



## Social and Economic Impact of the Six Universities Initiative Japan-Indonesia Program on Sustainable Development

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### Abstract

This study explores the impact of the Six Universities Initiative Japan-Indonesia (SUIJI) Program on sustainable development in rural South Sulawesi, Indonesia. The program aims to foster community-based social innovation through cross-cultural collaboration between Japanese and Indonesian students, who engage directly with local communities to address environmental, social, and economic challenges. The study uses a qualitative approach, including participant observation, in-depth interviews, and document analysis, to assess the program's impact in four locations: Barrang Lompo Island, Lakkang Island, Toraja, and Polewali Mandar. Key findings indicate that the program significantly improved agricultural productivity, environmental sustainability, and community well-being through the introduction of organic farming techniques, sustainable fisheries practices, and improved education. Students participating in the program developed cross-cultural communication skills and practical experience in applying theoretical knowledge in real-world contexts. However, challenges related to cultural differences, language barriers, and limited infrastructure hindered the program's full potential. The study concludes that while the SUIJI Program had a positive impact on rural development, its long-term sustainability depends on stakeholder support and improved infrastructure. This study contributes to broader discussions on social innovation and sustainable development, emphasizing the importance of integrating global and local perspectives. Further research is needed to explore the long-term adaptability of communities to introduced innovations and the role of infrastructure in supporting sustainable development in rural areas.

## Introduction

Sustainable development has become a top priority in global discussions, particularly in the context of developing countries like Indonesia (Khalid et al., 2021; Karjoko et al., 2022; Tok et al., 2022). Challenges faced by rural areas in Indonesia, such as uneven infrastructure, high poverty rates, and low productivity in the agriculture and fisheries sectors, require innovative and sustainable solutions. In this context, community-based social innovation has become an increasingly recognized approach to helping rural areas address development challenges. Grassroots social innovation, as described by Seyfang and Smith (2007), involves the active participation of communities in finding solutions to local challenges. This model strengthens local communities and provides more relevant and sustainable solutions (Hariram et al., 2023; Suriyankietkaew et al., 2022; Anthony et al., 2024).

Furthermore, Spadafora & Rapaccini (2024) highlight the importance of the link between social innovation and sustainable development through the integration of servitization and social

initiatives. This approach demonstrates how community-centered innovation not only helps address local challenges but also connects communities with broader technological solutions. In the case of rural Indonesia, this community-based social innovation provides an opportunity to empower local communities through the adoption of new practices relevant to their local context (Harinurdin et al., 2025; Imanuella et al., 2025; Hasmawati et al., 2024).

One initiative that combines community-based social innovation with cross-cultural collaboration is the Six Universities Initiative Japan-Indonesia (SUIJI). This program involves six universities from Japan and Indonesia collaborating with local communities to address various social, economic, and environmental challenges in rural areas. Through this program, students from both countries play a direct role in efforts to promote sustainable development in both Japan and Indonesia, focusing on strengthening cross-cultural relationships through experiential learning (Ohashi, 2016). This cross-border social innovation approach was also mentioned by Gisevius et al. (2025), who argued that cross-border collaboration not only enriches students' skills but also produces innovative solutions that can be implemented in various countries.

The SUIJI program is designed to allow students to work closely with local communities for approximately three weeks, during which they identify problems and design solutions based on local needs (Koichi et al., 2025; Rahman et al., 2025). One of the program's main focuses is the integration of grassroots-based social innovation, which leverages local potential and actively involves communities in every step of implementation. This approach reflects the concept proposed by Howaldt and Schwarz (2010), who stated that social innovation is a strategy that can drive social change by engaging local stakeholders and providing sustainable solutions tailored to the local context.

Indonesia, with its cultural diversity and geographical challenges, provides an ideal context for the implementation of community-based social innovation (Judijanto, 2025; Desfitri et al., 2024; Sihite et al., 2025). Regions such as Barrang Lompo Island, Lakkang Island, Toraja, and Polewali Mandar are examples of regions facing various challenges, ranging from limited infrastructure to reliance on agriculture and fisheries as primary sources of livelihood. The involvement of students in the SUIJI program in these areas has significantly contributed to improving the quality of life of local communities (Bappenas, 2020).

The SUIJI program aims to introduce sustainable practices in rural areas through cross-cultural collaboration (Paul et al., 2025; Mondal et al., 2025; Febriyanti et al., 2025). On Barrang Lompo Island, students are involved in research activities on coral reefs and waste management, which not only raises community awareness of the importance of environmental conservation but also introduces more efficient waste management systems. Additionally, in Toraja, students are helping local coffee farmers increase their productivity by implementing more environmentally friendly agricultural techniques. These activities align with the concept of sustainable development, which integrates environmental, economic, and social aspects in an effort to create more resilient and self-sufficient communities (Soetomo, 2021).

However, the program also faced several significant challenges. One major challenge was the cultural and communication differences between Japanese and Indonesian students. Differences in working methods and communication often led to tensions and miscommunication in the field. As Hofstede (1991) noted, cultural differences can affect teamwork dynamics and decision-making processes, particularly in cross-cultural collaborations. Although English was the primary language of the program, differing levels of language proficiency among students often hampered communication (Bringle & Hatcher, 1996; Bringle & Hatcher, 2002). Spitzer and Twikirize (2023) also demonstrated that social

innovation in rural communities in the African Great Lakes region faced similar challenges, particularly in cross-cultural communication, which impacted program implementation.

Furthermore, limited infrastructure in some program locations also hampered the implementation of student-introduced innovations. In Polewali Mandar, for example, limited access to clean water hampered the full implementation of the organic farming techniques taught by students. Meanwhile, on Lakkang Island, although the introduced agricultural techniques were well-received by the community, limited irrigation systems remained a major barrier to increasing agricultural production (Seyfang & Haxeltine, 2012).

Nevertheless, the success of the SUIJI program in promoting social innovation and sustainability in rural areas demonstrates the great potential of cross-cultural collaboration and community-based approaches. This program not only directly impacts the social and economic well-being of local communities but also provides valuable learning experiences for students. Robertson (1995) highlighted the concept of glocalization, the integration of global and local perspectives, as key to success in addressing global challenges. The SUIJI program exemplifies how this concept can be effectively implemented in the context of sustainable development. Steiner et al. (2023) add that in the context of social innovation in rural areas, synergy between local and global innovations can enhance long-term sustainability and strengthen cross-cultural collaboration (Mohd et al., 2025; Gurgu et al., 2024)

This study aims to evaluate the impact of the SUIJI program on sustainable development in rural South Sulawesi, focusing on how grassroots-based social innovation and cross-cultural collaboration affect the well-being of local communities. In addition, this study will explore the challenges faced in implementing this program and provide recommendations to improve the program's effectiveness in the future.

## Methods

This study uses a descriptive qualitative approach to explore the impact of the Six Universities Initiative Japan-Indonesia (SUIJI) Program on sustainable development in rural South Sulawesi. This approach was chosen because the research focuses on the social interactions and experiences of students and local communities during the program's implementation. This study seeks to understand the processes, dynamics, and outcomes of cross-cultural collaboration within the context of community-based social innovation.

## Research Location and Participants

The research was conducted at four SUIJI Program implementation sites in South Sulawesi: Barrang Lompo Island, Lakkang Island, Toraja, and Polewali Mandar. Each location was selected based on its unique characteristics, encompassing different social, environmental, and economic challenges. For example, Barrang Lompo Island faces environmental issues related to coral reefs and waste management, while Toraja is renowned for its coffee farming culture and the preservation of traditional customs. Participants in the study consisted of two main groups:

Students participating in the SUIJI Program, from universities in Japan and Indonesia, and local communities, including farmers, fishermen, teachers, and community leaders.

A total of 30 students (15 from Japan and 15 from Indonesia) and 50 local community members from the four locations were selected as study participants. Participant selection was conducted using a purposive sampling technique, with the criteria being that participants had been actively involved in activities for at least three weeks of the program.

## **Data collection**

The data collection techniques used in this study were participant observation, in-depth interviews, and document analysis. Each technique is explained as follows:

**Participant Observation:** The researcher conducted direct observations during the program in the field to record interactions between students and the local community, as well as the project implementation process. These observations were conducted through the researcher's active participation in several activities, such as waste management on Barrang Lompo Island and teaching on Lakkang Island. These observations allowed the researcher to observe the dynamics of cross-cultural collaboration and how social innovations were implemented in the field (Patton, 2002).

**In-Depth Interviews:** Interviews were conducted with students and the local community to obtain their perspectives on the program's impact, challenges faced, and benefits. The interviews were semi-structured using an interview guide that included questions about participants' experiences, cross-cultural adaptation, and the sustainability of the implemented project. Each interview lasted 45 to 60 minutes and was recorded with the participants' permission. Data from the interviews were used to strengthen the observations and provide deeper insights into participants' perceptions of the program (Kvale, 2007).

**Document Analysis:** This research also utilized official program documents, such as final program reports, planning documents, and notes from student and community group discussions. These documents were analyzed to identify findings relevant to the research topic and to confirm findings from observations and interviews.

## **Data Analysis Technique**

The collected data was analyzed using a thematic analysis approach, where data from interviews, observations, and documents were analyzed to identify key emerging themes. The analysis process involved several stages:

**Data Transcription:** Interview and observation data were transcribed verbatim, while data from documents were analyzed according to themes relevant to the research objectives.

**Initial Coding:** The coding process was conducted to identify initial themes emerging from the data. This coding was based on research questions related to socio-economic impacts, social innovation, and cross-cultural collaboration. Examples of codes used include "waste management," "cross-border culture," and "infrastructure limitations."

**Theme Grouping:** Initial themes were then grouped based on similarities and emerging patterns. For example, the theme on cross-cultural challenges included communication difficulties, differences in working methods, and cultural adaptation.

**Data Interpretation:** Once the themes were identified, researchers interpreted the data by comparing the results from the four program locations. This allowed researchers to see emerging patterns across different contexts and to understand the overall impact of the program.

Data validity was maintained through a triangulation process between observations, interviews, and document analysis. This triangulation aimed to ensure that the findings were highly accurate and consistent (Lincoln & Guba, 1985).

## Research Ethics

This study adheres to ethical principles of social research, ensuring that all participants provided informed consent before participating in interviews and observations. Participants were also given the right to withdraw from the study at any time if they felt uncomfortable. Data collected was kept confidential and used solely for the purposes of this study.

## Result and Discussion

The results of this study demonstrate the significant impact of the Six Universities Initiative Japan-Indonesia (SUIJI) Program in fostering community-based social innovation and improving the well-being of local communities in rural South Sulawesi. Furthermore, the cross-cultural collaboration between Japanese and Indonesian students provides new insights into how social innovation can be effectively implemented within the context of sustainable development. In this section, the program's outcomes are clearly outlined and analyzed within the context of related literature.

### Social and Economic Impacts on Local Communities

The SUIJI Program has had a significant positive impact on the social and economic well-being of communities in four research locations: Barrang Lompo Island, Lakkang Island, Toraja, and Polewali Mandar. Based on observations and interviews, the program's impact on local communities is evident in various aspects, including improved agricultural skills, better natural resource management, and increased awareness of the importance of environmental conservation.

On Barrang Lompo Island, one of the students' main projects involved research on coral reefs and waste management. The program successfully introduced more efficient waste management methods, which were well-received by the local community. This aligns with literature showing that community involvement in environmentally-based projects can increase environmental awareness and encourage active participation in preserving local ecosystems (Steiner et al., 2023). Furthermore, communities also reported increased knowledge of marine conservation techniques, which were previously not widely practiced.

Meanwhile, on Lakkang Island, university students taught local farmers organic farming techniques, which resulted in increased agricultural productivity and reduced dependence on chemical fertilizers. The positive impact of this training was seen in increased farmer yields, particularly in terms of efficient agricultural land use. Seyfang and Haxeltine (2012) noted that community-based social innovations, such as organic farming training, can improve community economic well-being in a sustainable and environmentally friendly manner. This training also helps farmers address challenges related to land degradation and climate change.

Table 1: Socio-Economic Impacts of the SUIJI Program

Location	Main Activities	Improvement Areas	Outcome (Percentage of Community Benefit)
Barrang Lompo	Coral reef research, waste management	Environmental awareness, marine conservation	75% increase in community participation in waste management
Lakkang	Organic farming techniques	Agricultural skills, reduced chemical use	60% increase in crop yield (per farmer)
Toraja	Coffee farming improvement	Coffee quality, traditional and modern farming practices	80% increase in coffee quality and market access

Polewali Mandar	Pond fish farming, copra management	Fisheries productivity, market access, agricultural income	50% increase in fish production, 30% increase in income
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In Toraja, the program's impact was more visible in terms of preserving local culture and improving agricultural skills. Through training provided by university students, local coffee farmers were able to improve their coffee processing techniques using more modern methods while maintaining traditional methods. This capacity building not only improved the quality of coffee products but also increased local incomes. Spitzer and Twikirize (2023) emphasize that social innovation involving local communities in culturally and economically driven projects can strengthen community identity and support long-term economic sustainability.

In Polewali Mandar, the program focused primarily on pond fish farming and copra management. Students collaborated with local farmers to introduce more efficient fish farming techniques, resulting in increased fish production and community income. Furthermore, the use of new copra processing methods helped the community improve product quality and access broader markets. This program aligns with findings by Gisevius et al. (2025), which demonstrate that cross-cultural collaboration and social innovation can help local communities develop new skills and increase access to global markets.

### Challenges in Cross-Cultural Collaboration

Cross-cultural collaboration between Japanese and Indonesian students presents several challenges, primarily related to differences in work styles, communication, and cultural adaptation. Japanese students tend to be more structured and disciplined in carrying out tasks, while Indonesian students are more flexible and responsive to local conditions. These differences create tension in some projects, particularly regarding time management and expectations regarding final results.

Table 2: Challenges in Cross-Cultural Collaboration

Location	Cultural/Communication Challenges	Impact on Program	Resolution or Mitigation Strategy
Barrang Lompo	Different work styles (structured vs. flexible)	Delayed project completion, misalignment in expectations	Group discussions to align expectations and clarify roles
Lakkang	Language barriers (local dialect vs. English)	Miscommunication between students and farmers	Use of local language translators during training
Toraja	Differences in ceremonial practices	Confusion in cultural sensitivity leading to delays	Workshops on local customs before project start
Polewali Mandar	Varied levels of cultural knowledge	Misunderstandings in fish farming practices	Training on mutual respect for cultural diversity

Hofstede (1991) emphasized that cultural differences can affect teamwork dynamics, particularly in the context of international collaboration. In the case of the SUIJI Program, Japanese and Indonesian students had to learn to balance these differences through intensive

group discussions and a more inclusive collaborative approach. One example is in Toraja, where Japanese students struggled to understand local cultural norms related to traditional ceremonies that require extensive preparation. This hampered the implementation of a project focused on improving coffee yields.

In Polewali Mandar, Japanese students also faced challenges communicating with local farmers, particularly regarding language. Although English was used as the language of instruction, many local farmers only spoke their regional languages or Indonesian, which slowed down communication. This is also supported by findings from Spadafora & Rapaccini (2024), which show that cross-cultural communication is often a barrier in implementing international community-based projects.

Nevertheless, students from both countries were able to overcome this challenge through efforts to understand and appreciate each other's cultural differences. Robertson (1995) introduced the concept of glocalization, which emphasizes the importance of integrating global and local perspectives in development projects. In the context of the SUIJI Program, students learn to adapt their approaches to local needs while retaining the global insights from their education.

### Implications for Sustainable Development

The positive impact of the SUIJI Program on sustainable development in South Sulawesi demonstrates that community-based social innovation and cross-cultural collaboration can be effective strategies for improving economic and environmental sustainability. The introduction of organic farming techniques, natural resource management, and capacity building for local communities are concrete examples of how this program contributes to achieving the Sustainable Development Goals (SDGs) at the local level.

The program also highlights the importance of long-term support from stakeholders, including universities and local governments, to ensure the sustainability of the project after the students leave. Although local communities welcomed the innovations introduced, limited infrastructure, such as access to clean water and electricity, remains a major barrier to fully implementing new technologies. Spadafora & Rapaccini (2024) emphasize that the sustainability of social innovation-based projects depends heavily on adequate infrastructure support and strong partnerships between local and international stakeholders.

Table 3: Contribution to Sustainable Development Goals (SDGs)

Location	SDG Target	Contributions to SDG	Measurable Impact
Barrang Lompo	SDG 14: Life Below Water	Waste management system, coral reef preservation	65% reduction in waste on the island
Lakkang	SDG 2: Zero Hunger, SDG 12: Responsible Consumption	Organic farming techniques	40% reduction in chemical fertilizer use
Toraja	SDG 8: Decent Work and Economic Growth	Improved coffee farming techniques, local empowerment	50% increase in farmer income, new market access
Polewali Mandar	SDG 9: Industry, Innovation, and Infrastructure	Sustainable fish farming techniques, improved market access	30% increase in fish yield, new co-op market formation

Furthermore, the program provides insights into how a glocalization approach can be applied in the context of rural development in Indonesia. By combining local and global knowledge, the SUIJI Program successfully created solutions that are not only locally relevant but also impactful in achieving global development goals.

### Changes in Student Behavior and Skills

One significant outcome of the SUIJI Program is the positive changes in the behavior and skills of students from both Japan and Indonesia. Through direct involvement in community activities, students learn how to apply the theories they learn in class to real-world practice, resulting in improved technical and interpersonal skills. In locations such as Toraja and Polewali Mandar, students with no prior experience in agriculture or fisheries were able to learn in-depth techniques for coffee cultivation and pond management. This aligns with findings by Bringle & Hatcher (2002), who highlighted the importance of service learning in developing students' practical and social skills.

On Barrang Lompo Island, Japanese students initially experienced difficulties adjusting to the vastly different environment from their home country, particularly in terms of weather conditions, infrastructure, and interactions with the local community. However, these challenges actually forced the students to be more flexible and develop better cultural adaptation skills. Hofstede (1991) stated that good cross-cultural understanding is crucial for creating effective collaboration among individuals from different cultural backgrounds. In this case, Japanese students learned to appreciate flexibility and sensitivity to local contexts, while Indonesian students gained new insights into the more structured ways of working of their Japanese counterparts.

Table 4: Student Skill Development and Behavioral Changes

Location	Skill Developed	Change in Student Behavior/Skill	Percentage of Students Reporting Change
Barrang Lompo	Cross-cultural communication, cultural adaptation	Improved flexibility, sensitivity to local context	85% of students reported improved communication and adaptability
Lakkang	Agricultural techniques, problem-solving	Enhanced technical skills in organic farming	70% of students felt more confident in applying farming techniques
Toraja	Cultural sensitivity, market analysis	Better understanding of cultural traditions and market needs	90% of students learned new approaches to balancing modern and traditional methods
Polewali Mandar	Technical knowledge in fisheries	Increased competency in fish farming and marketing	80% of students improved their technical expertise in fish farming

In addition to technical skills, the program also improved students' cross-cultural communication skills. Effective communication is a crucial component of successful collaboration in this program, especially when the primary language of instruction is English, which is not the mother tongue of most participants. Communication difficulties initially led to tensions and misunderstandings, especially in locations like Lakkang Island, where locals are more comfortable communicating in their native languages. However, students from both countries were able to overcome these obstacles through a collaborative approach and mutual understanding of each other's cultural differences. These findings support a study by Steiner et

al. (2023), which showed that cross-cultural interactions in social innovation programs can improve communication skills and adaptability in multicultural environments.

### Impact of the Program on Sustainable Development

The SUIJI program has made significant contributions to sustainable development in all four research sites. As explained by Spadafora & Rapaccini (2024), social innovation combined with appropriate technology can accelerate the achievement of sustainable development goals, particularly in rural areas. In this case, students involved in the SUIJI program successfully introduced new technologies and practices relevant to local needs, such as organic farming techniques on Lakkang Island and sustainable coffee cultivation in Toraja. These activities not only increased community production and income but also strengthened the sustainability of the local ecosystem.

In Polewali Mandar, the introduction of more efficient pond fish farming methods had a positive impact on the local economy. Communities previously using traditional fish farming methods were now able to increase their yields using the techniques taught by the students. This impact demonstrates how grassroots-based social innovation can trigger sustainable changes in local agricultural and fisheries practices, as explained by Seyfang & Haxeltine (2012). However, this success depends heavily on long-term support from local governments and organizations to ensure that communities can continue to implement the new technologies introduced.

In terms of environmental conservation, the SUIJI program has also had a significant impact, particularly on Barrang Lompo Island. Student research projects on coral reefs and waste management have raised local awareness of the importance of preserving marine ecosystems. By introducing a more organized waste management system, students have helped reduce the negative impact of waste on marine ecosystems, which was previously a major problem on the island. According to Spitzer & Twikirize (2023), social innovations that involve active community participation in environmental conservation can create sustainable behavioral change, as evidenced in the context of Barrang Lompo Island. Table 2 below summarizes the SUIJI Program's key contributions to sustainable development at each research site.

Table 5. Contribution of the SUIJI Program to sustainable development at the research location.

Location	Contribution to Sustainable Development
Barrang Lompo	Increasing environmental awareness through coral reef research
Lakkang	Increasing agricultural productivity through organic techniques
Toraja	Preserving local culture and improving the economy through coffee
Polewali Mandar	Increasing pond fish production through modern cultivation techniques

Table 5: Factors Influencing Program Sustainability

Location	Challenges to Sustainability	Key Influencing Factors	Recommendations for Future Programs
Barrang Lompo	Limited infrastructure (water, power)	Strong local engagement, environmental focus	Prioritize infrastructure development in future programs
Lakkang	Limited irrigation systems	Positive reception of farming techniques	Ensure better access to water resources

Toraja	Limited connectivity and transport	Cultural acceptance of innovation	Build stronger partnerships with local government for logistical support
Polewali Mandar	Poor infrastructure for technology use	Community's willingness to adopt new practices	Invest in infrastructure to support new technologies

The sustainability of the SUIJI program's impact in the rural areas of South Sulawesi is heavily influenced by various factors, particularly local infrastructure, community engagement, and the ability to implement and maintain new practices. In Barrang Lompo, one of the major challenges was the limited infrastructure, especially in terms of water supply and power, which hindered the full implementation of some of the introduced innovations. However, the strong community engagement in environmental conservation provided a solid foundation for sustaining some of these initiatives. This highlights the importance of prioritizing infrastructure development, especially in rural areas, to ensure the long-term success and scalability of social innovations.

On Lakkang Island, the primary challenge was the lack of an adequate irrigation system, which restricted the full potential of the organic farming techniques that were introduced. Despite this limitation, the community showed a positive response to the new farming methods, and there was a noticeable increase in agricultural productivity. This suggests that if the community had access to better irrigation systems, the positive impacts of organic farming could be significantly expanded. Therefore, future programs should focus on improving basic agricultural infrastructure, particularly water resources, to support sustainable farming practices.

In Toraja, infrastructure issues such as limited connectivity and transportation posed significant challenges to the effective implementation of the program's initiatives. However, the community's openness and cultural acceptance of the innovations introduced played a critical role in the program's success. The community's willingness to engage with the students and adopt new practices demonstrated that cultural sensitivity and local acceptance are key to the success of such initiatives. Strengthening partnerships with local governments to improve logistical support and infrastructure could help address these barriers in the future.

Finally, in Polewali Mandar, the community faced challenges related to inadequate infrastructure for the technologies introduced, particularly in the fisheries sector. While these limitations initially hindered the implementation of certain practices, the local farmers were highly receptive to the new fish farming techniques, which led to improvements in production. This positive reception indicates that, with the right infrastructure in place, the community would be able to fully capitalize on these innovations. Therefore, future programs must include infrastructure development as a critical component to ensure that new technologies can be effectively implemented and sustained.

### **The Role of Students in Developing Social Innovation**

Students play a crucial role as agents of change in the development of social innovation in local communities. Through direct interaction with the community, they not only transfer new knowledge and technology but also learn from the local knowledge held by the community. On Barrang Lompo Island, for example, students learned how local communities traditionally utilize marine resources to support their livelihoods. Meanwhile, in Toraja, students learned about how communities maintain their cultural values in the face of modernization.

Students' role as facilitators in the development of social innovation is also evident in their ability to mobilize local resources and create solutions contextualized to community needs. This supports the findings of Gisevius et al. (2025), who showed that students involved in cross-cultural programs can act as liaisons between local communities and the outside world, expanding community access to new knowledge and technology.

However, despite the crucial role students play in developing social innovation, the challenges they face in adapting to the local environment should not be overlooked. Several students reported difficulties adapting to limited infrastructure in some locations, such as limited access to clean water and electricity on Lakkang Island. These challenges reduced the effectiveness of some projects, particularly those requiring modern technology. To address these issues, it is crucial for future similar programs to consider local infrastructure development as an integral part of social innovation projects.

### **Implications for Policy and Program Development**

The results of this study provide several important implications for policy and the development of similar programs in the future. First, the success of the SUIJI Program in integrating social innovation and cross-cultural collaboration demonstrates that partnerships between universities, local communities, and the government can be an effective model for achieving sustainable development goals in rural areas. However, to enhance the sustainability of the project, long-term support from local governments and non-governmental organizations is needed to ensure that the innovations introduced by students can continue after the program concludes.

Second, the results of this study also emphasize the importance of a cross-cultural approach in social innovation programs. The challenges faced by students related to communication and cultural adaptation suggest that more in-depth cross-cultural training is needed before the program begins. This training can help students develop better cross-cultural skills, which in turn will increase the program's effectiveness on the ground.

Furthermore, supporting local infrastructure should be a priority in future program development. As identified in the findings of this study, infrastructure limitations in some research sites, such as Lakkang Island and Polewali Mandar, hamper the full implementation of the new technologies introduced. Therefore, partnerships between the government and universities need to be strengthened to address these barriers, with a focus on providing basic infrastructure that supports the sustainability of the projects.

### **Conclusion**

This study evaluates the impact of the Six Universities Initiative Japan-Indonesia (SUIJI) Program on sustainable development in rural South Sulawesi. The results show that community-based social innovation and cross-cultural collaboration play a crucial role in improving the social and economic well-being of local communities. The program significantly contributed to increased agricultural productivity, improved waste management, and environmental preservation through the direct involvement of students from Japan and Indonesia. Communities on Barrang Lompo Island, Lakkang Island, Toraja, and Polewali Mandar benefited from the introduction of organic farming techniques, sustainable fisheries management, and improvements to the education system.

One key finding was positive changes in student behavior and skills, particularly in cross-cultural communication and the application of theoretical knowledge to real-world practice. However, challenges related to cultural differences, language barriers, and limited

infrastructure in the target communities were identified as obstacles hindering the full implementation of the program's initiatives.

The results suggest that while the program has successfully delivered tangible results, its long-term sustainability depends on continued support from local stakeholders, including universities, government, and non-governmental organizations. Furthermore, the integration of local and global perspectives, as reflected in the glocalization framework, is key to ensuring that the solutions introduced by the program are relevant to the local context and supported globally.

This research contributes to the literature on social innovation and sustainable development by providing empirical evidence from a cross-cultural context. The findings emphasize the importance of integrating local knowledge with global expertise to address rural development challenges. Further research is needed to explore the long-term impact of similar programs, particularly in assessing how communities can continue to adapt and sustain the innovations introduced after the program ends. Furthermore, further exploration of the role of infrastructure development in supporting sustainable initiatives in rural areas is needed.

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