

Impacts of Ambient Brightness Control and Short-Wavelength Spectral Content on Display Screen User Responses

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Abstract

In today's digital age, broadcasting plays a crucial role in showcasing the potential of rural areas. It serves as a platform for educating the public, fostering community engagement, and establishing partnerships. This initiative was implemented in Kalipuro Village, Banyuwangi Regency, chosen for its promising prospects in tourism, culture, industry, agriculture, and livestock. The main objectives of this initiative are to introduce the village's potential, educate the community, encourage youth participation, foster partnerships, and promote entrepreneurship and the local economy. The activities involved in this initiative include conducting location surveys and obtaining permits, preparing and executing field activities, organizing Forum Group Discussions (FGD) and providing Technical Guidance, developing and producing broadcasting media, setting up Mini Broadcast Centers, providing training and mentoring for broadcast production, and monitoring and evaluating programs. The results of these activities include successful FGDs involving Mahasiswa Membangun 1000 Desa Universitas Brawijaya, PT. Borsya Digital Smartindo (BDS), the Kalipuro Village Government, and the Kalipuro Village Youth Community. This resulted in potential mapping, strategic solutions, and technical implementation plans. Moreover, this initiative led to the development of the "Desaverse" broadcasting application by the Strategic Community Service Grant Team for 1000 Villages, Brawijaya University, and PT BDS. Desaverse is an application that showcases exclusive content from areas in East Java, providing widespread access to information, education, and entertainment through high-quality content broadcasts in Kalipuro and Tulungrejo villages.

Keywords: Broadcasting, Kalipuro, Tulungrejo, Village Tourism

INTRODUCTION

The village plays a crucial role in the economy and society of many countries worldwide. While urban development has been prioritized in recent years, it is important not to overlook the significance of rural development. Sustainable rural development has the potential to improve the quality of life for communities, stimulate economic growth, and preserve local culture and traditions. Rural development plays a vital role in the economy and society of many countries worldwide. Despite the recent emphasis on urban development, the significance of rural development cannot be underestimated. Sustainable rural development has

the potential to enhance the standard of living for communities, boost economic growth, and conserve local resources. Therefore, it is crucial to prioritize rural development alongside urban development for the overall progress and well-being of society.

In addition, inclusive economic growth is facilitated by rural development initiatives. Agriculture, tourism, crafts, and other local industries are potential sources of income for villages. By promoting sustainable rural development and improving these sectors, rural communities can increase their revenue and reduce their reliance on the informal sector. Additionally, rural development

plays a critical role in preserving local cultures and traditions, as many villages across the globe have unique and valuable cultural heritage. By supporting sustainable rural development, these traditions can be protected and passed down to future generations.

Effective implementation of government programs requires collaboration among stakeholders. Collaboration is the act of working together with one or more parties to achieve a common goal. It involves the participation of multiple parties to expedite the process. In public administration, collaboration is a new strategy that prioritizes consensus from multiple stakeholders, including the government and the community, to solve public issues or manage public programs. According to Morse and Stephens, collaboration is a supportive form of governance that emphasizes the natural process of agreement from various social actors (stakeholders), not only from the government but also involving the community and non-governmental institutions in collective action or cooperation.

Communication technology has played a crucial role in developing rural areas in today's constantly evolving digital era. Broadcasting, in particular, is a highly influential communication tool that has been instrumental in promoting, preserving, and developing village potential more broadly and effectively. Broadcasting refers to the process of delivering information, messages, or content to a large audience through mass communication channels. It involves the transmission of electronic media such as radio and television. However, with the advancement of digital technology, broadcasting can now also include online platforms like video streaming and podcasts.

Broadcasting is a method of communication that allows for the delivery of various types of content to a diverse audience. It enables many people to access the message or information conveyed by the broadcasting source simultaneously without significant geographical limitations. Broadcasting serves different purposes in various contexts, including information, entertainment, education, and promotion. In the context of rural potential development, broadcasting can be used to

showcase the village's capabilities and richness to the wider community, educate the public about best practices, foster community engagement, and facilitate partnerships with external parties.

MATERIAL AND METHOD

This community service activity was supported by the Research and Community Service Institute (LPPM) of Brawijaya University in both the implementation and the accompanying monitoring of the activity's success. The method used was a participatory approach that involved local community groups in the dissemination process. Through workshops, training sessions, and other educational activities, it was expected that the knowledge and awareness of the community regarding broadcasting would increase.

The following steps were taken to implement solutions to specific challenges faced in resolving issues as formulated in the problem statement, objectives, and proposed solutions outlined in the above section.

1. Location and Permit Survey
2. Field Activity Preparation
3. Activity Implementation
4. Focus Group Discussion (FGD)
5. Problem Identification
6. Design of broadcasting applications and Mini Broadcast Centers in Kalipuro Village and Tulungrejo Village
7. Training and assistance in broadcast production
8. Monitoring and program evaluation
9. Writing the publications and mass media
10. Preparation of the final activity report
11. Collection of final activity reports.

RESULT AND DISCUSSION

The achievements obtained in the implementation of the Strategic Community Service Grant for 1000 Villages are as follows:

1. Brainstorming and Focus Group Discussion (FGD)

The first FGD activity was conducted among the Strategic Community Service Grant Team for 1000 Villages, Brawijaya University, PT BDS, the Kalipuro Village Government, and the Kalipuro Village Youth Organization. The second FGD activity was carried out among the Strategic Community Service Grant Team for 1000 Villages, Brawijaya University, PT BDS, the Tulungrejo Village Government, and the

Tulungrejo Village Youth Organization. During these FGD activities, brainstorming was conducted regarding issues, strategic solutions, and technical implementation of activities to ensure they are on target. The FGD sessions formulated the synchronization of the Strategic Community Service activities for 1000 Villages by UB and PT BDS collaborating to achieve the target goals to help explore all the potential of the villages, including community economy, MSME sector, agriculture sector, arts and culture, and tourism.



Figure1. Monitoring and evaluation carried out by DRPM UB to ensure they are on target.

2. Discussion for the Desaverse Application

The Strategic Community Service Grant Team for 1000 Villages, Brawijaya University, and PT BDS have developed the Desaverse application. The Desaverse application showcases exclusive content from regions in East Java. The application provides wide-ranging access to information, education, and entertainment through high-quality content from each area. Kalipuro Village represents Banyuwangi Regency to initiate the broadcasting activities. The Desaverse application can be accessed through the website <https://desaverse.co.id/>. The menu options in this application include Desaverse TV, Village Product Gallery, and Strategic Partnerships.



Figure2. interface The Desaverse application showcases exclusive content.

3. Training and Assistance in Broadcasting

Training and assistance (Bimtek) were conducted to provide basic knowledge about broadcasting to the youth of Kalipuro Village. During this activity, the Desaverse Coverage Team was formed to carry out coverage activities in Kalipuro Village and Tulungrejo Village. Training and assistance were also provided to students who were implementing the Student Village Development Program (MMD) in Kalipuro Village and Tulungrejo Village. The training aimed to introduce coverage techniques to ensure maximum results. Over the course of 5 days, the team and students conducted coverage based on the 5 themes that had been prepared, namely:

- Village Profile Documentation
- Interviewing Village Officials
- Visiting the Community/MSMEs/Village-Owned Enterprises
- Visiting the Tourism Sector
- Visiting the cultural assets in the Village



Figure3. Training and assistance (Bimtek) were conducted to provide basic knowledge about broadcasting to the youth of Kalipuro Village..

4. Training and Assistance on Business Institutional Management

This training (Bimtek) was prompted by the community's lack of ability, particularly in the youth organization (karangtaruna), to manage the businesses they are engaged in, resulting in limited development. Additionally, the administration of the Strategic Community Service Grant for 1000 Villages is still lacking. It is hoped that through institutional management training, the management of businesses can be improved, including the use of Google Business to reach a wider market.

Furthermore, the village broadcasting management group, consisting of youth from the karangtaruna, lacks clarity in its organization. As the group progresses and expands, a more defined and

detailed organizational structure is needed to facilitate collaborative efforts. The Strategic Community Service Grant Team for 1000 Villages from LPPM UB, along with MMD students, held discussions with the youth of Karangtaruna, providing training on organizational charts and job descriptions for positions that had been previously outlined. This was followed by the development of an organizational chart and job descriptions for those responsible within the broadcasting organization.

The measurement of the improvement in community knowledge related to broadcasting was conducted by comparing the results of the pre-test with the results of the post-test. A total of 30 selected youths from the Karangtaruna served as samples and completed all the pre-test and post-test questions. After analysis, the results indicated an enhancement in participants' understanding of broadcasting. This can be observed from the difference in the average scores between the pre-test and post-test results in Table 1.

Tabel 2. Hasil *Pre-test* dan *Post-test*

<i>Pre-test</i>				<i>Post-test</i>			
Peserta	Nilai	Peserta	Nilai	Peserta	Nilai	Peserta	Nilai
1.	40	16.	100	1.	90	16.	90
2.	70	17.	80	2.	90	17.	90
3.	70	18.	70	3.	90	18.	100
4.	70	19.	90	4.	90	19.	100
5.	70	20.	70	5.	100	20.	100
6.	80	21.	90	6.	100	21.	100
7.	90	22.	90	7.	90	22.	100
8.	80	23.	70	8.	100	23.	100
9.	70	24.	70	9.	100	24.	100
10.	30	25.	90	10.	90	25.	100
11.	70	26.	60	11.	90	26.	100
12.	70	27.	90	12.	100	27.	100
13.	70	28.	60	13.	100	28.	100
14.	70	29.	70	14.	100	29.	90
15.	50	30.	100	15.	100	30.	90
Rerata <i>Pre-test</i>				Rerata <i>Post-test</i>			
73,33				96,33			

From Table 1, the average pre-test score is 73.33, while the average post-test score is 96.33. In the pre-test results, the lowest score was 30, and the highest score was 100, achieved by 2 participants. In the post-test results, the lowest score is 90, while the highest score is 100, which was achieved by 19 participants. The initiative significantly improved the community's understanding and skills in broadcasting. Pre-test and post-test assessments showed an increase in the average score, indicating enhanced knowledge among participants about broadcasting technology.

The creation of the "Desaverse" broadcasting application is a significant accomplishment in the effort to showcase local products and culture from East Java. This digital platform features exclusive content that highlights the unique characteristics and potential of various villages in the region. By offering users a rich blend of information, education, and entertainment, Desaverse not only increases the visibility of village assets but also fosters a deeper understanding and appreciation of local heritage. The application serves as a bridge between rural communities and a global audience, effectively promoting tourism, local products, and cultural heritage. Through its interactive features and high-quality content, Desaverse enables villages like Kalipuro to access broader markets and audiences, thereby driving economic growth and enhancing the overall development of rural areas in East Java. This integration of digital broadcasting technology into community service efforts highlights the transformative power of media in advancing sustainable rural development.

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