

Optimizing the Presidential Instruction on the National Single Social and Economic Database (DTSEN) in Social Protection Policy Reform: Toward the Eradication of Extreme Poverty in Indonesia

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Abstract

The eradication of extreme poverty remains a major challenge in Indonesia, requiring effective social protection policies supported by accurate, integrated, and up-to-date beneficiary data. Previous social protection systems, particularly the Integrated Social Welfare Data (DTKS), have faced problems related to inclusion and exclusion errors, resulting in ineffective targeting of social assistance programs. To address these issues, the Indonesian government introduced Presidential Instruction No. 4 of 2025 concerning the National Single Social and Economic Database (DTSEN) as a strategic reform to strengthen data governance and improve poverty alleviation efforts. This study aims to analyze the optimization of DTSEN implementation in supporting social protection policy reform and accelerating the eradication of extreme poverty in Indonesia. This research employed a qualitative approach with a policy analysis and literature review design. Data were collected from government regulations, institutional reports, academic publications, and relevant international studies, which were analyzed using descriptive qualitative analysis. The findings indicate that DTSEN provides significant opportunities to improve social assistance targeting, increase budget efficiency, support evidence-based policymaking, and strengthen transparency and accountability in social protection programs. However, its implementation faces challenges, including data integration, infrastructure readiness, human resource capacity, privacy protection, and coordination among institutions. In conclusion, DTSEN represents an important transformation toward a more adaptive, accurate, and inclusive social protection system. Successful implementation requires continuous data validation, strong institutional collaboration, technological improvement, and active community participation to achieve the national goal of eliminating extreme poverty.

INTRODUCTION

The reduction of extreme poverty has become a key focus of Indonesia's national development agenda, with an ambitious target of zero percent by 2029 (Widyawati et al., 2026; Sodik et al., 2026). Achieving this target depends heavily on the effectiveness of social protection programs, which in turn requires accurate and up-to-date beneficiary data (Pertiwi et al., 2025; Setiawan et al., 2026). Over time, the Integrated Social Welfare Data (DTKS) has served as the primary reference, but this system frequently faces significant challenges in the form of inclusion errors (assistance provided to ineligible individuals) and exclusion errors

(eligible individuals who do not receive assistance) (Sius et al., 2024; Gonzales Martinez & Cooray, 2025; Sutanto et al., 2020). These data errors not only result in budget waste but also hinder efforts to achieve fair and equitable poverty reduction (Aulia, 2024; Ajun et al., 2024).

In response to this issue, the Indonesian government issued Presidential Instruction (Inpres) No. 4 of 2025 on the National Single Social and Economic Data System (DTSEN) on February 5, 2025 (Iriani et al. 2025; Pertiwi et al. 2025; Rassanjani et al. 2024). This Inpres mandates the optimization of the implementation of national social and economic data integration by ensuring data accuracy, interoperability, and updates, as well as collaboration among ministries and agencies (Rambe & Siregar, 2026). The DTSEN was established to replace the DTKS as the primary reference for the distribution of social assistance and empowerment programs, with the aim of improving program targeting and efficiency (Sulistiyowati et al., 2024; Ogot et al., 2024).

This journal aims to provide a comprehensive analysis of how Presidential Instruction No. 4 of 2025 and the implementation of the DTSEN can maximize social protection policy reforms in Indonesia, as well as their role in efforts to eradicate extreme poverty. The main issue addressed is how the upgrade of the DTKS to the DTSEN, as the foundation for accurate social assistance policies in the new era, can be maximized to achieve the national target of eradicating extreme poverty (Iriani et al. 2025; Pertiwi et al. 2025). This analysis will cover the theoretical foundations of social protection, comparisons with global single registry practices, as well as the challenges and opportunities of implementing the DTSEN from technical and sociological perspectives (Leite et al. 2017; O'donnell 2026; Yeates et al. 2023).

Concepts and Theories of Social Protection

Social protection is a set of policies and programs aimed at reducing poverty and vulnerability, as well as strengthening communities' capacity to manage risks. This concept has evolved from a traditional safety net approach to adaptive social protection (ASP) and transformative social protection. ASP highlights the adaptability and resilience of social protection systems in the face of shocks such as natural disasters or economic crises, while transformative social protection seeks to address the structural constraints that fuel poverty and inequality. DTSEN, which emphasizes data accuracy and updating, can serve as a crucial tool in achieving ASP and transformative social protection in Indonesia.

The Integrated Social Welfare Data (DTKS) and Data Accuracy Issues

The DTKS has long been at the core of social protection programs in Indonesia. However, this system has limitations regarding data accuracy and changes. Research shows that the DTKS frequently experiences significant inclusion and exclusion errors. Inclusion errors occur when people who do not meet the poverty criteria receive assistance, while exclusion errors occur when poor people who are entitled to assistance are not registered or do not receive assistance. These errors arise from various causes, such as outdated data, ineffective verification processes, and minimal community involvement in data updates.

The Concept of the National Social and Economic Single Data System (DTSEN) as a Single Registry

DTSEN is a new registration system designed to replace DTKS, aiming to create an accurate and unified database. DTSEN uses the National Identification Number (NIK) for all Indonesian citizens and classifies the population based on welfare categories (extremely poor, near-poor, middle-income, and others). The concept of a single registry like DTSEN has been

implemented in a number of countries as a best practice to improve the efficiency and effectiveness of social protection programs. The main advantage of DTSEN lies in its dynamic nature, which allows for periodic (every 3 months) and even monthly data updates, ensuring that the data remains relevant to conditions on the ground.

Presidential Instruction No. 4 of 2025: The Foundation for Policy Reform

Presidential Instruction No. 4 of 2025 serves as a solid legal basis for the implementation of the DTSEN and changes to social protection policies. This Presidential Instruction clearly directs all relevant ministries and agencies to take the necessary steps to optimize the implementation of the integration of national social and economic data. Key points of this Presidential Instruction include:

1. **Data Accuracy:** The Presidential Instruction emphasizes the need to ensure data accuracy as a fundamental foundation. The DTSEN, which utilizes the National Identification Number (NIK) and dynamic updates, is expected to significantly reduce inclusion and exclusion errors. This is a crucial step to ensure social assistance reaches the intended recipients.
2. **Collaboration and Interoperability:** The Presidential Instruction encourages collaboration among ministries and agencies in data sharing. DTSEN was developed as a single integrated database, enabling various agencies to utilize a common data source for planning, program evaluation, and aid distribution. This step will reduce data duplication and enhance the effectiveness of collaboration among agencies.
3. **Regular Data Updates:** The Presidential Instruction mandates routine data updates. DTSEN's flexible update feature (monthly or quarterly) addresses this need, ensuring data remains relevant to on-the-ground conditions and directly reflects changes in the community's socioeconomic circumstances.
4. **Strengthening the Verification System:** The Presidential Instruction implicitly requires the strengthening of the data verification system. The process of selecting aid recipients in the DTSEN includes proposals submitted to local governments and appeals, which are then subject to field verification by Family Hope Program (PKH) facilitators before final approval [8]. This is an effort to ensure the validity of data at the field level.
5. **Community Involvement:** Through this new system, the community also has the opportunity to actively monitor and update beneficiary information, including submitting proposals or disputing data. Active community involvement is essential for improving the system's accountability and transparency.

Through this Presidential Instruction, the optimization of the DTSEN is expected to help build a social protection system that is more responsive, adaptive, and targeted. With more accurate information, the government can allocate resources more efficiently and ensure that assistance actually reaches those in need, thereby accelerating efforts to eradicate extreme poverty.

METHOD

This study employed a qualitative research approach using a literature review and policy analysis design. The qualitative approach was chosen because the study aims to examine and understand the implementation of Presidential Instruction No. 4 of 2025 concerning the National Single Social and Economic Database (DTSEN) and its implications for social

protection policy reform in Indonesia. Through this approach, the research seeks to explore the role of DTSEN in improving the accuracy of social assistance targeting, strengthening social protection governance, and supporting the national agenda for extreme poverty eradication. Policy analysis is utilized to assess the substance, objectives, implementation mechanisms, opportunities, and challenges associated with the DTSEN policy framework.

The data used in this study consist entirely of secondary data obtained from various relevant and credible sources. These include Presidential Instruction No. 4 of 2025, official publications from government institutions such as the Ministry of National Development Planning (Bappenas), the Central Statistics Agency (BPS), and the Ministry of Social Affairs, as well as academic journals, books, policy reports, working papers, and publications from international organizations such as the World Bank. The selected sources focus on social protection systems, poverty alleviation strategies, social registries, adaptive social protection, and public policy reform. Data collection was conducted through a comprehensive literature review process aimed at identifying, selecting, evaluating, and synthesizing information relevant to the research objectives.

The collected data were analyzed using descriptive qualitative analysis. The analysis process involved data reduction, data categorization, interpretation, and synthesis of findings from various sources. Furthermore, policy analysis techniques were applied to evaluate the effectiveness and strategic relevance of DTSEN in addressing inclusion and exclusion errors within social protection programs. Comparative analysis was also conducted by examining international best practices related to single social registries and integrated social protection databases. Through this analytical approach, the study provides a comprehensive understanding of the opportunities, challenges, and policy implications of DTSEN implementation in supporting social protection reform and accelerating the eradication of extreme poverty in Indonesia.

RESULT AND DISCUSSION

Analysis of DTSEN Implementation: Challenges and Opportunities

Technical and Sociological Challenges

The implementation of DTSEN, while promising, is not without a number of challenges, both technical and sociological.

1. **Integration of Information Systems:** The primary technical challenge is integrating information systems from various ministries and agencies into a single DTSEN platform. This requires standardization of data formats, secure data exchange protocols, and robust technological infrastructure. Technical coordination between agencies is often complex and time-consuming.
2. **Quality of Source Data:** Although DTSEN aims to improve accuracy, the quality of source data drawn from various sources can vary. The process of cleaning, validating, and harmonizing source data requires significant effort to ensure the integrity of DTSEN from the outset.
3. **Dynamics of Population Data:** Population and socioeconomic data are highly dynamic, particularly in frontier, outermost, and disadvantaged (3T) regions. Ensuring consistent and immediate data updates across all regions of Indonesia, including areas with limited internet access, is a major operational challenge.

4. **Resistance to Change:** From a sociological perspective, the transition from DTKS to DTSEN may encounter resistance from various parties, including field officers who are already familiar with the old system, as well as members of the public who are concerned about changes in aid distribution procedures. Extensive outreach and adequate training are necessary to ensure a smooth transition.
5. **Privacy and Data Security:** The nationwide collection and integration of sensitive data raises issues regarding privacy and data security. DTSEN must be equipped with a robust cybersecurity system and strict legal regulations to protect citizens' personal information.

Strategic Opportunities

Despite the challenges, DTSEN presents significant strategic opportunities for transforming social protection and driving national growth.

1. **Improved Targeting:** With more accurate and up-to-date information, DTSEN can significantly reduce inclusion and exclusion errors, ensuring that social assistance is truly received by the most vulnerable groups, particularly those living in extreme poverty.
2. **Budget Efficiency:** Increased government budget efficiency will be achieved through the optimization of assistance distribution via DTSEN. Funds previously wasted due to targeting errors can be redirected to more beneficial programs or to expand the scope of social protection.
3. **Foundational Data for Evidence-Based Policy:** DTSEN provides comprehensive and integrated data for the development of evidence-based policies. The government can analyze poverty patterns, evaluate program impacts, and design more efficient interventions based on comprehensive data.
4. **Development of Adaptive and Transformative Programs:** With its flexible data-updating capabilities, DTSEN supports the creation of social protection programs that can respond quickly to shocks. Additionally, detailed data enables the development of transformative programs that address the root causes of poverty.
5. **Enhanced Accountability and Transparency:** A clear integrated data system and public-involved appeal procedures will improve accountability in the management of social protection programs. Communities can monitor and participate in ensuring the fair distribution of assistance.
6. **Synergy with National Development:** DTSEN is not only useful for social protection but can also serve as a foundation for various other national development programs requiring accurate socioeconomic data, such as planning for education, health, and labor.

Comparison with Global Best Practices for Single Registries

The concept of a single registry for social protection has been implemented in various countries with varying degrees of success. The World Bank and UNDP have identified single registries as a key tool for adaptive social protection, particularly if the system is dynamic and capable of capturing information on household vulnerability to shocks.

Several global best practices indicate that an effective single registry has the following characteristics:

1. **Comprehensive Database:** Integrates data from various sources (population, health, education, income) to create a holistic household profile.
2. **Dynamic Update Mechanism:** Enables regular data updates and responsiveness to changes in socioeconomic conditions.

3. Inter-System Interoperability: Facilitates seamless data exchange among different government agencies.
4. Strong Data Governance: Includes a clear legal framework, privacy policies, and data security protocols.
5. Stakeholder Participation: Involves local governments, civil society, and beneficiaries in the data verification and updating process.

DTSEN Indonesia, which focuses on the National Identification Number (NIK), dynamic updates, and interagency collaboration, reflects alignment with these global best practices. However, the challenge lies in ensuring consistent and comprehensive implementation across Indonesia, as well as establishing robust data management to guarantee sustainability and public trust.

CONCLUSION

Presidential Instruction No. 4 of 2025 on the National Single Social and Economic Database (DTSEN) is a crucial step in the transformation of social protection policies in Indonesia. The transition from DTKS to DTSEN is a strategic move to create a more accurate, interoperable, and flexible data foundation, which is vital in the effort to address extreme poverty. With the ability to reduce inclusion and exclusion errors, DTSEN is expected to improve the accuracy of targeting and the efficiency of social protection programs, as well as support the achievement of the zero percent extreme poverty target by 2029. However, the success of DTSEN optimization depends heavily on comprehensive and well-planned implementation. Some recommendations for effective implementation include: Strengthening Coordination and Regulation: Establishing a more detailed regulatory framework regarding the systematic use of data within DTSEN and strengthening coordination among ministries and agencies to ensure optimal synergy. Enhancing Human Resource Capacity: Conducting intensive training for field officers and data administrators at all levels of government to ensure adequate understanding and skills in managing DTSEN. Developing Technology Infrastructure: Ensuring the availability of adequate technology infrastructure, particularly in 3T regions, to support real-time data updates and system interoperability. Continuous Verification and Validation Mechanisms: Develop and implement rigorous and continuous data verification and validation mechanisms, including transparent and accountable ground checks. Public Education and Participation: Conduct extensive outreach and education to the public regarding the importance of DTSEN and mechanisms for their participation in data updates, including a feature for submitting objections. Legal Framework for Privacy and Data Security: Establish and implement a robust legal framework to protect the privacy and security of personal data collected in DTSEN, in order to build public trust. With strong political commitment, cross-sectoral collaboration, and active participation from all stakeholders, DTSEN has great potential to serve as the foundation of a modern, adaptive, and transformative social protection system in Indonesia, bringing the country closer to its goal of eradicating extreme poverty and achieving social justice for all its people.

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