

THE IMPLEMENTATION OF THE SAYANG WARGA APPLICATION IN SUPPORTING STUNTING REDUCTION INITIATIVES IN RUNGKUT DISTRICT

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Abstract

This study explores the implementation of the Sayang Warga Application by the Surabaya City Government as a public service innovation aimed at reducing child stunting. Utilizing a qualitative approach, the study is based on secondary data and adopts a longitudinal planning analysis. Centered on Rungkut District, the analysis highlights how the application enables health cadres to gather household-level information in real time, thereby enhancing the early identification of stunting risks and enabling precise intervention. Guided by the theoretical framework of Rogers (1995), the initiative reflects innovation in public policy direction, the policymaking process, and the dissemination of innovation. The findings show a notable decline in stunting rates in Rungkut between 2022 and 2024. The study confirms that the application's implementation has positively impacted the delivery of public health services, particularly in monitoring and addressing stunting cases. As a digital innovation, SayangWarga has strengthened the Surabaya City Government's ability especially in Rungkut District to manage and organize stunting prevention efforts more systematically and effectively.

Keywords: Implementation, Public Service Innovation, SayangWarga App, Stunting.

INTRODUCTION

The rapid growth of technology has become an undeniable reality, enabling people across all segments of society to access information swiftly and accurately. As digital technology usage continues to rise, various sectors including government institutions are leveraging this momentum to develop applications and information services that respond to public needs. This digital shift is not only embraced by the public but is also increasingly integrated into government strategies to deliver efficient and high-quality public services.

Providing excellent service to citizens is a fundamental responsibility of the government, as outlined in Article 18 of Law No. 25 of 2009 on Public Services, which guarantees the right of every citizen to receive quality service based on clear principles and objectives. Public satisfaction with government performance is often reflected in the accessibility and effectiveness of the services delivered. Advancements in digital technology have significantly transformed how public services operate, moving away from traditional, manual systems to online or electronic platforms. To drive improvements in service quality, the Indonesian government has introduced several policies, one of which is the Public Service Innovation Competition (Kompetisi Inovasi Pelayanan Publik/KIPP), initiated by the Ministry of Administrative and Bureaucratic Reform (Kemenpan RB).

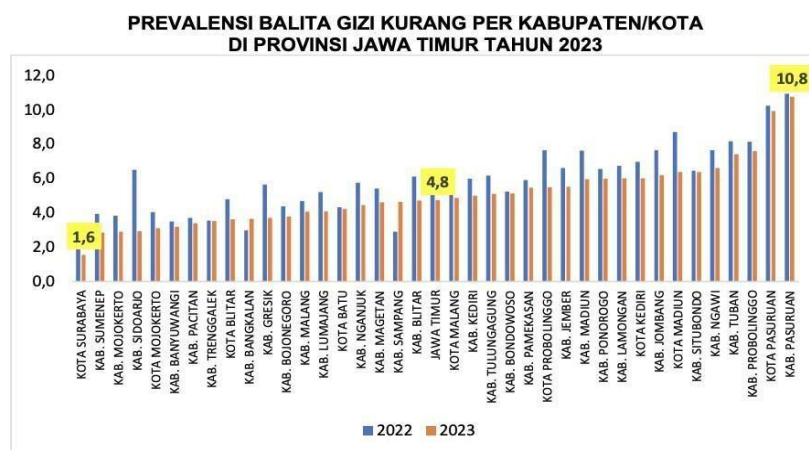
Among the top innovations was the "Sayang Warga Surabaya" application (System for Resident Assistance and Protection developed by the Surabaya City Government). The application itself is available for free and you can only access or download it via Google Play Store by using Android. Through a web-based platform, enables local Neighborhood Association (RT) leaders and Kader Kesehatan (Kader Surabaya Hebat) volunteers to document various community challenges, particularly

those related to poverty and public health, including child stunting in the Rungkut District.

Stunting is defined as a condition diagnosed in children under five years of age who have a height below the average for toddlers. Several factors contribute to stunting, including socio-economic conditions, maternal consumption during pregnancy, and inadequate infant nutrition. Lack of awareness of maintaining infant nutrition, as well as inadequate and proper infant and toddler health care, can contribute to stunting. If stunting is not addressed promptly, it can lead to delayed brain development, mental retardation, and learning disabilities (Ministry of Health, 2018). Stunting occurs after birth and in the early postnatal period, but nutritional problems only emerge after the baby is two years old (Wati, Kusyuni, and Fitriyah, 2021). According to the WHO, stunting can be identified by comparing a child's height with the standard height of children in the normal population of the same age and sex. A child is considered stunted if their height falls below -2 standard deviations (SD) (Dewey & Begum, 2011). According to the WHO, the global prevalence of stunting in 2020 is estimated at 22%, or 150.8 million people. In Indonesia, based on data from the Indonesian Nutritional Status Survey (SSGI), the stunting prevalence rate in 2023 was 21.5%, a 0.1% decrease from 21.6% in 2022. Although Indonesia has seen a decline in stunting prevalence, this figure still falls short of the WHO standard of below 20%.

To reduce and suppress stunting, family participation is essential, as the family is the smallest group in society and the starting point for achieving optimal public health. Preventive efforts can begin among pregnant women, breastfeeding mothers, and children under two years of age. The short-term consequences of stunting in children and infants include impaired brain, body, and metabolic development. Long-term consequences include decreased cognitive and learning abilities, decreased immunity and increased susceptibility to infectious diseases (Ministry of Health, 2018).

Stunting remains a critical public health concern that must not be overlooked. In response, the National Development Planning Meeting (Musrenbangnas) for the 2020-2024 National Medium-Term Development Plan (RPJMN) set a clear objective: to lower the national stunting prevalence to 14% over a five-year period. To realize this goal, the government introduced Presidential Regulation No. 72 of 2021, which focuses on accelerating efforts to reduce stunting. This initiative emphasizes the importance of integrated coordination and collaboration among ministries, government agencies, provincial and local administrations, village authorities, and other stakeholders, all working together in support of Indonesia's vision for Indonesia Emas 2045.



Sumber : Bidang Kesehatan Masyarakat, Dinkes Jatim, 2023

Figure 1. Prevalence of Malnourished Toddlers per Regency/City in East Java Province in 2023

East Java is a province located in the eastern part of Java Island, Indonesia. Located on the north coast of East Java Province, this city has 154 villages divided into 31 sub-districts, 1,362 neighborhood units (RW) and 9,096 neighborhood units (RT). The Head of the Surabaya City Population and Civil Registration Office (Dispendukcapil) revealed that Surabaya currently has a population of 3,009,286. The prevalence of stunting in East Java Province decreased by 4.3 percent, from 23.5 percent in 2021 to 19.2 percent in 2022. This is based on data from the 2022 Indonesian Nutritional Status Survey (SSGI) published by the Health Development Policy Agency of the Indonesian Ministry of Health. According to the Directorate General of Regional Development of the Ministry of Home Affairs, the stunting rate in Surabaya was recorded at 4.5% in 2022, and decreased again in 2023 to 1.5% and in 2024 to 0.7%, the lowest in East Java. In an effort to address the stunting problem, the Surabaya city government has issued Mayoral Regulation (Perwali) No. 79 of 2022 concerning the acceleration of stunting reduction and Mayoral Decree (SK Walikota) No. 100.3.3.3/62/436.1.2/2023 concerning the Acceleration Team for Stunting Reduction in Surabaya City.

The Surabaya City Government is very focused on reducing the prevalence of stunting. Furthermore, the Surabaya City Government also has a program to achieve Zero New, namely zero new cases of stunting. To ensure the success of this program, Surabaya Mayor Eri Cahyadi has asked local leaders (village heads, sub-district heads, neighborhood associations (RT) and community associations (RW) to participate in this program and work together so that all regions can implement this stunting reduction policy, including Rungkut District.

2.1 WILAYAH ADMINISTRATIF ADMINISTRATIVE AREA

Tabel 2.1.1 Jumlah Rukun Warga (RW) dan Rukun Tetangga (RT) Menurut Desa/Kelurahan di Kecamatan Rungkut, 2023
Number of Rukun Warga and Rukun Tetangga by Villages/ Kelurahan in Rungkut District, 2023

Desa/Kelurahan Village/Kelurahan	Rukun Warga (RW)	Rukun Tetangga (RT)
(1)	(2)	(3)
Rungkut Kidul	12	58
Medokan Ayu	15	108
Wonorejo	10	55
Penjaringan Sari	12	61
Kedung Baruk	10	49
Kali Rungkut	15	86
Kecamatan Rungkut	74	417

Catatan/Note: Kantor Kecamatan Rungkut/Rungkut District Office

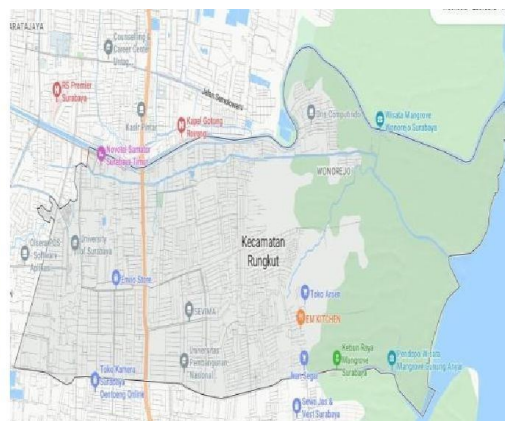


Figure 2. Distribution Map of Rungkut District (source: BPS Surabaya City)

Rungkut District covers an area of 21.85 square kilometers and has 57 neighborhood associations (RW) and 326 neighborhood associations (RT). It also comprises six urban villages: KedungBaruk, Wonorejo, Medokan Ayu, Penjaringan Sari, RungkutKidul, and Kali Rungkut. The largest urban village is Medokan Ayu, covering an area of approximately 8.43 square kilometers, while the smallest is RungkutKidul, with an area of 1.35 square kilometers. Medokan Ayu is the urban village with the

largest number of neighborhood associations (RW), while Kali Rungkut is the urban village with the largest number of neighborhood associations (RT), with a total population of 121,941 (Surabaya City Statistics Agency, 2023).

**PREVALENSI BALITA STUNTING PER KELURAHAN DI
KECAMATAN RUNGKUT TAHUN 2022-2024**

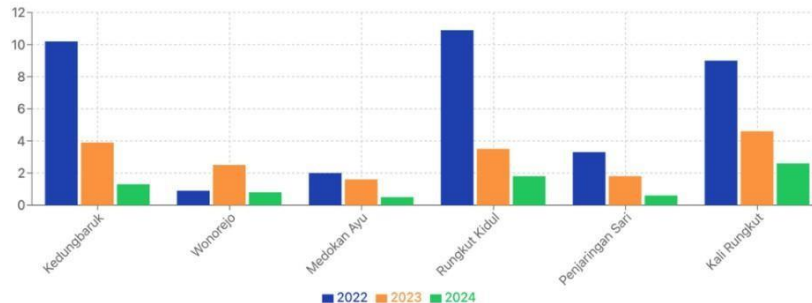


Figure 3. Graph of stunting distribution in 2022-2024 in sub-districts in Rungkut District, Surabaya City (managed by the author).

According to the Surabaya City Central Statistics Agency website, the number of births in Rungkut District reported per sub-district based on the 2024 registration results was 4,119, with 53 children registered as short and 11 children as very short (stunting). The average prevalence of stunting in the sub-district was 6 percent in 2022, then decreased to 3 percent in 2023 and 1.33 percent in 2024. According to the Ministry of Home Affairs' Monitoring of the Implementation of 8 Convergence Actions to Reduce Stunting, one sub-district under Rungkut District has the highest stunting rate in Surabaya: Kali Rungkut Sub-district, with 25 short children and 2 very short children, for a prevalence of 2.6 percent. In contrast, the villages with the lowest prevalence in Rungkut District are Medokan Ayu and Penjaringan Sari, with five children with short stature and one child with very short stature recorded in each, for a prevalence of 0.5 percent. Other villages under Rungkut District are KedungBaruk with a stunting prevalence of 1.5 percent, RungkutKidul with 2 percent, and Wonorejo with 1 percent.

Given the high number of stunted toddlers in the sub-district, government intervention is needed to address the problem, one of which is identifying stunted children through the SayangWarga application. This application is expected to address stunting quickly and accurately. However, this application has several limitations. At the neighborhood association (RT) and healthcare levels, regular updates to the number of active users are not possible because the number of active accounts using the website cannot be checked by the public, and logging into the application is somewhat complicated, especially for the public.

Despite its innovative approach, the SayangWarga application still faces several challenges, particularly in terms of overlapping menus that may lead to user confusion. Evaluating its implementation in reducing stunting requires a close examination of available data and strategic frameworks. The World Health Organization (WHO) underscores the need for efficient and affordable policies to address stunting among children under five (Onís & Branca, 2016). In response, various digital platforms have been developed to support monitoring and prevention efforts. One such tool is e-PPGBM (Electronic Community-Based Nutrition Reporting), which enables Posyandu cadres to log toddlers' nutritional data. Meanwhile, the Sisrute (Integrated Referral System) application facilitates digital referrals in healthcare services, including for

expectant mothers and young children facing nutritional issues. As a nationally adopted system, Sisrute has demonstrated beneficial outcomes in managing cases of stunting.

The integration of digital technology in public health programs through applications like SayangWarga reflects a broader movement toward innovation in accelerating stunting reduction initiatives. While earlier studies have addressed the impact of technological interventions like e-PPGBM and Sisrute, limited research has specifically assessed the effectiveness of the SayangWarga application in the Surabaya context. In particular, there remains a lack of empirical inquiry focusing on its operationalization at the sub-district level. Consequently, further study is necessary to explore how the SayangWarga application functions in local stunting reduction efforts, especially in the Rungkut District. This research intends to investigate both the barriers and opportunities in utilizing this system. With that in mind, this study is titled “The Implementation of the SayangWarga Application in Supporting Stunting Reduction Initiatives in Rungkut District.” The primary objective is to analyze how this Surabaya City Government service innovation contributes to accelerating stunting mitigation, using theory of policy implementation and public service innovation.

LITERATURE REVIEW

Policy Implementation

Implementation is a concept with a very broad range of meanings, not merely related to the execution of a program or activity, but also related to a number of influencing factors, as well as the results and benefits obtained. Furthermore, the concept of implementation also relates to the achievement of broader and larger goals as part of achieving the overall organizational objectives. For example, micro scale public service activities carried out by work units of public organizations within the regional scope are activities that actually have broader and broader goals within the context of the nation and state. The success of public service policy implementation in the region is not limited to the success of implementing the intended programs and activities according to established SOPs, but also success in achieving objectives in the form of results and benefits, as well as accuracy in achieving policy targets or objectives. This means that there are many assessment measures, contexts, and factors that contribute to the success or failure of policy implementation (Jumroh., Yoga, 2021).

Policy implementation is a crucial component within the overall cycle of public policy. A policy that has been designed will not yield tangible benefits unless it is effectively carried out. In essence, every policy program must be operationalized to generate impact and achieve its intended goals. Implementation is understood as a series of interactions between policy objectives and the actions taken to realize those objectives. This process involves the simultaneous participation of various elements, such as implementing actors, institutions, mechanisms, and technical procedures. According to Sunggono (1994:137), Implementation refers to a structured effort to attain specific objectives by utilizing appropriate tools and executing them within a defined timeframe. The implementation process can only begin once policy goals have been clearly outlined, supportive programs have been prepared, and adequate funding has been allocated.

Implementation can be systematically described through several stages: policy formulation, execution process, outputs, and long-term impact. This sequence emphasizes that policy execution begins with a policy decision that must be acted upon, with the immediate result known as policy performance. George Edward III

(1980:1) asserts that implementation is a decisive stage in determining the success of public policy. No matter how well a policy is designed, if its implementation is not carefully planned and executed, the policy goals will not be realized. Conversely, well-prepared implementation efforts will also be ineffective if the policy itself is poorly formulated. Therefore, policy formulation and implementation must be coordinated and thoroughly planned. Edward identifies four critical variables that influence the success of policy implementation:

1. Communication

Communication is a fundamental factor because it pertains to how information, directives, policies, and instructions are conveyed to policy executors. Effective implementation depends on how well these actors understand what is expected of them. The clarity and consistency of information dissemination play a key role in ensuring uniform interpretation and smooth execution of policies across various administrative levels.

2. Resources

Even when communication is effective and instructions are clear, implementation may still fail if it lacks sufficient resources. This includes:

- **Adequate and Competent Human Resources**
Policy execution requires a sufficient number of personnel who possess the necessary qualifications, skills, and knowledge to perform their duties effectively.
- **Authority**
Implementing actors must have the legal and organizational authority to carry out the assigned tasks in accordance with the policy mandates.
- **Information**
Proper implementation requires access to accurate and in the form of documents, technical guidelines, manuals, and procedures that serve as operational references.
- **Facilities and Infrastructure**
The availability of supporting facilities, tools, and infrastructure is essential to facilitates smooth implementation. These resources must directly support the activities stipulated by the policy.

3. Disposition or Attitude of Implementers

The attitudes of individuals involved in policy execution significantly affect implementation outcomes. When implementers are willing and committed to carrying out the policy without coercion, the likelihood of achieving policy goals increases. Their acceptance and support reflect a positive disposition toward the policy.

4. Bureaucratic Structure

The structure of the bureaucracy plays a vital role in either facilitating or hindering implementation. According to Edward, there are two main characteristics in a bureaucratic system:

- a. **Standard Operating Procedures (SOPs)**
- b. **Fragmentation**
Fragmentation refers to the distribution of responsibilities among different organizational units or agencies in implementing a policy. Although tasks are divided, they must be coordinated to prevent overlap and to ensure that all necessary functions are fulfilled effectively.

Public Service Innovation

The term innovation is now widely recognized across various areas of life and is regarded as a critical factor in addressing and resolving a wide range of issues be it at the individual, societal, organizational, or national level. Within the framework of state-public relations, the government serves as both a facilitator and regulator of public policies. Meanwhile, innovation has emerged as a strategic keyword, particularly when the outcomes or impacts of existing policies are no longer adequate to meet the evolving needs and global dynamics of society.

At this stage, innovation becomes essential to reinforce public policy sectors with broader and more adaptive approaches. Strategic shifts in public policy rooted in innovative thinking should be understood as a necessary step to ensure policies possess elements of novelty and offer meaningful benefits to the broader community. The growing demand for high-quality public policy is one of the driving forces behind the emergence of policies with a strong public orientation policies that go beyond addressing narrow agendas or issues.

Public policy must therefore not exist in an exclusive domain that restricts public engagement or critical questioning. Instead, it should function in tandem with the public, continuously evolving in a dynamic continuum alongside societal development. In this sense, public policy functions much like the brain within the human body. It acts as the central mechanism through which state and societal operations are carried out whether by bureaucratic institutions, the private sector, or civil society (Mulyadi, 2015). Therefore, for public policies to generate real impact and value, they must be guided by policy innovation, which entails expanding and modifying policy content in ways that introduce novelty and practical benefits spanning the stages of policy formulation, implementation, and evaluation.

According to Rogers (1995), innovation can be understood as the introduction of new ideas, technologies, institutional arrangements, behaviors, values, or practices that are perceived as novel by individuals or communities. Such novelty may also result from a process of adaptation or modification. Meanwhile, public policy, as defined by Lasswell and Kaplan (1970), refers to “a projected program of goals, values, and practices.” Conceptually, public policy innovation can be categorized into three key forms:

a. Policy Innovation: New Policy Directions and Initiatives

This involves the introduction of new policy frameworks or directions. Every policy initiative, in principle, should aim to incorporate fresh approaches or original solutions.

b. Innovation in the Policy-Making Process

This form emphasizes improving or transforming the actual process through which policies are formulated, enabling more participatory, responsive, or efficient mechanisms.

c. Policies to Promote Innovation and Its Dissemination

This category refers to policies that are intentionally designed to stimulate, nurture, and spread innovation across sectors, thereby enhancing systemic adaptability and progress.

METHODS

This research explores the implementation of public policy and innovation in public services carried out by the Surabaya City Government, which earned recognition

through the Commendable Public Service Innovation Award at the 2023 Public Service Innovation Competition under the city government category. To examine this case, the study employs a qualitative methodology incorporating a longitudinal data planning approach, based on relevant and credible sources of information that support the validity of the findings (Hughes, 2011).

The research primarily relies on secondary data and acknowledges certain limitations, such as the use of a small sample size and restricted scope of analysis. To interpret the findings, the study adopts the interactive data analysis model developed by Miles and Huberman. This model consists of several inter-related stages: data condensation, data display, and drawing/verifying conclusions (Miles, Huberman, & Saldana, 2014). The process continues with the structured presentation of findings, where data are condensed, filtered, and refined to formulate conclusions. This stage also includes thorough evaluation of data from its initial collection through to final analysis, allowing for the identification of recurring patterns and the development of interpretative insights.

RESULTS/FINDINGS

The implementation of the SayangWarga application represents a strategic initiative by the Surabaya City Government to modernize and streamline public services, particularly in the context of improving community health outcomes and addressing stunting among children. This digital platform enables community health volunteers (Kader Surabaya Hebat) to collect comprehensive household-level data, including information related to maternal health, early childhood development, socioeconomic status, housing conditions, and access to essential public services and enables health centre (Puskesmas) to inform before the baby or toddler were claim as stunting.

The integration of SayangWarga into public service delivery reflects the city's commitment to evidence-based policymaking and digital transformation. By connecting real-time field data with centralized databases, the government can respond more quickly and accurately to the needs of vulnerable groups. The application facilitates early detection of high-risk cases, allowing timely intervention and targeted allocation of health resources.



Figure 4. SayangWarga Application

However, despite its potential, the implementation of the SayangWarga application faces several challenges. These include overlapping menu functions, occasional system inefficiencies, and varying levels of digital literacy among field personnel. Moreover, limited training and inconsistent internet access in certain subdistricts may affect the accuracy and timeliness of data input.

In assessing the implementation of this public service innovation, it is important to consider the four key variables of policy implementation as outlined by George C. Edwards III: communication, resources, disposition, and bureaucratic structure. Clear communication between stakeholders and adequate technical support are essential to ensure uniform understanding and usage of the application. Additionally, the availability of trained personnel, operational equipment, and internet infrastructure significantly influences implementation outcomes.



Figure 5. Accumulated Data on Toddler Stunting for 2022-2025 in the SayangWargaApp

Preliminary findings suggest that the SayangWarga application has improved the government's ability to monitor public health indicators at the grassroots level. Nevertheless, to maximize its impact, continuous system improvement, cross-sector collaboration, and community engagement are critical. Evaluating the application's implementation from both a technical and governance perspective provides insight into its strengths, limitations, and opportunities for scalability across other urban regions.

This section, the researcher analyzes the results of observations regarding various factors, particularly external factors, such as the responses provided by users of the SayangWarga application regarding stunting case data collection. This study examines the implementation of the public policy service system and assistance provided by the Surabaya City Government through the SayangWarga application, based on a theory proposed by Rogers (1995), that conceptually, public policy innovation can be classified into three primary forms:

a) Policy Innovation: New Policy Directions and Initiatives The development of the SayangWarga application exemplifies a strategic shift in local government policy to embrace digital transformation in public service delivery. As an initiative introduced by the Surabaya City Government, it represents a new direction in how data-driven governance is approached, particularly in the health and social sectors. This policy innovation facilitates the integration of household-level data into centralized decision-making processes, enabling more proactive and targeted public health interventions, especially in the reduction of childhood stunting.

b) Innovation in the Policy-Making Process: The application also contributes to transforming the process of public policy formulation. By equipping field volunteers (Kader Surabaya Hebat) and TemanPuskesmas with mobile-based tools to collect real-time, georeferenced data, the SayangWarga application fosters a more responsive and participatory system. This bottom-up approach allows for the inclusion of marginalized voices in public health planning, strengthening evidence-based policymaking and improving the responsiveness of local governance.

c) Policies to Promote Innovation and Its Dissemination: The SayangWarga program reflects a broader policy framework aimed at encouraging innovation diffusion across different administrative units and service domains. By institutionalizing the use of digital tools in community-level monitoring, the Surabaya City Government not only promotes technological adoption but also sets a replicable model for other regions seeking to modernize their public service systems. The initiative aligns with national goals on smart governance and represents a scalable policy instrument for promoting systemic innovation. In summary, the implementation of the SayangWarga application illustrates how a local government can operationalize public policy innovation across all three conceptual categories by introducing a novel digital service, transforming the governance process, and fostering innovation throughout public sector ecosystems.



Figure 6. Trend of decreasing stunting rates in Rungkut District during the 2022-2024 period (managed by the author)

Through the implementation of the SayangWarga application, Rungkut District experienced a decline in stunting rates. In 2022, the program will focus on consolidating data on at-risk families and validating stunting targets. Interventions were not yet optimal, but a foundation for coordination was being built, reaching 3.1%. In 2023, a significant decline of 0.9 percentage points will occur. This was the result of cross-sectoral interventions such as supplementary feeding (PMT), toddler nutrition education integrated health post (Posyandu) training, and increased growth and development monitoring. The decline continued in 2024 to 1.4%, a target that was nearly achieved thanks to a family-based approach, such as mapping by name and address, intensive mentoring of high-risk families, and collaboration between the TPPS (Public Health Unit), cadres, and health workers.

The implementation of this application in Rungkut District, particularly in the RungkutMenanggal and Kalirungkut Villages, has shown quite effective results. Based

on findings from Kalirungkut Village, one of the villages under Rungkut District, the use of this application in population administration services is running smoothly. Field officers are considered responsive, professional, and capable of good communication (Fatlakah, 2023). However, obstacles remain, including a lack of public education and weak transparency and accountability in program implementation. Furthermore, this application has contributed to the reduction of stunting rates in Surabaya, from 28.9 percent in 2021 to 1.6 percent in 2023, reflecting the successful synergy between technology and field cadre performance in providing appropriate and efficient public services. Despite its numerous benefits, the SayangWarga application still faces several challenges, including limited public understanding of its usefulness, low digital skills among community health volunteers (Kader Surabaya Hebat), limited technological facilities, and socio-cultural barriers that impact community participation. Therefore, efforts are needed to increase the capacity of community health volunteers through training, strengthen transparency in program implementation, expand outreach to the neighborhood/community unit (RT/RW) level, and implement a communication approach that is appropriate to the characteristics of the local community. With these steps, SayangWarga has great potential to become a model for inclusive, responsive, and sustainable digital public service innovation, particularly in addressing stunting.

CONCLUSION

The implementation of the SayangWarga application by the Surabaya City Government signifies a progressive step toward modernizing public services through digital innovation, particularly in tackling stunting and enhancing maternal and child health outcomes. By enabling frontline health workers and local volunteers to collect and manage household-level data in real time, the application strengthens the government's capacity to identify at-risk groups and deploy timely, targeted interventions.

Evaluated through the lens of public policy innovation as outlined by Rogers (1995), the SayangWarga initiative exemplifies innovation on three levels: as a new policy direction, as a reform in the policymaking process, and as a driver of broader innovation diffusion. It introduces a novel governance model that integrates technology with grassroots health surveillance, ensuring that local communities receive evidence-based and context-specific public health services. In the case of Rungkut District, measurable progress has been achieved, with stunting rates declining significantly between 2022 and 2024.

This success is attributed to a coordinated effort involving data consolidation, family-based targeting, integrated health services, and active community participation. However, challenges remain. These include limited public awareness, digital literacy gaps among volunteers, and infrastructural constraints that hinder optimal implementation. To enhance the effectiveness and sustainability of the program, efforts must focus on strengthening digital training for field workers, fostering community engagement, and improving transparency and accountability at all levels. By addressing this barriers, the SayangWarga application holds strong potential to serve as a replicable model for other regions aiming to implement inclusive, responsive, and data-driven public health policies. Ultimately, SayangWarga illustrates how digital innovation can bridge systemic gaps in public service delivery, advance the goals of smart governance, and significantly contribute to achieving sustainable public health outcomes in urban communities.

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