



COMMUNITY GARDEN ARRANGEMENT PHASE 5 ROSE GARDEN

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Abstract. The international community service program at the Community Garden (Kebun Komuniti) Phase 5, Taman Mawar, Pasir Gudang, Malaysia, aimed to introduce and strengthen community-based environmental management practices. The activity was designed to address the absence of clear land boundaries in the community garden, which often created confusion, overlapping planting, and conflicts among members. By establishing physical boundaries, the program not only improved spatial organization but also enhanced social cohesion and collective ownership of the communal land. The implementation involved a participatory and collaborative approach, with active involvement of 21 Universitas Riau Kepulauan students, local residents, and the garden management committee. The stages included planning, preparation of tools and materials, collective work in boundary installation, and evaluation of results. The tools used ranged from bamboo and recycled wood for boundary posts to paint markers and cement for reinforcement. The results showed that the boundaries successfully organized the communal garden, prevented land overlaps, and improved the efficiency of cultivation. Moreover, the activity fostered community solidarity and strengthened the sense of belonging through collective participation. From an educational perspective, students gained practical experience in sustainable community-based environmental management. Overall, this initiative demonstrates that small-scale ecological practices can significantly contribute to social harmony, environmental order, and sustainable community development.

Keyword: community garden, environmental management, participatory approach, social cohesion, sustainability

INTRODUCTION

The Taman Mawar Phase 5 Community Garden in Pasir Gudang, Malaysia, is a green space that serves as a medium for social interaction and a means of meeting the local community's food needs. The community garden concept offers not only ecological benefits but also social, economic, and even cultural ones. Communities can grow crops together, interact with each other, and foster social solidarity in an open and productive space (Awaluddin et al., 2025).

The main problem faced is the lack of clear boundaries for the garden area. This situation creates confusion in land management, overlapping plantings, and potential friction among community members. The lack of boundaries also complicates garden maintenance, reducing productivity and order (Hanum et al., 2023).

The solution offered through this program is the creation of physical boundaries using environmentally friendly materials such as bamboo, recycled wood, and natural stone. The boundary creation is carried out through collaborative efforts between students, residents, and garden administrators. This concept not only solves technical problems but also strengthens the



values of togetherness and collective ownership of shared spaces.

The aims of this program are: (1) to clarify the structure of community garden land so that it is tidier and more productive, (2) to increase public awareness of the importance of order in resource management, (3) to strengthen social solidarity through collaborative work, and (4) to provide practical experience for students in managing community-based sustainable development.

METHODOLOGY

The international community service program, conducted at Taman Mawar Phase 5 Community Garden in Pasir Gudang, Malaysia, employed a participatory and collaborative approach. This approach was chosen because it aligns with the program's community empowerment-oriented characteristics, where program success is largely determined by the active involvement of partners at every stage of implementation. Community participation is considered a crucial element in building a sense of ownership over the program's outcomes and ensuring program sustainability beyond the implementation period.

In practice, the implementation of the activity was carried out through a series of complementary techniques, including community meetings, field observations, interactive discussions, collaborative work, and activity documentation. The community meetings served as a means of identifying needs and reaching mutual agreement regarding the boundaries to be established. Field observations allowed the student team and community to review the actual condition of the garden, determine unclear boundaries, and map potential technical obstacles that might be encountered. Meanwhile, interactive discussions served to bring together ideas between students and the community so that decisions made truly reflected shared needs. The collaborative stage then became the core of the activity, where students and residents directly installed bamboo and wooden stakes, connecting them with rope and paint to make the garden boundaries clearly visible. This entire process was supported by documentation in the form of photos, videos, and reflection notes, which were then used for evaluation and publication.

The implementation of the activities was systematically structured through four main stages. First, the preparation stage, which included intensive coordination with the Community Garden management and the surrounding community, prioritizing issues, and compiling material requirements such as bamboo, wood, paint, and work equipment. This stage also involved developing a schedule, assigning roles, and preparing evaluation instruments. Second, the implementation stage, in which all student team members and residents collaborated on the



process of installing garden boundaries, utilizing environmentally friendly materials and maximizing local resources. Third, the evaluation stage, which involved re-measuring the established boundaries and conducting a joint reflection to assess the effectiveness of the activities, both technically and socially. This evaluation focused not only on the physical results of the garden boundaries, but also on the level of community involvement, satisfaction, and sense of ownership. Fourth, the follow-up stage, which involved compiling activity reports, disseminating results through academic publications, and developing plans for the garden as a model of sustainability that could be replicated in other areas.

The target group for this activity were residents of Taman Mawar Phase 5 Community Garden and students from the University of Riau Islands. Twenty students participated as active participants, while community partners acted as facilitators and landowners. The activity was held in Pasir Gudang, Malaysia, on August 28–31, 2025, with the implementation location focused on the community garden area, which serves as the center of community activities. This location was chosen based on the urgency of the land boundary issues faced by the community, as well as the garden's relevance as a public space representing ecological and social collaboration.

The program's workflow can be explained as follows: the program begins with preparation through coordination and needs analysis, followed by implementation through collaborative garden boundary installation, evaluation through measurement and collective reflection, and finally, a follow-up action plan consisting of reports, publications, and further development plans. This flow demonstrates that the program does not stop at physical results, but rather aims to build awareness, solidarity, and a model of sustainability that can have a long-term impact on the community.

RESULT AND DISSCUSION

Result

The project successfully created neat and clear garden boundaries using bamboo and wooden stakes connected with rope. The stakes were painted in bright colors for easy identification. The boundaries have improved the planting area, eliminated overlapping plots, and made maintenance easier for residents. Furthermore, this activity also fostered positive synergy between students, garden administrators, and local residents. All parties were actively involved, from preparing tools and materials, through the installation process, to the post-cleanup. The results were not only



physical boundaries but also an increased spirit of mutual cooperation, strengthening social ties among residents.

The boundary design also enhances the layout of the community garden. Previously, the garden area appeared haphazard, but now it's more organized with clear boundaries. This simplifies planting, maintenance, and harvesting, while also creating a professional impression, serving as an example of good environmental management for other areas.

Overall, the results of this activity significantly contribute to the sustainability of the community garden program. Not only does it create order in land management, but it also raises community awareness of the importance of participatory environmental management.

Table 1. Level of Student Participation in Activities

Type of activity	Number of participants	Percentage (%)
Presence	20	100
Discussion & Deliberation	18	85.7
Stake Installation	20	100
Garden Cleaning	20	95.2

Discussion

This program demonstrates the successful integration of technical and social aspects. Garden boundaries serve not only as spatial markers but also as instruments of order and conflict prevention (Roddin et al., 2017). Socially, mutual cooperation activities strengthen solidarity among community members, consistent with Hanum et al.'s (2023) findings regarding the importance of participation in empowerment. Furthermore, from an environmental perspective, neat garden boundaries support sustainable spatial planning while increasing land use efficiency. This aligns with the value of community transformation born from simple yet impactful practices (Roddin et al., 2017).



From an educational perspective, students learn directly about community-based sustainability practices, in line with Kiptiyah & Liesdiani (2024), who emphasize the importance of cultural and environmental literacy through hands-on mentoring. Through these activities, students understand that environmental management is not only a technical issue but also a social and cultural learning that supports sustainable development. Thus, creating garden boundaries in the Rose Garden is not just a physical task, but also a learning tool that combines technical, social, cultural and environmental aspects in an integrated manner.



Figure 1. Community service activity

CONCLUSION AND RECOMMENDATION

Conclusion

An international community service activity carried out at the Phase 5 Community Garden of Taman Mawar, Pasir Gudang, Malaysia, successfully achieved its main objective of providing a solution to the land boundary problem that has been a source of uncertainty for the local community. Through a participatory and collaborative approach, students from the University of Riau Islands together with local residents were able to work together in designing, preparing, and installing garden boundary markers through mutual cooperation. The result was not only a clear physical boundary marked by the installation of bamboo, wood, and rope as markers, but also a sense of ownership, solidarity, and increased awareness of the importance of joint management of public spaces. With clear garden boundaries, the potential for conflict between communities can be minimized, while community agricultural activities can run more orderly, productive, and sustainable.



Recommendations

While this activity has had a positive impact, it faces several limitations, particularly the short duration of implementation, which limited the opportunity for in-depth study and capacity building for community members. Therefore, follow-up, including ongoing mentoring, is necessary to maintain and expand the achieved results.

Going forward, similar programs should be complemented with digital-based learning modules on garden management, more systematic documentation, and consistent youth engagement to ensure sustainability. Furthermore, collaboration across institutions, both academic and local government, needs to be strengthened so that the program doesn't stop at a one-time intervention but instead develops into an empowerment model that can be replicated in other regions. Thus, this community service activity not only provides practical benefits for the Taman Mawar community, but also contributes to enriching the literature on international community service practices based on the culture of mutual cooperation and socio-ecological sustainability.

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