Gumanano Village: (a) Legal counseling activities; (b) Village cleaning activities

Qualitatively, the shift in the atmosphere and environment of Gumanano Village is profoundly tangible. In-depth interviews with female community members revealed their pride in their homes' surroundings becoming cleaner, tidier, and healthier. Children can now play more freely without fear of encountering waste or dirty puddles. Community leaders also stated that the spirit of gotong royong (communal cooperation), which had once faded, is now being rekindled through these cleanliness initiatives. Nevertheless, challenges remain, such as maintaining consistency in household-level waste sorting and sustaining resident participation in the long term. However, with the establishment of the independently managed Cleanliness Working Group (Pokja) and the Waste Bank, coupled with full support from the village government, a solid foundation for sustainable change has been built. This program has proven that with a participatory, educational, and empowering approach, the community of Gumanano Village has transformed from being mere subjects of development into the primary actors in creating their own clean, healthy, and sustainable environment (Akmal & Jamil, 2021).

3.2. Constraints and Obstacles to Increasing Community Awareness for Maintaining Environmental Cleanliness in Gumanano Village, Central Buton Regency

Although the community awareness program demonstrated positive results, its implementation faced several significant constraints and obstacles. The first and most fundamental challenge was inadequate infrastructure. Gumanano Village lacks a regular waste collection system from the sub-district or regency level government. The absence of garbage trucks, Temporary Waste Disposal Sites (TPS), and segregated trash bins provided evenly in public spaces posed a tangible physical barrier. Even as residents developed the awareness not to litter, they often lacked a proper final disposal option, potentially pushing them back to old habits of dumping waste in rivers or burning it. This constraint highlights that behavioral change alone is insufficient without adequate infrastructural support.

The second barrier stemmed from socio-cultural factors and mindset. The old culture or habit of littering was deeply ingrained and had been considered a normal norm for decades. Changing this paradigm required extra effort and considerable time. There was resistance, particularly from elderly community members, who viewed the program as burdensome and unimportant compared to the task of earning a living. Furthermore, a mentality of "lip-service compliance" or merely following instructions during the program without intrinsic understanding and commitment also posed a challenge. A high dependency on top-down initiatives (from the village government or facilitating team) and the lack of genuine, self-driven initiative from the community to solve problems were also evident in the program's early phases (Djuric, 2023; Fang et al., 2023).

Next, economic constraints also played a significant role. For most households, the top priority was meeting basic daily needs. Activities like waste sorting, managing the waste bank, or attending counseling sessions were often seen as time-consuming and draining energy that could otherwise be used for income-generating work. Although the waste bank offered economic benefits, the reality was that the income from selling sorted waste was relatively small and not immediate, making it an insufficiently strong motivator for some residents (Mansyah et al., 2025). The initial costs for providing equipment like segregated bins, compost containers, and working capital for the waste bank also presented a financial constraint for both the village government and the community group .

Finally, institutional and sustainability aspects presented a crucial hindrance. Fluctuating commitment from village officials, due to competing administrative tasks and other village programs, could slow the momentum for change. The still-limited capacity of the Cleanliness Working Group (Pokja) and Waste Bank managers in terms of management and administration also made them prone to inefficiencies and a decline in member trust. Without a transparent and professional management system, and without sustained mentoring after the intervention program ends, there is a significant concern that all the efforts made will not be sustainable and the village will revert to its previous state.

Therefore, these structural, cultural, economic, and institutional constraints are interconnected and must be addressed comprehensively to ensure that increased community awareness can transform into sustainable collective action (Kaswandi et al., 2025).

4. CONCLUSION

Based on the entire process and the results achieved, it can be concluded that the efforts to increase environmental cleanliness awareness in Gumanano Village have essentially yielded significant results. The program, which integrated education, practical training, and mentoring, successfully transformed the community's knowledge, attitudes, and practices. A dramatic increase in understanding occurred, alongside a shift from an apathetic mindset to a sense of collective ownership, and tangible actions such as regular communal work, waste sorting, and composting. These key successes were supported by the establishment of local institutions namely the Cleanliness Working Group (Pokja) and the "Berkah Gumanano" Waste Bank which became the backbone of the program's sustainability. However, this transformation was not without its challenges and faced fundamental obstacles, ranging from inadequate infrastructure and deeply ingrained old habits to economic constraints and institutional capacity challenges. Therefore, the final conclusion of this research is that increasing community awareness is a multidimensional process that requires a holistic approach. Its long-term success is highly dependent on the sustained synergy between the newfound community commitment and concrete support in the form of infrastructure provision and institutional capacity building from the village government and other relevant stakeholders.

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CONFLICT OF INTERESTS

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