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Implementation of Population Administration Information System in Realizing Orderly Population Administration in Nias Regency

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Abstract

This research is motivated by the importance of success regarding the implementation of the population administration information system in orderly Population Administration in Nias Regency. The method used is a qualitative method with a descriptive approach. In this research, the author uses informants who know and relate to the problem. The data collection technique used in this research is through two ways, including secondary data (books, scientific works, and documents/archives) and primary data (obtained from the field, both observations and interviews). From the results of the research it can be seen that the implementation of the Population Information System in realizing orderly administration has not been maximized, because there are still several obstacles and do not yet have a Regional Regulation specifically on Population in Nias Regency, so there is still a lot that needs to be addressed. Reviewed from 4 policy implementation models according to Edward III, namely communication, disposition / attitude, resources, and bureaucratic structure. In this study, researchers also gained a new understanding that in the implementation of good state service population administration, it would be better if the apparatus not only carried out population administration activities, but also needed to pay attention and care about the general needs of the community.

Kata Kunci: *Implementation, Population Administration Information System*

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INTRODUCTION

Population administration constitutes a fundamental aspect in population data management that underpins various government policies and public services at both regional and national levels. A reliable information system in population administration is essential to ensure that population data is recorded accurately, comprehensively, and accountably. In this context, the Population Administration Information System (SIAK) emerges as an information technology solution that supports effective and efficient identity management (Hidayati et al., 2024) . Rahayu (2024) explains that SIAK implementation can accelerate administrative processes while maintaining consistency in population data through the integration of various administrative regions.

In Nias Regency, challenges related to orderly population administration remain substantial. Nias Regency encompasses an area of 853.44 km² with 10 sub-districts, 170 villages, and 550 hamlets. The population in 2024 reached 155,629 inhabitants, comprising 76,052 males and 79,577 females (sex ratio 95.57). Idanogawo Sub-district has the highest population density with 28,456 inhabitants. The average population density is 182.35

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inhabitants/km². Regional Original Revenue (PAD) in 2024 was recorded at IDR 117.9 billion with total regional revenue of IDR 998.6 billion, and regional expenditure reaching IDR 738.16 billion, illustrating the budgetary capacity to support various programmes, including population administration (BPS, 2025).

Furthermore, Anggraini (2025) emphasises that the successful implementation of SIAK is heavily dependent on full support from all stakeholders, particularly regional apparatus and the readiness of human resources operating the information system. Conversely, Fitri & Tukiman (2025) state that the adaptation of online-based population administration service applications, such as the Poedak application in Semarang City, can enhance accessibility and transparency of services to the community. This demonstrates that optimal utilisation of information technology in population administration becomes an urgent necessity to support sustainable administrative order.

Illahi (2022) explains that the development of integrated web-based population administration information systems provides convenience in data management and minimises recording error risks that impact untimely public services. Thus, orderly population administration is not merely about data recording, but also about how information systems support transparent and accountable governance. Yuza (2025) in his research in Pekanbaru City adds that empowering integrated population service information systems can drive the achievement of effective population administration implementation up to the sub-district and village levels.

In Nias Regency itself, efforts to implement policies related to population administration continue to be undertaken by the Department of Population and Civil Registration through socialisation and capacity building for population administration service implementation. However, evidence indicates that there remains a gap between web-based population administration information system policies and their actual implementation in the field, particularly due to technological infrastructure limitations and resistance to change from administrative officers. This presents a serious challenge to realising orderly population administration that is expected to guarantee citizens' rights and make population data a reliable information source.

Improving public service quality through the utilisation of population administration information systems represents one strategic effort in realising administrative order and strengthening governance at the regional level. Experiences from various regions that have optimally implemented this system need to serve as references for Nias Regency in formulating concrete measures to overcome existing constraints.

Therefore, this research will comprehensively examine how the implementation of population administration information systems in Nias Regency can contribute significantly to realising orderly population administration. The analytical focus will encompass the effectiveness of applied information technology, the role and support of regional government, and the impact of these changes on strengthening population administration services to the community comprehensively.

METHODOLOGY

According to Moleong (2021), research approach represents the overall method in conducting scientific activities from problem formulation to conclusion drawing. In other words, research approach constitutes a systematic strategy and thinking pattern in answering research questions, ensuring that obtained information is reliable and valid. In qualitative studies, several types of research approaches can be employed, including case studies, which are methods or research strategies for understanding in-depth specific cases or phenomena within particular real contexts; descriptive approaches, namely research that attempts to illustrate or describe phenomena, events, or occurrences systematically and factually as they are; and phenomenology, which studies individuals' life experiences in-depth with the aim of

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understanding subjective meanings of phenomena experienced by those individuals.

Based on this theoretical framework, this research employs a qualitative approach with descriptive methodology. This approach was selected because the research aims to clearly describe the implementation process of the Population Administration Information System (SIAK) in realising orderly population administration in Nias Regency, without conducting intervention or manipulation of the research object. According to Suigiyono (2020), qualitative research is research conducted on objects containing experiences and events directly experienced by research subjects, where researchers serve as the primary instrument for data collection. In this context, qualitative methodology is most appropriate because the research focus is in-depth understanding of SIAK implementation processes and practices involving social interaction and organisational culture within the Population Department.

This research type differs from quantitative research, which according to Sugiyono (2020) produces findings through statistical procedures to test hypotheses and relationships between variables numerically. Mixed methods research utilises both quantitative and qualitative approaches; however, this research focuses solely on descriptive qualitative methodology to obtain comprehensive real depictions of field phenomena. Research variables in this study refer to Suigiyono (2020) definition, stating that variables are operational definitions providing detailed explanations of what will be measured or observed to facilitate understanding by researchers and readers. In this research, the primary variables examined are:

Population Administration Information System (SIAK) is an information technology-based system designed to record, manage, and store all population data in an integrated and accurate manner. This system facilitates the management of population administration information at the implementer level and the Department of Population and Civil Registration as a unified entity, encompassing population data collection and civil registration based on population events and vital events experienced by the community from birth to death. Public Service refers to services provided by regional government, particularly the Department of Population and Civil Registration, to the community in population administration fields such as electronic ID card creation, family cards, and other supporting documents.

Primary data will be collected through in-depth interviews with key informants directly involved in SIAK implementation, including population department officers, division heads, and community service users. Additionally, participatory observation will be conducted to understand system work processes and interactions between officers and the information system as well as related administrative documents. Documentation as secondary data will be obtained from departmental archives, regional regulations, implementation reports, and Nias Regency population statistics. Data triangulation methods are employed to enhance finding validity through comparison of data sources and collection techniques.

Data analysis is conducted qualitatively using interactive models encompassing data reduction, data presentation, and verification or conclusion drawing processes. This approach enables researchers to understand patterns, themes, and meanings from SIAK implementation processes, thereby depicting actual conditions and supporting and inhibiting factors.

RESULTS AND DISCUSSION

Research Results

Based on research findings, data accuracy constitutes the primary foundation for successful population administration services at the Department of Population and Civil Registration of Nias Regency. Presented data must be valid and reliable to support appropriate and prompt decision-making. This is reinforced by interview results with the Department Head who explained that population data validity facilitates the process of issuing important documents such as identity cards and birth certificates.

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However, in practice, there are real constraints in the form of internet network instability, particularly in sub-district areas, which hampers data synchronisation processes, resulting in untimely services. The Head of Population Registration Service Section also revealed that employee resistance to technological change impacts the accuracy and continuity of data input. Employees who are unfamiliar and lack adequate training hinder data processing speed, making system implementation timing suboptimal.

Data security and privacy aspects become primary priorities in SIAK implementation. The Department Head conveyed that although security systems have been implemented, public concerns regarding personal data confidentiality persist. These concerns necessitate continuous education and socialisation to enhance public trust in the system. Strong data protection is also important to ensure administrative services can operate without disruption or violations that cause harm.

System integration across departments and work units also becomes a key aspect supporting operational efficiency. Based on interviews with technical staff, this integration minimises data duplication and accelerates service processes. However, coordination constraints between units are still encountered, causing data to occasionally become unsynchronised or delayed in updates. This condition becomes a real obstacle requiring improvement for more responsive and targeted population administration processes.

To enhance time efficiency in responding to service requests, the Department has implemented policies including structured management team formation and utilisation of current communication technology such as RFID and mobile applications. Nevertheless, interviews with field staff reveal that community access and understanding of this technology remains uneven, particularly in rural areas. Many residents still must visit offices directly to obtain services due to technological literacy limitations. This burdens officers and results in long queues and extended waiting times. Infrastructure limitations and employee resistance to new technology also add challenges in system optimisation.

Discussion

Research findings demonstrate that data accuracy, timeliness, and data security and privacy constitute key factors in the successful implementation of the Population Administration Information System (SIAK) at the Department of Population and Civil Registration of Nias Regency. Field findings detail that primary emerging constraints include technological infrastructure limitations, human resource resistance, inter-unit coordination difficulties, and insufficient community digital literacy, particularly in rural areas. According to Rohaini (2025), population administration information management that optimally utilises information technology not only enhances public service efficiency but also requires feature completeness such as online data verification, digital document creation, and comprehensive inter-system integration to reduce overlap and improve data accuracy. In this context, SIAK represents a modern solution capable of accelerating administrative processes and providing an integrated national database; however, its implementation must be accompanied by special attention to supporting factors such as infrastructure readiness and human resource training (Al Farabi, 2024).

Studies by Dinillah & Rodiyah (2024) reveal that end-user satisfaction with information technology systems, such as SIAK, heavily depends on data content quality, accuracy, ease of use, presentation format, and service timeliness. Human resource and technology access barriers in the field potentially reduce system effectiveness and public satisfaction, consistent with findings in Nias Regency where employee resistance and low community understanding become obstacles to optimal services (Purba, 2019).

Furthermore, research by Darma (2025) underscores the importance of inter-departmental system integration as a key to efficiency and accuracy in population administration. Data integration enables synchronisation, minimising errors and data duplication. However, suboptimal coordination and technical problems in the field can cause

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delays and data inconsistencies that impact community services. Employee resistance constraints and infrastructure limitations are also frequently mentioned in studies on Digital Population Identity Service (IKD) policy implementation. Although digital policies and administration systems have been implemented, community utilisation levels remain relatively low due to minimal socialisation, limited internet access, and insufficient training for service officers (Dunan & Syahputra, 2023). Policy implementation emphasises clear communication aspects, resource distribution of authority, implementer disposition, and bureaucratic structure as determinant factors for successful public information technology policy implementation. Interview findings indicate that these aspects still require strengthening in Nias Regency, particularly in terms of policy communication, human resource development, and infrastructure improvement (Masdianto et al., 2023).

To strengthen the implementation of the Population Administration Information System (SIAK) in Nias Regency to realise fast, accurate, and reliable population administration services, strategic measures are required including: strengthening human resource (HR) capacity through continuous training and enhanced understanding of information technology; improving technological infrastructure, including expanding internet network coverage and providing adequate hardware at sub-district and village levels; enhancing policy communication and inter-unit coordination to ensure smooth data synchronisation and integrated services; education and socialisation to the community to encourage adaptation and utilisation of digital services; and implementing regular monitoring and evaluation using user satisfaction measurement methods such as EUCS as material for continuous improvement (Subadi, 2019).

These measures are important as responses to various constraints encountered in SIAK field implementation, aimed at improving service quality to the community in population administration. Through these measures, SIAK can function optimally as a modern population administration information system that not only meets technical demands but also community social needs. This aligns with modern public service paradigms that prioritise transparency, accessibility, and accountability through information technology utilisation.

CONCLUSION

Based on research findings regarding the implementation of the Population Administration Information System (SIAK) at the Department of Population and Civil Registration of Nias Regency, it can be concluded that four important aspects constitute keys to this system's success: accurate data collection, appropriate implementation timing, maintained data security, and interconnected systems across departments. Correct and complete data makes system information reliable, thereby facilitating appropriate decision-making and ensuring community satisfaction with services. When this system operates effectively and is interconnected across departments, services become faster, more precise, secure, and accessible to the community.

The Department of Population and Civil Registration of Nias Regency has undertaken various efforts to enhance community services, such as implementing systematic work procedures, forming specialised teams, and utilising communication technology. However, in SIAK implementation, several supporting and inhibiting factors exist. Supporting factors include adequate technology, competent employees, sound policies, and community participation. Inhibiting factors include employee difficulty in accepting technological change, data security issues, funding limitations, insufficient inter-departmental coordination, and community lack of understanding regarding SIAK importance.

Therefore, it is recommended that the department focus more on data improvement and timeliness, continue regular technological equipment enhancement, conduct comprehensive training programmes to address employee resistance to new technology, strengthen data security systems, establish inter-departmental cooperation teams, and

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increase community education regarding SIAK benefits. This research has several limitations, including being conducted in only one region, namely Nias Regency, thus research findings may not be applicable to other regions; continued dependence on subjective opinions from interviewed individuals; and not utilising numerical analysis that could demonstrate causal relationships between factors. Nevertheless, this research contributes to knowledge regarding government information system implementation in Indonesia and provides exemplary practices for other regions intending to implement similar systems, whilst offering input to central government for improved policy formulation.

References :

Al Farabi, N. A. (2024). Implementation of Web-Based Population Administration Information System Policy. *Jurnal APB*.

Anggraini, M. D. (2025). *Implementation of Population Administration Services Through Population Administration Information System (SIAK) in Semarang City*. Diponegoro University.

BPS. (2025). *Nias Regency in Figures 2025* (Vol. 23). Central Statistics Agency of Nias Regency.

Dinillah, R. R., & Rodiyah, I. (2024). Village Apparatus Performance in Population Administration Services in Watesari Village. *NeoRespublica: Journal of Government Science*, *5*(2), 646–661. https://doi.org/10.52423/neores.v5i2.217

Dunan, H., & Syahputra, M. Y. (2023). The Influence of Working Relations and Communication on Employee Performance at the Department of Population and Civil Registration of Bandar Lampung City. *Jurnal EMT KITA*, *7*(3), 605–610. https://doi.org/10.35870/emt.v7i3.1130

Fitri, I. N., & Tukiman, A. (2025). Implementation of Online Service Application for Population Administration Registration (Poedak). *Journal of Governance Studies*, *11*(1).

Hidayati, S., Netti, H., & Adrianto, A. (2024). Village Apparatus Services at Sungai Rambai Village Office, North Pariaman Sub-district. *Journal of Government and Policy (JPK)*, *5*(2), 91–100. https://doi.org/10.18196/jpk.v5i2.19215

Illahi, A. W. (2022). Web-Based Population Administration Information System for Karangasem Village. *Janitra Journal of Informatics and Information Systems*, *2*(2), 107–115.

Masdianto, M., Hannan, M., & Adnan, M. A. (2023). Work motivation of village apparatus in governance implementation in Taan Village, Tapalang Sub-district. *Perguruan: Journal of Education, Social and Humanities*, *5*(2), 110–119. https://journal.lppm-unasman.ac.id/index.php/pegguruang/article/view/2368

Moleong, L. J. (2021). *Qualitative research methodology* (Revised edition). Remaja Rosdakarya.

Purba, J. F. (2019). Implementation of Population Administration Information System Policy in Improving Public Services in Indramayu Regency. *Perspektif Journal*.

Rahayu, T. N. (2024). Implementation of Population Administration Information System (SIAK) at the Department of Population and Civil Registration of Tangerang City. *Cahaya Mandalika Journal*, *3*(3), 1808–1821.

Rohaini, E. (2025). Population Information System of Singkut Sub-district. *UNAMA Journal*.

Subadi, W. (2019). Village Apparatus Performance in Village Government Implementation in Ribang Village, Muara Uya Sub-district, Tabalong Regency. *Journal of Public Administration and Business Administration Thought and Research*, *3*(2), 102–116. http://jurnal.stiatabalong.ac.id

Sugiyono, S. (2020). *Quantitative, qualitative, and R&D research methods* (10th edition). Pustaka Ilmu.

Yuza, A. F. (2025). Implementation of Integrated Population Service Information System Program in Pekanbaru City. *Journal of Government Studies*, *11*(1).