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Implementing Data-Driven Social Assistance Policy in Indonesia: The Case of the National Single Socio-Economic Data in Merauke

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Abstract

Digital transformation in social protection has prompted the government to develop data-driven policies to improve the accuracy of beneficiary identification. In Indonesia, the National Single Socio-Economic Data (DTSEN) was developed as an integrated database to support the distribution of social assistance, but its implementation at the local level still faces challenges in data updating, civil service capacity, public understanding, and institutional coordination. This study aims to analyze the implementation of DTSEN-based social assistance policies in Kelapa Lima, Merauke District, Merauke Regency, using George C. Edwards III's implementation framework. The study employs a qualitative descriptive approach with four key informants purposively selected from district and village government officials. Data were collected through interviews, observations, and documentation, then analyzed through the stages of data condensation, data display, and conclusion drawing/verification. The results indicate that communication and bureaucratic structures are in place but still face obstacles regarding the clarity of information, coordination, and the speed of follow-up. Resources are available, but technical capacity and supporting facilities still need to be strengthened, while the disposition of implementers is relatively supportive of policy implementation. The findings also indicate that changes in the community's socioeconomic conditions require continuous data updates. The study concludes that the success of DTSEN implementation is determined not only by the existence of an integrated database but also by the capacity of local institutions to acquire, verify, update, and disseminate information in a responsive manner. These findings highlight the need for continuous social data governance to strengthen the data updating process and support the accuracy of social assistance targeting.

Keywords: DTSEN, Policy Implementation, Social Assistance, Data-Driven Governance, Social Assistance Targeting.

1. Introduction

Digital transformation has shifted the delivery of social protection from a fragmented administrative system toward increasingly data-driven governance. In this context, data no longer serves merely as a tool for recording beneficiaries but forms the foundation for identifying vulnerabilities, determining eligibility, and supporting social policy decision-making. These developments have spurred the emergence of data-driven welfare governance the systematic use of socioeconomic data to enhance the efficiency, responsiveness, and precision of government interventions (Alexopoulou, 2025; Margetts, 2021). Data-driven governance also requires adequate information quality, data governance, and inter-organizational coordination so that data can be used effectively in the policymaking process (van Donge et al., 2022). In the context of social protection, these requirements are becoming increasingly critical because the effectiveness of assistance depends heavily on the government's ability to identify those in need and to adapt interventions to changing socioeconomic conditions (Barrientos, 2021; International Labour Organization [ILO], 2021; World Bank, 2020).

Indonesia is addressing this need through the development of the National Single Socioeconomic Database (DTSEN) as a database to support social assistance, social empowerment, and social welfare programs (Ministry of Social Affairs of the Republic of Indonesia, 2025; Republic of Indonesia, 2025). However, the existence of a single national database does not automatically guarantee accurate targeting. At the local level, discrepancies still exist between the actual socioeconomic conditions of the community and the available data, while changes in family circumstances are not always promptly reported and updated. In addition, the implementation of DTSEN faces limitations in terms of the technical capabilities of government officials, supporting infrastructure, public understanding of data update mechanisms, and coordination across levels of government. These conditions can increase the risk of targeting inaccuracies in the form of inclusion errors or exclusion errors. Thus, the main challenge of data-driven social assistance relates not only to the development of information systems but also to the capacity of institutions to keep data up-to-date, verified, and appropriately utilized in decision-making.

Previous research indicates that the effectiveness of social assistance targeting is influenced by data quality, beneficiary selection methods, changes in household circumstances, and institutional capacity. Henderson and Follett (2022) and Follett and Henderson (2023) highlight the importance of a targeting design capable of improving the accuracy of beneficiary identification. Beuermann et al. (2025) emphasize that changes in household income and well-being make policy targets dynamic, so targeting mechanisms that are too static risk losing accuracy. On the institutional front, Haseeb and Vyborny (2022) highlight the importance of administrative data and institutional capacity, while van Donge et al. (2022) emphasize the role of data stewardship and coordination within a data-driven governance ecosystem. Technology can also improve targeting precision (Smythe & Blumenstock, 2022). However, digitization does not always yield inclusive results; data systems and digital platforms that fail to adapt to changes in user circumstances can create risks of exclusion and inaccuracies in beneficiary identification (Dadap-Cantal et al., 2021; Masiero & Arvidsson, 2021).

Although the literature has addressed targeting techniques, the use of administrative data, digital governance, and the risks of exclusion, there remains a limited body of research explaining how integrated national social data systems are implemented at the local level as a policy process. Most studies focus primarily on the questions of “who should be targeted” and “how targeting accuracy can be improved,” while the process of “how data-driven targeting policies are implemented” through communication, resource capacity, implementers' attitudes, and bureaucratic coordination has received relatively little attention. In fact, data quality is determined not only by technology but also by the ability of local actors to collect, verify, and disseminate information regarding changes in community conditions. A study by Trachtman et al. (2026) also highlights the limitations of community-based information in accurately capturing changes in well-being. This gap underscores the need to bridge the literature on social assistance targeting and data-driven governance with the perspective of policy implementation at the local level.

The novelty of this research lies in its approach to viewing data-driven social assistance as a dynamic implementation process, rather than merely the existence of an integrated database. This study connects three perspectives: policy implementation, data-driven governance, and social assistance targeting. George C. Edwards III's framework is used to analyze four dimensions of implementation: communication, resources, disposition, and bureaucratic structure (Edwards, 1980). This framework is linked to the need for information governance and coordination in data-driven government (van Donge et al., 2022) as well as the idea that households' socioeconomic conditions are dynamic and require mechanisms for continuous updating (Beuermann et al., 2025; Follett & Henderson, 2023). Thus, this study shifts the focus from mere data availability to institutional capacity to update, verify, communicate, and translate changes in social data into decisions regarding aid targeting.

Based on these gaps, this study aims to analyze the implementation of social assistance policies based on the National Socioeconomic Single Data (DTSEN) in Merauke through George C. Edwards III's implementation framework, focusing on communication, resources, implementers' dispositions, and bureaucratic structures. This study also identifies supporting and hindering factors in data updating and utilization and examines their implications for the accuracy of social assistance targeting. Through this approach, the study is expected to broaden understanding of the implementation of data-driven social assistance policies at the local level and demonstrate that policy effectiveness is determined not only by technological integration but also by institutional capacity to maintain the connection between changes in community conditions, data updates, and social assistance targeting decisions.

2. Literature Review

2.1 Policy Implementation

Policy implementation is the process by which formal decisions are translated into administrative actions and public services. Edwards (1980) explains that the success of implementation is influenced by four main dimensions: communication, resources, disposition, and bureaucratic structure. Communication relates to the clarity and consistency of policy communication; resources encompass human resources, information, authority, and facilities; disposition relates to the attitudes and commitment of implementers; while bureaucratic structure encompasses the

division of tasks, procedures, and organizational coordination. This perspective is reinforced by Hill and Hupe (2021), Cairney (2020), and Howlett and Ramesh (2021), who emphasize that implementation is influenced by inter-institutional interactions, administrative capacity, and institutional context.

The Edwards III framework is relevant for analyzing the implementation of the DTSEN because this policy involves various levels of government and requires the flow of information from the public to administrative structures. At the local level, data collection and updating involve local governments, districts, sub-districts, RT/RW units, and the community in the processes of communication, verification, and reporting of data changes. Therefore, the four dimensions of Edwards III are used as the primary analytical lens to understand how data-driven policies are translated into implementation practices at the local level.

2.2 Data-Driven Governance in Social Protection

Data-driven governance positions data as a critical foundation for decision-making and the delivery of public services. However, the effectiveness of data-driven governance is determined not only by technology but also by the quality of information, organizational capacity, data stewardship, the division of responsibilities, and interagency coordination (Margetts, 2021; van Donge et al., 2022). In social protection, data quality is increasingly important because socioeconomic information is used to identify poor and vulnerable groups and determine beneficiaries (Barrientos, 2021; International Labour Organization [ILO], 2021; World Bank, 2020). Haseeb and Vyborny (2022) also demonstrate that the use of administrative data can strengthen targeting capacity and reduce discretion in aid distribution.

DTSEN represents Indonesia's effort to build a more integrated and data-driven social protection governance system (Ministry of Social Affairs of the Republic of Indonesia, 2025; Republic of Indonesia, 2025). However, the benefits of data integration heavily depend on institutions' ability to keep information up-to-date with the actual conditions of the community. At the implementation level, there are still limitations in terms of the technical capabilities of civil servants, supporting infrastructure, public understanding of update mechanisms, and coordination across levels of government. Thus, data-driven governance in social assistance must be understood as the institutional capacity to manage and update information, not merely the use of digital systems.

2.3 Social Assistance Targeting and Dynamic Data Updating

Targeting accuracy is a key issue in social assistance policy because programs must be able to reach those who are truly in need. Henderson and Follett (2022) and Follett and Henderson (2023) show that the design and combination of targeting mechanisms influence the government's ability to identify beneficiaries. Smythe and Blumenstock (2022) also note that the use of more detailed data can improve targeting precision. However, households' socioeconomic conditions are not static. Beuermann et al. (2025) describe this situation as "shooting a moving target"—that is, when changes in income and well-being cause previously accurate information to no longer reflect current conditions.

The system's inability to keep pace with these changes can increase the risk of inclusion errors and exclusion errors. Dadap-Cantal et al. (2021) show that social registries that are not updated

in a responsive manner can undermine the effectiveness of targeting, while Masiero and Arvidsson (2021) warn that digital systems can also result in exclusion when administrative designs do not align with users' circumstances. Community engagement can help provide local information, but Trachtman et al. (2026) point out that community-provided information does not always accurately capture changes in well-being. Therefore, targeting accuracy requires mechanisms for continuous data updating, verification, and coordination.

2.4 Analytical Framework

This study uses George C. Edwards III's framework as the primary analytical framework to understand the implementation of DTSEN at the local level. Its four dimensions communication, resources, disposition, and bureaucratic structure—are used to assess how policy information is communicated and understood, how capacity and facilities support data updates, how the attitudes of implementers influence policy execution, and how bureaucratic structures govern coordination and update procedures (Edwards, 1980). This framework allows for analysis not only of the existence of policies but also of the processes through which they are implemented.

The Edwards III framework was subsequently enriched with perspectives on data-driven governance and social assistance targeting. Data-driven governance requires high-quality information and institutional coordination (van Donge et al., 2022), while dynamic socioeconomic conditions demand continuous data updates (Beuermann et al., 2025; Follett & Henderson, 2023). Thus, the implementation of DTSEN is understood as an institutional process that links changes in the socioeconomic conditions of the community, data updates and verification, local implementation capacity, and its implications for social assistance targeting.

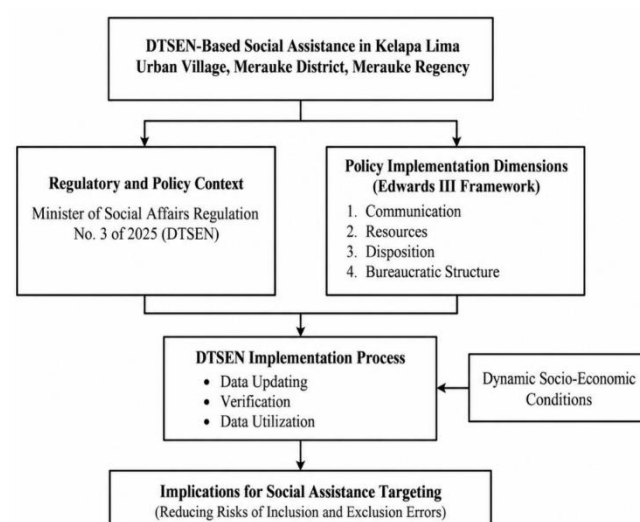


Figure 1. Analytical Framework of DTSEN-Based Social Assistance Policy Implementation

Source: Author's elaboration based on Edwards (1980), van Donge et al. (2022), Follett and Henderson (2023), Beuermann et al. (2025), and Minister of Social Affairs Regulation No. 3 of 2025.

This framework is subsequently used as the basis for guiding the collection, organization, and interpretation of data in the study.

3. Methodology

3.1 Research Design and Study Site

This study employs a qualitative descriptive approach to understand the implementation of social assistance policies based on the National Socioeconomic Single Data (DTSEN) at the local government level. The qualitative approach was chosen because it allows for an in-depth analysis of the implementation process, the experiences of implementers, coordination mechanisms, and challenges in updating and utilizing data (Creswell & Creswell, 2021). The analysis was guided by George C. Edwards III's framework, which consists of four dimensions: communication, resources, disposition, and bureaucratic structure. Data were collected through observation, interviews, and documentation.

The research was conducted in Kelapa Lima Urban Village, Merauke District, Merauke Regency, South Papua Province, Indonesia. The location was selected purposefully because the area implements social assistance programs related to DTSEN and faces

implementation challenges such as targeting accuracy, variations in the community's socioeconomic conditions, and the need for interagency coordination. Kelapa Lima's character as an urban area with relatively high population mobility also makes it relevant for examining the need for continuous updating of socioeconomic data.

3.2 Informants and Data Collection

Informants were selected using purposive sampling based on their knowledge, experience, and direct involvement in the implementation of DTSEN. The study involved four key informants representing implementing actors at the district and sub-district levels. This selection was intended to obtain information from parties directly involved in the coordination, data collection, updating, and implementation of DTSEN-based social assistance policies. The number and involvement of these informants are consistent with the data presentation section, which draws on four primary interview sources.

Table 1. Profile of Key Informants

Code	Position	Administrative Level	Institutional Relevance to DTSEN
I1	Acting Head of Merauke District	District	Coordination, supervision, and oversight of local implementation
I2	Head of the Community Empowerment Section for Villages and Urban Villages	District	Coordination of community empowerment and local administrative implementation
I3	Head of Kelapa Lima Urban Village	Urban Village	Local implementation, community data collection, and facilitation of data updates
I4	Head of the Urban Village Community Empowerment Section	Urban Village	Support for community data collection and DTSEN updating processes

Source: Authors' compilation based on primary research data, 2026.

Data was collected through interviews, observations, and documentation. Interviews were used to gather information on policy implementation processes, including communication, resource availability, implementers' attitudes, bureaucratic structures, and constraints in updating and utilizing the DTSEN. Observations were used to understand the context of policy implementation at the local level, while documentation was used to supplement primary data through regulations, reports, administrative data, and relevant program documents. The use of these three techniques allowed data to be obtained from various sources, thereby providing a more comprehensive picture of the implementation of the DTSEN policy.

3.3 Data Analysis and Trustworthiness

Data analysis was conducted interactively, following the approach outlined by Miles, Huberman, and Saldaña, through three stages: data condensation, data display, and conclusion drawing/verification (Miles et al., 2020). During the data condensation stage, information from interviews, observations, and documentation was selected and grouped based on the research focus. Next, the data were presented in narrative and matrix formats according to Edwards III's four dimensions. The final stage involved drawing conclusions that were continuously verified throughout the analysis process. This procedure aligns with the interactive analysis stages used in the study.

The validity of the findings was evaluated using four criteria of qualitative research: credibility, transferability, dependability, and confirmability. Credibility relates to the alignment of interpretations with empirical information; transferability is supported by a clear presentation of the research context; dependability relates to the consistency of the data collection and analysis processes; while confirmability ensures that interpretations are based on available evidence. Using these procedures, the analysis aims to produce a systematic understanding of the implementation of DTSEN and the capacity of local implementers to support data updates and the targeting of social assistance.

4. Results

The research findings indicate that the implementation of DTSEN-based social assistance in Kelapa Lima has proceeded through communication mechanisms, resource support, the commitment of implementers, and the division of tasks among different levels of government. However, its implementation has not yet been fully optimal. Challenges primarily relate to public understanding, the technical capacity of government officials, supporting facilities, dynamic changes in socioeconomic conditions, as well as coordination and the speed of data updates. The findings were then categorized based on Edwards III's four dimensions of implementation: communication, resources, disposition, and bureaucratic structure.

4.1 Communication

Communication regarding the implementation of DTSEN has been carried out through coordination among district and sub-district governments, RT/RW officials, and the community. The information conveyed includes data collection, updates on socioeconomic conditions, changes in family data, and social assistance mechanisms. Although communication channels are in place, findings indicate that this information has not always led to a shared understanding at the community level. There remains a perception that being registered in the DTSEN automatically qualifies a person to receive social assistance. Informant I1 described the situation as follows:

"...communication has not yet been fully optimized because there are still members of the public who do not understand the function of the DTSEN and assume that being registered directly means they will receive assistance." (I1, interview)

Similar findings emerged at the urban village level. Informant I3 explained that community members are quite active in raising questions and complaints, but some still do not understand the data update process or the limits of the urban village's authority in determining aid recipients. Thus, the communication issue is not primarily caused by a lack of communication, but by the uneven clarity and understanding of policy information.

4.2 Resources

The implementation of DTSEN is supported by government officials, community leaders, administrative population data, and the technological facilities used in the data collection and updating process. Officials play a role in coordinating efforts, receiving information from the public, assisting with data collection, and relaying data changes. However, the available resources are not yet fully capable of supporting a rapid and sustainable updating process. These limitations primarily relate to the technical capabilities of staff, supporting facilities, and access to and use of the data management system. Information from I2 explains:

"...there are still limitations in both the number and technical capabilities of staff, especially when they have to handle a significant volume of changes to community data." (I2, interview)

At the urban village level, informant I4 also stated that computers, internet connections, administrative documents, and community information support the updating process, but there are still limitations in facilities and technical capabilities, preventing the entire process from being carried out quickly. These findings indicate that resource issues are not only related to the number of personnel but also to the technical capacity and infrastructure readiness required to manage constantly changing data.

4.3 Disposition

The disposition of implementers is a dimension that relatively supports the implementation of DTSEN. District and village officials demonstrated a commitment to assisting with data collection, receiving reports from the public, providing information, and coordinating the data update process. Implementers also sought to maintain objectivity by explaining that being registered in DTSEN does not automatically mean that a person is designated as a recipient of social assistance. Informant I3 stated:

"Officials strive to provide services objectively without discriminating against the public and accept reports when there are changes in a family's socioeconomic conditions." (I3, interview)

Although the implementers' disposition is relatively positive, the interview results also indicate a need to improve consistency, discipline, accuracy, and oversight. This is important because socioeconomic data is dynamic and requires continuous follow-up. Overall, the implementers' commitment has been a supporting factor, but it still needs to be strengthened so that implementation does not stop at merely fulfilling administrative procedures.

4.4 Bureaucratic Structure

The DTSEN bureaucratic structure already has a division of roles involving local governments, districts, urban villages, and RT/RW officials. Districts play a role in coordination and facilitation, while urban villages serve as key liaisons in receiving community information, conducting initial verifications, and forwarding data changes through established procedures. However, the existence of this structure and division of tasks has not always been accompanied by prompt coordination and follow-up. Informant I1 explained:

"Coordination between units is already in place, but it still needs to be strengthened, especially regarding the communication of data changes and follow-up on community reports." (I1, interview)

At the kelurahan level, challenges were also identified regarding understanding the data update workflow and the need to simplify procedures. Informant I4 emphasized the need for consistent coordination and clarity regarding the stages of data updates so that public reports can be handled in accordance with each party's respective authority. Therefore, the bureaucratic structure has essentially supported the implementation of DTSEN, but coordination, procedural clarity, and the speed of response to data changes remain areas that need to be strengthened.

Table 2. Synthesis of DTSEN Policy Implementation Based on the Edwards III Framework

Implementation Dimension	Main Empirical Finding	Key Implementation Issue	Overall Interpretation
Communication	Communication takes place through district, urban village, RT/RW, and community channels	Uneven public understanding of DTSEN functions, update procedures, and beneficiary determination	Communication is functioning, but clarity and understanding remain insufficient
Resources	Government personnel, administrative data, and basic- - technology facilities are available	Limited technical capacity, facilities, and speed of data updates	Basic resources are available but need to be strengthened

Implementation Dimension	Main Empirical Finding	Key Implementation Issue	Overall Interpretation
Disposition	Implementers generally demonstrate commitment, responsibility, openness, and a willingness to assist the community	Consistency, accuracy, discipline, and monitoring still need improvement	The disposition is relatively supportive of implementation
Bureaucratic Structure	Roles and responsibilities among actors at the district, urban village, and community levels have been established	Coordination, information flow, procedural clarity, and follow-up on data changes are not always timely	The structure is functioning but is not yet fully effective

Source: Authors' synthesis based on interview data, 2026.

Overall, Table 2 shows that disposition is the dimension that is relatively the most supportive, while communication, resources, and bureaucratic structure still face several operational challenges. The implementation of DTSEN already has an administrative and institutional foundation, but its substantive effectiveness depends on the ability of local governments to strengthen public communication, the technical capacity of civil servants, coordination across levels, and continuous data updates.

5. Discussion

5.1 Communication: From Information Delivery to Policy Understanding

Institutional communication regarding the DTSEN has been underway, but it has not yet fully resulted in a uniform understanding at the community level, particularly regarding the DTSEN's functions, data-updating mechanisms, and the difference between "registered" status and "aid recipient" status. This indicates that the effectiveness of policy communication is determined not only by the existence of information channels, but also by the extent to which messages can be clearly and consistently understood by the target groups. From Edwards's (1980) perspective, the clarity and consistency of messages are essential prerequisites for effective implementation.

This interpretation aligns with Alexopoulou (2025), who notes that digital transformation in welfare systems still requires institutional capacity and user engagement, as well as Masiero and Arvidsson (2021), who emphasize that digital systems can lead to exclusion if users are unable to access or understand their administrative mechanisms. In the context of DTSEN, gaps in understanding arise because the public must comprehend processes involving data collection, updating, verification, and beneficiary determination across different levels of authority. Consequently, communication must be integrated into data governance not merely treated as an outreach activity—through the delivery of simple, consistent information accompanied by feedback mechanisms.

5.2 Resources: Institutional Capacity as a Data-Governance Bottleneck

The availability of personnel, administrative data, and basic facilities has supported the implementation of DTSEN, but limitations in technical capabilities and infrastructure still affect the speed of data updates. The key implication of this finding is that resources in data-driven policies cannot be understood solely in terms of the number of personnel or the presence of technological equipment. A more critical capacity is the ability of personnel to manage, verify, update, and disseminate information in a timely manner.

Haseeb and Vyborny (2022) demonstrate that the effectiveness of using administrative data in social assistance programs is highly dependent on institutional capacity, while van Donge et al. (2022) emphasize the importance of data stewardship and coordination within a data-driven governance ecosystem. Conditions at the local level can be explained by the nature of the DTSEN, which requires repeated updates as income, employment, family composition, and the social conditions of the community change. Consequently, resource strengthening must be directed toward improving data management competencies, technological infrastructure, system access, and clarity regarding responsibilities for the quality and updating of information.

5.3 Disposition: Commitment Is Necessary but Not Sufficient

Disposition is a dimension that relatively supports the implementation of DTSEN. Government officials demonstrate commitment, openness to public reports, and a willingness to assist in the data update process, although consistency, accuracy, and oversight still need to be strengthened. These findings indicate that the positive attitudes of implementers are an important condition, but are not sufficient to guarantee the quality of implementation if not supported by adequate procedures and organizational capacity.

This is consistent with Edwards (1980), who identifies disposition as a key factor in translating policy into action, as well as Hill and Hupe (2021), who emphasize the role of implementation actors in carrying out policy at the operational level. In the context of DTSEN, individual commitment faces challenges because data updates must be carried out continuously and cannot rely on responses to occasional complaints. Consequently, implementers' commitment needs to be institutionalized through routine updating procedures, evaluations, coaching, and oversight so that the quality of implementation does not depend on personal initiative.

5.4 Bureaucratic Structure: Coordination and Timeliness of Data Updates

The bureaucratic structure already has a relatively clear division of roles, but coordination and the speed of conveying data changes remain challenges. This indicates that the main issue lies not in the absence of a structure, but in the structure's ability to swiftly channel information from the public to higher-level administrative systems. In data-driven policies, administrative delays can reduce the relevance of information even when formal procedures are in place.

This finding aligns with van Donge et al. (2022), who emphasize the importance of cross-organizational coordination within the government's data ecosystem. Follett and Henderson (2023) also demonstrate that more adaptive targeting requires mechanisms capable of effectively updating information. In the local context,

processes involving the community, RT/RW units, sub-districts, districts, and other institutions have the potential to create a time lag before changes in socioeconomic conditions are reflected in the data. The implication is the need for clearer update workflows, well-defined authority boundaries, measurable follow-up timelines, and more responsive coordination mechanisms.

5.5 From a Single Database to Continuous Social Data Governance

Overall, the research findings indicate that the challenges of DTSEN do not end with the creation of a single national database, but lie in the system's ability to keep data relevant to changes in the community's socioeconomic conditions. Data that is accurate at one point in time may lose its relevance when income, employment, residence, family composition, or vulnerability levels change. This study demonstrates that data updating must be understood as a continuous process, rather than as a periodic and discontinuous data collection activity.

These findings align with those of Beuermann et al. (2025), who describe social program targeting as "shooting a moving target," as well as Dadap-Cantal et al. (2021), who demonstrate that social registration systems unable to keep pace with changes in poverty conditions can undermine the effectiveness of targeting. Follett and Henderson (2023) also emphasize the importance of adaptive targeting mechanisms. However, this study expands on that discussion by showing that adaptability is not merely a matter of targeting methods but also a matter of implementation capacity at the local level. Communication determines whether changes in circumstances are known; resources determine whether information can be processed; disposition influences the consistency of follow-up; and bureaucratic structure determines how quickly information moves through the system.

The main implication of this study is the need for a shift from the single social database paradigm toward continuous social data governance. From this perspective, the success of DTSEN depends not only on national data integration but also on institutional capacity to acquire, verify, update, and translate changes in socioeconomic information into the targeting process. Thus, this study demonstrates that the ability of the implementation system to maintain a connection between changes in community conditions and data is a critical prerequisite for improving the accuracy of social assistance targeting.

6. Conclusion

This study concludes that the implementation of DTSEN-based social assistance policies in Kelapa Lima has proceeded administratively and institutionally, but has not yet been fully optimal in substantive terms. Based on Edwards's III framework, the dimensions of "communication" and "bureaucratic structure" have functioned but still face challenges regarding information clarity, coordination, and the speed of follow-up; resources are available, but technical capacity and facility support still need to be strengthened; whereas "disposition" is the dimension that is relatively the most supportive, as implementers demonstrate commitment and responsibility in carrying out the policy. These findings confirm that the existence of a national database alone is insufficient to ensure targeting accuracy if socioeconomic information cannot be updated and processed in a responsive manner.

Conceptually, this study expands our understanding of data-driven social assistance policy by demonstrating that the success of DTSEN implementation must be understood within the framework of continuous social data governance. Socioeconomic conditions are dynamic; therefore, the quality of targeting depends on the ability of local institutions to continuously collect, verify, update, and disseminate information. Thus, the implementation of data-driven policies is not merely a matter of technology but is also linked to communication, civil service capacity, the commitment of implementers, and bureaucratic coordination—all of which ensure that the data continues to accurately reflect community conditions.

The practical implication is the need to strengthen the technical capacity of government officials, simplify updating mechanisms, improve public communication, and enhance coordination across levels of government so that changes in community conditions can be more quickly reflected in the DTSEN. However, since this study focuses on a single location and involves four key informants from government agencies, the findings are not intended to be broadly generalized. Future research could involve beneficiaries, environmental officials, social workers, and several different regions, and could more directly examine the relationship between continuous data updating and the risk of inclusion and exclusion errors.

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