



Motivation of the People in Solo City to Implement Climate Change Adaptation and Mitigation Strategies

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Abstract. Climate change is a global issue that has a significant impact on environmental, social, and economic aspects of society, especially in urban areas. This condition requires the active involvement of the community in implementing adaptation and mitigation strategies based on local wisdom. This study aims to analyze the motivation of the people of Surakarta City in implementing climate change adaptation and mitigation efforts and to identify the factors that influence the sustainability of their participation in the Climate Village Program (ProKlim). This study uses a qualitative approach with data collection techniques through in-depth interviews, participatory observation, and documentation. The results show that the community has carried out various adaptation and mitigation activities. These activities have contributed to increased ecological awareness and environmental resilience among the local community. However, the community's motivation to maintain the sustainability of these activities often declines after incentives or attention from relevant agencies decrease. This phenomenon is reinforced by the perception that ProKlim activities are ceremonial and competition-oriented, rather than focused on sustainable ecological needs. In addition, time constraints due to residents' busy schedules and a lack of post-program assistance are also factors that hinder participation. Therefore, a strategy is needed to increase community motivation through a participatory approach that emphasizes the internalization of environmental values, strengthening local institutional capacity, and a sustainable mentoring system. These efforts are expected to encourage the community to participate consistently and independently in facing the challenges of climate change adaptation and mitigation at the local level. **Keywords:** Climate Change, Adaptation Strategy, Mitigation Strategy, Motivation, Sustainability.

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1 Introduction

Climate change is a global phenomenon characterized by an increase in the Earth's average temperature, changes in rainfall patterns, and more frequent extreme weather events. These conditions are caused by an increase in the concentration of greenhouse gases in the atmosphere [1] and are mainly due to human activities such as the use of fossil fuels, land use change, and unsustainable agricultural practices. [2] One of the impacts of climate change is rising temperatures, with a 0.8 degrees Celsius increase in 2024, which has a significant impact on human life. The impacts of climate change are not only felt in the environment but also affect the social, economic, and food security sectors. At the local level, climate change can affect agricultural productivity, water availability, and increase community vulnerability to hydrometeorological disasters. [3] This shows that, broadly speaking, climate change can threaten the sustainability of human life. Therefore, it is important to understand the dynamics of climate change and community responses in adaptation and mitigation efforts, so that more sustainable and climate-resilient development

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strategies can be formulated.

Adaptation and mitigation activities are two key approaches to addressing the impacts of climate change, [4] and are one of the main agendas in SDG 13, which is climate action. Adaptation focuses on efforts to adjust to current and future climate change, such as increasing community capacity to deal with hydrometeorological disasters, implementing water-saving technologies, and developing agricultural systems that are more resistant to climate variability. Meanwhile, mitigation is aimed at reducing greenhouse gas emissions through better waste management, increasing green open spaces, improving energy efficiency, and utilizing renewable energy. These two types of activities complement each other and are important to be implemented in an integrated manner, especially at the community level, in order to improve environmental and social resilience. Effective implementation of adaptation and mitigation measures depends not only on the availability of resources, but also on community participation, government policy support, and the sustainability of the programs being implemented.

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2 Methodology

This study employed a qualitative descriptive approach using Focus Group Discussions (FGDs), in-depth interviews, documentation review, and field observations. The research focuses on analyzing community motivation in implementing adaptation and mitigation activities within ProKlim across all program categories in Solo City. The results are expected to provide strategic insights to strengthen the effectiveness and sustainability of climate action at the community level. Activity can be seen in Figure 1-3.



FIGURE 1. In-depth Interview



FIGURE 2. Focus Group Discussion (FGD)



FIGURE 3. Field Observation

3 Result And Discussion

The implementation of the Climate Village Program (ProKlim) in Solo City has shown various achievements related to climate change adaptation and mitigation efforts. Every year, the Surakarta City Environment Agency holds a cleanliness competition as one of its strategies to encourage environmentally friendly behavior at the community level. This activity not only strengthens the culture of caring for the environment, but also serves as a gateway for the community to get involved in adaptation and mitigation actions. In addition, communities in the ProKlim area carry out various adaptation and mitigation activities such as community service, waste bank management, urban farming, and the use of environmentally friendly energy. These activities directly contribute to reducing climate risks and improving the quality of the residential environment. The implementation of ProKlim also has a positive impact in the form of increasing community resilience to climate disaster risks and strengthening the city government's ability to realize sustainable environmental development. Examples of outcomes from adaptation and mitigation activities can be seen in Figure 4.



FIGURE 4. Examples of outcomes from adaptation and mitigation activities

Of course, the adaptation and mitigation activities carried out in ProKlim do not always run smoothly. These obstacles have an impact on the decline in motivation and consistency in program implementation, so that the effectiveness of adaptation and mitigation activities is not optimally achieved. The following are some of the main obstacles that have emerged based on field findings:

1. The perception that ProKlim is only

The perception that ProKlim is only a "competition." Some members of the community realize that ProKlim is often perceived as an annual competition between sub-districts, rather than a long-term environmental program. When the competition assessment is complete, community participation also declines. This perception makes residents feel that activities only need to be carried out ahead of the assessment, rather than as a continuous routine to improve climate resilience. As a result, adaptation and mitigation activities are not carried out consistently and it is difficult to show sustainable results.

2. Community busyness

Keterbatasan waktu menjadi salah As an urban area with a population dominated by formal and informal sector workers, residents have relatively limited time to participate in environmental activities. The community's busy lifestyle, ranging from long working hours and high daily mobility to other work demands, reduces their opportunities to consistently engage in community-based activities. This situation has resulted in low community participation in ProKlim facility maintenance activities, such as community gardens, waste management, and other adaptation and mitigation actions that require regular involvement. As a result, program sustainability is often

hampered because activities do not receive adequate time and energy support from the community.

3. Limitations in facilities, infrastructure, and funding

Supporting facilities such as waste processing equipment, planting land, and operational funds are still limited in several ProKlim areas. When initial assistance ended, many activities could not be continued due to the unavailability of resources to support program operations. This condition shows that program sustainability is highly dependent on the availability of adequate facilities and funding support.

4. Lack of Socialization

The implementation of ProKlim in several areas in Surakarta City also faces obstacles in the form of limited institutional support and minimal socialization from relevant parties. Coordination between agencies, both at the city, sub-district, and supporting institution levels, has not been optimal, resulting in information about the objectives, benefits, and sustainability mechanisms of ProKlim not being conveyed evenly to the community. In addition, outreach activities tend to be sporadic and emphasize preparation for competitions rather than long-term capacity building. As a result, residents do not have a complete understanding of the urgency of climate change adaptation and mitigation, and are less aware of the importance of sustainable participation outside of the competition momentum. The lack of technical support, follow-up assistance, and routine monitoring further weakens the community's motivation to maintain ProKlim activities independently.

To overcome various obstacles in implementing climate change adaptation and mitigation activities in Surakarta City, a comprehensive and sustainable program strengthening strategy is needed. First, community capacity building needs to be carried out through environmental education and technical training designed to be easily accessible to residents, including adjusting the timing of activities to the patterns of urban community activities. This approach allows for more flexible participation without disrupting people's working hours or routine activities. Second, institutional support needs to be enhanced through more intensive coordination between the Environment Agency, the village government, and community groups. Institutional strengthening can be achieved by clarifying the division of roles, providing regular technical assistance, and establishing a monitoring system to ensure the sustainability of activities in the field. Third, the intensity of socialization needs to be increased so that the community gains a more comprehensive understanding of the urgency of climate change adaptation and mitigation. Continuous socialization—not just before the competition assessment—can change the community's perception that ProKlim is a long-term program, not just an annual competition. This communication can be strengthened through community meetings, neighborhood social media, environmental campaigns, or collaboration with schools and youth communities. Fourth, to overcome funding constraints, it is necessary to encourage multi-stakeholder collaboration through CSR support, partnerships with universities, and cooperation with the private sector that is committed to the environment. Diversifying funding sources enables adaptation and mitigation activities to run sustainably even without special assistance from the government. Overall, the implementation of these strategies and solutions is expected to strengthen the effectiveness of ProKlim, increase community motivation, and ensure that adaptation and mitigation activities run independently, sustainably, and contribute to the climate resilience of Surakarta City.

4 Conclusion

The motivation of the people of Solo to carry out climate change adaptation and mitigation activities is still hindered by various obstacles that affect the consistency and effectiveness of community participation. Several key constraints include the persistent perception that ProKlim functions merely as a competition rather than a long-term environmental initiative, limited availability of funding and institutional support, low levels of environmental awareness among some community members, and restricted time allocation due to heavy work commitments typical of urban populations. These factors collectively contribute to reduced engagement, irregular participation, and suboptimal implementation of ProKlim activities in the field. Nevertheless, the potential for improvement remains high. If these obstacles can be systematically addressed through efforts to enhance public understanding of climate-related issues, the provision of more adequate and sustainable funding mechanisms, continuous technical assistance and mentoring, as well as strengthened collaboration between government agencies, community groups, and external partners, the motivation of the community is likely to increase significantly. Such improvements would not only encourage more active involvement but also create the conditions necessary to ensure the long-term sustainability, continuity, and effectiveness of ProKlim initiatives across Solo City.

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