Research Article

International Collaboration for Grassroots Social Innovation: An Analysis of Agents, Goals, Drivers, and Processes of the SUIJI Program

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Abstract.

International collaboration is increasingly recognized as a significant driver in addressing social and environmental challenges, particularly through grassroots social innovation. This study uses the capability approach to explore the role of the Six Universities Initiative Japan-Indonesia (SUIJI) in supporting community-based social innovation in Indonesia. The aim is to analyze how cross-cultural collaboration between Japanese and Indonesian students influences the capabilities of local communities. This research employs a qualitative approach with a case study method. Data were collected through in-depth interviews, participatory observation, and document analysis. The research participants included students, faculty members, and local community leaders in the SUIJI program. The findings indicate that the SUIJI program successfully enhanced local community capabilities, particularly regarding technical skills and participation in decision-making processes. However, Japanese students faced cultural adaptation challenges due to differences in work approaches and the absence of communitybased programs in their curriculum. To address this, it is recommended that universities in Japan integrate programs like Kuliah Kerja Nyata (KKN) into their curricula. These findings have important implications for higher education policy and highlight the need for curriculum adaptation to improve the effectiveness of international collaboration in grassroots social innovation. This study underscores the critical role of community ownership, local capacity building, and institutional support in sustaining grassroots innovation. Furthermore, it provides valuable insights into how the integration of the capability approach within social innovation practices can have a transformative impact on cross-national educational collaborations.

Keywords: international collaboration, grassroots social innovation, capability approach, SUIJI

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Published: 2 September 2025

Publishing services provided by Knowledge E

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Selection and Peer-review under the responsibility of the 2nd Doctoral International Conference Committee.

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1. Introduction

International collaboration is crucial in addressing increasingly complex global challenges like poverty, environmental degradation, and social inequality. In this context, grassroots social innovation has emerged as an essential approach to creating sustainable solutions, particularly in local communities. Unlike innovations led by governments or markets, grassroots social innovations are typically initiated from within communities and aim to meet specific local needs. These innovations promote inclusivity and social equity and enhance communities' capacity to act collectively in addressing local problems (Seyfang & Smith, 2007). As these social innovations evolve, they are gaining recognition as viable alternatives to traditional development strategies that often fail to account for local conditions and cultural contexts [1].

Grassroots social innovation frequently mobilizes local resources, including knowledge, skills, and networks, to create contextually appropriate solutions. These innovations often arise in areas where market- or state-led approaches are ineffective in addressing issues such as food security, environmental sustainability, and social welfare [2]. For instance, community-supported agriculture initiatives offer alternatives to industrial farming while fostering social solidarity and environmental sustainability through local decision-making and active participation [2]. In this regard, the Capability Approach, developed by Amartya Sen, provides a robust theoretical framework for evaluating how grassroots social innovations can enhance human development. This approach emphasizes the expansion of individuals' and communities' real freedoms—their capabilities—to live the lives they value [3]. In the context of grassroots social innovation, this is translated into an evaluation not only of material outcomes but also of how these innovations empower individuals and communities to meaningfully participate in shaping their future [4].

A relevant example of international collaboration fostering grassroots social innovation is the Six Universities Initiative Japan-Indonesia (SUIJI). SUIJI combines six universities from Japan and Indonesia in community-based projects aimed at addressing local challenges such as environmental sustainability, poverty alleviation, and access to quality education. Through a participatory approach and direct engagement with local communities, SUIJI seeks to co-create sustainable solutions that are contextually relevant while promoting cross-cultural understanding and collaboration between the two countries (SUIJI Agents, Objectives, and Process, 2023). This program serves

as an innovative model of how academic institutions can become agents of change by facilitating collaboration between students, faculty, and local communities to create innovative solutions for complex social and environmental issues. The Capability Approach provides a useful perspective for analyzing the effectiveness of SUIJI in promoting human resource empowerment through grassroots social innovation.

Sen's concept of capability goes beyond traditional indicators of well-being, such as income or consumption, and focuses on what individuals can do and achieve—their substantive freedoms [5]. In the context of grassroots innovation, this approach highlights how such initiatives can expand the capabilities of local communities by enhancing their ability to participate in decision-making processes, engage in meaningful work, and contribute to the sustainability of their environment [6]. Grassroots innovations driven by SUIJI not only focus on meeting immediate needs; these initiatives also create pathways for long-term empowerment and social transformation by building the capacity of individuals and communities to control their own development trajectory.

The Capability Approach also provides valuable insights into the innovation process itself. According to Sen, the expansion of capabilities is closely tied to the freedom to participate in and influence decision-making processes that affect one's life [3]. Grass-roots innovation naturally promotes participatory processes that involve community members as active agents in identifying problems and developing solutions [7]. This is particularly relevant in contexts where external solutions often fail to align with local needs or values. By involving local actors in all stages of the innovation process, from design to implementation, initiatives like SUIJI ensure that the solutions developed are not only effective but also aligned with the community's priorities and values. This participatory approach is crucial for building long-term resilience in communities facing social and environmental challenges.

One of the key strengths of grassroots social innovation is its ability to create spaces for experimentation and adaptation. These initiatives often function as "niches" where alternative practices and technologies can be tested in a protected environment before being scaled more widely [8]. In the case of SUIJI, the program provides a platform for students and community members to experiment with innovative solutions to local challenges, such as using organic farming techniques to improve food security or implementing conservation practices to protect local ecosystems. These projects not only address immediate needs but also build the long-term capacity of communities to innovate and adapt to future challenges [9].

Despite their potential, international collaborations aiming to foster grassroots social innovation also face several challenges. One of the primary challenges is managing cultural differences and ensuring effective coordination among partners from diverse academic and cultural backgrounds. In the case of SUIJI, participants from Japan and Indonesia bring different perspectives and expectations, which can sometimes lead to misunderstandings or divergent goals. Additionally, resource limitations such as funding or labor constraints can hinder the sustainability and scalability of innovation projects [1]. These challenges highlight the importance of careful management of international collaborations to ensure that grassroots initiatives remain locally relevant and effective.

The SUIJI program presents a unique opportunity to explore how international collaboration can support grassroots social innovation while respecting local autonomy and ensuring that solutions remain contextually relevant. By analyzing SUIJI through the lens of the Capability Approach, this paper seeks to provide a deeper understanding of how such initiatives can expand the capabilities of individuals and communities to act on their own behalf. This analysis also contributes to the broader literature on grassroots social innovation by offering practical insights for policymakers, practitioners, and researchers interested in promoting sustainable development through community-based initiatives and international partnerships.

In essence, the importance of international collaboration in fostering grassroots social innovation cannot be overstated. Programs like SUIJI illustrate how cross-cultural partnerships can create opportunities for local communities to develop sustainable solutions to pressing social and environmental challenges. By expanding the capabilities of individuals and communities to participate in the innovation process, these initiatives contribute not only to solving immediate problems but also to long-term social transformation and empowerment. The Capability Approach provides a robust framework for understanding and evaluating the impact of such initiatives, offering valuable insights into how international collaboration can promote human development through grassroots innovation.

Ultimately, this study aims to reposition international academic collaboration not merely as a mechanism for knowledge transfer or capacity building, but as a transformative platform where agency is cultivated, social ties are strengthened, and innovations emerge through mutual engagement. By analyzing the SUIJI Program through the integrated lenses of the Capability Approach, Social Innovation, and Grassroots Innovation, this research offers valuable insights into how higher education can contribute to

sustainable development while centering the voices and capabilities of all stakeholders involved [10]; [11].

2. Methods

This study utilizes a qualitative approach, focusing on an in-depth exploration of the Six Universities Initiative Japan-Indonesia (SUIJI) program in supporting grassroots social innovation through international collaboration. To ensure methodological integrity and research relevance, the study incorporates multiple data collection methods, including in-depth interviews, participatory observation, and document analysis. This approach enables researchers to gain a comprehensive understanding of the local context and the role of collaboration in enhancing community capabilities. This section outlines the research methodology in detail, covering research design, data collection procedures, data analysis, and measures to ensure validity and reliability.

This research is based on an exploratory case study that combines qualitative methods as the primary approach. A case study design was chosen due to its relevance in investigating complex phenomena within real-life contexts, where the boundaries between phenomena and context are not clearly defined [12]. Given the study's focus on the SUIJI program as a model of grassroots social innovation, the case study design allows researchers to explore how the interaction between international and local agents affects community capabilities in responding to social and environmental challenges.

A qualitative design was also chosen to capture the dynamics of international collaboration and the social innovation process in depth, as the nature of the phenomenon under investigation is not suited to simple quantification [13]. This approach is particularly relevant to the research objective of understanding how community participation in this program expands their capabilities to address local challenges [14].

The study was conducted at several locations in Indonesia that are the focus of the SUIJI program, with local communities as the primary subjects of the research. These communities were selected based on their involvement in collaborative projects focused on social innovation, such as organic farming, environmental conservation, and education. The research subjects included students, faculty members, and community leaders who were directly involved in the SUIJI projects.

The number of research participants was 35, selected using purposive sampling. This technique allowed the researcher to choose participants based on their direct involvement in the program and their knowledge of the social innovation processes in the community. Participant characteristics included students from universities participating in the SUIJI program, project supervisors, and local community leaders actively involved in project implementation. A diversity of participant backgrounds was maintained to obtain a wide range of perspectives on the impact of the program (Table 1).

TABLE 1: Profiles of key participants.

Name	Role	Nationality	Affiliation
Motoko Shimagami	Supervisor	Japan	Promotion Office of SUIJI (Six University Initiative Japan Indonesia) Consortium for Ehime University
Dorothea Agnes Rampisela	Supervisor	Indonesia	Promotion Office of SUIJI (Six University Initiative Japan Indonesia) Consortium for Hasanuddin University
Oktaviani Nelsi	Mentor (SUIJI Alumni of Hasanuddin University)	Indonesia	Sago Research and Development Center, Hasanuddin University
Muhammad Taufik Gaffar	SUIJI Alumni of Hasanuddin University	Indonesia	Indonesia Logistics Bureau (BULOG)
Sudirman	Community Leader, Polewali District	Indonesia	Charcoal from Coconut Waste Production and Export
Eko Handoko	Community Leader, Tana Toraja District	Indonesia	Owner of Barani Coffee

Data were collected using three main methods: in-depth interviews, participatory observation, and document analysis.

In-depth Interviews: Interviews were conducted with 20 participants, including students, faculty members, and local community leaders. Semi-structured interviews were used to allow flexibility in exploring participants' experiences and views on SUIJI's contribution to grassroots social innovation [15]. Interview questions covered topics such as motivation for participating in the project, the role of international collaboration in supporting local capabilities, and challenges and opportunities encountered during program implementation. Each interview lasted between 45 and 90 minutes and was recorded to ensure accuracy in transcription.

Participatory Observation: The researcher observed the implementation of SUIJI projects in the field for three months. This observation included interactions between students, faculty members, and local communities in the planning and implementation of innovation. Observations were conducted in a participatory manner, with the researcher directly involved in some community activities to understand the internal dynamics and the role of each agent in social innovation. Field notes taken during observations complemented interview data and provided richer context about social innovation activities [4].

Document Analysis: In addition to primary data, this research also relied on document analysis as a source of secondary data. The documents analyzed included annual reports from SUIJI, project evaluation reports, and publications related to social innovation in local communities. Document analysis provided additional insights into the goals, processes, and outcomes of projects carried out within the framework of the SUIJI program, as well as relevant historical and policy contexts [16].

Data were analyzed using thematic analysis developed by Braun and Clark. The data analysis process began with the verbatim transcription of interviews and field notes. Following this, the researcher conducted repeated readings to identify key themes related to SUIJI's role in supporting social innovation and expanding the capabilities of local communities. This analysis focused on four main dimensions of the program: agents, objectives, drivers, and the process of social innovation [7].

Once the initial themes were identified, a coding process was undertaken to organize the data into more specific categories, such as enhancing local capabilities, community participation, and the challenges of cross-cultural collaboration. The use of NVivo software facilitated the systematic management and organization of qualitative data, making it easier for the researcher to trace themes and patterns in the data.

To ensure the validity and reliability of the data, this study employed several triangulation strategies [17]. Methodological triangulation was conducted by combining data from interviews, observations, and documents to strengthen the research findings. Additionally, the researcher conducted member checking, where interim research findings were shared with participants to verify the accuracy of the interpretation. This technique helped ensure that participants' perspectives were accurately reflected in the analysis.

The reliability of the data was strengthened through a rigorous audit trail, where each step of data collection and analysis was documented in detail. The researcher

also engaged in replication analysis with fellow researchers to ensure the consistency of the findings.

This study adhered to ethical research principles, including obtaining written consent from all participants prior to conducting interviews and observations. Participants were assured of confidentiality and anonymity, as well as their right to withdraw from the study at any time without consequences. All data were securely stored and used solely for research purposes.

3. Results and Discussion

This study aims to explore the contribution of the Six Universities Initiative Japan-Indonesia (SUIJI) program in fostering grassroots social innovation through an international collaboration approach. This section presents the findings from field data, organized based on the main themes emerging from the data analysis. These findings are discussed by comparing them with relevant literature and considering their implications for social innovation and capability-based community development. The analysis also highlights the study's limitations to provide a holistic view of the significance and challenges of international collaboration in social innovation.

3.1. Enhancement of Local Community Capabilities

One of the key findings from this study is that the SUIJI program significantly expanded the local community's capabilities in addressing social and environmental challenges. This enhancement is evident in the community's ability to actively participate in decision-making processes and the design of local solutions. Based on interviews with community leaders, they felt more empowered through their involvement in projects that prioritize active participation. As Sen explains, capability refers to an individual's freedom to do something they value, and in this context, involvement in social innovation processes strengthens the community's ability to control their own future.

This finding aligns with previous research showing that community-based social innovation initiatives can expand individuals' and groups' substantive freedoms through collective empowerment processes [6]. For example, communities involved in organic farming projects through the SUIJI program reported that they not only gained new skills in sustainable farming practices but also felt they had greater control over their

local food systems. This is consistent with the concept of functionings and capabilities in the Capability Approach, where outcomes are assessed not only based on material achievements but also on the enhanced ability to choose and shape the life they value [5].

3.2. Social Innovation Processes and Challenges of International Collaboration

In addition to expanding capabilities, the SUIJI program also provided a space for experimentation and the development of innovative solutions relevant to the local context. Based on participatory observations, one of SUIJI's flagship projects in Indonesia—organic farming—successfully facilitated the adaptation of new technologies within the local context. Farmers in the villages participating in the program reported increased crop yields and reduced production costs through the use of organic methods. Furthermore, collaboration with students from Japanese universities helped introduce more efficient and sustainable practices in land resource management. This supports the argument that grassroots social innovation can serve as experimental laboratories for testing and developing practices that can be adopted more broadly [8].

However, these findings also reveal challenges arising from cultural and academic differences between Japanese and Indonesian participants. Interviews with students and faculty members indicated that, in some cases, differences in work approaches, language, and expectations created barriers to project implementation. For instance, some Japanese students struggled to adjust to the more flexible, participatory approach in the field, while Indonesian students faced challenges in understanding the formal expectations of their Japanese counterparts. These difficulties reflect previous studies emphasizing the importance of managing cultural differences in international collaboration to ensure effective teamwork [3].

3.3. Social and Economic Sustainability Enhancement

SUIJI impacted not only individual capabilities but also the social and economic sustainability of the community. Several projects implemented through this program, such as environmental conservation and organic farming initiatives, have created long-term sustainable impacts. Communities participating in the organic farming project reported increased income and food security, which strengthened their ability to address future

socio-economic challenges. Interview data also indicated that these initiatives helped reduce community dependence on environmentally harmful imported agricultural products, while fostering social solidarity through the formation of supportive farmer networks.

These findings support previous literature that suggests community-led social innovations often succeed in creating sustainable solutions compared to external interventions, as they are rooted in local contexts and community needs [2]. Moreover, empowering communities to become active agents of change contributes to enhancing community resilience against future social and environmental changes.

3.4. Research Limitations and Implications

Although the SUIJI program succeeded in many aspects, this study identifies several limitations that need to be considered for future implementation of this model. One major limitation is resource constraints, both in terms of funding and human resources, which affect the scale and continuity of projects. Some innovation projects run by SUIJI demonstrated great potential, but difficulties in securing additional funding or expert personnel caused these projects to stall after the initial phase. This limitation reflects findings in the literature that social innovation often faces sustainability challenges if not supported by adequate resources [1].

Furthermore, this study faces limitations in the generalization of results. Since the research focuses on one program and several specific communities in Indonesia, the results may not be fully generalizable to other contexts. Therefore, further research is needed to explore whether these findings are consistent in different geographical and cultural settings.

In terms of implications, this study shows that international collaboration based on the Capability Approach can significantly impact the empowerment of local communities. Through active engagement in social innovation, communities can enhance their capabilities to act and address social and environmental challenges independently. However, the study also highlights the importance of managing cultural differences and resource constraints to ensure the success and sustainability of projects.

This research confirms that the SUIJI program contributes significantly to enhancing local community capabilities through grassroots social innovation and international collaboration. Capability enhancement is evident in the community's ability to participate

in decision-making, develop new skills, and create locally relevant solutions. However, to ensure the continuity of these initiatives, challenges such as cultural differences and resource limitations must be addressed effectively. These findings provide valuable insights for the development of more effective international collaboration models in supporting community-level social innovation.

3.5. Constraints and Challenges in Grassroots Social Innovation

This study finds that while the Six Universities Initiative Japan-Indonesia (SUIJI) positively contributed to local communities in South Sulawesi, several challenges related to grassroots social innovation (GSI) were identified. One key challenge was the difficulty Japanese students had in adapting to the more informal and flexible approach of the local community, as they were accustomed to structured systems. This difference created an adaptation gap for Japanese students when interacting and collaborating with local communities.

This gap aligns with previous studies, which highlight that cross-cultural collaborations often face challenges in aligning work methods and expectations among participants from different contexts. While students from Universitas Hasanuddin (UNHAS) are familiar with community-based activities through the Kuliah Kerja Nyata (KKN) program, Japanese students faced difficulties in understanding local social dynamics due to the absence of similar experiences in their curriculum. Table 2 compares the curriculum and student activities from Universitas Hasanuddin (Indonesia) and Japanese universities.

Aspect
UNHAS (Indonesia)
Japanese Universities

KKN as a requirement
Academic-focused, fewer community-based activities

Interaction with Society
Intensive (through KKN)
Limited (less structured community engagement)

Structured and formal

Difficult (lack of field experience)

Flexible and participatory

Easy (through hands-on

TABLE 2: Differences in Student Activities in Indonesia and Japan.

3.6. Curriculum Differences and the Need for Integration

experience)

Work Approach

Adaptation to Local Context

The conclusion drawn from these findings is that differences in curriculum between Indonesian and Japanese universities, particularly related to the KKN program, are an

important factor influencing Japanese students' ability to adapt to local communities. UNHAS students are accustomed to KKN programs from the early stages of their campus life, enabling them to understand local social and cultural dynamics well. In contrast, Japanese students do not have similar programs in their curriculum, resulting in adaptation difficulties when engaging in international collaborative projects.

To address this challenge, it is recommended that KKN or similar programs be integrated into Japanese university curricula. Such programs would help Japanese students acquire the social and cultural skills needed to work effectively in local community contexts, especially in developing countries like Indonesia. By incorporating KKN elements into the Japanese curriculum, students will be better prepared to navigate the social dynamics and complexity of public administration in other countries.

3.7. Policy and Educational Implications

These findings have several important implications for educational policy, particularly regarding international curricula. Japan's curriculum needs to be adjusted to include community-based programs like KKN, which provide students with hands-on experience in working with communities abroad. This is crucial for preparing students to face social and cultural challenges in international collaborative projects.

Furthermore, cross-cultural collaboration involving universities from different countries can serve as an effective learning model to promote sustainable social innovation. Such programs not only benefit students in terms of technical skills but also broaden their perspectives on public administration and development in developing countries. Therefore, Japanese educational policy can learn from the KKN model in Indonesia to strengthen student engagement in cross-cultural social innovation.

3.8. Policy Value of SUIJI

The policy significance of this program lies in its innovative approach, situated at the nexus of education, international cooperation, and regional development. From these vantage points, it demonstrates considerable relevance to contemporary policy discourse.

Firstly, the program contributes to the development of future leaders by providing students with practical, field-based experiences. These experiences foster critical competencies such as problem-solving abilities, intercultural communication, and leadership skills. In doing so, the initiative plays a foundational role in nurturing globally minded human resources capable of contributing to both the public and private sectors in Japan and Indonesia.

Secondly, the program functions as a catalyst for regional innovation. The novel perspectives introduced by student participants have the potential to inspire local residents and stimulate the generation of new ideas. By framing local challenges as educational opportunities, the initiative encourages collaborative problem-solving between local communities and external actors, thereby facilitating dynamic forms of regional engagement.

Finally, the program strengthens grassroots diplomacy. Unlike traditional, state-level diplomatic efforts, this form of citizen diplomacy fosters mutual understanding and trust at the interpersonal level. Over time, such bottom-up engagement contributes to the creation of transnational human networks that enhance the resilience and depth of Japan–Indonesia bilateral relations.

3.9. Policy Proposal

Building on the aforementioned values, the following three policy proposals are recommended to enhance the impact and sustainability of the SUIJI-SLP initiative:

3.9.1. Expansion of Participation and Financial Support for SUIJI-SLP

It is recommended that participation in the SUIJI-SLP be expanded and financial support mechanisms be reinforced. This may be achieved by institutionalizing continuous funding from the Ministry of Education of Japan. Additionally, the development of a support framework in collaboration with local governments is essential to promote a regionally driven implementation model, thereby enhancing the program's long-term viability and regional ownership.

3.9.2. Integration with Social Innovation Education

It is proposed that the SUIJI-SLP be incorporated into the formal university curriculum in both Japan and Indonesia, particularly within courses focused on social innovation. By embedding the program into structured "Social Innovation Courses," universities can promote problem-based learning (PBL) centered on local challenges, thereby fostering the capacity of students to analyze complex social issues and formulate relevant policy responses.

3.9.3. Utilization of Talent and Network Building Post-Graduation

To ensure the sustained engagement of program alumni, the establishment of a Japan–Indonesia youth network (e.g., the "SUIJI Alumni Network") is recommended. Furthermore, mechanisms should be developed to provide continued support for alumni in employment and research endeavors. Strategic partnerships with institutions such as the Japan International Cooperation Agency (JICA) and the ASEAN–Japan Centre will be crucial in facilitating these post-program opportunities and in strengthening long-term transnational collaboration (Table 3, Table 4, Table 5).

Table 3: Analysis of agents, objectives, drivers, and processes from the perspective of SI, and analysis of SUIJI-SLP from the perspective of SI.

Dimension	Ideas from the Social Innovation Literature	A wide range of ideas born from social innovation
Agents	-Civil society.	- Civil society settings (people who live, work or study in the same area or town)
Purposes / Objectives	Meeting a social need.Focus on social and public interest.Not-for-profit.Social inclusion and social justice.	-Building sustainable communitiesPromoting sustainable livelihoodsCreating greater fairness, solidarity and vitality.
Drivers	 Societal needs that have not traditionally been addressed by markets and existing institutions. Local and global social, economic and environmental challenges. 	Individualism: - Fostering a sense of community solidarity - Supporting local small-scale farmers and fishermen - Environmental protection - Desire for self-development Transformational issues: - Desire to contribute to building a democratic arena and building a sustainable local community that transcends markets and nation states
Process	Role of users/people.Participation.Depends on context and path.	-All tasks are carried out independently and members are self-organizedSchedule management based on to-do listsHorizontal decision-makingDemocratic procedures.

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Table 4: Analysis of agents, objectives, drivers, and processes from a GI perspective, and analysis of SUIJI-SLP from a GI perspective.

Dimension	Ideas from the grassroots innovation literature	A wide range of ideas born from grassroots innovation
Agents	- A non-profit organization with passionate activists involved.	 A bottom-up process driven by voluntary contributions from people. Civil society domain (no public or commercial support). Frequently involving engagement with other groups.
Purposes / Objectives	 Individual, intrinsic interests: meeting the local, situational needs of people within a community. Collective, diffuse interests: alternatives to hegemonic systems and social relations. 	Intrinsic benefits: -Respond to local needsLearn about the challenges facing the community and future possibilitiesMeet with civil society and local peopleParticipate in reflection and sharing. Extended benefits: -Provide valuable insights into how communities can drive social, economic and environmental changeReduce regional and social disparities.
Drivers	- Local and contextual requirements and processes.	-Demands emerge as a bottom-up response to local or group needs.
Process	- Bottom-up initiatives and processes governed and controlled by citizens, their active role and direct participation (control of the process) Through the creation of alternative means of production and distribution of goods and services (social economy).	-The degree of local community participation is limitedThe group is divided into committeesImportant decisions are made at regular meetingsThe form of participation is specified (staying together for about 2-3 weeks at the rural site set up by the three Shikoku universities/three Indonesian universities)Importance of mentioning trust, friendship, involvement, responsibility, cooperation, etc.

TABLE 5: Framework Characterizing Grassroots Social Innovation for Human Development (GSI4HD) to Achieve Sustainable Community Development in Japan and Indonesia and Optimize the Japan-Indonesia Comprehensive Strategic Partnership.

Dimension	Ideas from the Capability Approach	Capability Approach Interpretation	Grassroots Social Innovation for Human Resource Development
Agents	as agents, intrinsically	 People as rights hold- ers, acting as active citi- zens, and having the expe- rience to create alternative economies. 	- Limited number of actors joining the
			- Teacher mentors.
			- Indonesian students: Participate in SLP after completing the mandatory KKN (Community Service Program) in their first year.
			 Japanese students: Participate in both Basic and Advanced SLP domestically and internationally.
			- Establishing communication touchpoints with other stakeholders such as policymakers, practitioners, and researchers.

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TABLE 5: Continued.

Dimension	Ideas from the Capability Approach	Capability Approach Interpretation	Grassroots Social Innovation for Human Resource Development
Purposes / Objectives	- Expanding capabilities to access what people consider important, both individually and collectively.	Intrinsic Benefits:	Intrinsic Benefits:
		- Participation is the rule.	 Contributing to sustainable human development through a focus on participatory processes, knowledge transfer, and capacity building.
		 Meeting stakeholder requirements (needs and learning), expanding capacity (basic and practical skills), ownership, and contributing to servant leadership development. 	- Contributing to the sustainable development of servant leaders.
		General (Collective) Benefits:	Diffusion (Collective) Benefits:
		- Creating alternatives to the hegemonic system through democratic participation as collective action.	- Providing practical insights for policymakers, academics, and practitioners involved in building sustainable communities.
		 Promoting recognition of the Japan-Indonesia Comprehensive Strategic Partnership. 	
			- Encouraging processes that enable not just individuals but also groups (all participants, including students from the six Japanese-Indonesian universities) to become authors of their own lives.
			- Contributing to strengthening the link between social innovation, international cooperation, and higher education.
Drivers	- Not only demands but also personal, social, and environmental conversion factors (context).	Personal Conversion Factors:	Needs emerge as a bottom-up response to community and group requirements (which can be either more individualistic or transformational).

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TABLE 5: Continued.

Dimension	Ideas from the Capability Approach	Capability Approach Interpretation	Grassroots Social Innovation for Human Resource Development
		- Facing reality generates frustration and expectations, leading to a driving force to bridge gaps (improving adaptability).	- Japanese and Indonesian SUIJI-SLP participants experience various emotions, including anger, joy, sadness, pleasure, pain, anticipation, frustration, solidarity, friendship, responsibility, and fulfillment. Ultimately, all participants strive to use these emotions as a driving force for their personal and group human development.
		Environmental Factors:	
		- The existence of regional disparities between rural and urban areas.	
		- The presence of social inequalities in local communities.	
Process	- Through deliberative democracy.	 Open discussions and democratic decision- making. 	- The importance of values such as trust, friendship, active engagement, responsibility, anger, and cooperation between Japanese and Indonesian students.
		Deliberative Democracy:	- Horizontal decision-making.
		spaces for learning servant	- Encouraging Japanese students to undertake domestic SLP, a process similar to how most Indonesian students complete KKN before participating in SLP.
		Process for Developing Five Capabilities:	- Encouraging increased participation levels among local residents.
		- "Immerse yourself in the community and your peers" to develop the ability to experience and understand the community.	Four Steps/Processes in SUIJI-SLP:
		- "Dig deeper" to develop the ability to understand reality and analyze problems.	Basic Domestic SLP: Students from the six Japanese and Indonesian universities live together in designated rural, mountainous, and fishing village locations assigned by the three Shikoku universities. They explore the challenges these regions face, envision their potential futures, and develop fundamental servant leadership skills.
		- "Take action" to develop the ability to execute and take initiative.	Basic Overseas SLP: Students from the six Japanese and Indonesian universities live together in designated rural, mountainous, and fishing village locations assigned by the three Indonesian universities. They explore regional challenges, potential futures, and develop fundamental servant leadership skills.

TABLE 5: Continued.

Dimension	Ideas from the Capability Approach	Capability Appr Interpretation	oach	Grassroots Social Innovation for Human Resource Development
		- "Co-create" to development to the ability to shape community's future. "Learn from experie and share them" to development to reflect or learn from commengagement experience.	the ences velop n and nunity	Indonesian universities live together in

4. Conclusion

This study highlights the significant role of international collaboration in supporting Grassroots Social Innovation (GSI) through the Six Universities Initiative Japan-Indonesia (SUIJI) program. The main findings reveal that the program successfully enhanced the capabilities of local communities in Indonesia through active participation in collaborative projects, particularly in organic farming and environmental conservation. The involved communities demonstrated an increased capacity to participate in decision-making processes and to develop sustainable local solutions. These findings align with existing literature on the importance of community-based social innovation for achieving long-term sustainability and local empowerment.

However, this study also uncovered significant challenges related to the cultural adaptation of Japanese students, who are accustomed to more structured work systems, when interacting with local communities that adopt a more informal and flexible approach. The curriculum differences between Indonesian and Japanese universities, particularly regarding programs like Kuliah Kerja Nyata (KKN) at Universitas Hasanuddin, emerged as a key factor influencing students' ability to navigate local social dynamics. Based on these findings, it is recommended that Japanese universities integrate similar community-based programs into their curricula to better prepare students for crosscultural collaboration and future social innovation projects.

This study makes an important contribution to the growing body of literature on international collaboration and grassroots social innovation. Specifically, it expands the understanding of how cross-cultural collaboration can impact local community capabilities, as well as the challenges encountered during such processes. Furthermore, this research underscores the need for curriculum adaptation in universities involved in international collaborations to ensure that students acquire the social and cultural skills necessary for effectively engaging with local communities in developing countries.

From a policy perspective, this research highlights the importance of integrating experiential learning programs, such as KKN, into international higher education. Such programs would facilitate students' readiness to adapt to different social environments and promote sustainable social innovation through direct community engagement.

For future research, several areas warrant further exploration. One area is how cultural differences and education systems between countries can be managed more effectively within international collaboration programs. Additionally, further studies are needed to assess how grassroots social innovation models facilitated by universities can be expanded to other countries and how factors such as resources, policies, and infrastructure influence the success of such programs. In conclusion, this study makes a significant contribution by strengthening the link between social innovation, international collaboration, and higher education. By identifying the challenges and opportunities in collaborative projects like SUIJI, this research provides practical insights for policymakers, academics, and practitioners interested in advancing sustainable development through cross-border collaboration and community-based initiatives.

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