

## Optimizing the Climate Village Program to Preserve Culture and Enhance Welfare in Kalitan Village

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**Abstract.** The purpose of this community service is to realize the needs of Kalitan Village Kertonatan Sukoharjo in developing proklim kalitan to be known more widely by the community through a clear introduction to the environment using directions. The methods used in this activity are observation, interview and interview. The results obtained from this community service activity are that the authors and the team were able to realize the direction signs for the climate village program in the village of Kalitan Kertonatan Sukoharjo including the waste bank, IPAL, Toga, Jambe Spring, Women Farmers Group, and Playground. This is very beneficial for the community because Kalitan village, especially Proklim Kalitan Sukoharjo, becomes more recognized by the community.

**Keywords:** Proklim; Kalitan Village; Optimizing; Community

### 1. Introduction

Kertonatan Kalitan Kartasura Sukoharjo village has a rich culture that has the potential to be developed. The local culture of Kertonatan Kalitan Kartasura Sukoharjo Village is an ancestral heritage and community identity (Al Hidayah et al., 2024; Mayunita et al., 2023). The Climate Village Program is a national movement for community-based climate change control (Hadmoko & Hizbaron, 2023; Sholikhah & Mirwan, 2023). This program is one of the strategic steps in grounding the global issue of climate change into joint action at the local level (Kholik, 2023). This village is also one of the villages that pay attention to the environment and is one of three villages that get special attention from the local government in the field of environment by creating a climate village program or Proklim (Saputra et al., 2023). Proklim Kalitan is a proklim that continues to develop its activities in managing the surrounding environment (Gazali, 2023). However, as time goes by and globalization flows, local culture is increasingly marginalized. Many of the younger generation are unaware of the village's traditions and local wisdom. Implementasi Program Kampung Iklim

Implementation of the Climate Village Program The implementation of the Climate Village Program (Proklim) has been running in Kalitan RW 05 Kertonatan Village, which is

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the leading RW in Kertonatan Village, Kartasura, Central Java. In addition, Kalitan RW 05 is also an example for other RWs in the implementation of the climate village program managed by Kertonatan Village (Susanti et al., 2022). The development of proklim in the community is to increase public awareness about climate change that is increasingly evident. The government through the proklim competition hopes for more understanding and awareness to save the environment (Andy Saputra et al., 2023). Proklim Kalitan Sukoharjo has environmental maintenance programs that have been running consistently including Household Medicinal Plants (TOGA), Waste Bank, Women Farmers Group (KWT) and so on but the lack of direction information in the village makes it difficult for people who want to visit to find the location. Based on this, it is necessary to innovate the design of directions in order to optimize visitors in visiting the location.

## 2. Methods

This approach is intended to describe and explain the reality of problems in the environment by gathering responses to specific cases (Nur Z.O et al., 2022; Zulkifli et al., 2022). The aim is to present a clear picture of the actual situations being studied. By using this method, the researchers can explore and analyze the current conditions and challenges in the community (Irianto et al., 2022). The subjects of this study were leaders of the PROKLIM program (a community climate initiative) and officials from RW05 and RT units in Kalitan Village, Kertonatan. These individuals were selected because of their leadership roles and relevance to the research focus. To gather data, the researchers used purposive sampling, a technique that selects participants who are most relevant to the study's objectives. Data collection was carried out through interviews and observations, allowing the researchers to engage directly with the subjects and their environment.



**Figure 1** Observation



Multiple data collection techniques were employed in this study, including observation, interviews, documentation, and literature review. Observations allowed the researchers to assess the conditions in Kalitan Village, while interviews provided deeper insights from key informants. Documentation, such as official records, and literature study of relevant existing research were also used to support the data collection process. This combination of methods ensured a comprehensive understanding of the issues at hand. Data analysis was carried out in several stages. The researchers began by organizing the data and breaking it down into smaller units for analysis. After synthesizing the information, they compiled it into patterns and identified the most important data. The final step was to draw conclusions based on the patterns and findings. As part of the study, observations were conducted in Kalitan Village, where both the researchers and students explored the area to better understand its conditions. This fieldwork allowed them to assess the needs of the village and gather firsthand information, which contributed to the overall findings of the research.

The interview conducted as part of this study was aimed at gathering detailed information on the specific needs of Kalitan Village, located in Kertonatan, Sukoharjo. The key informant in this interview was Mrs. Dra. Kusnarti, the head of the PROKLIM (Program Kampung Iklim or Climate Village Program) initiative in the area. As the leader of the program, Mrs. Kusnarti holds a prominent role within the community and possesses valuable insights regarding the village's current challenges and needs. One of the key points raised during the interview was the need for improved directions or signage in the village. According to Mrs. Kusnarti, this would address an important issue faced by visitors to the PROKLIM program. She explained that when people come to the village to learn about the community's climate efforts and other initiatives under the PROKLIM program, they often find themselves confused due to a lack of clear guidance. As a result, this has caused difficulties for visitors in navigating their way to the key locations or facilities related to the program.

Mrs. Kusnarti highlighted that this lack of signage is a significant issue, especially for those coming from outside the community to learn about the program's initiatives. The PROKLIM program is designed to foster environmental awareness and encourage sustainable practices at the local level ([DJPP] Direktorat Jenderal Pengendalian Perubahan Iklim, 2022). Therefore, it regularly receives visitors, including community leaders, environmentalists, students, and other groups interested in learning about climate-related activities implemented in Kalitan Village (Damayanti *et al.*, 2021). Without proper directions, the overall visitor experience is negatively affected, and this could hinder the community's ability to effectively showcase their work (Nur & Kurniawan, 2021). The need for improved signage may seem like a minor issue at first glance, but it actually touches on broader themes of accessibility and community engagement (Ghaniyyu & Husnita, 2021). For instance, clear and visible signs would not only help visitors navigate the village more easily but also enhance the overall visibility of the PROKLIM program itself (Karuniasa, 2020). By improving accessibility, the village could strengthen its role as a model community for environmental and climate resilience initiatives.

Furthermore, Mrs. Kusnarti's comments suggest that there is an underlying need for better infrastructure and organization within the village. Signage is just one aspect of this broader need. It indicates a desire to create a more welcoming and structured environment for outsiders, which in turn reflects a commitment to improving the image



and functionality of the village. This need also implies that the community is looking to increase engagement with external visitors, either to raise awareness about environmental issues or to attract support and collaboration from broader networks. In addition to the physical need for signage, this issue may also reflect a need for better communication and information dissemination within the village. If visitors are confused, it could suggest that the village might benefit from more organized or systematic approaches to guiding and informing people. This could include not only physical signage but also informational materials, maps, or even digital tools that could assist both visitors and residents in better understanding the layout and key points of interest in the community.



**Figure 2** Interview

The interview with Mrs. Kusnarti revealed an important need for improved signage and directions in Kalitan Village. This issue impacts both the functionality of the PROKLIM program and the overall visitor experience. Addressing this need could enhance the village's ability to engage with external visitors, better showcase their environmental initiatives, and foster a more organized and welcoming community environment. By improving such aspects, the village could potentially attract more support, collaboration, and recognition for its efforts in promoting climate resilience. One of the data collection techniques in research that aims to collect information from various existing written, visual, or digital sources. This method is often used in qualitative research and can complement data obtained through interviews, observations, or surveys.

### **3. Results and Discussion**

The Climate Village Program (PROKLIM) in Sukoharjo Regency, initiated in 2017 through a circular letter from the Sukoharjo Regent (No. 660.1/1396, dated April 20,





2017), serves as a community-based initiative aimed at combating climate change. Managed by the Ministry of Environment, PROKLIM seeks to empower local communities by increasing their adaptive capacity to the impacts of climate change while reducing greenhouse gas emissions (Hatmojo, 2020; Suci, 2020). This program also acknowledges and rewards climate adaptation and mitigation efforts that have been successfully implemented at the local level, making it a national model for climate action. In Sukoharjo Regency, the Environmental, Hygiene, and Beauty Office (DLHK) designated specific villages to carry out PROKLIM activities. One of these villages is Kertonatan, located in the Kartasura District. More specifically, the climate village program was implemented in Kalitan, RW 5 of Kertonatan Village. This area has become a focal point for community-driven environmental projects aimed at mitigating and adapting to climate change, in line with the goals set by the national PROKLIM initiative.

*3.1. PROKLIM Assessment Criteria*

The success of PROKLIM is measured through a tiered assessment system that evaluates local community efforts in climate action.

**Table 1** PROKLIM Program Assessment Criteria and Scoring Levels

<b>PROKLIM Level</b>	<b>Score Range</b>	<b>Description</b>
Proklim Pratama	0 - 50 points	Initial level of the PROKLIM program, indicating basic engagement with climate adaptation and mitigation.
Proklim Madya	51 - 81 points	Intermediate level, showing more advanced efforts in climate change adaptation and mitigation.
Proklim Utama	Above 81 points	Highest level, reflecting significant achievements and contributions to climate adaptation and mitigation.

Kalitan’s designation as a PROKLIM village reflects the community’s significant role in enriching activities related to climate change adaptation and mitigation. The village’s efforts also focus on strengthening institutional frameworks and fostering the development of similar programs in three other neighboring locations, ensuring that climate action is sustained and scaled up across the region (Fekri, 2018; Maulana et al., 2018). Field observations conducted as part of this research highlighted several areas within Kalitan Village that are actively involved in the PROKLIM initiative. These include the Kelompok Wanita Tani (KWT), a local women’s farming group, a playground, the village’s waste bank (Bank Sampah), the Sendang Jambe spring, an integrated wastewater treatment facility (IPAL), and a medicinal plant garden (TOGA). While these initiatives are crucial for climate resilience, a significant challenge faced by the village is the lack of clear signage or place identity for these important sites. This has caused confusion among visitors, limiting the potential impact and outreach of the village’s climate efforts.

Mrs. Drs. Kusnarti, the head of PROKLIM in Kalitan, emphasized this issue during a conversation with the author. She explained that despite the village’s extensive environmental initiatives, there are no clear directions or signage to guide visitors. As a result, many visitors are unable to fully engage with or understand the various components of the PROKLIM program. The need for improved wayfinding in the village



was highlighted as a priority, as it would enhance visitor experience and increase the visibility of the climate initiatives being implemented.

### 3.2. Key Locations and Programs

The PROKLIM initiative in Kalitan Village consists of six main programs, which are as follows:

#### 3.2.1. Bank Sampah (Waste Bank)

The Bank Sampah plays a critical role in waste management within the community. It encourages local residents to collect, sort, and recycle waste, turning waste into economic value. This not only helps reduce the village's overall waste footprint but also promotes sustainable waste management practices that can be scaled across the region.

#### 3.2.2. IPAL (Integrated Wastewater Treatment Facility)

The IPAL facility is designed to manage wastewater in an environmentally friendly way, ensuring that water pollution is minimized. By treating wastewater before it is discharged back into the environment, the village is able to maintain cleaner water systems, which is vital for both public health and the surrounding ecosystems.

#### 3.2.3. Sendang Jambe (Jambe Spring)

Sendang Jambe is a natural water source within the village. This spring is integral to the village's water supply, and efforts are being made to protect it as part of the PROKLIM initiative. By maintaining the cleanliness and sustainability of the spring, the village ensures that this critical resource remains available for future generations, while also helping to safeguard biodiversity.

#### 3.2.4. TOGA (Medicinal Plant Garden)

The TOGA garden is dedicated to the cultivation of medicinal plants. It plays an important role in promoting traditional knowledge about herbal remedies, which can help improve the health and well-being of the local population. Additionally, the TOGA garden represents an eco-friendly approach to healthcare, relying on natural resources for treatment.

#### 3.2.5. Kelompok Wanita Tani (Women Farmers Group)

The Kelompok Wanita Tani is a women's farming collective that focuses on sustainable agricultural practices. This group empowers women in the community to take an active role in farming and environmental stewardship, fostering resilience to climate change through sustainable food production.

#### 3.2.6. Taman Bermain (Playground)

The playground in Kalitan Village is an important space for community interaction and education. It provides an area for children and families to gather, learn, and play, all while promoting environmental education through activities focused on nature and sustainability.

Overall, the PROKLIM initiative in Kalitan Village represents a comprehensive approach to addressing climate challenges while enhancing the quality of life for its residents. Through these six key programs, the village demonstrates its commitment to



sustainability, resilience, and community empowerment. The successful integration of these initiatives highlights the potential for local actions to have a significant impact on global environmental goals, making Kalitan a model for other communities facing similar challenges.

### 3.3. *The Need for Directional Signage*

One of the key findings from the interviews and observations was the urgent need for directional signage to improve the accessibility and visibility of these programs. Mrs. Kusnarti mentioned that each of these six programs could greatly benefit from clearer directions to guide visitors and showcase the village's achievements in climate adaptation and mitigation. To address this issue, the research team, comprising students from the Automotive Engineering Technology program under the supervision of Mr. Onery Andy Saputra, M.Pd, and the MBKM manager Mrs. Norma Puspitasari, M.Pd, worked on creating solutions. As part of the design course in Automotive Engineering Technology, they developed a plan for placing clear, well-designed signage in key areas of the village. This initiative aims to make it easier for visitors to locate and engage with the village's climate initiatives, thereby improving the overall impact of the PROKLIM program.

### 3.4. *Discussion*

The implementation of the Climate Village Program in Kalitan Village highlights both the successes and challenges of community-driven environmental action. On the one hand, the village has made significant strides in addressing climate change through waste management, water conservation, sustainable agriculture, and environmental education (Astrika, 2018; KLHK, 2012). These efforts not only contribute to local resilience but also serve as a model for other communities facing similar climate challenges. However, the lack of adequate infrastructure, particularly signage and wayfinding, has limited the reach and effectiveness of the program. Visitors, including external stakeholders such as students, environmentalists, and policymakers, often face difficulties in navigating the village and understanding the full scope of its climate initiatives. This, in turn, reduces the potential for knowledge-sharing and collaboration.

Addressing these infrastructural gaps is essential for the future success of the PROKLIM initiative in Kalitan Village. By improving accessibility and enhancing the visibility of its programs, the village can better position itself as a leader in climate resilience and attract greater support for its initiatives. The efforts of the research team to develop signage solutions represent a step in the right direction, bridging the gap between community action and public engagement. Kalitan Village's implementation of the Climate Village Program demonstrates the power of local action in addressing global climate challenges. With further improvements in infrastructure and visitor engagement, the village can continue to serve as a beacon of sustainability and resilience in the face of climate change.

## 4. **Conclusions**

The community service activity aimed at improving the Climate Village Program (PROKLIM) in Kalitan, Kertonatan Sukoharjo has led to the successful installation of six directional signposts across key locations. These signposts were specifically designed to guide visitors to important sites within the village, such as the *Bank Sampah* (Waste



Bank), *Sendang Jambe* (Jambe Spring), IPAL (Wastewater Treatment Facility), TOGA (Medicinal Plant Garden), *Kelompok Wanita Tani* (Women Farmers Group), and the playground. The installation of these signposts addressed a major issue that had been causing confusion among visitors. Prior to this initiative, visitors often struggled to navigate the village, making it difficult for them to engage with the different environmental and climate adaptation programs in place. The lack of clear directions not only limited the accessibility of the village's programs but also hindered the ability of the community to showcase their efforts in climate change mitigation and adaptation.

The response from the residents of Kertonatan was overwhelmingly positive. The signposts have made the village more welcoming and visually appealing, increasing its attractiveness both for visitors and locals. Residents expressed enthusiasm for the changes, as the signposts have helped improve the village's image, giving it a more organized and professional appearance. In addition to making navigation easier for visitors, the installation of these signposts also supports the broader goals of the PROKLIM program. By providing clear directions, the village is better positioned to demonstrate its achievements in environmental sustainability, making it a model for other communities involved in similar initiatives. Visitors can now easily explore the various locations and programs, which enhances their understanding of the community's climate resilience efforts.

Overall, the project has successfully met its objectives. The installation of the directional signposts not only addressed a practical problem but also contributed to raising the profile of the PROKLIM program in Kalitan Village. This improvement is expected to encourage more visitors, including students, environmentalists, and policymakers, to visit the village, further supporting the community's efforts in environmental sustainability and climate action. The success of this project highlights the importance of simple yet effective infrastructure improvements in enhancing the functionality and visibility of community-driven programs like PROKLIM.

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