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Affording Homes in Yogyakarta: An Empirical Analysis of Local Housing Market Affordability

Bagaskara, Yudistira Permana, Maygsi Suwandi

Monetary Policy in Action: The Dynamic Influence of Reserve Requirements on Bank Lending in Indonesia

Vadilla Mutia Zahara, Maitsoo Zalfaa, Togi Haidat Mangara

Public Expenditure and Human Development Convergence in Eastern Indonesia 2015-2023

Eva Setyaningsih, Yozi Aulia Rahman

The Impact Analysis of Green Bond Issuance on Carbon (CO₂) Emissions: Green Finance Transformation in Developed and Developing Countries

Wijianto, Telisa Aulia Falianty

Internet Utilization and Local Government Procurement for MSEs

Vianita Lianasari Dini, Riatu Mariatul Qibthiyyah

Analysis of The Relationship between Child Marriage and Women's Employment Sector

Priskila Saragih

The ASEAN Export Paradox: Endogenous Resilience and Structural Transformation in Southeast Asian Trade Dynamics

Endang, Hartiningsih Astuti, Diah Chitra Puspitaningrum

Cost And Benefit Analysis Pelaksanaan Program Desa Bersih Narkoba (Bersinar) Melalui Pendekatan Ketahanan Sosial

Ade Aryanti Fahrani, Palupi Lindiasari Samputra

Poverty Alleviation Model in Tasikmalaya City: An Analytic Network Process Approach

Apip Supriadi, Gusti Tia Andriani, Aso Sukarso, Jumri

The Effect of Exchange Rates on Exports in the Era of Global and Regional Value Chains

Rizke Dwi Setiyani, Sugiharso Safuan

The Desa Bersinar (Drug-Free Village) Program: A Cost-Benefit Analysis Through the Social Resilience Perspective

Abstract

The "Desa Bersih Narkoba" (Drug-Free Village) program was implemented to reduce drug vulnerability in drug-prone areas. However, this objective was not significantly achieved in Jambu Hilir Village. This study aims to analyze the feasibility and impact of the program through a cost-benefit approach integrated with the concept of social resilience. A mixed-methodology was employed, where quantitative data were analyzed using CBA, while qualitative data were gathered through in-depth interviews. The results indicate that the program is economically feasible, with a BCR of 8.26 and a positive NPV of IDR 5,544,362,176. Furthermore, qualitative analysis identifies "silent resistance" and adaptive religious-based mitigation as key intangible benefits. However, transformative capacity remains dormant due to personal-dependent governance, which explains the administrative stagnation despite high economic efficiency. These findings demonstrate that reducing permanent vulnerability requires transitioning from personal-dependent to system-dependent institutional frameworks.

Keywords: cost-benefit analysis, drug-free village, drug-prone area, social resilience.
JEL classification codes: H43, K42, I38, and Z13

INTRODUCTION

Drug abuse and illicit trafficking are multidimensional threats in Indonesia that endanger individuals and weaken the social structure of communities, even in remote villages (Oktaviani and Yumitro, 2022). The scale of this problem is reflected in the 2023 national prevalence data, which shows that 1.73% of the population aged 15-64 is involved in drug abuse, which is equivalent to 173 people per 10,000 population (BNN, 2023).

One of the areas facing this problem is Hulu Sungai Selatan Regency in South

Kalimantan Province, where drug abuse and illicit trafficking have even involved various segments of society, such as village officials, students, children, and women (Radar Banjarmasin, 2023).

The presence of drug abuse and illicit drug trafficking activities in an area is one indication that a village/subdistrict can be categorized as a drug-prone area (Deputy for Community Empowerment, National Narcotics Agency of Indonesia, 2019). The existence of drug-prone areas can have various negative impacts on society, such as: health aspects (Boden and Day, 2023), social

(Hamel et al., 2020), security (Gutiérrez-Romero and Oviedo, 2017), and economic (Blackaby et al., 2023) aspects, increased crime and social problems (Rahmawati et al., 2021), and a threat to national human security (Hidayat, 2021).

The National Narcotic Board of Hulu Sungai Selatan District (BNNK HSS), as the leading sector in handling drug problems, has implemented the "Drug-Free Village (Desa Bersinar)"

program. From 2021 to 2023, this program has intervened in seven drug-prone areas in Hulu Sungai Selatan District (P2M Section, 2023). However, the implementation of this program has shown inconsistent results. Table 1 shows that only four of the seven villages have experienced a decrease in vulnerability levels, whereas the other three villages – Jambu Hilir, Karasikan, and Samuda – remain stagnant in the "alert" category.

Table 1: Desa Bersinar in Hulu Sungai Selatan District

No	Village Name	Intervention Year	Vulnerable Area Category		
			2021	2022	2023
1	Jambu Hilir	2021	alert	alert	alert
2	Lungau	2021	alert	caution	Safe
3	Karasikan	2022	alert	caution	caution
4	Jembatan Merah	2022	alert	caution	caution
5	Balimau	2022	alert	caution	caution
6	Sungai Mandala	2023	alert	caution	caution
7	Samuda	2023	alert	alert	alert

Source: Processed by researchers from P2M BNNK HSS data (2024)

Table 1 shows a significant stagnation in Jambu Hilir village. Despite three years of intervention, Jambu Hilir remains at "alert" status, while neighboring areas have successfully transitioned to "safe" status. This condition raises a critical question: "To what extent is the Desa Bersinar program in Jambu Hilir truly effective, both in terms of its economic feasibility and its

substantive social impact on community resilience?"

This persistent gap between intervention efforts and the stagnant vulnerability status indicates that a purely administrative assessment is often insufficient to capture the nuances of localized outcomes. Research that evaluating community-based programs solely through process analysis and implementation constraints fail to explore

the broader substantive social impacts (Lardier et al., 2020). This implies that the program's long-term success is fundamentally anchored in internal community factors, specifically social resilience, which is a critical element for program sustainability (Cole, 2022). Therefore, a shift toward the qualitative dimensions of community capacity that underpin resilience in drug-prone areas is required to evaluate true effectiveness.

Several academic publications have confirmed the relevance of social resilience in the context of drug-prone areas. Social resilience, defined as a community's ability to cope with disturbances and respond to social, political, and environmental changes, is a crucial aspect in dealing with the threat of drugs (Kwok et al., 2016 ; Ghafur, 2016) . A community with weak social resilience tends to be more vulnerable to external threats that can increase the vulnerability of individuals to drug abuse and illicit drug trafficking (Rahmawati et al., 2021). Social resilience reflects the ability to establish, maintain, and strengthen positive relationships and cope with life pressures and social isolation (Sunoto, Aziz, & Dhesthoni, 2023). According to Keck and Sakdapolrak (2013) , social

resilience consists of 3 dimensions, namely: (1) coping, (2) adaptive, and (3) transformative capacities.

On the other hand, previous evaluation studies on the Desa Bersinar program tend to focus on process analysis and implementation constraints, such as SOP compliance, internal and external challenges, and budget limitations (Nataludin, 2023; Nurul Mardhiyah & RFS, 2022; Kasita & Sudarmo, 2023). Although important, these studies often fail to comprehensively explore the program's benefits, both from an economic efficiency perspective and in terms of its social impact. This limitation creates a significant research gap, namely, the absence of an analysis capable of measuring the feasibility of program investment and its impact on strengthening community capacity.

This study integrates two robust analytical frameworks to address the aforementioned gaps. First, it employs the CBA method, a systematic economic instrument used to assess policy efficiency by quantifying total costs and benefits in monetary terms (Dunn, 2003; et al., 2021; Rahmiyati et al., 2018). The analysis utilizes NPV and BCR indicators to provide a rigorous quantitative

justification for the program's economic feasibility (HM et al., 2022 ; Putra et al., 2021).

Second, this study incorporates the social resilience approach developed by Keck and Sakdapolrak (2013) to explore the program's intangible social benefits (Keck and Sakdapolrak, 2013). This dual approach is essential to capture the program's holistic value, bridging the gap between measurable economic efficiency and the community's qualitative capacity-building.

The primary objective of this study is to evaluate the effectiveness of the Desa Bersinar program in Jambu Hilir Village by integrating these economic and social resilience perspectives. By focusing on this specific case, the research seeks to explain the "effectiveness paradox" where a program in Jambu Hilir may demonstrate high economic value despite a stagnant administrative vulnerability status. Specifically, this study aims to answer: "To what extent is the Desa Bersinar program in Jambu Hilir truly effective, both in terms of its economic feasibility and its substantive social impact on community resilience?". The findings of this study are expected to provide a comprehensive evidence-based

foundation for future policy formulation, particularly for sustaining drug intervention programs in stagnant drug-prone areas.

RESEARCH METHOD

This study uses a mixed-method design with a concurrent embedded model (Azhari et al., 2023; Creswell, 2020). In this model, the quantitative approach serves as the primary method to evaluate economic feasibility, while the qualitative approach is embedded as a secondary method to provide in-depth context regarding social impacts. This design is specifically chosen to address the "effectiveness paradox" in Jambu Hilir Village by triangulating measurable financial data with the intangible dynamics of community resilience.

Unit of analysis and evaluation period

The unit of analysis is strictly focused on Jambu Hilir Village, Hulu Sungai Selatan Regency, to ensure clarity and consistency in inference. The evaluation period covers three years of program implementation from 2021 to 2023. This specific focus allows for a longitudinal observation of why

vulnerability status remained stagnant despite continuous intervention.

Quantitative Approach: Cost-Benefit Analysis

The quantitative approach is descriptive and aims to quantify the monetary value of program costs and benefits. Data collection involved documentation studies of two secondary sources : (1) Cost Components: Derived from the 2021-2023 Work Plan and Budget (RKAKL) of BNNK Hulu Sungai Selatan; and (2) Benefit Components: Quantified based on the "unit cost" of drug abuse prevention as established by the National Narcotics Board RI study (2015). Economic feasibility is determined using two key indicators: (1) the benefit-cost ratio (calculated to compare total benefits against total costs) and (2) the net present value (used to assess long-term value by considering the time value of money).

Qualitative Approach: Social Resilience Framework (SRF)

The qualitative approach explores the intangible benefits of the program through the social resilience framework. This analysis is categorized into three dimensions, as proposed by Keck and

Sakdapolrak (2013): coping, adaptive, and transformative capacities.

The primary data were gathered through semi-structured interviews conducted between August 14 and 25, 2024. Purposive sampling was used to select informants to ensure the inclusion of key stakeholders :

- 1) The Head of the BNNK HSS
- 2) The Eradication Team Leader BNNK
- 3) The Head of Jambu Hilir Village
- 4) The Neighborhood Head (RT 1)
- 5) The Neighborhood Head (RT 2)
- 6) YN (an ex-illegal drug dealer)
- 7) MR (informant YN's child)
- 8) Informant ND (local youth)

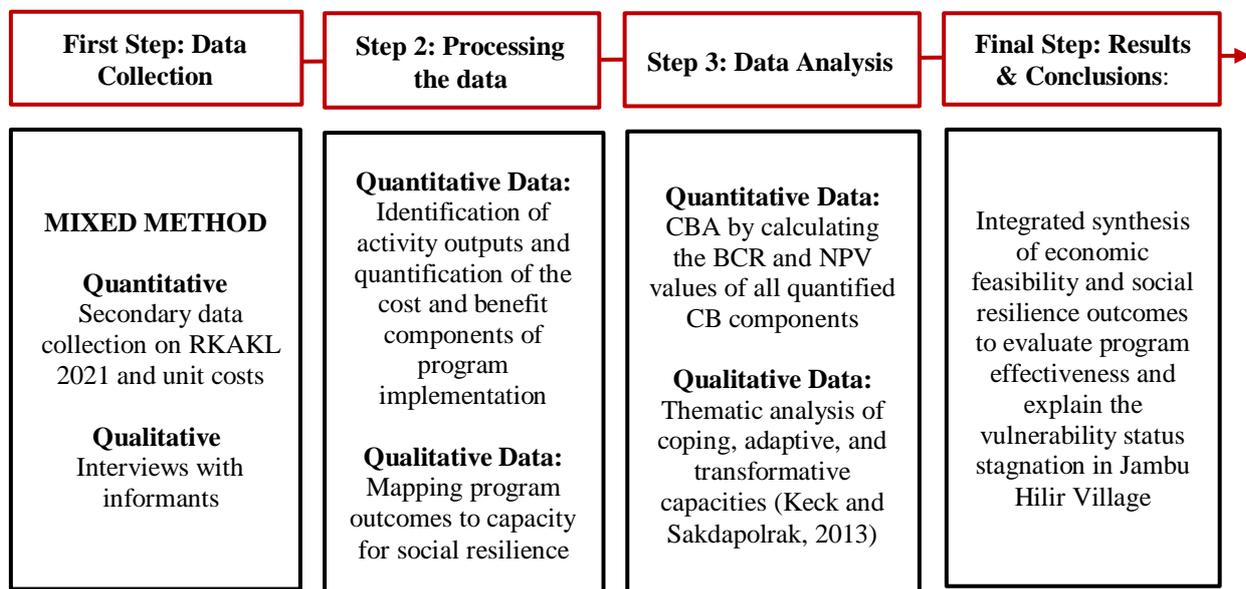
The interview data were processed using thematic analysis to identify the patterns of community capacity development.

Data integration and interpretation

Integration occurs during the interpretation stage. The quantitative BCR and NPV results provide the baseline for economic efficiency, while the thematic qualitative findings explain the social mechanisms that influenced the program's outcomes in Jambu Hilir. This holistic approach ensures that the findings go beyond administrative

metrics to provide a substantive evaluation of policy effectiveness.

Figure 1: Research Flow



Source: Research findings

RESULTS AND DISCUSSION

Implementation of the Desa Bersinar Program in Jambu Hilir

Desa Bersinar is a sub-district / village-level administrative unit that meets certain criteria, where a massive program for the Prevention and Eradication of Drug Abuse and Illegal Drug Trafficking is implemented (Deputy for Prevention BNN RI, 2021). According to Nataludin (2023), the Desa Bersinar program is more about encouraging or empowering local governments, village governments, communities, and stakeholders related to villages to work synergistically and collaboratively in

overcoming the threat of drugs in villages (Nataludin and Samputra, 2023).

The Desa Bersinar program in Jambu Hilir Village initially focused on intervening in a drug-prone area as known the "Pulau Negara". The intervention program focused more on prevention and community empowerment. The implementation of this program over three years produced outputs and outcomes. The outputs were based on the results of activities budgeted by the BNN Hulu Sungai Selatan District, while the outcomes were based on the impact of the intervention in the community. Then, the researchers

specified these outcomes based on the 3 present the outputs and outcomes of the social resilience dimension. Tables 2 and Desa Bersinar program implementation.

Table 2: Output of the Desa Bersinar Program in Jambu Hilir Village in 2021

Sub-Program	Implementation output
The antidrug family resilience program (KKAN)	<ul style="list-style-type: none"> A total of 5 families received resilience life skills training consisting of 5 children and 5 parents
Strengthening drug-free family resilience based on village development resources	<ul style="list-style-type: none"> Establishment of a shining village in Jambu Hilir Commitment from the village head and officials to support the P4GN program in the area
Community empowerment program	<ul style="list-style-type: none"> Formation of 10 antidrug volunteers
Formation of peer antidrug groups among youth	<ul style="list-style-type: none"> The formation of 5 youth peer anti-drug advocates who serve as partners of the BNN

Source: Processed by the researcher from data from the P2M Section of the South Hulu Sungai BNNK

Table 3: Outcomes after program implementation (2021–2023)

Dimension	Outcome
Social Resilience	
Coping Capacity	<ul style="list-style-type: none"> There are 9 drug abusers are aware of undergoing rehabilitation. The police department handling 6 people suspects in drug-related criminal cases Seized drugs successfully secured by the HSS Police Department included 0.67-g methamphetamine and 4,128 seledryl tablets
Adaptive Capacity	<ul style="list-style-type: none"> The community has voluntarily formed youth groups to create positive activities for the younger generation to prevent them from becoming involved in drug abuse.
Transformative Capacity	<ul style="list-style-type: none"> A network of cooperation was formed between Jambu Hilir Village and external agencies (P4GN) to prevent and eradicate drug abuse and illicit trafficking. Over a period of 3 years, 30 socialization activities and large-scale anti-drug campaigns were carried out by the sub-district’s external agencies, such as the Police, BNN, MUI, and PKK. (the estimated number of Jambu Hilir sub-district residents exposed to these activities was 3,485 people).

Source: Interview results and BNNK HSS report documents

Cost Components of the Desa Bersinar Program

The cost components in the cost-benefit analysis include direct costs, which cover the operational expenses of program implementation, and indirect

costs, which cover the indirect economic impacts of the disruption, such as lost time or other activities. Indirect costs can also take the form of losses due to resource diversion from other alternatives that can provide benefits

(Dunn, 2003). The direct cost component in this paper is based on the budget spent by the BNN Hulu Sungai Selatan District to implement the Desa Bersinar program in Jambu Hilir Village and the budget spent by the community/other agencies in carrying out activities. Indirect costs are quantified in monetary terms as the productive time lost by participants due to participating in this program.

The quantification approach used is based on the 2021 Hulu Sungai Selatan Regency Minimum Wage of IDR 2,877,448/month with an estimated 22 working days, resulting in a quantification of IDR 130,793 for lost productive time per day. Based on the results of the calculations in Table 4, the cost incurred to produce the output and outcome of the DB program was Rp. 851,017,839.

Table 4: Quantification of Output and Outcome Costs for the Desa Bersinar Program

Cost Component	Budget/cost amount (Rp)
Direct costs (i.e., activity implementation costs)	
• The antidrug family resilience program (KKAN)	
1) The Family Resilience Coordination Meeting	12,125,000
2) Facilitating drug-free family resilience	
• Drug-free family resilience based on village development resources	8,495,000
• Community empowerment program	
1) Working meeting of the community empowerment program	
2) Antidrug Volunteers Workshop	15,600,500
3) Urine test for village officials and neighborhood associations	
4) Monitoring and Evaluation of the Program	
• Formation of peer-to-peer antidrug youth groups	28,880,000
• Transportation costs for rehabilitation clients accessing rehabilitation services at BNNK HSS (Rp. 50,000 x 9 people x 12 times*)	5,400,000
*The average number of outpatient rehabilitation treatment sessions was 12 times.	
• Cost of investigation and prosecution activities for 6 suspects in narcotics-related criminal cases (*Rp. 25,000,000 x 6 suspects)	150,000,000
*Based on the average budget spent by the eradication section in uncovering criminal cases of narcotics	
• Operational costs of youth rehabilitation groups per year (Rp. 3,600,000 x 2 youth rehabilitation groups x 3 years)	21,600,000
• Cost of conducting 30 anti-drug awareness campaigns and outreach activities over 3 years (*Rp. 35,000 x 3,485 people)	121,975,000
*Estimated cost per person for consumption Rp 35,000	
Total Direct Cost Components	364,075,500

Cost Component	Budget/cost amount (Rp)
Indirect costs (loss of productive time when participating in an activity)	
• Cost of participants in the KKAN	
1) Family resilience coordination meeting (10 people x 1 day) x IDR 130,793	3,923,790
2) Facilitation of family resilience against drugs (5 people x 4 days) x IDR 130,793	
• Cost of KKSPD activity participants (15 people x 1 day) x IDR 130,793	1,961,895
• Cost of participants in PPM activities	
1) Community Empowerment Program Working Meeting (10 people x 1 day) x IDR 130,793	4,577,755
2) Anti-Drug Activist Workshop (10 people x 1 day) x IDR 130,793	
3) Urine Test for Village Officials and RT Chairpersons (15 people x 1 day) x IDR 130,793	
• Cost of participants in the RTS activity (5 people x 10 days) x IDR 130,793	6,539,650
• Cost of lost time for rehabilitation clients when attending rehabilitation services (Rp. 130,793 x 9 people x 12 times)	14,125,644
• Cost of time for socialization activities and large-scale anti-drug campaigns (IDR 130,793 x 3,485 people)	455,813,605
Total indirect cost components (%)	486,942,339
Total overall cost components (direct + indirect)	851,017,839

Source: Processed by the researcher from the 2021 RKAKL data of the Hulu Sungai Selatan BNNK and the 2021 daily average UMK of Hulu Sungai Selatan

Components of the Desa Bersinar Program in Jambu Hilir

The Desa Bersinar Program in Jambu Hilir focuses on prevention and community empowerment. Therefore, the benefits generated from the implementation of the Desa Bersinar Program in this paper are in the form of costs that can be prevented from the impact of drugs on both individuals and society.

The benefits of a program can be classified into direct and indirect benefits

(Dunn, 2003). Direct benefits refer to tangible results that can be quantitatively measured, such as estimates of individual costs due to drugs (individual costs) that can be reduced through exposure to drug prevention programs for activity participants. Indirect benefits are positive side effects that influence the success of the program but are not always directly measurable. In this study, social costs that can be reduced through prevention programs in the community are included.

According to the Indonesian government, the costs incurred from drug

abuse consist of individual and social costs. Individual costs are the costs borne by drug abusers. These individual costs consist of the cost of drug consumption, treatment, and medication for drug-related illnesses, costs incurred in the event of an overdose, costs of detoxification and rehabilitation, costs of self-treatment in an effort to stop drug use, costs incurred as a result of traffic accidents, costs incurred in relation to being caught by the police for drug use, costs incurred due to imprisonment, and

lost productivity costs due to drug use, resulting in respondents being unable to work or attend school.

Social costs are the financial burdens resulting from drug abuse that indirectly impact society. The social cost component consists of lost productivity costs due to waiting for sick respondents, overdosing, detoxification and rehabilitation, accidents while dealing with the police, dealing with the prison authorities, death due to drugs, and criminal acts (BNN RI, 2015) .

Table 5: The magnitude of individual drug abuse costs

Individual cost	Range of median unit cost per individual/year (IDR)	Average individual loss due to drug abuse (IDR)
Drug Consumption	10,800,000	10,800,000
Illness treatment/hospitalization	2,100,000–4,800,000	3,450,000
Overdose	50,000–165,000	107,500
Detoxification and Rehabilitation	500,000–1,000,000	750,000
Self-Treatment / Outpatient Care	140,000–218,000	179,000
Accidents	575,000–600,000	587,500
Dealing with Law Enforcement	6,500,000–10,000,000	8,250,000
Prison	7,000,000–10,000,000	8,500,000
Disrupted Activities	172,500–205,000	188,750
Individual cost amount		32,812,750

Source: Processed by researchers from research results (BNN RI, 2015)

Table 6: Amount of Social Cost of Drug Abuse

Social cost	Median unit cost per individual per year (IDR)	Average social loss due to drug abuse (IDR)
Loss of productivity	*Minimum wage for the HSS in 2021	2,877,448
Criminal acts	700,000–1,200,000	950,000
Social cost amount		3,827,448

Source: Processed by researchers from the study (BNN RI, 2015) and UMK HSS 2021

Table 7: Benefit amounts from the output and outcome of program (2021 - 2023)

Benefit Components	Individual (IDR)	Social (IDR)	Total Benefits Individual + Social
<ul style="list-style-type: none"> • KKAN benefits in preventing drug abuse (15 people x 32,812,750) (15 people x 3,827,448) 	492,191,250	57,411,720	549,602,970
<ul style="list-style-type: none"> • KKSPD benefits in preventing substance abuse (15 people x 32,812,750) (15 people x 3,827,448) 	492,191,250	57,411,720	549,602,970
<ul style="list-style-type: none"> • Benefits of PPM activities in preventing drug abuse (35 people x 32,812,750) (35 people x 3,827,448) 	1,148,446,250	133,960,680	1,282,406,930
<ul style="list-style-type: none"> • RTS benefits in preventing drug abuse (5 people x 32,812,750) (5 people x 3,827,448) 	164,063,750	19,137,240	183,200,990
<ul style="list-style-type: none"> • Benefits for 9 drug abusers who underwent rehabilitation and were freed from drug problems (9 people x 32,812,750) (9 individuals x 3,827,448) 	295,314,750	34,447,032	329,761,782
<ul style="list-style-type: none"> • Benefits of arresting 6 drug couriers (estimated that arresting 1 courier can save 10 drug users) (6 people x 10 x 32,812,750) (6 people x 10 x 3,827,448) 	1,968,765,000	229,646,880	2,198,411,880
<ul style="list-style-type: none"> • Benefits of Habsyi group activities in preventing drug abuse among teenagers (18 people x 32,812,750) (18 people x 3,827,448) 	590,629,500	68,894,064	659,523,564
<ul style="list-style-type: none"> • Benefits of anti-drug awareness and campaign activities (estimated 1% of 3,485 participants not becoming drug abusers) (35 people x 32,812,750) (35 people x 3,827,448) 	1,148,446,250	133,960,680	1,282,406,930
Total	6,300,048,000	734,870,016	7,034,918,016

Source: Research findings

As shown in Table 7, the implementation of the Desa Bersinar program in Jambu Hilir Village resulted in the prevention of individual losses due to drug abuse, amounting to Rp. 6,300,048,000, and preventable social losses, amounting to Rp. 734,870,016. The total benefits from the prevention of individual and social losses were Rp. 7,034,918,016.

Cost-benefit Analysis

The economic efficiency of the *Desa Bersinar* Program in Jambu Hilir Village was evaluated by comparing the total quantified benefits with the total costs incurred. The BCR serves as a primary indicator of the program's feasibility . Based on the results presented in Tables 7 and 8, the BCR is calculated as follows :

$$\begin{aligned} \text{BCR} &= \frac{\text{Total benefits}}{\text{Total Costs}} \\ &= \frac{7,034,918,016}{851,017,839} \approx 8.26 \end{aligned}$$

The BCR calculation resulted in a value of ≈ 8.26 ($\text{BCR} > 0$), indicating that the program is feasible. Every IDR 1 invested in the Desa Bersinar Program will result in a benefit of IDR 8.26. This

result demonstrates high economic efficiency, aligning with international benchmarks set by the UNODC and WHO, which suggest that every \$1 spent on prevention efforts can save \$10 in potential abuse costs (UNODC, 2021).

To ensure the credibility of this calculation, the benefit components used a conservative estimation. For instance, the benefit from awareness campaigns was estimated at a minimal 1% prevention rate, and to maintain a realistic and grounded valuation, individual loss data were based on the most comprehensive national study by BNN RI (2015).

Furthermore, the NPV assessment, using a 10% discount rate (), reinforces the program's long-term feasibility :

$$\begin{aligned} \text{NPV} &= \frac{R}{(1 + r)^t} - C \\ \text{NPV} &= \frac{2,564,813,860}{1.10} - 851,017,839 \\ \text{NPV} &= 6,395,380,015 - 851,017,839 \\ &= 5,544,362,176 \end{aligned}$$

The positive NPV of IDR 5,544,362,176 confirms that the program yields substantial economic value even after accounting for the time value of

money . However, these robust economic figures present an evaluative paradox. Despite its high economic efficiency and positive investment feasibility, the administrative vulnerability status of Jambu Hilir Village remained stagnant in the "Alert" category from 2021 to 2023.

This anomaly suggests that while the program is highly successful in generating economic benefits (primarily through the prevention of individual and

social losses), these financial gains have not yet translated into a formal reduction of the village's drug-vulnerability index.

This gap indicates that economic efficiency alone is an insufficient metric for total program success. Therefore, the following sections utilize a social resilience perspective to explore the underlying community dynamics and intangible factors that explain this stagnation.

Table 8: Cost-benefit analysis of the Desa Bersinar Program Implementation

Component	Amount (Rp)
Total cost (output + outcome)	851,017,839
Total benefits (output + outcome)	7,034,918,016
Benefit-cost ratio (BCR)	≈ 8.26 (BCR > 0) (This program is feasible)
Net Present Value (NPV)	P. 5,544,362,176 (NPV > 0) (This program is feasible.)

Source: Research findings

Analysis of Intangible Benefits Using Social Resilience

Benefits can be divided into two types: tangible and intangible. The difference between the two is whether they can be calculated in monetary terms (Maulani, Larasati, and Kuntjoro, 2018). Tangible benefits include the loss value that can be prevented from drug abuse, both individually and socially. Meanwhile, intangible benefits, such as a

sense of peace, resilience, and harmony, are more emphasized in terms of social benefits that are difficult to quantify in monetary terms. The intangible benefits of implementing the Desa Bersinar program in Jambu Hilir Village were explored and analyzed using the social resilience approach of Keck and Sakdapolrak (2013), which consists of three dimensions: coping, adaptive, and transformative capacities.

Coping Capacity: Shifting from Social Apathy to Silent Resistance

Coping capacity is defined as a community's immediate ability to absorb disturbances and overcome threats using available resources. In the context of Jambu Hilir Village, particularly in the Pulau Negara area, a deep-seated culture of social apathy initially hindered this capacity. In this area, residents adopted an individualistic attitude, avoiding reporting illegal activities to prevent personal conflict or protect family members.

However, evidence a significant shift in risk perception and coping strategies among individuals. The "Mesa Bersinar" program has catalyzed an emerging awareness that drug abuse is a direct threat to family survival rather than a social norm. A poignant example is found in the testimony of an ex-illegal drug dealer (Informant YH), who abandoned a highly lucrative trade, earning approximately IDR 330,000 in profit per box, due to an intensified fear of legal consequences and concern for her children's future. This individual shift is a critical component of the program's economic efficiency; individuals directly prevent substantial financial losses,

estimated at IDR 32,812,750 per person annually, by choosing to cease illegal activities.

Furthermore, the community is transitioning from total apathy toward what can be termed as "Silent Resistance". While residents may still appear indifferent in public to maintaining local harmony, there is an increasing trend of drug-related issues being reported through confidential channels. As noted by the Village Head, residents who previously remained silent now actively provide information "behind the scenes".

"There are also people who may appear indifferent on the surface, but behind the scenes they usually report to us."

(Head of Jambu Hilir).

This strengthened coping capacity explains the "effectiveness paradox" in Jambu Hilir. While the program is highly successful at the micro level, where individual awareness prevents significant economic and social losses, these impacts remain largely invisible in formal administrative metrics. Because this resistance is "silent" and individualistic, it has not yet reached the collective "tipping point" necessary to shift the village's official vulnerability status from "Alert" to "Safe," despite the high BCR of 8.26.

Consequently, while the community has developed the capacity to survive and resist drug threats individually, the lack of an overt, collective institutionalized response contributes to the observed administrative stagnation.

**Strengthening adaptive capacity :
Religious-based mitigation and
socioeconomic adjustment**

Adaptive capacity refers to the ability of the community to anticipate future threats by learning from past experiences and adjusting behaviors to mitigate risks. This capacity is manifested in Jambu Hilir Village through a strategic shift from high-risk environments toward culturally and religiously anchored protective factors. The "Mesa Bersinar" program has facilitated a transition where drug activities have significantly decreased and retreated into hidden spaces due to increased communal vigilance.

The institutionalization of religious and youth-oriented activities as a preventive shield is a primary driver of this adaptation. The community has proactively used traditional institutions, such as Majelis Taklim and Habsyi youth groups, to redirect the younger generation away from drug-prone circles.

As noted by the Neighborhood Head of RT 2, the regular schedule of religious lectures and Quranic recitations has successfully reduced deviant behaviors among local youth:

"We also formed a Habsyi group. Alhamdulillah, not many teenagers hang out with strange people. On Saturday nights, religious lectures are held in RT 2 and on Wednesday nights in RT 1. Alhamdulillah, it's not like it used to be. In the past, many young people used to get drunk, but now you can count them on one hand (very few)." (Neighborhood Head 2) .

This socio-religious adaptation provides a substantive explanation for the high economic feasibility of the program. By engaging in these positive alternatives, youth avoid the high costs associated with addiction and legal entanglements. From a cost-benefit analysis perspective, every individual who chooses these religious activities over drug abuse represents a prevented loss of IDR 32,812,750 per year. The involvement of youth like Informant ND, who avoids peer pressure by staying active in work and sports, exemplifies how individual adaptive choices contribute to the village's collective economic benefit.

Furthermore, adaptive capacity is evident in former participants' economic transitions in the illicit economy. The case of informant YH, an ex-illegal drug dealer who transitioned to a small street food business, illustrates a conscious adaptation to prioritize family safety and legal security over high-profit illegal trades. Despite the lower income, this shift creates a healthier domestic environment, effectively breaking the intergenerational cycle of abuse, as seen in the commitment of her son (Informant MR) to support the family through legitimate work.

Despite these clear successes in substantive social resilience, the "effectiveness paradox" persists because these adaptive measures are often localized and informal. While the community has learned to create "safe havens" through religion and individual career shifts, these efforts have not yet been scaled into a village-wide institutional system that can override the long-standing "Texas Kandangan" stigma. Thus, while the BCR of 8.26 reflects the immense value of these adaptive behaviors, the administrative stagnation of the village status highlights the need to move from informal

adaptation to a more robust, formalized transformation.

Strengthening transformative capacity : institutionalization fragility and the leadership gap

Transformative capacity represents the most advanced level of social resilience, referring to the ability of a community to fundamentally restructure its systems and institutions to create a new, more resilient reality. This capacity is identified as the weakest link in the evaluation of the Desa Bersinar program in Jambu Hilir, providing a definitive explanation for why the village remains at "Alert" status despite the program's high economic efficiency.

The lack of institutional sustainability is the primary barrier to transformative resilience. Findings from the interviews reveal that while innovative grassroots programs were initiated, they often fell into a state of "dormant" due to shifts in organizational leadership. As highlighted by the village head of Jambu Hilir, a promising volunteer-based initiative failed to reach its potential because it was tied to a specific individual rather than being embedded in the official structure of the village:

"There were volunteers, but they are in a state of dormant... the former Head of the Narcotics Police Unit had a good program, but after he changed, the program failed... it stopped halfway."

(Head of Jambu Hilir).

This fragility is compounded by a dependency on specific figures (personal-dependent governance). The Head of BNNK HSS acknowledged that previous interventions often missed the "direct target" by focusing on the public rather than local drug-vulnerable pockets like Pulau Negara.

Furthermore, the lack of dedicated human resources and permanent funding at the village level hinders the transformation from temporary project-based interventions to permanent social institutions. As noted by the Neighborhood Head (RT 1), community activities such as the *Habsyi* groups, which contribute to social resilience, still struggle with financial sustainability, often relying on sporadic donations or local contributions.

From a CBA perspective, this systemic weakness represents a missed opportunity to amplify the already high BCR of 8.26. While individual coping and adaptive behaviors have successfully

prevented significant financial losses, the failure to institutionalize these behaviors prevents the village from achieving the "tipping point" required to permanently lower its vulnerability index. The current transformation is "surface-level"; individuals have changed, but the administrative and social systems of the village remain vulnerable to leadership turnover and resource depletion.

In conclusion, Jambu Hilir's administrative stagnation is not a failure of individual participation but a failure of systemic institutionalization. To move from "Alert" to "Safe," the *Desa Bersinar* program must evolve from a top-down administrative requirement into a community-led institution that is protected by local regulations and permanent resource allocations. This would ensure that transformative gains are not lost during BNNK or village leadership transitions, thereby translating economic efficiency into long-term social security.

Limitations of the Study

While this study provides a comprehensive evaluation of the *Desa Bersinar* program, several limitations must be acknowledged. First, the

quantitative benefit quantification relies on the national "unit cost" data from 2015, which may not fully reflect the current inflationary pressures of 2025. Second, as a single case study focused on Jambu Hilir, the findings regarding social resilience dynamics may have limited generalizability to areas with different cultural or geographic characteristics. Finally, the qualitative insights are subject to recall bias from informants regarding historical program implementation between 2021 and 2023

CONCLUSION

This study concludes that the "Desa Bersinar" program in Jambu Hilir Village represents a highly efficient economic investment, as evidenced by a BCR of 8.26 and a positive NPV of IDR 5,544,362,176. These figures indicate that the program successfully prevents significant individual and social economic losses by fostering individual coping and adaptive capacities. However, a significant "effectiveness paradox" is observed: despite this high economic efficiency, Jambu Hilir's administrative status remained stagnant in the "Alert" category from 2021 to 2023.

Qualitative analysis through the social resilience lens reveals that this stagnation is rooted in the fragility of transformative capacity. While individual awareness has shifted from social apathy toward "silent resistance" and adaptive religious-based mitigation, institutionalization of these efforts remains weak. The "dormant" of volunteer programs due to leadership turnover in local law enforcement and village government highlights that the program's success is currently personal-dependent rather than system-dependent. Consequently, while the program effectively mitigates immediate risks, it has yet to transform the systemic social structures required to permanently shift the vulnerability status of the village.

This study offers the following evidence-based recommendations to ensure the sustainability and transformative impact of the *Desa Bersinar* program :

- Establish formal legal protections and permanent roles for anti-drug volunteers through Village Regulations or Regency Decrees to prevent dormant community-led initiatives during leadership transitions. Institutionalization

ensures that programs are anchored in the village structure rather than being dependent on specific individuals.

- Shift future BNNK interventions from public awareness campaigns to localized hotspot strategies that specifically target high-risk zones, such as Pulau Negara, through intensive door-to-door or key person approaches. This method is necessary to dismantle deep-seated stigma and social apathy that often hinder official reporting in drug-prone areas.
- Provide consistent financial support or grants for religious and cultural activities such as Habsyi and Majelis Taklim, which have proven to be effective adaptive preventive tools for the local youth. Sustainable funding will move the burden away from sporadic local donations and ensure that these safe havens remain operational regardless of leadership changes.
- Substantive social resilience indicators, such as community reporting trends and former perpetrators' economic transition, are incorporated into official evaluation metrics. Shifting away from a sole reliance on administrative status labels will

prevent significant underlying progress such as individuals moving to legitimate trades from being overlooked during program assessments.

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