

Community Participation in the Farm Road Development Program in Nagari Gadut, Tilatang Kamang District, Agam Regency, in 2024

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Abstract

Background This qualitative-descriptive study identifies the forms of community participation and its driving factors in the 2024 Sicawan RRI Farming Road Development Program in Nagari Gadut, Agam Regency.

Methods Qualitative-Descriptive with grounded in Keith Davis's participation framework encompassing mind, labor, goods, and money the research utilized interviews, observations, and documentation for data collection.

Results Findings reveal that while overall community participation is high, there are significant disparities in intensity across different forms. Labor participation emerged as the most dominant, driven by high enthusiasm for self-managed communal work (gotong royong) and reinforced by nagari policies prioritizing local labor, which reflects strong social capital and local ownership. Furthermore, material (goods) and financial participation were high, effectively addressing budget shortfalls in the Village Fund through transparent management by the Activity Management Team (TPK).

Conclusions In contrast, "mind participation" during the planning and decision-making stages remained low and passive. This lack of involvement is attributed to uneven information dissemination, a lack of technical confidence among residents, and top-down communication patterns. Despite the limited intellectual involvement, the synergy between high physical, material, and financial contributions, supported by credible administration, ensured the successful implementation of the farming road project.

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Keywords

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Introduction

The level of community welfare serves as a fundamental indicator of a region's developmental success. In Indonesia, the development paradigm has shifted from a centralized model to a participatory approach, positioning the village, or nagari, as the primary subject. In accordance with the 1945 Constitution and technically regulated under Law Number 6 of 2014 concerning Villages, village governments bear full responsibility for managing community affairs and development. However, the essence of development extends beyond physical transformation; it represents a national shift toward improvement through growth efforts consciously structured by the government in collaboration with the people ([Siagian, 2000](#)).

Within rural settings, agricultural infrastructure like farm roads (Jalan Usaha Tani) is essential for economic stability. For the horticulture and food crop sectors in West Sumatra, efficient distribution channels are indispensable. Nagari Gadut in Tilatang Kamang District stands out for its proactive approach to infrastructure development. This is evidenced by its accolades, including a high ranking in the 2024 Agam Regency Sustainable Food House competition and being named the third-best Nagari in the province in 2022, showcasing strong community coordination. Nonetheless, the dependence on public funding remains a critical bottleneck, especially when budgetary allocations cannot keep pace with practical needs on the ground.

This is where the role of community participation becomes crucial. Theoretically, participation is often oversimplified as mere physical presence; however, scholars provide a much broader perspective. [Mardikanto & Soebianto \(2015\)](#) emphasize that participation reflects social awareness and responsibility aimed at improving collective quality of life. Meanwhile, Keith Davis as cited in [\(Davis & Newstrom, 1972\)](#) offers a more granular framework by categorizing participation into six key indicators: ideas, labor, a combination of ideas and labor, expertise, goods, and financial contribution. Davis asserts that participation is a mental and emotional involvement that motivates individuals to contribute to group goals. Without such mental engagement (ideas), participation risks becoming nothing more than top-down mass mobilization.

In practice, there is often a significant gap between theoretical frameworks and the reality of development. Bureaucratic-heavy strategies tend to marginalize local interests, leading to participation that is only skin-deep, where citizens are limited to paying taxes or merely executing decisions made by others ([Ndraha, 2011](#)). Consequently, local potential is rarely optimized because community-based initiatives are given little room to grow ([Tjiptoherijanto, 1993](#)). However, the 2024 Sicawan–RRI Farm Road Program in Nagari Gadut offers a compelling case. This 1.1 km project was implemented using a self-management approach and funded entirely by the nagari's own budget, bypassing provincial or central aid. Given its modest budget of Rp 176,899,621, the success of this program rests significantly on the self-reliance of the local population.

Initial findings point toward a 'participation paradox' in Nagari Gadut. While formal funding is limited, community participation in terms of labor and resources remains exceptionally high. This engagement is seen in the men's dedication to communal labor and their willingness to provide private land for road widening without seeking compensation. Women also play a vital role by coordinating food and supplies for those working on-site.

According to the Head of *Nagari Gadut*, Mr. Edison, such hands-on involvement is a clear manifestation of strong social capital in the face of budgetary constraints.

Conversely, participation in the form of ideas during the planning and oversight stages remains weak. Attendance data from the *Nagari* consultative meetings (*Musyawahar Nagari*) reveals a striking disparity between sub-villages (*jorong*). *Jorong PGRM*, the project's primary site, recorded the highest attendance, while other sub-villages such as *Kambing VII*, *Tiga Kampung*, and *PSB* showed lower participation due to poor information distribution and geographical distance. This confirms Keith Davis's view that participation is heavily influenced by a sense of direct relevance (*self-relevance*). The low level of mental participation risks creating an information gap and a sense of exclusion among certain community groups ([Sastropetro, 1988](#)).

The discrepancy between high physical engagement and low conceptual involvement underscores the significance of this study. It explores why *Nagari Gadut* residents provide robust material support while remaining relatively inactive in the planning process. Both internal variables such as educational and economic backgrounds and external variables including local government communication strategies are believed to hinder optimal participation ([Mardikanto & Soebianto, 2015](#)). Therefore, this research seeks to map out community participation through Keith Davis's framework and examine the catalysts and barriers within the *Sicawan–RRI Farm Road* project. Ultimately, this study intends to provide a benchmark for building more integrated and sustainable participation models for local governance.

Several previous studies suggest that community participation in rural infrastructure development is often influenced by the effectiveness of government communication and the collective awareness of residents. Research by [Mahendra et al. \(2022\)](#) in Karangwotan Village revealed that suboptimal participation is generally caused by insufficient socialization and low community attendance in planning forums such as the Village Development Planning Deliberation (*Musrenbangdes*). On the other hand, a study by [Mega Selvina Agusta et al., \(2020\)](#) regarding the *Rumah Bahasa* Program in Surabaya utilized Keith Davis's theory to map community participation although limited to mental and physical aspects during the pandemic, it remained a crucial indicator for the sustainability of public programs. Both studies underscore that community engagement is not merely about physical presence but is determined by the willingness and opportunities provided by the local government structures.

The significance of this research is also supported by the work of [Fitra et al. \(2023\)](#) on the Padang Lua Market revitalization, where development thrived on community-led initiatives involving thoughts, skills, and funding. However, unlike the market setting, this study specifically examines Farm Road (JUT) development, which highlights the empowerment of the agricultural sector via self-management of *Nagari* funds. By employing a qualitative descriptive method, the research seeks to address the lack of analysis on how different forms of participation intellectual, physical, and material enhance autonomy and governance accountability in *Nagari Gadut*. Furthermore, it provides a comparative lens to evaluate these dynamics against earlier findings in socioculturally similar areas.

Within the perspective of public administration, [Samaun et al. \(2022\)](#), through their study in Oluhuta Village, assert that community participation as defined by Keith Davis's theory in

the forms of ideas, labor, and expertise is a primary determinant of developmental success, although its implementation often remains limited to mere physical labor mobilization. This is further corroborated by the findings of [Marlita & Widodo \(2020\)](#) in the *Mediasosian Journal*, which identify that the effectiveness of citizen engagement is frequently hindered by the dominance of local power structures and a lack of information transparency. Consequently, critical intellectual contributions tend to be sidelined in favor of communal physical contributions, such as *gotong royong*.

The primary rationale for employing Keith Davis's theory in this research lies in its comprehensive framework, which dissects the dimensions of participation not merely as physical presence, but as a mental and emotional involvement of the individual ([Davis & Newstrom, 2008](#)). This theory enables a granular mapping of community contributions into specific indicators: ideas, labor, a combination of ideas and labor, goods, and financial resources. Through this approach, the dynamics of the Farm Road development in Nagari Gadut can be analyzed more profoundly, particularly in uncovering the phenomenon where the community exhibits high material and physical commitment yet remains limited in conceptual engagement or decision-making. Consequently, this theory is highly relevant for measuring the extent of the community's sense of ownership and responsibility toward the sustainability of local development programs.

Methods

This research employs a descriptive qualitative approach within a post-positivist paradigm to understand the phenomenon of community participation holistically and in its natural context ([Creswell & Poth, 2018](#)). The researcher serves as the primary instrument in collecting both primary and secondary data ([Sugiyono, 2017](#)) through semi-structured interviews, post-activity observations at the construction site, and documentary studies of the 2024 Nagari Budget (APB Nagari) realization reports. Informants were selected using purposive sampling, consisting of key informants (the Head of Nagari, technical implementers, the Activity Implementation Team/TPK, and community members) and triangulation informants (Village Assistants and district-level authorities) to ensure data validity. Data analysis was conducted interactively following the [Miles et al. \(2014\)](#) model, which includes data reduction, data display, and conclusion drawing/verification. Data credibility was ensured through source triangulation by comparing information from various parties and cross-referencing it with physical evidence and administrative documents available in Nagari Gadut ([Moleong, 2007](#)).

Results and Discussion

The theoretical framework employed in this research is the theory of participation by [Keith Davis \(1972\)](#). According to Davis, participation consists of five distinct variables: participation in the form of ideas (*psychological participation*), participation in the form of labor (*physical participation*), a combination of ideas and labor (*psychological and physical participation*), participation in the form of goods (*material participation*), and participation in the form of financial contributions (*money participation*).

A. Intellectual Participation

Intellectual participation involves mental and emotional engagement manifested through ideas, suggestions, and decision-making. In Nagari Gadut, this participation

is divided into two forums: the Development Planning Deliberation (*Musrenbang*) and the Pre-Implementation Meeting. Based on Keith Davis's theory, the researcher found that community intellectual participation remains low and passive.

The first indicator, attendance in meetings, reveals an information disparity. During the planning phase, community attendance was minimal because the digitalization of invitations via WhatsApp failed to reach elderly groups with limited technological literacy. However, during the technical preparation phase, enthusiasm among Jorong PGRM residents increased significantly as the discussions directly pertained to job opportunities and economic benefits. This suggests that community participation is driven more by pragmatic interests than by long-term planning awareness.

The second indicator, the contribution of ideas and suggestions, was found to be very limited. Residents tend to act as active listeners who accept the technical designs provided by the *Nagari* Government and the Activity Implementation Team (TPK). This lack of initiative stems from the community's lack of confidence regarding technical construction knowledge and a high level of public trust in *Nagari* officials. From Keith Davis's perspective, this condition places the community at a consultative level; they are present to receive information but have yet to become critical partners in influencing the direction of development policy. The failure to reach an active participation level indicates that government communication remains one-way (top-down) in terms of intellectual planning.

B. Physical Participation

Physical participation in the construction of the Farm-to-Market Road (JUT) in *Nagari Gadut* (2024) represents the most dominant form of community involvement. Referring to Keith Davis's theory, physical participation is a tangible contribution most easily embraced by rural communities due to its applied nature and direct impact on project progress. In *Nagari Gadut*, this participation is interpreted not merely as a physical obligation but as a manifestation of social responsibility and the strengthening of social capital through the preserved culture of *gotong royong*.

This participation was implemented through a self-management (*swakelola*) mechanism, as mandated by Law Number 6 of 2014 and Minister of Villages Regulation (Permendes PDTT) Number 21 of 2020. The research found that community involvement was inclusive, featuring adaptive role-sharing based on individual capacity. Men dominated heavy tasks such as land clearing, excavation, and concrete casting. Meanwhile, women contributed by providing meals for the workers—a local tradition referred to by the Head of *Nagari*, Mr. Edison, as '*sipaik tarado*.' This division of labor demonstrates that physical participation in *Nagari Gadut* has accommodated local social structures without diminishing the essence of their contribution.

A significant finding in this study is the economic empowerment dimension within physical participation. The *Nagari* Government prioritized local labor, particularly for residents of Jorong PGRM who lacked steady employment. According to village documents, 33 workers from Jorong PGRM were involved through the Man-Day system (*Hari Orang Kerja* or HOK), with wages ranging from Rp100,000 to Rp130,000 per day. As stated by the District Head of Community Empowerment, Mrs. Susi

Devira, this policy aims to provide supplemental income for residents near the project site. This confirms that physical participation in Nagari Gadut serves a dual purpose: as an instrument for accelerating infrastructure development and as a tool for economic redistribution.

Technically, physical participation spans all construction stages, from land clearing and backfilling assisted by heavy equipment donated by overseas migrants (*perantau*) to the paving of a 300-meter concrete road. The high level of engagement, involving both skilled artisans and *gotong royong* volunteers, fosters a strong sense of ownership. Consequently, physical participation is a key element ensuring the sustainability of the JUT infrastructure, proving that village self-reliance heavily depends on the synergy between local government policies and the community's physical capital.

C. Psychological and Physical Participation

This category of participation requires the integration of both mental and physical efforts during construction. In Nagari Gadut, the study found that such combined involvement is still limited. Technical input during the labor phase was provided only by a few lead workers with specialized construction skills, while most participants simply followed the technical directives set by the local government and the TPK.

Interestingly, the research shows that the absence of creative input from the workers is not a sign of indifference. Instead, it stems from the profound public trust placed in the Nagari Gadut authorities. Residents assume that the projects have been professionally planned by experts. According to Mr. Asril, a local resident, there is a general consensus that following the government's lead is sufficient, given their high credibility.

While the *Nagari* Government has succeeded in building a transparent and professional atmosphere, it has also inadvertently established a paternalistic model of participation. Collaborative mental and physical engagement remains exclusive to technical staff. In light of Keith Davis's framework, the Nagari Gadut case illustrates how strong institutional legitimacy can reduce the community's drive for technical decision-making, shifting the weight of participation toward physical operations.

D. Material Participation

Participation in the form of goods and assets serves as a vital instrument in overcoming the budgetary constraints of the *Nagari* Budget (APB *Nagari*) for the Sicawan–RRI Farm Road development. According to Keith Davis's theory, this contribution signifies the involvement of community material resources driven by a sense of ownership. Field findings reveal a diverse range of contributions, including construction materials (sand, gravel, and cement), agricultural land grants ranging from 0.5 to 3 meters in width for road expansion, and the loaning of heavy equipment (rollers) from the overseas migrant community (*perantau*). The total recorded value of self-reliant contributions in goods and cash reached Rp10,418,500—a significant figure that increased the physical work volume beyond the official budget.

A unique element of this participation is the inclusive involvement of women's groups through the provision of daily meals, managed rotationally by PKK members and the workers' wives. This local tradition, known as '*sipaik tarado*,' functions as a catalyst for

the spirit of *gotong royong* on the ground. Furthermore, the involvement of *perantau* in donating heavy equipment and fuel funds proves that material participation in Nagari Gadut is not geographically limited; rather, it is driven by emotional ties to one's hometown. This aligns with the view that material participation enhances cost efficiency while accelerating the technical process of road compaction.

The Nagari Gadut Government acts as an accountability manager through administrative recording mechanisms conducted by the Activity Implementation Team (TPK). Every contribution, including daily meal packages, is valued based on market prices and transparently recorded in the accountability reports. This mechanism has proven effective in building public trust, as the community sees their contributions officially recognized and utilized appropriately. Consequently, material participation not only provides technical convenience and economic savings but also strengthens the legitimacy of development and the accountability of village governance.

E. Money Participation

Community participation in the construction of the Sicawan–RRI Farm to Market Road (JUT) extends beyond physical labor to include significant financial support. According to field findings, the total self-reliant contribution collected in cash reached Rp10,418,500.00. These funds originated from voluntary contributions by the general public, farmer groups, community leaders, and the Nagari Gadut overseas migrant community (*perantau*).

The success of this fundraising reflects a profound dimension of mental and emotional involvement, as proposed by Keith Davis. Residents who faced time constraints for physical attendance particularly the *perantau* opted to allocate their financial resources as a form of social responsibility toward their birthplace. This phenomenon proves that participation arises from a high sense of ownership regarding the outcomes of development.

Table 1. Allocation of Community Contributions

No	Allocation of Contributions	Description of Use
1	Additional Materials	Purchase of nails, supporting timber, sand, and additional cement to cover volume shortages not funded by the Village Fund (<i>Dana Desa</i>).
2	Logistics & Consumption	Provision of food, beverages, and daily necessities for <i>gotong royong</i> (communal) workers over 56 working days.
3	Heavy Equipment Operations	Procurement of fuel and lubricants for the roller machine donated by the residents.

The management of these funds is conducted independently by the Activity Implementation Team (TPK) based on the principle of transparency. All revenues and expenditures are meticulously recorded and reported to the community during the

project handover assembly. The accountability mechanism implemented by the Nagari Gadut Government has proven to be a key factor in maintaining public trust. This aligns with [Mardikanto's \(2015\)](#) view that participation will flourish when supported by open and credible leadership. Consequently, financial participation in Nagari Gadut is not merely a budgetary supplement but a vital instrument that ensures operational continuity and the effectiveness of self-managed development.

Conclusion

Based on Keith Davis's theory, the most dominant forms are physical participation and material/financial participation. Physical participation demonstrated exceptional enthusiasm through self-management and *gotong royong* (communal work), further bolstered by local labor priority policies as an instrument for economic empowerment. Meanwhile, participation in the form of goods and money (self-reliant funds) totaling Rp10,418,500 significantly covered the Village Fund budget deficit, a success driven by the transparency and accountability of the Activity Implementation Team's (TPK) recording mechanisms. Conversely, intellectual participation and the combination of mental-physical involvement were found to be low and passive. This stems from uneven information distribution (digital barriers for the elderly), low community confidence regarding technical construction aspects, and a high level of public trust in the *Nagari* government, leading residents to prefer roles as implementers rather than decision-makers. Nevertheless, the strategic collaboration between high physical-material contributions and accountable self-management has proven capable of achieving optimal development effectiveness.

This research has several limitations that should be noted. First, the scope is limited to a single locus: the Sicawan-RRI Farm Road (JUT) development in Nagari Gadut. Consequently, the findings regarding community participation patterns may possess different characteristics when compared to other regions or villages with distinct sociocultural backgrounds. Second, this study employs a descriptive qualitative approach, where data collection relies heavily on the informants' experiences and the researcher's observations at a specific point in time. Third, the participation indicators measured through Keith Davis's theory focus primarily on the implementation phase, while the long-term impact of the road construction on farmers' income levels has not been analyzed in depth due to time constraints.

Based on these limitations, it is recommended that future researchers conduct comparative studies between two villages or districts with different achievement levels to identify drivers of participation more broadly. Additionally, a mixed-methods approach is suggested to strengthen qualitative findings with more representative quantitative data concerning the correlation between education and income levels with specific types of participation. Lastly, future research should examine the sustainability of the constructed infrastructure, specifically how intellectual participation can transform into collective oversight for the long-term maintenance of village assets.

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