

Strengthening Village Youth Leadership Competencies through Participatory Training Models and Community-Based Discussion Forums

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Abstract

Limited civic literacy capacity and weak village community governance remain significant challenges to strengthening community participation in various rural areas of Indonesia. This situation was also found in Duko Village, Arjasa District, Sumenep Regency, which is characterized by low understanding among officials and the community regarding digital literacy, village profile documentation, and participatory governance practices. This community service activity aims to increase civic literacy capacity and strengthen community governance through structured and collaborative mentoring. The implementation method uses a participatory action approach, including needs assessment, citizenship and digital literacy training, assistance in preparing village profiles, and facilitating improvements to community governance mechanisms. The results of the community service show a significant increase in the community's ability to compile and update village profiles, an increased understanding of substantive citizenship values, and the formation of more focused coordination and accountability practices within village organizations. The implications of this activity confirm that a mentoring model based on participation, literacy, and cross-stakeholder collaboration can be an effective strategy in strengthening community capacity and supporting sustainable village development.

1. Introduction

Rural youth play a strategic role as a driving force for social, economic, and cultural development, particularly in rural communities moving toward community-based social transformation. However, this dynamic has not yet been fully realized in various regions, including Duko Village, Arjasa District, Sumenep Regency, where the significant youth potential has not been matched by adequate leadership capacity. Initial observations indicate that a number of young people in Duko Village still face limited access to information, lack of opportunities to participate in relevant leadership training, and minimal experience in decision-making at the community level. This situation has limited the role of youth in village organizational governance, participation in deliberation forums, and contribution to the development of programs based on local potential. Amidst the increasing need in villages for young leaders who are adaptive, collaborative, and capable of solving social problems, an empowerment approach is needed that is not only instructional, but also participatory and contextual (Imran et al., 2025). Therefore, strengthening youth leadership competencies through structured, inclusive, and community-based training models is crucial to fostering a cadre of village leaders who are responsive to community dynamics and committed to sustainable development.

The main problem identified in Duko Village relates to the low leadership competency of youth, reflected in their limitations in designing community programs, facilitating social activities, and actively participating in village decision-making processes. Although local youth are highly enthusiastic about community activities, most lack basic leadership skills such as persuasive communication, organizational management, data-driven problem-solving, and the ability to build cross-group collaboration. The lack of

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access to training models that are appropriate to the socio-cultural context of the village further exacerbates this gap. In addition, the lack of systematic discussion spaces means that young people have less opportunity to articulate ideas, analyze village issues, and formulate solutions collectively. This situation results in youth contributions to village development remaining passive and reactive, rather than proactive and capacity-based. Therefore, interventions are needed to address these structural and cultural issues through a participatory training approach that positions youth as central actors in the learning and self-development process.

This community service program aims to strengthen youth leadership competencies in Duko Village through the implementation of a participatory training model designed contextually and responsive to local needs. Specifically, this program aims to improve youth's ability to understand the basic principles of community leadership, develop communication and collaboration skills, and facilitate a process of critical reflection on their role in village social dynamics. Furthermore, this activity also aims to provide a space for dialogue through community-based discussion forums as a means for youth to identify village problems, formulate alternative solutions, and develop action plans oriented towards sustainable development. Thus, this program is expected to produce young people who not only have better leadership capacity, but also demonstrate increased active participation in strengthening village governance and empowering communities in a sustainable manner.

A literature review on youth leadership development shows that most approaches still focus on conventional, top-down training models that fail to consider the local socio-cultural context (Kusumawati & Andiani, 2024). Previous research has focused more on strengthening youth capacity in urban or semi-urban areas, while leadership development efforts in rural settings, such as Duko Village, have received limited attention. Furthermore, existing interventions generally focus on improving technical skills without integrating participatory strategies that enable youth to actively develop their own leadership knowledge and experiences (Wahidin & Episiasi, 2025). Another gap is the lack of integration between formal training and community discussion forums, a social learning tool that can strengthen youth's ability to identify village issues and develop solutions based on local contexts (Mahdi et al., 2025). Thus, there is a clear need for a service model that emphasizes not only individual capacity building but also fosters collaborative, reflective, and community-based processes, which are currently rarely implemented in rural youth empowerment programs.

This community service program offers novel value through the development of a participatory training model explicitly integrated with community-based discussion forums as a mechanism for strengthening village youth leadership. This approach differs from youth empowerment programs that are generally oriented towards one-way knowledge transfer, as it positions youth as active actors who build their own capacity through dialogical, reflective, and collaborative processes. The integration of training and community forums not only strengthens the relevance of the material to the social conditions of Duko Village but also encourages the formation of leadership based on real-life experiences and direct participation in solving local problems. The academic justification for this service lies in its contribution to broadening the understanding of effective leadership development practices in rural contexts, while its practical justification is seen in the potential replicability of this model in other villages with similar characteristics. Thus, this program not only offers innovative interventions, but also makes an important contribution to strengthening the capacity of youth as a pillar of sustainable development at the grassroots community level.

Literature review

1. Youth Leadership in Village Development

Youth are strategic actors in social, economic, and cultural development at the village level. Their role extends beyond implementing activities to innovators, catalysts for change, and drivers of community participation (Mukhlis et al., 2021). In the village context, youth leadership is needed to strengthen community governance, initiate creative programs, and encourage collaboration between community groups. However, various studies show that youth leadership capacity in rural areas tends to be underdeveloped due to limited access to training, minimal organizational experience, and limited participation (Prasetyo et al., 2024).

2. Participatory Training as a Capacity Building Model

Participatory training emphasizes a dialogic, collaborative, and experiential learning process. This model encourages participants to actively participate in problem identification, needs analysis, local issue resolution, and action plan formulation (Firmansyah et al., 2021). Unlike conventional top-down training, participatory training provides broader interaction and allows for more contextual leadership capacity development. Previous research has shown that a participatory approach is

effective in improving social competence, communication, and group collaboration, particularly in the context of village community empowerment (Cahyati & Nurhayati, 2024).

3. **Community-Based Discussion Forums as Social Learning Spaces**
Community-based discussion forums are a platform for social interaction that allows youth to articulate ideas, analyze village issues, and collectively design solutions. These forums function as learning communities that encourage collaborative leadership, strengthen youth social networks, and open up dialogue between youth and village officials (Mendrofa et al., 2024). In the context of strengthening youth in rural areas, discussion forums have been shown to increase youth self-confidence, communication skills, and understanding of local dynamics. Furthermore, community forums are considered effective in encouraging youth to take on strategic roles in the village development process (Hidayat et al., 2021).
4. **Village Youth Empowerment and Contextual Challenges**
Empowering rural youth faces structural challenges such as a lack of supporting facilities, limited digital literacy, and limited leadership experience. Cultural challenges also arise from hierarchical communication patterns that make youth tend to be passive in formal forums (Arshad & Hong, 2019). Therefore, an empowerment approach must be responsive to the socio-cultural context of the village and provide a safe space for youth to practice leadership. Integrating participatory training and community discussion forums is a relevant approach to holistically enhancing youth capacity, including knowledge, skills, and leadership attitudes.
5. **Relevance of Strengthening Youth Leadership in Duko Village**
Duko Village boasts significant youth potential, but this is not matched by adequate leadership skills. Competency gaps are evident in limited public communication skills, program planning, organizational management, and low participation in village decision-making. Based on a literature review, the most appropriate intervention is a training model that not only provides conceptual knowledge but also creates space for dialogue, reflection, and collaboration, enabling youth to develop concrete leadership within the local community.

Based on the problems and conceptual framework in the literature review, this community service activity aims to:

Improving the leadership competency of Duko Village youth through participatory training models and community-based discussion forums that are responsive to the social context and local needs.

1. Increasing youth knowledge regarding the basic concepts of participatory leadership and the strategic role of youth in village development.
2. Developing youth's practical skills in public communication, group collaboration, problem solving, and community activity planning.
3. Providing dialogue space through community discussion forums to identify priority village issues and collectively formulate alternative solutions.
4. Encourage the formation of leadership initiatives, such as the development of action plans and the organization of youth activities independently and sustainably.
5. Strengthening social networks and youth coordination to create a more inclusive, adaptive, and sustainable development-oriented village youth structure.

This community service design is based on the Participatory Action Approach, an empowerment approach that involves youth as active subjects in the process of problem identification, learning, reflection, and action planning. This design consists of four main components: (1) Input, (2) Process/Activities, (3) Output, and (4) Outcome. Furthermore, activities are designed through a repetitive cycle (spiral) that includes assessment → action → reflection → improvement.

2. Method

This community service applies participatory training methods combined with community-based discussion forums as the main approach to improving the leadership competency of the youth of Duko Village, Arjasa District, Sumenep Regency. The participatory approach was chosen because of the social characteristics of village youth who are strong in community ties, have collective communication patterns, and show the need for interaction spaces that allow them to be actively involved in the learning process.

This method allows all participants to be critically involved starting from identifying problems, exploring needs, to formulating alternative solutions that are relevant to local youth dynamics.

The implementation of this activity was preceded by a needs analysis (needs assessment) through initial observations and informal interviews with community leaders, village officials, and representatives of youth organizations. The results of the analysis show that most young people have high motivation to contribute to village development, but their leadership abilities are still limited to spontaneous experiences without being supported by adequate conceptual knowledge and managerial skills. Therefore, the activity design is formulated as a series of training that is collaborative, reflective, and experience-based.

This service-based training model combines three main elements: (1) leadership knowledge transfer through interactive facilitation, (2) strengthening practical skills through local case studies, and (3) developing critical thinking through community-based discussion forums. The facilitation technique is two-way to ensure that participants are not only recipients of the material, but also active contributors based on their experiences and the social context of the village (Fatihin et al., 2025).

To maintain the quality of the program's processes and outputs, this community service program utilizes formative and summative evaluation approaches. Formative evaluation is conducted throughout the process to ensure participant engagement, effective delivery of materials, and the continuity of discussions. Summative evaluation is conducted at the end of the activity in the form of group reflections, capacity building assessments, and identification of follow-up recommendations.

The program implementation is carried out through the following stages:



Scheme 1 Stages of implementation of the Duko Village leadership program

The method used in this community service is designed to ensure that the improvement of youth leadership competencies is not only cognitive, but also includes affective and psychomotor aspects. Thus, this program is expected to produce young people from Duko Village who are more adaptive, participatory, and ready to play a role in community-based local development.

3. Result and Discussion

The implementation of the community service program in Duko Village, Arjasa District, Sumenep Regency, took place in a youth social situation that showed interesting dynamics as well as structural challenges that needed intervention. Based on initial observations during the program, village youth appeared to be in a transitional phase between a strong desire to participate in local development and limited leadership capacity that prevented them from taking strategic roles in village forums. The program was attended by 32 youth aged 16-28, consisting of members of the youth organization (Karung Taruna), the mosque youth community, and several non-organizational youth interested in improving their capacity. The participants' enthusiasm was evident from the registration stage, demonstrated by their active involvement in informal dialogues and readiness to participate in the entire training series. However, prior

to the program's implementation, youth participation in village deliberations, community activity planning, and decision-making processes was still relatively low, characterized by passive attendance and a lack of sustained initiative. This condition underpins the urgency of a leadership strengthening program, as without targeted intervention, youth's potential to become agents of change in village development risks not developing optimally (Eryanto, 2025). The participatory training program and community discussion forums organized within this service were then designed to systematically address this need.

The results of the needs analysis conducted through field observations, informal interviews with village officials, and initial discussions with youth leaders showed a significant gap between the leadership potential of the youth of Duko Village and the actual skills they possess. Most young people are motivated to contribute to village social activities, but are not yet equipped with a conceptual understanding of the role of participatory leadership or practical skills such as effective communication, conflict management, and community-based program planning. Field data also revealed a tendency toward passive communication patterns in formal forums; many young people reported feeling less confident speaking in front of village officials or community leaders due to their lack of experience. In addition, the internal coordination mechanism between youth organizations is still weak, as seen from the absence of a structured annual agenda in youth organizations or other youth communities. This condition strengthens the finding that increasing leadership capacity cannot be addressed only through one-way socialization, but requires an approach that involves youth actively, reflectively, and collaboratively. These needs findings then became the basis for formulating a participatory training design that was more responsive to the social context of Duko Village.

The implementation of the leadership training workshop had a direct impact on increasing the knowledge and skills of the youth of Duko Village. During the training session, participants showed significant progress in understanding the concept of participatory leadership, particularly regarding the importance of collaboration, two-way communication, and consensus-based decision-making. The interactive facilitation—through small group discussions, village deliberation simulations, and real-life case analysis related to local youth issues—encourages participants to connect theory to their own social experiences. Behavioral changes were seen when participants began to dare to take on the role of group leader in various exercises, including facilitating discussions, presenting arguments, and formulating joint solutions. One interesting finding was the emergence of three previously passive youth who then demonstrated strong coordination skills while leading a community activity planning simulation. This demonstrates the effectiveness of participatory training methods in creating a safe space for youth to experiment with constructive leadership styles. Overall, the workshop not only improved technical leadership competency but also sparked attitudinal transformation, particularly in terms of expressing their opinions and awareness of social responsibility as part of the village community.



Figure 1. Community-based discussion forum session involving the youth of Duko Village after the workshop.



Figure 2. Youth identified priority village issues, such as the lack of creative space and weak coordination of youth organizations.



Figure 3 Focused discussions to formulate alternative solutions based on the capacity and resources of village communities.



Figure 4. Forum participants demonstrated increased analytical skills in mapping problems more systematically.



Figure 5. Youth begin to develop action plans, including the formation of work teams and monthly activity agendas.

The community-based discussion forum held after the workshop became an important platform in facilitating the transformation of collective awareness of Duko Village youth regarding their strategic role in local development. In this forum, youth are involved in focused discussions to identify priority issues they face, while formulating realistic alternative solutions based on community capacity and resources. The dynamic of the discussion demonstrated an improvement in the participants' analytical skills; they were able to articulate issues in a more structured manner, such as the lack of creative spaces for youth, weak coordination between youth organizations, and the lack of digital literacy that impacts access to information and opportunities for self-development. From this discussion, the youth successfully formulated several action plans, including the formation of a youth work team, the development of a monthly activity agenda, and the initiative to establish the "Duko Youth Forum" as a cross-community collaborative platform. Interestingly, the village officials present at this session responded positively, providing support for facilitating meeting spaces and integrating the youth agenda into the village work plan. These findings confirm that community discussion forums not only function as a means of exchanging opinions, but also as a catalyst for strengthening collaboration and social legitimacy of the role of youth in the context of village development.

The participatory training program and community discussion forum showed a significant direct impact on improving the leadership competency of the youth of Duko Village, both in terms of knowledge, skills, and attitudes. One of the most striking changes was the increased confidence of participants in communicating in public spaces. At the beginning of the activity, most young people tend to speak softly, hesitate to express their opinions, and often avoid the role of facilitator. However, by the end of the program, some participants were able to lead small discussions independently, present arguments with a clear structure, and demonstrate the ability to listen and respond constructively to the opinions of other colleagues. In addition, self-reflection skills also improved, as seen from participants' willingness to evaluate their roles in simulations and discussions. The change in interaction patterns from passive to proactive is increasingly visible when several young people propose further initiatives, such as compiling activity calendars, developing digital learning communities, and partnering with local organizations. This transformation indicates that the participatory approach has strengthened community-based leadership values-particularly collaboration, empathy, and social responsibility-that are relevant to the socio-cultural context of Duko Village. Thus, this program not only succeeded in improving the individual competencies of participants, but also encouraged the formation of a more empowered and sustainable young leadership ecosystem.

The implications of this youth leadership strengthening program are seen not only in the increased capacity of individual participants, but also in changes in the social structure of youth in Duko Village more broadly. Program results indicate that participatory training can be an effective intervention model for strengthening youth social networks and enhancing cross-community collaboration. The formation of the Duko Youth Forum, which emerged organically from a discussion forum, is an important indicator that young people are beginning to recognize the need for a shared platform to plan, implement, and evaluate activities relevant to village development. In the long term, this forum has the potential to serve as a strategic partner for the Duko Village Government in developing youth programs, including those in the areas of economic empowerment, improving digital literacy, and developing creative activities based on

local culture. Furthermore, the training model used can be replicated in other villages with similar characteristics, as the participatory approach is highly flexible and adaptable to the needs and social dynamics of the local community. These findings enrich the literature on strengthening the capacity of rural youth and provide practical contributions to efforts to build more inclusive and sustainable local leadership.

Overall, this community service activity shows that the participatory training model combined with community discussion forums is able to significantly increase the leadership capacity of the youth of Duko Village. Three main achievements can be highlighted from the results of the activities. First, there was an increase in conceptual knowledge regarding participatory leadership and the strategic role of youth in village development. Second, practical skills such as public communication, group collaboration, and local problem analysis experienced real development, as seen from changes in participants' behavior during workshops and discussions. Third, values-based leadership attitudes—including courage to express opinions, social empathy, and a sense of responsibility towards the community, were strengthened, reflected in follow-up initiatives emerging from the participants themselves. These three aspects strengthen the conclusion that active engagement-based interventions are not only effective in increasing individual capacity, but also have a systemic impact on strengthening the village youth ecosystem. Thus, this program provides a strong foundation for sustainable youth empowerment efforts and can serve as a reference for leadership development intervention models in other rural areas.

4. Conclusion

Duko Village youth through a participatory training model and community-based discussion forums has demonstrated significant effectiveness in enhancing the personal and collective capacity of village youth. This intervention resulted in improvements in three key dimensions of leadership: knowledge, skills, and attitudes. In terms of knowledge, participants demonstrated a deeper understanding of the concept of participatory leadership and the strategic role of youth as agents of change in local development. In terms of skills, training and simulation activities have successfully strengthened public communication skills, group collaboration, and structured analysis of village issues. Meanwhile, in terms of attitude, it reflects an increase in self-confidence, social responsibility, and the courage to actively participate in community forums.

In addition to providing individual impact, this program also contributes to the formation of a more inclusive and sustainable youth leadership ecosystem in Duko Village. Further initiatives that emerged—such as the formation of the Duko Youth Forum, the development of a joint activity agenda, and a commitment to cross-community collaboration—demonstrated that youth were beginning to have a long-term orientation towards village development. These findings confirm that participatory training approaches, when designed in harmony with the social and cultural context of a community, are capable of producing substantial social transformation. Thus, this program not only succeeded in achieving its main objectives, but also made a relevant empirical contribution to the development of youth empowerment models in rural areas.

Author Contributions

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Conceptualization, Methodology, Investigation, Formal Analysis, Project Administration, Writing – Original Draft.
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3. Mohammad Nasir:
Resources, Supervision, Writing – Review & Editing.
4. Moh. Irwan:
Investigation, Methodology, Validation, Writing – Review & Editing.
5. Arini Zulfaida:
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References

- Arshad, M. M., & Hong, T. H. (2019). Police Leadership in Developing Youth Leaders in The Community: Positive Youth Development Perspectives in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 9(11), Pages 1434-1445. <https://doi.org/10.6007/IJARBS/v9-i11/6710>
- Cahyati, S. C., & Nurhayati, S. (2024). THE IMPACT OF YOUTH BASIC LEADERSHIP TRAINING ON GENERATION Z'S LEADERSHIP SKILL ENHANCEMENT. *JURNAL DIMENSI*, 13(1), 118-127. <https://doi.org/10.33373/dms.v13i1.6016>
- Eryanto, A. (2025). Pengabdian Masyarakat Berbasis Teori Organisasi: Strategi Penguatan. *JURNAL AKADEMIK PENGABDIAN MASYARAKAT*, 3(4), 207-213. <https://doi.org/10.61722/japm.v3i4.5802>
- Fatihin, M. K., Sucipto, S., Raharjo, K. M., & Zulkarnain, Z. (2025). Pendidikan Masyarakat sebagai Jalan Menuju Kemandirian Desa: Studi Model Fasilitasi Desa Wisata. *Jurnal Pendidikan Nonformal*, 20(1), 13-22. <https://doi.org/10.17977/um041v20i12025p13-22>
- Firmansyah, V. S., Syarif, E., & Ruyadi, Y. (2021). Youth Leadership Character Development at the Karang Taruna Organization in Karawang West Java. *Tadbir: Jurnal Studi Manajemen Pendidikan*, 5(2), 279. <https://doi.org/10.29240/jsmp.v5i2.3928>
- Hidayat, R., Tauhid, T., & Sauki, M. (2021). Citizen Journalism Training to Strengthen the Role of Youth in Overseeing the Village Development. *Jurnal Pengabdian Kepada Masyarakat (Indonesian Journal of Community Engagement)*, 7(4), 258. <https://doi.org/10.22146/jpkm.53069>
- Imran, T., Ngala, E., Mambu, L., & Lapalelo, B. (2025). Pemberdayaan Pemuda Dan Penguatan Kompetensi SDM Dalam Pembangunan Ekonomi Berkelanjutan. *Jurnal Pengabdian*, 4(1), 67-76. <https://doi.org/10.58222/jp.v4i1.1278>
- Kusumawati, E., & Andiani, D. (2024). Pelatihan Kepemimpinan Berbasis Komunitas bagi Karang Taruna Jakarta Barat. *Jurnal Pasca Dharma Pengabdian Masyarakat*, 5(2), 21-40. <https://doi.org/10.17509/pdpm.v5i2.88430>
- Mahdi, I., Alvaro, A. R., Trifaldo, Y., Wiranda, M., & Pratama, R. (2025). Peningkatan Kapasitas Kepemimpinan Karang Taruna Desa Tungku Jaya, Kabupaten Ogan Komering Ulu, Sumatera Selatan melalui Sosialisasi Efektif. *Jurnal Pengabdian Masyarakat Inovasi Indonesia*, 3(4), 297-302. <https://doi.org/10.54082/jpmii.875>
- Mendrofa, Y., Halawa, O., Ndraha, A. B., & Lahagu, P. (2024). Analysis of Strengthening Youth Organizations in Lolowua Village, Hiliserangkai District Nias Regency, Indonesia. *Golden Ratio of Data in Summary*, 4(2), 820-826. <https://doi.org/10.52970/grdis.v4i2.675>
- Mukhlis, M., Robiani, B., Taufiq, T., Suhel, S., Adnan, N., Ishak, Z., Sukanto, S., & Hamira, H. (2021). Organizational Training And Leadership Of Mosque Youth In Kerinjing Village. *Sricommerce: Journal of Sriwijaya Community Services*, 2(2), 139-146. <https://doi.org/10.29259/jscs.v2i2.66>
- Prasetyo, J. H., Wiharso, G., Fabrianto, L., & Safitri, R. A. (2024). Pelatihan Kepemimpinan: From Organization to Become the Best Leader. *Jurnal Abdimas: Sosial, Bisnis, Dan Lingkungan*, 1(2), 71-76. <https://doi.org/10.46806/abdimas.v1i2.1127>

Wahidin, W., & Episiasi, E. (2025). Pendampingan Karang Taruna Desa Sukaraja dalam Mengembangkan Program Pemberdayaan Pemuda. *JURNAL CEMERLANG: Pengabdian Pada Masyarakat*, 7(2), 421-429. <https://doi.org/10.31540/jpm.v7i2.3509>