

Revitalization of "Gotong Royong" as Social Capital in Village Infrastructure Development: A Case Study of Macadam Road Construction in Ngranget Village, Dagangan District, Madiun Regency

Aulia Zalzabela Widiyaningsih^{*}, Edy Prayitno¹, Mai Puspadya Bilyastuti¹

¹Public Administration, PDKU Ponorogo, Merdeka University of Malang

^{*}Corresponding author: zlzbelwxyz@gmail.com

Abstract.

This study examines the implementation of cooperation in the construction of macadam roads in Ngranget Village, Dagang District, Madiun Regency. Through participant observation and in-depth interviews, this study analyzes how the value of cooperation functions as social capital, strengthening community participation and collaborative village governance. The findings show that cooperation is not only a mechanism for resource mobilization but also an instrument for strengthening community capacity to achieve sustainable development. Gotong royong reflects the values of unity and social justice that underpin people's lives in Indonesia. This study emphasizes the relevance of local values in the context of Sustainable Development Goals (SDGs) 11 and 16. It shows that revitalizing cooperation is an effective strategy for realizing inclusive, sustainable, and equitable village development and provides an empirical basis for developing empowerment programs that place the community as the leading actor in development by strengthening village social capital in a more community-based manner.

Keywords: gotong royong; village development; community participation

1 Introduction

Village development is an integral part of national development, especially since the enactment of Law Number 6 of 2014 concerning Villages, which provides greater space for villages to plan, manage, and carry out development independently. In village development, the success of the program is not only determined by the availability of government budget and infrastructure, but also by the participation and mutual cooperation of the community as a social force that is still relevant in village life. Gotong royong is not only understood as joint work but also as a form of social solidarity, trust, and a network of relationships that are the foundation of life in rural communities.

Gotong royong has long been recognized as a characteristic of rural Indonesia's collective work culture. Although modernization and social changes have led to a fading of the value of cooperation in some regions, in many villages, this tradition is still preserved. It serves as significant social capital in the implementation of development. Recent studies confirm that this practice persists, even experiencing revitalization as a local development strategy (Effendi, 2013).

More than just a traditional practice, cooperation embodies Pancasila values. In his historic speech on June 1, 1945, President Soekarno stated that if the five precepts of Pancasila were compressed into one, it would yield a single pure word: *mutual cooperation* (Soekarno, 1945). Sukarno described it as "joint bone cutting, joint sweat squeezing, joint struggle for

mutual aid. Charity all for the benefit of all, sweat all for the happiness of all." He then called this concept *Ekasila*, which is the essence of all Pancasila values (Latif, 2011). In the context of village development, cooperation is a mechanism that translates the nation's ideology into concrete collective action, placing common interests above individual interests so that equitable distribution of burdens and development benefits can be realized.

The tradition of cooperation as social capital, including beliefs, norms, and cooperation networks, is applied to address various village needs, especially infrastructure development, such as roads, bridges, public facilities, and social buildings. With substantial social capital, community participation in the form of energy, materials, consumption, and moral support can reduce development costs and speed up the completion process, while strengthening local leadership and community ownership of development outcomes.

Ngranget Village in Dagangan District, Madiun Regency, is one of the villages that still maintains the practice of cooperation in development activities. One concrete example is the construction of makadam roads at several village points that actively involve the community, from planning and material collection to development implementation. When village funds and government assistance are not enough to meet the needs of project completion, the community contributes through material donations, food donations, and unpaid community service. This shows that mutual cooperation is not only of cultural value but also serves as productive social capital that supports infrastructure development.

This phenomenon is interesting to study because it shows that development does not depend solely on the village's fiscal capacity, but also on the strength of the community's socio-cultural values. Amid the tide of individualism, the practice of mutual cooperation in Ngranget Village is proof that social capital serves as an effective development tool. Therefore, this study is important for understanding how the gotong royong revitalization process is carried out, what factors affect its sustainability, and how much it contributes to development outcomes.

Through the case study of the construction of the Makadam Road in Ngranget Village, it is hoped that the mechanism for mobilizing mutual cooperation, the roles of the village government and the community, the pattern of collaboration, and the benefits felt by residents after construction are understood. This research also has the potential to provide recommendations for other villages on utilizing social capital to address infrastructure development, especially when budget constraints are an obstacle. Thus, this study not only examines the social dimension of cooperation but also its contribution to physical development, strengthening community solidarity, improving village budget efficiency, and sustainable development through citizen participation.

2 Method

This study uses a qualitative approach, including participatory observation and semi-structured interviews. Researchers are not only passive observers, but also present in the community, following the process of cooperation from beginning to end. In this way, the empirical experience obtained becomes more complete, not only data but also an understanding of the meaning of living in togetherness in the field.

Data were collected through activity documentation, field photos, and in-depth conversations with 12 key informants, including RT chairs, community leaders, and actively

involved residents. During the data collection process, researchers sought to capture the emotional atmosphere that emerged: enthusiasm, laughter, fatigue, and a sense of pride that came together in working together.

Data analysis is carried out thematically, starting with data reduction and data presentation, and culminating in the extraction of meaning or conclusions through the triangulation of sources and techniques, as used by Prayitno et al. (2024) in a similar study on social capital at the community level. This approach was chosen to allow the research to explore the social and cultural dimensions of cooperation in depth, not only as a joint work activity but also as an expression of the collective spirit of the village community.

3 Result and Discussion

3.1 Organizational Structure and Coordination

The RT Chairman leads Ngranget Village's cooperation activities as the field coordinator, and the division of tasks is determined through residents' deliberations. This structure balances formal leadership with community participation. The organizational model aligns with the findings of Lego et al. (2025), which emphasize the role of informal leaders in mediating collaboration between residents and village governments. The deliberative process that is carried out openly reflects the democratic value of Pancasila, where every citizen has an equal right to vote in collective decision-making.



Figure 1. Deliberation, as well as the process of making wooden boxes

Figure 1 shows the atmosphere of citizen deliberation, which took place democratically and participatively. The forum not only discusses the technical aspects of the work but also develops tools, such as wooden boxes for transporting stones. The equality of position among citizens in the deliberative forum reflects the fourth precept of Pancasila, namely, the people's leadership guided by *wisdom in deliberation/representation*.

3.2 Profile and Participation Pattern

Participation in activities involves various levels of society: farmers, students, private employees, and state civil servants. The implementation of activities on Sundays is considered inclusive because it adjusts residents' free time (Juliana et al., 2025). The composition of citizen participation by profession can be seen in the following figure:

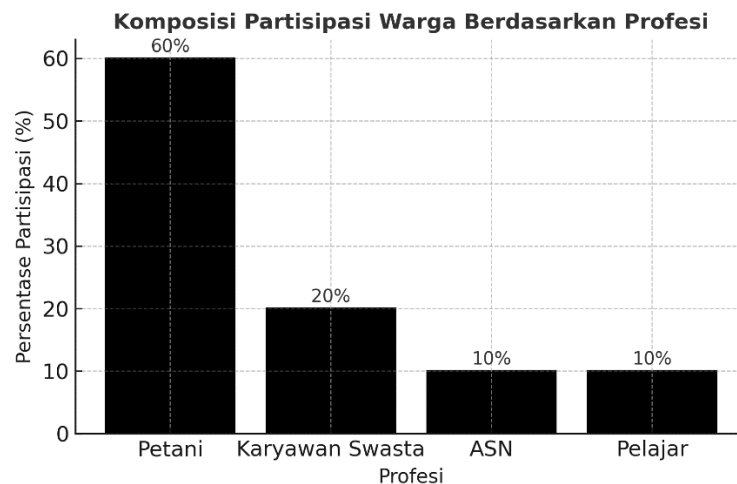


Figure 2. Composition of citizen participation by profession

Figure 2 shows that most of the gotong royong participants were farmers (60%), followed by private employees (20%), student groups, and civil servants (10% each). This composition reflects cross-professional participation that strengthens social solidarity and the value of unity in village development.

The division of roles also demonstrates gender-based equality: men focus on physical work, while women focus on preparation, consumption, and logistics. This pattern is consistent with ethnographic findings in various other villages (Effendi, 2013).

The diversity of the participants' professions shows how the value of Pancasila unity is manifested in practice. Farmers, students, employees, and civil servants work hand in hand without social barriers, strengthening community solidarity and cohesion.

3.3 Mobilization of Local Resources

The procurement of macadam stones takes advantage of the natural potential around the slopes of Mount Wilis. The use of these local resources increases cost efficiency and grows the village economy. Eliminating external contractor costs also strengthens community independence.

This model shows a real multiplier effect: the resources expended by residents circulate back into the local environment and create economic value for the community (Saifuddin, 2020; Maulidah & Setiajid, 2021).



Figure 3. Stone fracturing and transport

Figure 3 shows the process of manual stone breaking and transportation. The work is carried out through a rotation system, demonstrating the principle of social justice: every citizen contributes according to his or her ability, without distinction based on economic or educational status.

In addition to economic efficiency, this approach also reflects the ecological wisdom of the village community. By using stones from the surrounding environment, communities reduce their carbon footprint while strengthening local economic resilience in line with the principles of sustainable development.

3.4 Implementation of Collective Work

The process of installing the macadam stone is carried out through a coordinated team approach. Some residents prepare the foundation, while others arrange the stones to ensure they are sturdy and flat. The division of tasks is carried out spontaneously and flexibly, in line with the field's needs.

During implementation, macadam stones are not installed across the entire width of the road. According to the Chairman of RT, Mr. Parman, the makadam is installed only in the middle of the road, between the right and left concrete rebates built through the Village Fund program. The width of each side of the rebate is about 50 centimeters, so that the area in the middle becomes the vehicle's wheel path if it crosses paths with other vehicles. The purpose of installing this macadam stone is to prevent the vehicle's wheels from slipping into the gap between the concrete rebates.

Mr. Parman added that the concrete rebate was built before he served as the RT's chairman. Now, with residents' cooperation, the rebate gap has been filled, making the road safer and flatter.



Figure 4. Installation of the macestone

Figures 4 show the stages of installing the macadam stone that require coordination and high precision. When one group needed additional workforce, the other group immediately helped without waiting for a formal order. This spontaneity of mutual help is the essence of cooperation, which has been internalized in the community's social life.

This phenomenon shows that cooperation does not depend on structural directives but arises from citizens' collective awareness of shared responsibility. This also shows the effectiveness of Pancasila values as a guideline for social behavior at the community level.

3.5 Social Dynamics and Conflict Resolution

The collective awareness of the people of Ngranget Village is evident in the flexibility of participation: some residents who cannot be physically present still contribute through financial support. This practice reflects a form of social adaptation that minimizes the potential for conflict and maintains community harmony (Prayitno et al., 2024; Subagyo, 2021).



Figure 5. Moments of rest/consumption together

Figure 5 shows moments of rest and consumption together. Eating together serves dual purposes: as a means of energy recovery and as a medium for strengthening social ties. In a relaxed atmosphere, residents share stories, laughter, and experiences, creating an informal space to strengthen solidarity.

This tradition is also a natural mechanism for resolving tensions that may arise during work. Dialogue that takes place in a family atmosphere helps to maintain the spirit of togetherness and avoid open conflicts. The values of deliberation and consensus that it embodies demonstrate the actualization of Pancasila in daily life.

3.6 Development, Sustainability, and Sense of Ownership

The direct involvement of residents throughout the development process fosters a sense of ownership over the results achieved. Citizens feel proud and have a moral responsibility to maintain the infrastructure they have built themselves.



Figure 6. Finished Makadam Road

Figure 6 shows the final result of a sturdy, functional makadam road. The quality of the resulting roads is not inferior to that of professional contractors, but adds value in the form of a strong sense of ownership and social responsibility.

These findings strengthen the argument that the sustainability of village development is highly dependent on the depth of community participation and the level of social trust formed in the process (Fathy, 2019; Nugrahani et al., 2019).

Thus, cooperation is not just a strategy for mobilizing energy, but also a means of fostering a collective commitment to sustain the development results.

3.7 Gotong Royong as a Revitalization of Pancasila Values

The practice of cooperation in Ngranget Village shows that the values of Pancasila are not mere formal rhetoric but can be revived through concrete actions in development. The construction of the makadam road by the residents is concrete evidence of Soekarno's (1945) vision that cooperation is a key aspect of Pancasila Ekasila, which encompasses all the values of humanity, unity, and social justice.

In practice, cooperation in Ngranget Village realizes the third precept of *Indonesian Unity* through cross-professional participation, and social status does not divide farmers, students, private employees, and civil servants who work together without barriers. The fifth precept,

Social Justice for All Indonesian People, is realized through fair labor distribution and equitable distribution of the benefits of the infrastructure built. The deliberation process used in decision-making reflects the fourth precept of *Citizenship Led by Wisdom in Deliberation /Representation*.

Furthermore, the spirit of "charity all for the benefit of all, sweat for the happiness of all," as expressed by Soekarno, is not only a slogan but a principle internalized in the community's social practice.

Setyadi et al. (2023) emphasized that cooperation is the core of the Indonesian nation's identity, distinguishing it from other nations. As a form of social capital, cooperation builds unity, harmony, and solidarity across groups (Yunita et al., 2025). Therefore, re-examining the role of cooperation as social capital is important to formulate a more inclusive and sustainable infrastructure development scheme (Nugrahani et al., 2019).

In the context of globalization and modernization, which often erode communal values, revitalizing cooperation is an important strategy for maintaining national character and identity. The findings from Ngranget Village show that this noble value remains relevant and effective in facing contemporary development challenges, while strengthening social cohesion and the spirit of nationality (Effendi, 2013; Maulidah & Setiajid, 2021).

3.8 Implications For Public Administration

1) Replication of the Gotong Royong Model

The local government can develop guidelines to facilitate cooperation based on Ngranget Village's best practices (Lindawaty, 2023). This model can be adapted to other villages while maintaining the principles of justice, participation, and local independence.

2) Strengthening the Capacity of Village Governments

Village officials need to be trained to manage multi-stakeholder collaboration. The training includes facilitation skills, conflict mediation, and participatory management based on Pancasila values (Lego et al., 2025).

3) Infrastructure Financing Innovation

The gotong royong scheme can be combined with Village Financial Assistance (BKD) or Village Funds to reduce dependence on external contractors (Sutoro et al., 2014). This hybrid approach maximizes budget efficiency without sacrificing quality.

4) Integration of Pancasila Values in Village Development Policy

The government needs to formulate policies that explicitly recognize cooperation as the implementation of Pancasila values in village development (Republic of Indonesia, 2014). This can be realized through a reward or incentive system for villages that successfully implement the principle of participatory collaboration.

4 Conclusion

This study confirms that cooperation remains a relevant strategy for sustainable village infrastructure development. The value of collective work not only saves costs but also

strengthens social cohesion, accountability, and a sense of community ownership of development outcomes.

More than that, cooperation is a concrete manifestation of Pancasila as *Ekasila*, as formulated by Soekarno in his speech on June 1, 1945, so that it is not just a method of development but an instrument for strengthening the nation's character and identity.

The experience of Ngranget Village proves that the spirit of "joint bone-cutting, joint sweat-extortion, joint help-struggle struggle" can be revived in the context of modern development. Gotong Royong is not an artifact of the past, but a dynamic strategy that addresses the challenges of sustainable development. The study's main recommendations include:

- 1) Institutionalization of routine deliberative forums based on Pancasila values.
- 2) Increasing the capacity of local leadership in managing gotong royong activities.
- 3) Development of regional policies that recognize cooperation as a *collaborative governance practice*.
- 4) Integration of Pancasila values in education in village community empowerment programs.

Further research is suggested to explore:

- 1) replication of the cooperation model in urban and semi-urban areas;
- 2) adaptation of cooperation in the context of the digitization of public services; and
- 3) Measuring the long-term impact of cooperation on sustainable development and strengthening local democracy.

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