

IMPLEMENTATION OF THE FARM ROAD MAINTENANCE PROGRAM IN SOKO VILLAGE, LAMONGAN REGENCY

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Abstract

This study aims to analyze the implementation of the Agricultural Road Maintenance Program in Soko Village, Tikung District, Lamongan Regency using George C. Edwards III's theory. The method used is descriptive qualitative with data obtained through in-depth interviews, observation, and documentation. The results show that the program has been running but has not been optimal. The disposition variable is the main strength, reflected in the commitment of implementers and the participation of farmer mutual cooperation. Conversely, the resource variable is the biggest obstacle due to the reduction of Village Funds by Rp266 billion in Lamongan Regency in 2026 and the limited technical capacity of implementers. The program budget of Rp1,072,413,352 for 17 activities in 9 hamlets is not sufficient for comprehensive maintenance needs. In terms of communication, the reporting mechanism is still informal and socialization to farmers is not evenly distributed. The bureaucratic structure has not been strengthened with formal SOPs and technical support from district agencies. This program has had positive impacts in the form of easier land access, efficient distribution of agricultural products, and increased safety for road users. Recommendations include diversifying funding sources, formalizing standard operating procedures (SOPs), and strengthening coordination with the Lamongan Regency Agriculture and Public Works and Public Housing Offices.

Keywords: Agricultural Roads, Edwards III, Policy Implementation, Village Funds, Lamongan.

A. INTRODUCTION

Road infrastructure is a vital element in supporting community mobility, product distribution, and regional economic growth (Ivanova & Masarova, 2013). However, road conditions in various regions in Indonesia remain far from expected standards, including in Lamongan Regency. According to 2024 data from the East Java Statistics Agency (BPS), approximately 44.86% of roads in Lamongan Regency are in a state of moderate to severe damage, far exceeding the East Java average of 21.30% (Ningsih et al. 2025). This situation is even more critical considering that Lamongan is the largest food barn in East Java, with rice production reaching 1.2 million tons and corn production reaching 639,096 tons in 2021.

Therefore, smooth access to agricultural roads is a fundamental necessity for the economic sustainability of rural communities (Aslur and Tukiman 2023).

At the village level, this problem is directly felt by the farming community in Soko Village, Tikung District, Lamongan Regency. Damage to agricultural roads in this area is caused by unstable soil characteristics, high rainfall, and high loads of harvest transport vehicles, thus hampering the distribution of agricultural products and impacting on decreasing farmers' income. Although the Village Fund is the mainstay of financing for agricultural road maintenance, the challenges are getting tougher due to the reduction in the allocation of Village Funds in Lamongan Regency by IDR 266 billion in 2026 and the provisions on priority use of funds based on Village Ministerial Regulation Number 16 of 2025. Therefore, this study aims to examine how the implementation of the agricultural road maintenance program in Soko Village can run effectively amidst existing budget limitations.

B. LITERATURE REVIEW

The Concept of Public Policy Implementation

Public policy implementation is the process of implementing a government policy so that its objectives are realized and directly felt by the community (Smith T, 1973). According to Van Meter and Van Horn (1975), policy implementation is an action taken by individuals, groups, government institutions, or the private sector aimed at achieving the objectives established in previous policy decisions (Aslur & Tukiman 2023). Meanwhile, Mazmanian and Sabatier (1983) defined public policy implementation as the implementation of basic policy decisions outlined in laws, government regulations, or other administrative provisions (Safitri 2016).

In village governments, policy implementation is manifested in the implementation of programs stipulated in the Village Revenue and Expenditure Budget (APBDes) and the Village Government Work Plan (RKPDDes). One form of implementation at the village level is the agricultural road maintenance program, a village government effort to improve the quality of agricultural infrastructure to support the economic activities of the community, particularly farmers.

George C. Edwards III's Policy Implementation Theory

George C. Edwards III (1980), in his book "Public Policy," argued that the success of policy implementation is influenced by four main variables: communication, resources, dispositions, and bureaucratic structure. This theory is relevant for this research because its four variables can be concretely operationalized in village government, are comprehensive, encompassing both internal and relational aspects of implementation, and have been proven relevant in research on program implementation in villages (Edwards 1980)..

Table 1. Operationalization of Edward III's Theory

Variables	Dimensions	Research Indicators
Communication	Transmission, Clarity, Consistency	Program socialization, clarity of technical maintenance instructions, consistency of village

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		head's directives to village officials and implementing committees
Resources	Staff, Information, Authority, Facilities	Competence of village officials and committees, adequacy of the village budget (APBDesa), availability of tools and materials, formal authority of the village head
Disposition	Cognition, Response Direction, Response Intensity	Understanding of the importance of the program by village heads and officials, commitment of implementers, response from the farming community
Bureaucratic Structure	SOP, Fragmentation	Existence of SOPs for road maintenance implementation; clarity of division of tasks between village officials, committees, farmer groups, and the Department of Agriculture

Source: Processed by Researchers, 2026

Agricultural Road Maintenance Program

Agricultural roads are transportation infrastructure that connect agricultural land with agricultural settlements, marketing centers, and other agricultural support facilities (Lianto G, 2012). Farm roads are agricultural infrastructure built to facilitate the transportation of production inputs to agricultural land, the mobility of agricultural tools and machinery, and the transportation of agricultural products from the field to collection, processing, or marketing points (Safitri 2016).

The Ministry of Public Works and Public Housing, through Ministerial Regulation No. 13/PRT/M/2011 concerning Procedures for Road Maintenance and Inspection, defines road maintenance into three types: routine maintenance, periodic maintenance, and road rehabilitation (Ministry of Public Works 2011). Routine maintenance is carried out throughout the year, periodic maintenance is scheduled to prevent further damage, and road rehabilitation is carried out to restore road conditions to standards (Setianingsih et al., 2017).

Previous Research

Table 2. Previous Research

No	Researcher & Year	Focus	Similarities	Differences
1	Hardianto (2019)	Rural infrastructure development (roads, bridges, irrigation) in Bengkalis Regency	Implementation of infrastructure programs at the village level, a descriptive qualitative approach	Focus on general infrastructure; this study specifically focuses on agricultural roads in Soko Village
2	Yulianti & Pratomo (2020)	Effectiveness of Village Funds for agricultural	Agricultural infrastructure programs, policy	Focus on the effectiveness of Village Funds in general; this study specifically

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		infrastructure in implementation focuses on agricultural	
		Banyuwangi aspects road maintenance	
3	Wahyuni (2021)	Community Maintenance of village Emphasizes community	
		participation in road infrastructure, a participation; this study	
		village road qualitative approach emphasizes the	
		maintenance in implementation of	
		Malang Regency village government	
			programs
4	Susanto & Kurniawan (2022)	Community Public policy Focus on empowerment;	
		empowerment implementation theory, this study focuses on	
		through road qualitative methods agricultural road	
		programs in Ngawi maintenance and the	
		Village impact on agricultural	
			access
5	Aslur & Tukiman (2023)	Implementation of Implementation of At the district level,	
		the JAMULA road infrastructure details of village service	
		Program in programs and their processes and	
		Lamongan effectiveness community perceptions	
		Regency are not yet available.	

Source: Processed by Researchers, 2026

C. RESEARCH METHODOLOGY

This study used a qualitative approach with a descriptive approach. The qualitative approach was chosen because it aimed to gain an in-depth understanding of the phenomena related to the implementation of the agricultural road maintenance program and the effectiveness of village government services (Hettige H, 2006). Through this approach, researchers were able to gather comprehensive information from the perspectives of the research subjects.

The study was conducted in Soko Village, Tikung District, Lamongan Regency, from March to June 2026. The location was selected based on the relevance of village road infrastructure issues, which occurred amidst significant agricultural potential and Village Fund cuts.

The focus of this study was the effectiveness of village government services in managing road infrastructure and the level of community satisfaction with these services. The effectiveness of village government services encompasses the accuracy of service delivery, speed of service delivery, and the appropriateness of service outcomes to community needs. Furthermore, this study highlighted the management of village road infrastructure, including the condition of village roads, the road repair and maintenance process, and the village government's response to road damage. Furthermore, this study examined community satisfaction with village government services, including public perceptions of service quality, satisfaction with service outcomes, and community expectations regarding services provided by the village government.

Data were collected through two sources. Primary data were obtained through in-depth interviews and observations of village officials and the Soko Village community. Secondary data was obtained from documents, archives, reports, and village government data related to road infrastructure development and management.

Informants were selected using purposive sampling, which involves deliberately selecting informants based on their relevance to the research objectives. Informants included: (1) village officials involved in the management and implementation of road infrastructure development; and (2) village residents who utilize agricultural roads.

Data analysis was conducted interactively, following the Miles and Huberman (1994) model, which includes data reduction, data presentation, and conclusion drawing. Data validity was verified through source triangulation and technical triangulation.

D. RESULT AND DISCUSSION

Agricultural Road Maintenance Program Financing Budget

Based on the 2025 Village Budget (APBDes) of Soko Village, Tikung District, Lamongan Regency, total village revenue is IDR 1,960,360,188, sourced from Village Original Income (IDR 44,166,800), Village Funds (IDR 1,007,543,000), Village Allocation Funds (IDR 528,675,088), Regional Tax and Retribution Revenue Share (IDR 64,975,300), and Hamlet Funds (IDR 315,000,000). The development sector received an allocation of Rp1,249,195,362, of which the agricultural road maintenance and construction program received the largest portion, at Rp1,072,413,352, for 17 activities spread across nine hamlets: Soko, Kebondalem, Sememi, Banaran, Randekan, Lemahbang, Kalitengah, Kalisogo, and Banyuwet.

Table 3. Summary of the 2025 Soko Village Agricultural Road Maintenance Program Budget

No.	Activities	Budget (Rp)
1	Construction of concrete roads per hamlet (9 hamlets)	Rp 308.878.652
2	Construction of concrete roads in Randekan Hamlet, RT/RW 01/05	Rp 30.000.000
3	Construction of the Randekan-Lemahbang main road (round trip)	Rp 351.000.000
4	Construction of the Banyuwet-Kebondalem main road (round trip)	Rp 302.000.000
5	Construction of concrete roads in Kebondalem Hamlet (additional)	Rp 50.000.000
6	Construction of culverts in Soko Hamlet	Rp 17.312.600
7	Construction of the TPT in Randekan Hamlet	Rp 18.222.100
Total		Rp 1.072.413.352

Source: Soko Village Budget 2025

The largest allocation was allocated for the main roads between hamlets: Kebondalem Hamlet to Banyuwet Hamlet (Rp 202,000,000) and Lemahbang Hamlet to Randekan Hamlet (Rp 176,000,000), which are the most vital agricultural distribution routes.

Agricultural Road Conditions in Soko Village

According to data from Soko Village Head, Mr. Pujiyanto, the total length of agricultural roads is 3,050 meters and an area of 7,560 m² spread across nine hamlets. Field observations revealed significant variations in condition: Banaran Hamlet experienced severe damage, including large potholes, subsidence, and flooding; Sememi Hamlet was in moderate condition with minor damage; while the Randekan-Lemahbang and Banyuwet-Kebondalem main roads were identified as priorities because they are the main agricultural distribution routes.

Implementation Analysis Based on Edwards III Theory

Communication

The transmission dimension shows that the reporting mechanism still relies on personal relationships between residents and village officials. Residents unfamiliar with the officials submit reports informally through everyday conversations, which does not meet Edwards III's concept of equitable communication channels.

"If you know the village officials, you report directly. If you don't know them, you chat first, and it eventually reaches the sub-district head or neighborhood head." (Informant Alvian, 2026)

From the clarity dimension, the priority criteria for agricultural roads are well understood by implementers. From the consistency dimension, the village government consistently allocates funds and conducts regular evaluations with the sub-district, but formal outreach to farmers remains minimal.

Resources

The budget of Rp1,072,413,352 demonstrates a substantial fiscal commitment. However, this budget is insufficient considering the vast area and the reduction in Village Funds in Lamongan Regency of approximately Rp266 billion in 2026. Implementation is handed over to local subcontractors without assistance from the Ministry of Public Works and Public Housing (PUPR), resulting in suboptimal management of unstable soil conditions and rapid re-damage of the roads.

"Our budget is actually quite large, but the Soko area is vast. Moreover, this year's village funds have been cut, so we have to be more selective about what to prioritize." (Ahmad, Village Secretary of Soko Village, 2026)

Dispositions

The Village Secretary demonstrates a deep understanding and strong commitment, as reflected in the consistent implementation of temporary measures when budgets are unavailable. Farmer participation in road maintenance projects reflects the positive disposition of the target group. This disposition variable is a key strength in the program's implementation.

Bureaucratic Structure

The workflow, from needs identification to reporting, has been running smoothly, with good internal coordination. However, this flow has not been documented in written SOPs, and there is no formal involvement of district technical agencies in quality oversight. Inter-agency fragmentation is a major obstacle to village infrastructure implementation (Mozin and Abdussamad 2025).

In implementing the agricultural road maintenance program in Soko Village, the organizational structure of the village government plays a critical role in determining the

effectiveness of program coordination and implementation. The organizational structure of the Soko Village government directly involved in this program is presented in Table 4 below.

Table 4. Organizational Structure of the Soko Village Government

No.	Position	Name
1	Village Head	Pujiyanto
2	Village Secretary	A. Heri Irmawan
3	Head of Social Welfare Affairs	Hanifudin
4	Head of General Affairs	Ariyanto
5	Head of Planning Affairs	Dasri
6	Head of Government Section	Rudi Hartono
7	Head of Service Section	Nuryatun
8	Treasurer	Sumali
9	Head of Soko Hamlet	Hariyanto
10	Head of Kebondalem Hamlet	H. Tariyanto
11	Head of Sememi Hamlet	Sulaiman
12	Head of Banaran Hamlet	Tarwi
13	Head of Randekan Hamlet	Setyo
14	Head of Lemahbang Hamlet	A. Wahab
15	Head of Kalitengah Hamlet	Taqim
16	Head of Kalisogo Hamlet	Maksum
17	Head of Banyuwet Hamlet	Aseng

Source: Soko Village Government Data, 2026

According to Table 4, the implementation of the agricultural road maintenance program involves all elements of the village government structure. Village Head Pujiyanto is responsible for policy and approval of the Village Budget (APBDes), including the allocation of the agricultural road budget. Village Secretary A. Heri Irmawan handles administration and implementation coordination. Planning Head Dasri prepares activity plans, while Government Section Head Rudi Hartono and Service Section Head Nuryatun coordinate community relations. The most crucial role in field implementation is held by nine Hamlet Heads (Kasun) spread across all hamlets, from Soko (Hariyanto) to Banyuwet (Ajeng). The Kasun serve as the point of communication between the village government and farmers, receiving reports of damaged agricultural roads from residents, forwarding them to the Village Head, and overseeing development implementation in their respective areas. The suboptimal formalization of SOPs and technical coordination with district agencies is a structural challenge that must be addressed immediately to ensure more effective and equitable program implementation across all hamlets.

Supporting and Inhibiting Factors for Implementation

Supporting factors include: (1) a substantial Village Fund budget commitment; (2) a positive disposition from all implementers and farmers; (3) a clear priority system; (4) community participation in mutual cooperation; and (5) routine annual evaluations. Inhibiting factors include: (1) Village Fund cuts that tighten the budget; (2) unstable soil conditions in

rice fields; (3) access for heavy vehicles; (4) the absence of embankments on some sections; and (5) the lack of formal SOPs and technical support from district agencies.

Impact of the Program on Agricultural Activities

The agricultural road maintenance program has had a positive impact in four aspects: (1) easier access for farmers to their rice fields, saving time and transportation costs; (2) efficient distribution of agricultural products through shorter and more direct routes; (3) improved safety for road users, especially on sections previously prone to potholes and flooding. and (4) support for agricultural productivity through the smooth distribution of agricultural machinery and production facilities, in accordance with the Minister of Agriculture Regulation Number 79 of 2012.

Table 5. Research Findings Matrix Based on Edwards III Theory

Variables	Obstacles	Findings	Assessment
Communication	Dissemination is not yet evenly distributed; reporting is still informal	Structured reporting flow; clear priority criteria; annual evaluation	Good Enough
Resources	Insufficient budget; Village Funds have been cut; technical capacity is limited	Budget of Rp1.07 billion; local subcontractors available	Not Optimal
Disposition	Management is often delayed; quality is assessed as 50-50	Responsive equipment; farmers actively participate in mutual cooperation	Good Enough
Bureaucratic Structure	SOPs are not yet formalized; there is no district technical agency	Workflow ongoing; regular sub-district coordination	Needs Strengthening

Source: Researcher Analysis Results, 2026

E. CONCLUSION

The implementation of the agricultural road maintenance program in Soko Village, Tikung District, Lamongan Regency, has been ongoing but is not yet fully optimized. Based on Edwards III's (1980) theoretical analysis, the disposition variable is a key strength because all parties demonstrate positive commitment. While the resource variable is the biggest obstacle due to budget constraints, Village Fund cuts, minimal technical capacity of implementers, and unfavorable natural conditions.

The main supporting factors are budget commitment, positive implementer disposition, a clear priority system, and active farmer participation. The biggest inhibiting factors are budget constraints, unstable soil, heavy vehicle access, and the lack of formal SOPs and technical support from district agencies. This program has had a tangible positive impact on Soko Village farmers in terms of easier land access, efficient distribution of agricultural products, road user safety, and supporting agricultural productivity.

Recommendations: (1) diversify funding sources through synergy between Village Funds, the District Budget, and Ministry of Agriculture programs; (2) formalize SOPs for agricultural road management; (3) establish formal reporting channels that are easily accessible to all

farmers. and (4) improving coordination with the Lamongan Regency Agriculture and PUPR Service for higher quality technical assistance.

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