



ANALYSIS OF THE EFFECTIVENESS OF THE POPULATION DATA COLLECTION SYSTEM AT THE POPULATION AND CIVIL REGISTRATION SERVICE OF SOUTH LAMPUNG REGENCY

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Abstract :

As a region with a growing population and high levels of community mobility, South Lampung requires a reliable data collection system to support regional development planning. Law of the Republic of Indonesia Number 23 of 2014 concerning Regional Government (2014) places population administration and civil registration among the mandatory affairs of regional governments, making the reliability of this system a direct responsibility of the regency. The research method used is descriptive qualitative research. This method is used to describe the effectiveness of the Population Data Collection System at the Population and Civil Registration Office of South Lampung Regency. This study qualitatively examines how all data was obtained directly from informants in the field using interviews and document studies. The results of the study indicate that, based on five dimensions of effectiveness, the population data collection system at the Population and Civil Registration Office of South Lampung Regency is principally directed towards achieving the goal of providing accurate, up-to-date, and integrated population data to support population administration services and regional development planning. However, the effectiveness of this system is not yet fully optimal. Achieving this goal is still faced with obstacles in the work process, limited service time, limited resources, and variations in data and service quality.

Keywords : Effectiveness, System, Data Collection, Population and Civil Registration Office.

INTRODUCTION

Efforts to improve the effectiveness and efficiency of national population data collection. This system is designed to integrate all population data (Disdukcapil plays a crucial role in managing the SIAK-based population data collection system. As a region with a growing population and high levels of community mobility, South Lampung requires a reliable data collection system to support regional development planning.

Several obstacles frequently encountered in the field include limited internet network infrastructure in certain areas, disruptions to the central server system, and a shortage of operators, such as births, deaths, or population movements. These conditions often result in delays in the data update process and impact.

Furthermore, the effectiveness of the population data collection system at the Disdukcapil of South Lampung Regency is also influenced by managerial factors, such as inter-departmental coordination, internal oversight, and the



availability of budget and supporting infrastructure. Although the SIAK system has been implemented, operational implementation still faces challenges in maintaining data quality so that it remains valid and can be used for various government administration needs.

Thus, a study of the effectiveness of the population data system is crucial. The system implemented is able to achieve its objectives, and what factors influence its effectiveness. Implementing a more effective and efficient population data system can support orderly population administration, improve public services, and provide accurate population data as a basis for development planning in South Lampung Regency. Effectiveness itself concerns the extent to which an organization achieves its goals; Drucker (2019) describes it as doing the right things, while Robbins and Coulter (2018) distinguish it from efficiency, which concerns how well resources are used. Previous studies have also examined the effectiveness of government programs and electronic systems at the local level (Muazansyah, 2017; Rasyidin, 2021).

Over the past four months, the population data collection system has faced several problems that can be grouped into four main aspects. From a technical standpoint, network and system disruptions frequently hamper service delivery. From an administrative standpoint, data discrepancies between regions remain a recurring issue. In terms of human resources, many operators lack the skills needed to manage information systems effectively. Meanwhile, from the perspective of community participation, public awareness of the importance of updating population data remains low.

Further examination reveals several more specific problems. First, population data is not yet fully integrated across the village, sub-district, and district levels, which results in duplication and discrepancies between regions. Second, limitations in infrastructure and information technology continue to pose technical constraints on the system's operation. Third, there is a shortage of competent human resources, as not all officers possess adequate technical skills to operate the population information system, particularly when using online applications. Fourth, the updating of population data is often delayed because of complicated administrative mechanisms, minimal coordination between departments, and low public awareness of the need to report changes in population status. Fifth, public outreach and participation remain limited, as many residents do not yet understand the importance of accurate population data and therefore fail to promptly record their data or update their population documents. Sixth, data security and validity are still a concern, since the data collection system remains vulnerable to data loss, leaks of personal information, and weak security mechanisms for accessing population data.

Taken together, these problems show that the effectiveness of the population data collection system is constrained by limitations in technology and human resources, as well as by weak coordination and low public participation. These conditions lead to suboptimal public services and reduce the accuracy of population data, even though such data serves as the foundation for regional development planning.

Based on the problems identified above, this study seeks to answer two research questions. The first concerns the level of effectiveness of the population data collection system at the Population and Civil Registration Office of South Lampung Regency. The second concerns the aspects that support and hinder the effectiveness of the population data collection system at the same office.

RESEARCH METHOD

This research employs a qualitative approach with descriptive methods. This approach was chosen to gain a deeper understanding of the effectiveness of the population data collection system at the Population and Civil Registration Office of South Lampung Regency. The qualitative descriptive method provides the researcher with the opportunity to structuredly describe various facts, conditions, and phenomena found in the field, including the implementation of the data collection system, emerging obstacles, and steps taken to improve the effectiveness of population administration services. Effectiveness is examined through five dimensions, namely goal, process, time, resources, and quality, in line with the view that organizational effectiveness is a multidimensional concept (Gibson et al., 2019).

FINDINGS AND DISCUSSION

Goal Dimension

The effectiveness of a population data collection system is largely determined by the clarity of its objectives. In the context of the Population and Civil Registration Service (Disdukcapil) of South Lampung Regency, the purpose of the population data collection system is not only to collect data, but also to ensure that the data is accurate, up-to-date, integrated, and usable for various public service needs. An interview with the Head of the Population and Civil Registration Service of South Lampung Regency stated:

These issues indicate that the goal dimension is a fundamental aspect that needs to be examined in assessing the effectiveness of the population data collection system. Unclear or unattainable goals will directly impact data accuracy, service quality, policy effectiveness, and public satisfaction with population administration services. (Interview Results, December 2025).

Through the goal dimension, this research focuses on the extent to which the objectives of the population data collection system have been clearly formulated, understood by implementers, and translated into effective procedures. The objective dimension is important because it serves as the basis for measuring the success of system performance, ensuring that the data collection process is proceeding as intended, and serves as a benchmark for assessing the overall effectiveness of population administration services. This is consistent with the goal approach, which assesses effectiveness by the extent to which an organization attains its intended objectives (Effendi, 2015). According to an interview with the Head of the Population Registration Services Division of the Population and Civil Registration Office of South Lampung Regency, he stated:

Our target is to ensure that all residents have correct population documents and are recorded in the database. However, there are still obstacles related to data discrepancies between documents and uneven data updating by the public. (Interview Results, December 2025).

Therefore, reviewing effectiveness through the objective dimension allows for identification of whether the South Lampung Population and Civil Registration Office's vision of achieving valid, accurate, and real-time population data is reflected in the implementation of the existing population data collection system. If the system's objectives are unclear or unachieved, various other aspects such as coordination, technical implementation, and data utilization will be impacted, thus reducing the overall system's effectiveness.

Process Dimension

The effectiveness of a population data collection system is not only determined by clear objectives but also depends on how the work processes are designed, managed, and implemented. At the operational level, the process dimension highlights the extent to which the population data collection mechanism operates according to established procedures, is sustainable, and is supported by adequate coordination and technology. An interview with the Head of the Population and Civil Registration Office of South Lampung Regency stated:

The population data collection process follows national standards from the Ministry of Home Affairs. However, in practice, several obstacles remain, such as the data verification and validation process, which takes longer to ensure data accuracy. (Interview Results, December 2025).

The population data collection process involves many parties, including villages/sub-districts, sub-districts, hospitals, community health centers, and social services. However, coordination between agencies is often ineffective, resulting in asynchronous data on deaths, births, and social assistance recipients. Porter (2019) emphasizes that organizational performance depends on how interrelated activities are linked and coordinated, so weak links between agencies reduce the value of the overall process. Therefore, assessing effectiveness through the process dimension allows this research to identify whether the population data collection mechanism is running according to procedure, whether operational obstacles remain, and how the process can be improved to support the provision of accurate and reliable population data. An interview with the Head of the Population Registration Services Division of the Population and Civil Registration Office of South Lampung Regency stated:

Formally, SOPs are in place and serve as guidelines. However, in practice, several stages of the process still need to be simplified to avoid long queues. For example, during the document verification stage, many people bring incomplete data, resulting in a repetitive process. (Interview Results, December 2025).

The population data collection system is a series of administrative processes involving the continuous collection, processing, updating, and presentation of population data. At the Population and Civil Registration Office

of South Lampung Regency, the effectiveness of the population data system is determined not only by the objectives to be achieved but also by the implementation processes within the system. A well-organized process will ensure the quality of population data and the smooth delivery of administrative services to the public. This is in line with the principles of public service set out in Keputusan Menteri Negara Pendayagunaan Aparatur Negara Nomor 81 Tahun 1993 (1993), which include simplicity, clarity, certainty, and timeliness of service procedures. Based on the results of an interview with the Population Administration Information System Operator (SIK) at the Population and Civil Registration Service of South Lampung Regency, it was stated that:

Time Dimension

The effectiveness of a population data collection system depends not only on clear objectives and a smooth process, but also on the timeliness of each data collection stage. The time dimension is crucial because the quality of population data is largely determined by how quickly, regularly, and timely it is updated and presented to the public and the government. According to an interview with the Head of the Population and Civil Registration Office of South Lampung Regency, he stated:

Timeliness is our priority because it is directly related to public satisfaction. However, I admit that the implementation is not entirely ideal. There are occasional service delays, especially when the volume of public visits increases or when the network system experiences disruptions. (Interview Results, December 2025).

The time dimension in the population data collection system emphasizes the importance of accuracy, speed, sustainability, and regularity of the data collection process. Population data is highly dynamic and requires continuous updating to remain relevant. Any delay in data collection, no matter how small, can trigger a chain of problems in public services and local government policy formulation. Gibson et al. (2019) note that organizational effectiveness should be assessed across time horizons, from short-term outputs to long-term adaptation and development. According to an interview with the Head of the Population Registration Services Division of the South Lampung Regency Population and Civil Registration Office, he stated:

We have set time standards for each type of service, such as e-KTP recording, data changes, and family card issuance. However, in the field, these time standards are sometimes not met due to certain conditions, such as slow internet connections, incomplete community documents, or long queues. (Interview Results, December 2025).

Furthermore, the effectiveness of the population data collection system is also highly determined by the ability of the South Lampung Regency Population and Civil Registration Office to manage timeliness at every stage of the service, from recording, verification, validation, to the issuance of population documents. Frequent delays, such as long queues, sudden system downtime, or lengthy data verification processes due to data discrepancies between agencies, can impact the slow completion of services to the public. This situation not only reduces the

quality of public services but also hinders the accuracy and up-to-dateness of population data in the long term.

Resource Dimension

The effectiveness of the population data collection system is greatly influenced by the adequacy and quality of resources available at the Population and Civil Registration Office (Disdukcapil) of South Lampung Regency. These resources include human resources (HR), facilities and infrastructure, information technology infrastructure, and budget support. Without adequate resources, population data collection cannot run optimally, even with standard procedures and electronic systems in place. Moenir (2020) identifies adequate facilities and the skills of officers as key factors supporting public service, while Flippo (2020) stresses that training and development are needed so that employees can perform their tasks effectively. According to an interview with the Head of the Population and Civil Registration Office of South Lampung Regency, he stated:

Resource availability is a major challenge. We have competent staff, but their number is still limited compared to the number of people we serve. Furthermore, several technological devices, such as computers, servers, and e-KTP recording devices, require upgrading. (Interview Results, December 2025).

In terms of information technology infrastructure, the availability of computers, internet networks, data servers, biometric recording devices, and data security systems are crucial to ensuring smooth data collection. In practice, several obstacles such as outdated computers, unstable internet connections, and limited server capacity remain inhibiting factors. Dependence on a centralized system from the Ministry of Home Affairs also requires local infrastructure to be ready to operate smoothly without significant technical challenges. An interview with the Head of the Population Registration Services Division of the Population and Civil Registration Office of South Lampung Regency stated:

Generally, human resources are quite professional, but capacity is limited when service volumes increase. Infrastructure is also still unevenly distributed, especially across sub-districts. Some sub-districts lack mobile recording facilities or a stable network. (Interview Results, December 2025).

Thus, the resource dimension illustrates that the effectiveness of the population data collection system depends not only on procedures and technology, but also on the availability and quality of adequate resources. If available resources are not optimal, the effectiveness of population data collection in South Lampung Regency could potentially be compromised. Ravianto (2022) likewise links productivity to the optimal use of human, technological, and financial resources. Therefore, comprehensive strengthening is needed to support the creation of modern, reliable, and accurate population administration services. Based on the results of an interview with the Population Administration Information System Operator (SIK) at the Population and Civil Registration Service of South Lampung Regency, it was stated that:

Quality Dimension

The quality dimension is a crucial indicator in assessing the effectiveness

of a population data collection system. Quality in the context of population administration encompasses not only the quality of the data produced but also the quality of the service process, the quality of the technology used, and the quality of interactions between service providers and the public. In an ideal population data collection system, data submitted to the government must be accurate, up-to-date, complete, consistent, and accountable. Dwiyanto (2022) includes service quality, responsiveness, and accountability among the key indicators of public service performance. However, the reality on the ground often shows that the quality of the data produced still faces challenges. According to an interview with the Head of the Population and Civil Registration Office of South Lampung Regency, he stated:

Data quality is our primary focus. We strive to ensure that the data is accurate, up-to-date, and accountable. However, challenges remain, such as duplicate data, late public reporting of data changes, and discrepancies between agencies. (Interview Results, December 2025).

The quality dimension also encompasses the quality of the technology and information systems used in population data collection. Systems such as the SIAK used by the Population and Civil Registration Office must be able to provide fast, stable, and secure services, and have an interface that is easy to use for both employees and the public. Computer-based services are expected to support excellent service by improving the speed and accuracy of public service delivery (Rasul, 2020). However, technical disruptions such as server downtime, slow data synchronization with the central office, and malfunctioning recording devices can hamper the quality of output. If the technology system is not functioning optimally, the quality of public service will decline. According to an interview with the Head of the Population Registration Services Division of the Population and Civil Registration Office of South Lampung Regency, he stated:

In general, the quality of service is quite good. Issued documents are usually accurate. However, there are occasional data input errors or delays in information updates. (Interview Results, December 2025).

Thus, the quality dimension of the population data collection system illustrates that effectiveness is determined not only by compliant processes or the availability of resources, but also by the quality of output and the service experience experienced by the public. Good data quality, supported by professional service and reliable technology, is a crucial foundation for realizing an effective and reliable population data collection system in South Lampung Regency. According to an interview with the Population Administration Information System (SIAK) Operator at the Population and Civil Registration Office of South Lampung Regency, the following statement was made:

The SIAK system is capable of supporting data quality, particularly in the consolidation and management of population databases. However, the quality of data input is highly dependent on the accuracy of staff and the completeness of community documents. Technical disruptions such as slow networks or server problems can also reduce the quality of data output. (Interview Results, December 2025).

In addition to security factors, the quality of population data collection is also related to the system's ability to provide ease of use (user-friendliness) for both the public and staff. A system that is too complex or unintuitive can hinder the data collection process, slow down service, and increase the risk of data input errors. Staff who are less skilled in using the system may experience difficulties in verifying and validating data, resulting in data quality that does not meet expected standards. Therefore, providing an easy-to-use system, accompanied by adequate technical training, is crucial for improving data collection quality.

CONCLUSION

The quality dimension is a crucial indicator in assessing the effectiveness of a population data collection system. Quality in the context of population administration encompasses not only the quality of the data produced but also the quality of the service process, the quality of the technology used, and the quality of interactions between service providers and the public. In an ideal population data collection system, data submitted to the government must be accurate, up-to-date, complete, consistent, and accountable. However, the reality on the ground often shows that the quality of the data produced still faces challenges. According to an interview with the Head of the Population and Civil Registration Office of South Lampung Regency, he stated:

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REFERENCES

- Drucker, P. F. (2019). *Management: Tasks, responsibilities, practices*. Harper & Row.
- Dwiyanto, A. (2022). *Penilaian kinerja organisasi pelayanan publik* [Makalah seminar]. Seminar Kinerja Organisasi Pelayanan Publik, FISIPOL Universitas Gadjah Mada, Yogyakarta, Indonesia.
- Effendi, S. (2015). *Manajemen dan evaluasi kinerja organisasi*. Rajawali Pers.
- Flippo, E. B. (2020). *Manajemen sumber daya manusia*. [Penerbit].
- Gibson, J. L., Ivancevich, J. M., & Donnelly, J. H. (2019). *Organisasi dan manajemen: Perilaku, struktur, proses* (D. Wahid, Trans.). Erlangga.
- Keputusan Menteri Negara Pendayagunaan Aparatur Negara Nomor 81 Tahun 1993 tentang Pedoman Tata Laksana Pelayanan Umum. (1993).
- Mardiasmo. (2020). *Perpajakan di Indonesia* (5th ed.). Salemba Empat.
- Moenir, A. S. (2020). *Manajemen pelayanan umum di Indonesia*. Bumi Aksara.
- Muazansyah, M. (2017). Efektivitas program pemberdayaan masyarakat. *Jurnal Administrasi Publik*, 8(2), 101-112.
- Porter, M. E. (2019). *Competitive advantage: Creating and sustaining superior performance*. Free Press.
- Rasul, [inisial]. (2020). *Pelayanan prima berbasis komputer*. Prenhallindo.
- Rasyidin, R. A. (2021). *Efektivitas penerapan e-performance di Kelurahan Gunung Sari* [Skripsi, Universitas Negeri Surabaya].
- Ravianto, J. (2022). *Produktivitas dan pengukuran*. Lembaga Sarana Informasi Usaha dan Produktivitas.
- Robbins, S. P., & Coulter, M. (2018). *Management* (14th ed.). Pearson.
- Undang-Undang Republik Indonesia Nomor 23 Tahun 2014 tentang Pemerintahan Daerah. (2014). Citra Umbara.