International Journal of Environmental Sciences
ISSN: 2229-7359
Vol. 11 No. 4, 2025
https://theaspd.com/index.php

Policy Collaboration And Adaptation In Strengthening Health Services In Ponorogo District

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Abstract
This study explores how cross-sectoral collaboration and adaptive policymaking enhance the resilience of the local health system in Ponorogo Regency, Indonesia. Focusing on the revitalization of Posyandu (Integrated Health Service Posts) and the implementation of the Integrated Primary Health Services (ILP) Program, this qualitative case study employs a phenomenological approach to examine institutional and community dynamics. Data were collected through interviews, observations, FGDs, and documentation, with triangulation ensuring validity. The results highlight the effectiveness of collaborative governance involving village authorities, health cadres, medical staff, and citizens, which fostered participatory and sustainable service delivery. The ILP program, complemented by innovations such as Pesiar and CHEERS, improved access and non-communicable disease screening coverage to 86%. Policy adaptations such as cadre training, use of Village Funds, and the five-table Posyandu model demonstrate how local flexibility overcomes fiscal and geographic constraints. Routine evaluations via mini workshops further institutionalized learning and responsiveness. The Ponorogo case underscores the value of decentralized, context-specific, and inclusive approaches in public health policy. Its model offers practical insights for other regions aiming to develop collaborative, equity-oriented health service systems.

Keywords
Cross-Sector Collaboration, Policy Adaptation, Posyandu, Primary Health Services.

INTRODUCTION

Indonesia has a decentralized system of government, with central, provincial, and district governments responsible for the public health system [1], [2]. As the first level of public health service, primary health care has the main plan to improve health coverage and health status in the catchment area. Therefore, obtaining up-to-date, integrated, and valid community data is essential to improve the utilization of health information. Health Information Systems (HIS) improve the way data is handled, including the collection, analysis, storage, and transfer of data to networks [3], [4]. This ensures that data is processed quickly and of high quality for organizational decision-making.With a population of more than 273 million people, it faces significant challenges in achieving the Sustainable Development Goals (SDGs) in the health sector, especially related to the unequal distribution of health workers [5]. Data shows that the ratio of doctors to population in Indonesia is still far from the standard set by the World Health Organization (WHO), which is 1 doctor per 1,000 population [6]. According to CEO World's 2024 survey, Indonesia ranks 132nd in terms of doctor-to-population ratio, with only 0.7 doctors per 1,000 population [7]. This means each doctor has to treat around 1,517 patients, well above the global average of 1.76 doctors per 1,000 population [7], [8], [9]. This imbalance is more pronounced in remote, border, and island areas, where many puskesmas do not have adequate medical personnel [10]. Geographical and economic factors contribute to this unequal distribution of health workers,

hindering community access to quality health services [4], [11], [12], [13].The government, as a public organization, has the main task of making general public policy, while other functions include regulation, empowerment, development, and service [14], [15], [16]. The regulatory function of the government also acts as a regulator to create the right conditions that allow various activities to take place and create a good social order throughout community life [17]. Health is one example of a government public service [5]. The implementation of health services is one of the government's efforts to create a healthy society [18]. Here, "health services" means any effort made in an organization to improve and maintain health, prevent and cure disease, and restore the health of individuals, families, groups, and communities [8], [12], [19]. The government has built various health facilities, such as hospitals, health centers, and posyandu, to provide medical services to the community [20].Community empowerment is essential to achieve self-reliance in the health sector. One of the main objectives of health promotion is health sector empowerment [21], [22], [23]. Community empowerment is one of the global strategies to promote health [23], [24]. Therefore, it is important to empower the community to want to maintain and improve their health. Posyandu is one way for the government and community to come together [9], [25], [26]. A joint circular letter signed by the Minister of Health, the Head of BKKBN, and the Minister of Home Affairs in 1984 combined various community activities into one organization called Posyandu [27]. The five activities of posyandu in Indonesia, namely MCH, family planning, immunization, nutrition, and diarrhea prevention, use the concept of GOBI-3F, which means growth monitoring, oral hydration, breastfeeding, immunization, women's education, and family planning [25], [28]. The first Posyandu was launched by the President of the Republic of Indonesia in Yogyakarta in 1986, coinciding with the National Health Day. Posyandu functions as a service vehicle for various programs; its implementation must always include elements of community empowerment [8], [9], [29]. Efforts to improve Posyandu focus on the community empowerment aspect. Achieving this requires technical assistance from the Government and collaboration with various groups. One of the objectives of organizing Posyandu is to reduce infant mortality, maternal mortality, and a culture of clean and healthy living [30], [31], [32]. They also want to increase community participation and develop skills in family planning and health activities, as well as other activities that support the creation of a healthy community. Posyandu is focused on serving infants or toddlers, pregnant or breastfeeding mothers, women of childbearing age (WUS), and couples of childbearing age (PUS). Figure 1 provides an overview of Posyandu services in East Java Province based on the latest data. In general, the category with the highest number is "Total Participants" with more than 280 thousand people, indicating the wide reach of Posyandu services in the region. The "Toddlers Served" and "Activity Participants" categories also show very high numbers of over 250 thousand and 218 thousand, respectively, signifying Posyandu's top priority in supporting children's health and their regular programs. Meanwhile, the number of Posyandu cadres was recorded at 46,601 people, who are the backbone in driving this community-based health service. On the other hand, the number of services for adolescents and school-age children is relatively smaller, but still shows an active effort in expanding Posyandu coverage to a wider age group. Overall, this diagram illustrates the central role of Posyandu in maintaining and improving the health status of communities in East Java.

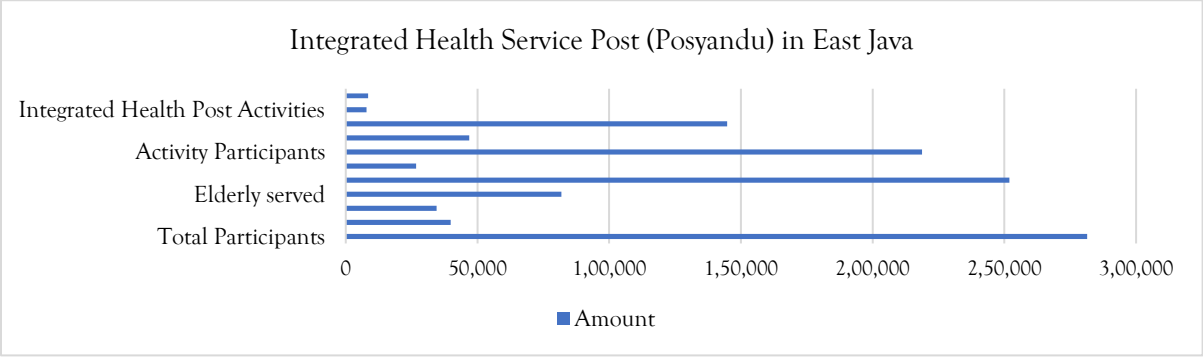


Figure 1 Posyandu service in East Java

To be able to achieve the success of a Posyandu, it is first necessary to know whether the services and programs provided by the Posyandu meet the expectations and needs of the community. Steps that can be taken to assess whether Posyandu services and programs are in line with the expectations and needs of the community are to conduct planning by the needs and preferences of the community served by the Posyandu, in addition to analyzing available health data, such as maternal and infant mortality rates, prevalence of certain diseases, or immunization coverage, to find out the main health problems in the area. This data can help determine the focus of the Posyandu program.In the dynamics of national development, the health sector remains the main pillar in realizing people's welfare [2], [33]. Ponorogo District, located in the East Java region, faces challenges typical of regions with limited resources and accessibility of health services, especially in remote areas [34]. However, in recent years, Ponorogo has shown progressive steps through cross-sector collaboration and innovative policy adaptations to strengthen health services. One strategic initiative is the launch of the Primary Care Integration Program (ILP) in September 2024, which combines services from puskesmas, pembantu puskesmas, posyandu, to clinics in one coordinated system [35], [36]. This program targets the entire life cycle, from fetus to elderly, with promotive, preventive, curative, rehabilitative, and palliative approaches. In addition, the Pesiar Program (Petakan, Sisir, Advokasi, dan Registrasi) was launched to ensure that the entire population is registered with the National Health Insurance (JKN), with a special target on unreached villages.These collaborative efforts not only involve local governments and health institutions, but also community organizations such as Nahdlatul Ulama through the Community Health Empowerment for Early-Detecting and Reintegrating of Schizophrenia (CHEERS) program, which successfully eliminated the practice of shackling and improved mental health services in Ponorogo [37]. The urgency of this discussion is increasing, considering the limitations of the Ponorogo Regional Budget (APBD), which is below IDR 2.5 trillion, forcing the local government to find innovative solutions through collaboration and policy adaptation [34], [38]. This transformation is a clear example of how inter-sectoral synergy can overcome limited resources and improve the quality of health services [21], [34], [39], [40].Input or discussion with all parties, including health workers, to get input on community health needs and effective programs [41], [42], [43]. In addition to planning and activities that are in accordance with public health conditions, it is necessary to evaluate programs that are already running periodically to assess their effectiveness [35], [44]. This may include evaluating service coverage, adherence to the immunization program, quality of service, and the impact of the program on community health, holding regular forums or meetings with the community to discuss the success of the Posyandu program, assess their satisfaction with the services provided, and listen to feedback for improvement [8], [10]. Based on the evaluation results and feedback from the community, Posyandu should be ready to adjust their programs and services to better suit the needs and expectations of the community [19], [45], [46]. By undertaking these steps, Posyandu can ensure that the services and programs they provide match the expectations and needs of the communities they serve, thereby achieving optimal health outcomes and improving the overall well-being of the community [28], [36], [37].This article will take an in-depth look at how policy collaboration and adaptation in the Ponorogo District have contributed to the strengthening of health services. The discussion will include an analysis of the implementation of the ILP and Cruise programs, the role of community organizations in supporting health services, and the challenges and opportunities faced in this transformation process. This approach is expected to provide insights and recommendations for other regions facing similar challenges in the health sector.

LITERATURE SURVEY

Theory of collaborative governance has become one of the most relevant approaches to understanding contemporary public policy dynamics, particularly in the context of regional health services. This paradigm emerged in response to the limitations of traditional governance models, which are overly hierarchical and fragmented and unable to adapt to social complexity. The need for cross-sector collaboration, active community participation, and contextualized policy responses forms the basis for applying this approach to deliver more effective and sustainable public services. Ansell and Gash (2008) first systematically raised the

concept of collaborative governance through a theoretical framework that formulates collaboration as a collective decision-making process between government institutions and non-state actors in a formal, consensual, and deliberative forum [47], [48], [49]. This process involves technical coordination as well as the negotiation of values, interests, and goals to be achieved together. Within this framework, actors who were previously considered only as recipients of policies began participating in their formulation and implementation. Over time, Emerson, Nabatchi, and Balogh (2012) further developed this theory by introducing the Integrative Framework for Collaborative Governance. They identified six components that determine collaboration effectiveness: (1) starting conditions, (2) institutional design, (3) facilitative leadership, (4) the collaborative process, (5) collaborative actions, and (6) adaptation and learning. These six elements are interdependent and form the basis of sustainable collaboration [50], [51], [52].The health sector is a highly complex policy area requiring a collaborative approach due to the involvement of numerous actors with different functions, authorities, and resources. In practice, health services cannot function optimally without cross-sectoral support from areas such as education, infrastructure, regional planning, and social protection. Because health is multidimensional and highly contextual, policy solutions must be adaptive and participatory. According to Choi and Robertson (2014), collaborative governance is an important instrument for bridging the gap between state capacity and community needs in health services [53]. Community participation is important not only for policy legitimacy but also to ensure that health interventions are based on the real needs of local communities. In regional health systems like Indonesia's, collaboration between local governments, health workers, civil society organizations, and traditional and religious leaders has been crucial to improving service accessibility and effectiveness. Furthermore, Bennett et al. (2018) demonstrate that collaborative governance improves the effectiveness of programs combating malnutrition and infectious diseases in various developing countries [54], [55]. They emphasize that collaboration success is determined not only by the number of actors involved but also by the quality of their relationships, trust, and clear coordination mechanisms.In a study on strengthening health services in Ponorogo District, the collaborative governance approach is a highly relevant framework. Collaboration among government agencies (the Health Department, the Regional Development Planning Agency, and the Village Community Empowerment Department), non-governmental organizations, and active community involvement is key to implementing health programs, especially those aimed at accelerating the reduction of stunting. The initial conditions that led to collaboration in Ponorogo were greatly influenced by the high stunting rate, limited health personnel, and geographical conditions that made accessing services difficult in some remote areas. These conditions created an urgent, shared understanding of the need to strengthen health services. According to Emerson et al. (2012), such conditions often trigger collaboration, encouraging different actors to pool their resources and strategies [50]. In Ponorogo, collaborative mechanisms were facilitated through cross-sector forums, such as Village Community Meetings (MMDs), Posyandu coordination forums, and the Community Health Center's (Puskesmas) active role as a technical coordination center. This institutional design enables various actors to participate in planning, implementing, and evaluating health programs. In line with Emerson et al.'s theory, collaborative institutions designed to be inclusive and open increase trust and ownership of resulting policies.Third, facilitative leadership is crucial for maintaining the rhythm of collaboration and addressing potential conflicts of interest among stakeholders. In the Ponorogo case study, the village head, the village health coordinator, and the medical staff played pivotal roles as informal leaders, ensuring the collaboration ran smoothly. These leaders not only served as program spokespersons but also as intermediaries between actors with diverse perspectives and interests. This inclusive, participatory leadership style, as described by Ansell and Gash (2008), is key to long-term collaboration success [47]. Fourth, the collaborative process in Ponorogo is evident through regular cross-sector meetings, open discussions between health workers and the community, and the development of programs based on local needs. This process is deliberative as well as

consultative, with actors actively participating in decision-making. Digital media, such as cross-agency WhatsApp groups and situational monitoring dashboards, serve as important mediums for accelerating coordination and information sharing. Fifth, the collaboration has resulted in concrete actions such as establishing auxiliary health centers in hard-to-reach areas, providing village transportation for the elderly and pregnant women, and managing village-based local food programs. These actions demonstrate that collaboration directly impacts service quality and is not merely symbolic. In line with McGuire (2006), collaboration success is measured by how effectively joint actions can be implemented and monitored [56]. Finally, elements of adaptation and learning are evident in Ponorogo. Regular evaluations of village health indicators, Posyandu cadre training, and comparative village studies demonstrate that the system is open to improvement and innovation. This shows that collaborative governance is not static but dynamic and continues to evolve in response to social changes and community needs.In theory, implementing collaborative governance in Ponorogo supports the idea that this approach effectively addresses structural and social challenges in the region's public services. This study provides empirical evidence that cross-sector collaboration is not only a normative ideal but also a practical reality with measurable results. In practice, Ponorogo's collaboration model can serve as a reference for other regions developing responsive and sustainable health governance. Key elements that can be replicated include flexible institutional design, inclusive leadership, and participatory evaluation mechanisms. This approach also demonstrates that health services cannot be separated from the active role of the community as the primary owners and drivers of change. This study provides empirical evidence that cross-sector collaboration is not only a normative ideal but also a practical reality with measurable results [53], [57], [58]. The collaboration model in Ponorogo can serve as a reference for other regions to develop responsive and sustainable health governance. Flexible institutional design, inclusive leadership, and participatory evaluation mechanisms are key elements that can be replicated. This approach demonstrates that health services cannot be separated from the active role of the community as the primary owners and drivers of change.

METHODOLOGY

This research uses a qualitative approach with a case study method to deeply understand social phenomena related to the successful management of independent Posyandu. This approach was chosen because it allows researchers to explore the roles of stakeholders, social dynamics, and processes that occur in the real context of the community [59], [60]. Research is conducted with direct involvement in the field so that researchers can capture social meaning more accurately. The phenomenological approach is also used to describe how people's perceptions and experiences of Posyandu management, emphasizing the meaning aspects experienced by the subject [60], [61]. The research focused on the dynamics of social behavior and the process of institutional adaptation of Posyandu in responding to various policies, as well as the role of local actors such as village heads, cadres, health workers, and communities.Data collection was conducted through in-depth interviews, direct observation, documentation, and focus group discussions (FGDs), all of which were intended to obtain a comprehensive picture from various perspectives [60], [62]. The researcher, as the main instrument, interacts directly with the research subject, using observation and interview guides to maintain focus on the topic under study. The use of triangulation techniques is carried out to increase confidence in the findings by combining various methods and data sources at different times [63]. Interviews with diverse informants such as village heads, cadres, health workers, and beneficiary communities provided diverse perspectives that enriched the data. Using a purposive sampling technique, informants were selected based on their deep understanding of the context and phenomena under study.To ensure data validity, this study applied the principle of credibility, which refers to internal validity in a qualitative approach [63]. Researchers conducted intensive and continuous observations at the research location, so as to obtain a complete understanding of the social phenomena that occurred. In addition, researchers conducted triangulation, namely by comparing data from various methods (technical triangulation), from various sources (source

triangulation), and at different times (time triangulation) [64]. For example, information from interviews will be confirmed through documentation or observation in the field. Through this approach, the research is expected to avoid subjective bias and increase the credibility of the findings. In some cases, researchers also conduct member checks, which involve asking for direct confirmation from informants on the interpretation of the data obtained.In addition to credibility, this research also meets the criteria of confirmability, which emphasizes that the findings really come from field data, not from the researcher's assumptions. The researcher ensures that the conclusions drawn are the logical result of the data that has been collected through interviews, observations, and documentation. The confirmability technique was carried out through an audit trail, namely tracking the data analysis process from the beginning to the conclusion, as well as the use of triangulation and researcher reflection to ensure objectivity. The researcher also made detailed records of the research process and decisions, which allowed other parties to review the research results transparently. Thus, this research not only describes social reality but also meets scientific standards that can be methodologically accounted for.

RESULTS AND DISCUSSION

The results of this study show that the policy collaboration and adaptation carried out by the Ponorogo District Government have significantly improved the accessibility and quality of public health services, especially in vulnerable groups and remote areas. Posyandu has developed into a strategic primary health care platform in Ponorogo. The Primary Care Integration Program (ILP), launched in September 2024, became an innovative and comprehensive model of health service collaboration [34], [36]. This program integrates services from puskesmas, posyandu, to private clinics in one integrated service system. Collaboration is carried out not only at the technical level between service providers but also strategically through coordination across agencies (DHO, Disdukcapil, and Dinsos) and support from community organizations.

Table 1. Primary Care Integration Program (ILP) Indicators

Indicators	**Before ILP (2023)**	**After ILP (2024)**
Coverage of hypertension screening	48%	65%
Coverage of the early detection of diabetes	42%	62%
Health centers with ILP services	-	82%

Pre-activity coordination, implementation of the five service desks, and post-evaluation showed effective cooperation. The community participation rate statistically reached 86%. This shows that the participatory approach works. Posyandu not only functions as a primary health care point, but has developed into a strategic community-based health service integration center. Based on interviews and field observations, the implementation of Posyandu shows strong cross-sectoral synergy. Posyandu cadres play a key role as technical implementers of activities, ranging from community mobilization, services at Posyandu tables, to recording and reporting health data. On the other hand, health workers from the Puskesmas and village midwives are in charge of providing medical services such as immunization, examination of pregnant women, and health counseling. Meanwhile, the village head acts as a local policy actor who supports the sustainability of Posyandu through village budget allocations, provision of facilities, and regulations based on the Village Decree.

This collaboration is not a mere formality, but is realized in intensive pre-activity coordination through a cross-stakeholder meeting forum, structured Posyandu implementation with a five-table approach (registration, weighing, recording, health services, and counseling), and routine post-activity evaluation through mini village

workshops and reporting to the Health Office. The performance achievement reflected in the community participation rate reaching 86% is evidence of the success of this participatory approach [34], [35], [36]. The high level of attendance, including from vulnerable groups such as toddlers and the elderly, shows that Posyandu has been accepted as an important part of the social and health system of the village community. The integration of roles, sustainability of policy support, and community-based approach make Posyandu in Ponorogo an example of good practice in strengthening primary health care at the local level.

4.1. Stakeholder Involvement in Policy Adaptation

Adaptation to the policy of strengthening posyandu services was responded to by restructuring roles and division of tasks. Cadres were trained and provided with 25 health skills, supported by periodic training from the Puskesmas. The village government allocates the Village Fund and ADD for cadre transport, medical equipment, PMT, and cadre training. This collaboration encourages the implementation of the primary care integration policy as stipulated in the Ponorogo Regent Circular 2024. A five-table system is used in the operation of the posyandu, from registration to counseling. Table four denotes health services. Praminitokarya and minilokarya forums are used to conduct regular evaluations. Data collected include the number of stunted children, immunization coverage, and community participation. In responding to program outcomes, these evaluations show that cadres and health workers have a strong monitoring system and that there is alignment.Village heads serve as key facilitators to support the posyandu program. They allocate budgets, select posyandu administrators, provide facilities, and encourage public participation. The importance of local leadership in implementing national health policies at the village level is demonstrated by the role of the village head. Figure 2 below shows the level of participation of each stakeholder in the management of Posyandu in Ponorogo was used to provide a visual representation of the pattern of participation in the management of Posyandu in Ponorogo. Figure 2 shows the amount of contribution made by each element of the Posyandu cadres, health workers, village government, general public, and beneficiaries in supporting the consistent implementation of Posyandu activities. This visualization supports the results of the qualitative interviews and shows that cross-sector cooperation is critical to the implementation of Posyandu.

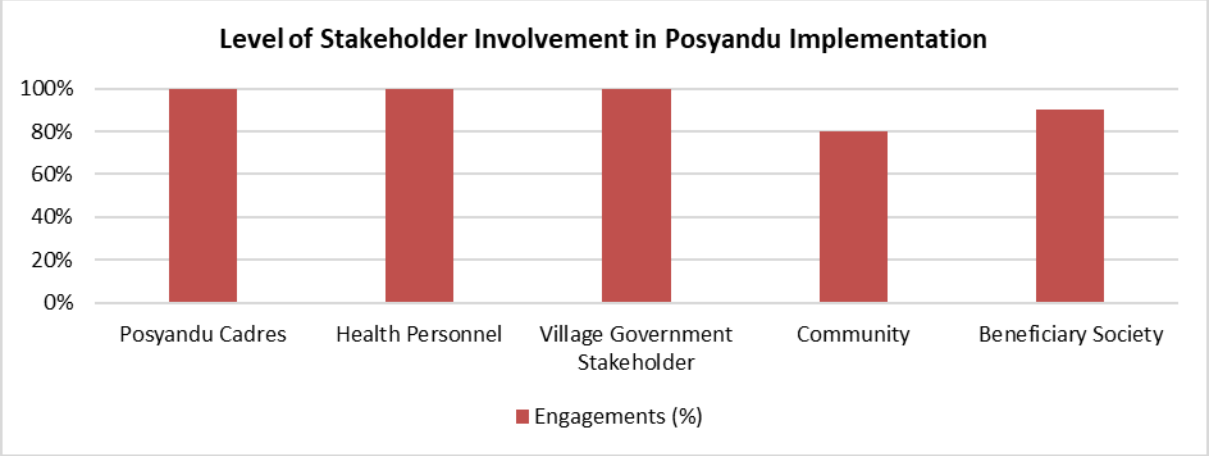


Figure 2. Level of Stakeholder Participation

Figure 2 shows that Posyandu cadres, health workers, and the village government are fully involved. They participated actively and consistently in the various phases of planning, implementation, and evaluation. In addition, the community and beneficiaries showed high levels of participation, at 86% and 90% respectively. This level of participation indicates that everyone knows how important Posyandu is as a primary community-based health service center. This data supports the qualitative conclusion that the strengthening of Posyandu in Ponorogo is not only influenced by official policies and structures, but also by real social participation and collaboration from the whole community. To better understand how cooperation between stakeholders takes place and how adaptive policies are used to improve Posyandu in Bedrug Village, a table of indicators was created that illustrates important elements in the implementation of Posyandu in Bedrug Village. This table

shows the concrete steps that have been taken by the village government, health workers, and Posyandu cadres to adapt national health policies to their needs and conditions.

Table 2 Indicators of Policy Collaboration and Adaptation

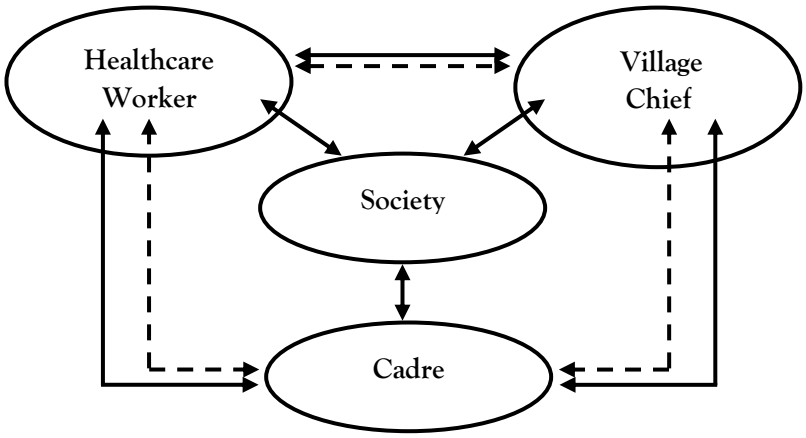
Indicators	Description	Status
Pre-Activity Coordination	Regular meetings between cadres, midwives, and the village government	Implemented
Clear Division of Tasks	Each cadre and health worker has a specific task at each table	Implemented
Cadre Training and Refreshment	Cadres attend training on 25 health skills	Implemented
Alokasi Dana Desa Village Fund Allocation	Village Fund and Village Fund Allocation budgets are used for PMT, medical equipment, etc.	Implemented
Usage 5 Posyandu table	Services are divided into 5 desks for efficiency	Implemented
Evaluation and Monitoring	Evaluation conducted in mini-workshops and village reports	Implemented
Adjustment of the Invitation Schedule	Invitations are timed to reduce queues	Implemented
Elderly Pick-Up Service	The elderly are picked up by the village ambulance so they can still attend	Implemented

The interpretation of Table 2 above shows that all indicators related to policy collaboration and adaptation have been implemented optimally. The existence of intensive coordination before implementation, careful planning through a clear division of tasks, and systematic cadre training are important indicators of the success of this program. Technical adjustments such as the scheduled invitation system and pick-up service for the elderly indicate an adaptive policy response to operational challenges in the field. This collaboration-based approach has not only increased the effectiveness of Posyandu services but also strengthened Posyandu's position as a center for inclusive and sustainable community health services. Health services through Posyandu in Ponorogo District are strengthened by effective cross-sector collaboration and the ability to adapt to primary care integration policies. Solid collaboration between cadres, health workers, village government, and the community has resulted in a service delivery system that is not only participatory but also responsive to local needs. Critical to the successful operation of Posyandu is cadre training based on 25 basic skills, implementation of the five service desks, and regular evaluation through mini-workshops [34].

4.2. Collaboration As A Strategy To Overcome Limitations

This study shows that cross-sector collaboration and responsive policy adaptation are important ways to improve health services in the Ponorogo District. In the context of regional autonomy, synergies between local governments, health service providers, and non-governmental actors such as universities, civil society organizations, and the private sector are critical to the success of public service delivery [65], [66], [67]. This study shows that the Ponorogo District government not only performs administrative functions but also actively participates in assisting and initiating health system changes by strategically collaborating and being flexible with the changes required by the local community.In the context of Ponorogo's limited budget (under IDR 2.5 trillion), collaboration is not only an alternative strategy but has become a structural necessity. The implementation of the ILP Program shows that integration across institutions and sectors can create efficiency and expand the reach of services. This collaboration reflects the whole of government and whole of society approach as recommended by WHO in strengthening primary health systems [68]. The Ponorogo experience shows that the collaborative model enables a clear division of roles between the health, population, social, and civil society sectors. This addresses the classic challenges of the local health sector, namely the fragmentation of services and poor coordination between units.The findings show that health service

governance has undergone a paradigm shift. The top-down and bureaucratic model has shifted to a more collaborative and participatory model. In addressing stunting and delivering basic health services, especially in remote areas, a multi-actor approach is used. This pattern of relationships demonstrates a modern form of governance that relies on a network of actors who have different, but interconnected, interests and authorities in policy network theory. The Cruise Program and CHEERS reflect a form of policy adaptation based on local needs. On the one hand, the Pesiar Program can respond to the low coverage of JKN with a community-based ball pick-up mechanism. On the other hand, the CHEERS Program proves that cultural and religious value-based approaches are effective in overcoming stigma and strengthening mental health services. This is in line with the literature on the importance of adaptive policies that are responsive to local social and cultural contexts [69]. The key to the successful adaptation of the Posyandu service policy in Ponorogo is flexibility in implementation. In this case, the role of the local government is to provide space for innovations coming from below (bottom-up), while maintaining policy direction through regulations and technical support from above (top-down). In addition, the findings of this study support previous research that emphasizes that policy flexibility and innovation are essential to address systemic problems such as inequality of access, limited health workers, and lack of infrastructure in rural areas [34], [35], [36]. Under these circumstances, important strategies to bridge the gap between central policy and field conditions are the development of Puskesmas Pembantu, capacity building of village health cadres, and data integration between agencies. The findings also make a new contribution to the understanding of how health policies can be effectively implemented in a decentralized framework [70], [71], [72]. Collaboration not only accelerates program implementation but also increases the social legitimacy of the policy itself. When the community is involved from planning to evaluation, the sense of ownership of the program increases, which ultimately has a positive impact on the sustainability and success of the health service program.Implicatively, these findings have a significant impact on various fields. The collaborative approach can serve as a model for interdisciplinary education that emphasizes the importance of teamwork and communication between sectors in education. Opportunities for digital innovations based on artificial intelligence and big data are emerging in the technology field due to the need for integrated and locally customizable health information systems [73], [74]. From a social perspective, public participation in public policy strengthens social cohesion and minimizes the distance between citizens and the government [75]. However, in policy terms, the model in Ponorogo District can be applied in other countries with adjustments tailored to local characteristics. Policy adaptation and cooperation are not just a technological tactic, but it is a moral commitment to create equitable, inclusive, and sustainable health services [76], [77]. This research not only confirms that collaboration between actors is important, but also offers insightful thoughts on how public policy should operate, listening, changing, and engaging. The most visible changes were the increase in non-communicable disease (NCD) screening coverage, the expansion of JKN membership, and the successful elimination of the practice of shackling. This shows that structural and social change can be achieved through a combination of appropriate policy strategies and effective collaboration. When linked to the theory of governance networks, Ponorogo has built productive collaborative governance networks between government, civil society, and nongovernmental organizations. Based on the findings from the research on policy collaboration and adaptation in strengthening health services, including the empirical conditions of involvement, implementation of support coordination, and obstacles in the implementation of posyandu, the pattern of relationships between stakeholders is obtained as shown below.



Description:
= Potential Conflict
= Contribution

Figure 3 Pattern of Collaborative Relationship between Stakeholders

In the relationship between health workers and the Village Head, 2 relationships were obtained, namely coordination and reciprocal relationships. The coordination relationship pattern is manifested in the implementation of coordination related to health programs that require support. The implementation of posyandu activities requires coordination, starting from preparations related to the place, schedule, and even coordination related to the availability of facilities to support posyandu. The involvement of health workers in the implementation of posyandu is very optimal in Posyandu Krajan, because coordination between stakeholders is very easy, and all support each other for the successful implementation of posyandu. The role of the village is very large, starting from the preparation of the place of implementation, up to consumables for the benefit of posyandu implementation.Posyandu, following the Regulation of the Minister of Home Affairs Number 19 of 2011 that Posyandu is one form of LKD that functions as a forum for aspirations and participation is a partner of the village or kelurahan government that implements health services and other social services. In carrying out its functional duties, Posyandu proposes programs and activities to the Village government and cooperates in carrying out its duties and functions. The village government is also obliged to manage, empower, and utilize Posyandu to assist the village head in carrying out his/her duties and functions, especially in the health sector. In line with this, puskesmas health workers, who are an extension of the Health Office, use Posyandu as a village community institution to improve community access to basic services, and it is used by those responsible for implementing health development throughout the sub-district.Posyandu management relies on the active involvement of stakeholders such as Posyandu cadres, communities, village government, and local organizations. This engagement includes participation in program planning, implementation, and evaluation. Stakeholder engagement ensures that the health services needed by the community are available and of high quality, and supports the operations and objectives of the Posyandu. By ensuring that all needs and issues can be identified and addressed simultaneously, the active involvement of stakeholders helps to keep the Posyandu system stable and consistent. To ensure that all Posyandu activities proceed as planned and intended, effective coordination between stakeholders is required. Clear task assignment, teamwork, and open communication are essential to ensure the implementation of Posyandu activities. Coordination serves as a mechanism to connect the various parts of the Posyandu system, ensuring that all parts work in harmony. Through good coordination, Posyandu can adapt to changes and challenges as they arise, maintaining the continuity and effectiveness of services.

4.3. Policy Adaptation of Posyandu Services

Posyandu provides benefits in monitoring the health of pregnant women (bumil), toddlers, and postpartum women (bufas) [5]. With posyandu screening, stakeholders can recognize the risk of disease for all ages, from infants to the elderly [38]. This shows how health information provided at posyandu can influence people's behavior in maintaining their health. When individuals receive important information about their health, they are more likely to take the necessary precautions. Posyandu not only serves as a health monitoring center, but also as a means to increase knowledge through counseling and education [34], [38]. Health education provided at posyandu can increase community awareness about the importance of maintaining health. The concept of collaboration emphasizes that changes in knowledge and attitudes can lead to changes in behaviour [78]. In other words, individuals who are more aware of health risks and how to prevent them are more likely to adopt healthier behaviors. Stakeholders involved in posyandu play a key role in delivering information and providing support. Their role as agents of change within the community is crucial. The concept of collaboration notes that individuals are often influenced by authority figures and opinion leaders in their community [79]. In this case, stakeholders help steer community behavior in a more positive direction through the information and support they provide. The results show that posyandu has a positive impact not only on people's physical health but also on social behavior change. By providing health information, education, and social support, posyandu helps empower individuals to take better action in maintaining their health and encourages positive behavior change within the community. Each stakeholder in the posyandu contributes according to their respective duties and authorities, which are described below.

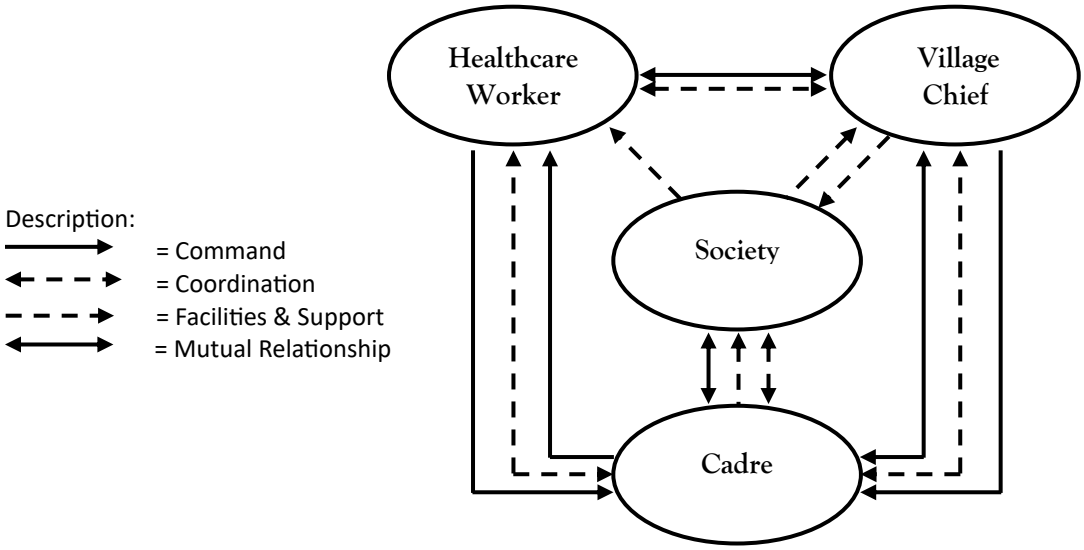


Figure 4. Pattern of Intern-stakeholder Relationship in Policy Adaptation

Contributions made by the Village Head to health workers are material contributions; the Village Head facilitates the implementation of posyandu following the Village's ability. The village provides infrastructure and medical equipment as well as consumables related to the implementation of posyandu. Besides that, the village also contributes in the form of actions, namely, consciously accepting that the activities proposed by health workers have an impact on the degree of public health in Bedrug Village. In addition, the village is also easy to work with and coordinate further, not only posyandu but also other health programs. In the relationship between health workers and cadres, the contribution is in the form of professionalism, where health workers provide training to cadres related to the 25 mandatory competencies required in posyandu services. Information is shared in a two-way manner between the government and the community at the posyandu. Through cadres, midwives, PLKB officers, and assistants, the government can disseminate information on maternal and child health. Information on childbirth, family planning, nutrition, and other

topics is an example. Maternal and child health issues are among the information that communities provide to the government.In social life, humans as social beings depend on each other, need each other, and help each other. They are also often involved in reciprocal relationships, both between individuals and between groups, involving the exchange of goods, services, or favors. In these reciprocal relationships, there is an obligation to reciprocate what the cooperating party has given. In social theory, this is known as social exchange theory. Social exchange theory explains reciprocal actions or relationships between individuals, which involve costs and rewards for their actions. In other words, when someone takes an action, they expect a reward in return for what they have sacrificed [80].In Posyandu, people are motivated to receive rewards in the form of supplementary feeding and believe that coming to Posyandu will improve their health. As for the puskesmas, they benefit in terms of program coverage. For the village, by providing facilities and supporting Posyandu, the health status in Bderug village is improved. Stakeholders in the context of Posyandu include Posyandu cadres, the community, the village government, and local organizations. The dynamics of their social behavior can be discussed in several aspects, namely contributions, potential role conflicts, solutions, and the value of benefits for the continuity of Posyandu. Stakeholders make important contributions in the form of time, energy, knowledge, and resources. Posyandu cadres, for example, play a role in health counseling and implementation of the Posyandu program. The community participates in activities and supports program implementation. Each stakeholder plays a role appropriate to their function in the Posyandu system. Cadres provide health services, the community actively participates, and the village government provides policy and resource support.Stakeholder contributions and cooperation provide significant value to the sustainability of Posyandu. Consistent support and active participation ensure that the Posyandu program can adapt to change and continue to provide the services that the community needs. Stakeholder support and participation help Posyandu to adapt to policy changes, community needs, and other challenges that may arise, maintaining balance and continuity of services. By ensuring stability and adaptability, Posyandu can continue to grow and provide sustainable health benefits to the community, supporting broader public health goals.

CONCLUSION

This study shows that strengthening health services in Ponorogo District relies heavily on two key components: inter-agency collaboration and the ability to adapt policies to local changes. High-quality health services are an important foundation for realizing community well-being. The results show that the transformation of health services in this area is not only influenced by the efforts of the local government, active involvement of the community and strategic collaboration with vertical institutions, health facilities, professional organizations, and other institutions are essential. Effective cooperation can overcome institutional fragmentation and enhance cross-sector collaboration, which in turn accelerates the implementation of important health programs such as primary care change and control of communicable and non-communicable diseases. Meanwhile, to maintain the relevance and effectiveness of interventions, especially amid challenges such as resource constraints, geography, and post-pandemic dynamics, policy adaptation is essential. Ponorogo District can demonstrate a progressive response by adjusting technical policies, improving health human resources, and updating operational procedures at the primary health facility level. Therefore, it can be concluded that the ability of governance to cooperate and adapt greatly influences the strength of sustainable health services in the region. The lessons learned from Ponorogo District show that health system reform can be carried out from the bottom up using an approach that is inclusive and responsive to local needs. It is hoped that this research will serve as an important reference for other fields in the creation of health service strengthening strategies that are based on multi-actor collaboration and flexible to policy changes.

REFERENCES

[1] J. Perrot, *Local Authorities in Strategic Contracting for Health Systems and Services*. Routledge Taylor & Francis Group, 2017. doi: https://doi.org/10.4324/9781315130309.

[2] M. Thoha, A. H. Syawqi, M. Z. Yahaya, D. D. Septiadi, and M. H. Hidayatulloh, "Can Indonesia's Decentralized Education

Technology Governance Policy: Evidence from Muslim Countries," *Bestuur*, vol. 11, no. 2, pp. 217–234, 2023, doi: 10.20961/BESTUUR.V11I2.78320.

[3] M. Doria, W. N. Triwulandari, W. T. Mutika, and T. Eryando, "Use of Information Systems in Maternal and Child Health Services at UPTD Puskesmas Mampang Depok," *J. Kesmas Untika Luwuk Public Heal. J.*, vol. 15, no. 02, pp. 108–116, 2024, doi: https://doi.org/10.51888/phj.v15i2.272.

[4] S. H. Afrizal, P. W. Handayani, A. N. Hidayanto, T. Eryando, M. Budiharsana, and E. Martha, "Barriers and challenges to Primary Health Care Information System (PHCIS) adoption from health management perspective: A qualitative study," *Informatics Med. Unlocked*, vol.. 17, no. April, p. 100198, 2019, doi: 10.1016/j.imu.2019.100198.

[5] T. Aditya, "Service Quality Analysis of Camar Posyandu, Poris Plawad Utara Urban Village, Cipondoh Subdistrict, Tangerang City," *J. Gov.. Civ. Soc.*, vol. 1, no. 2, p. 203, 2018, doi: 10.31000/jgcs.v1i2.445.

[6] G. Intan, "Jokowi: The ratio of doctors to population in Indonesia is very low," VOA Indonesia.

[7] K. Gilang, "Indonesia has the lowest ratio of doctors in the world," GoodStats.

[8] E. Sanora, E. Lorita, and H. Eko, "Policy Evaluation of Posyandu Implementation in Lawang Agung Village, South Bengkulu Regency," *Prof. J. Komun. Adm. PUBLIK*, vol. 11, no. 2, pp. 677–686344, 2024.

[9] K. T. Hermawan and I. G. Pusparani, "Implementation of Stunting Reduction Acceleration Policy in Cirebon City," *J. Borneo Akcaya*, vol. 9, no. 2, pp. 233–248, 2024, doi: 10.51266/borneoakcaya.v9i2.296.

[10] A. S. Nur Azizah, Nastia, "The Health Office's strategy in reducing the rate of stunting in South Buton Regency," *JIP J. Inov. penelitia*, vol. 2, no. 12, pp. 4145–4152, 2022.

[11] A. Soejoto, W. T. Subroto, and Suyanto, "Fiscal decentralization policy in promoting Indonesia's human development," *Int. J. Econ. Financ. Issues*, vol. 5, no. 3, pp. 763–771, 2015.

[12] B. Yudanagara, "Reproductive Health Peer Educators in Tosari District, Pasuruan: Youth Empowerment for Sustainability," *Media Publ. Promosi Kesehatan. Indones.*, vol. 3, no. 2, pp. 148–154, 2020, doi: 10.56338/mppki.v3i2.1085.

[13] A. Mau, E. Noviestari, K. Yetti, T. S. Hariyati, and D. Gayatri, "The culture of caring for the sick in the community in Flores, Sumba, and West Timor of East Nusa Tenggara, Indonesia," *Open Access Maced. J. Med. Sci.*, vol. 9, no. G, pp. 223–230, 2021, doi: 10.3889/oamjms.2021.7084.

[14] T. S. Anderson, C. B. Good, and W. F. Gellad, "Industry Payments to Academic Physicians: a Comparison of Reporting to Two Government Agencies," *J. Gen. Intern. Med..*, vol. 33, no. 10, pp. 1604–1606, 2018, doi: 10.1007/s11606-018-4527-2.

[15] S. S. Nadew, K. G. Michael Beyene, and S. W. Beza, "Adverse drug reaction reporting practice and associated factors among medical doctors in government hospitals in Addis Ababa, Ethiopia," *PLoS One*, vol. 15, no. 1, 2020, doi: 10.1371/journal.pone.0227712.

[16] D. Haryana, "Government Effectiveness in Improving Public Services Through Electronic-Based Government System On Legal Documentation and Information Network, Bangalore City," *Int. J. Policy Public Adm..*, vol. 4, no. 1, p. 2023, 2023, doi: 10.31186/DPPA.

[17] K. Kantamaturapoj *et al.*, "Legislating for public accountability in universal health coverage, Thailand," *Bull. World Health Organ.*, vol. 98, no. 2, pp. 117–125, 2020, doi: 10.2471/BLT.19.239335.

[18] Erialdy, "Community Assistance as a Facilitator in Guiding Musrenbang Activities at the Kelurahan Level," *Din. J. Pengabdi. Kpd. Masy.*, vol. 5, no. 2, pp. 342–348, 2021, doi: 10.31849/dinamisia.v5i2.5244.

[19] H. Amin, A. Tenri, and H. Lanaba, "The Role of Social Assistance in the Implementation of the Family Hope Program (PKH) in Batuawu Village, Siompu District, South Buton Regency," *J. Sosiol. Miabhari*, vol. 1, no. November, pp. 107–126, 2023.

[20] Y. Ndung and M. A. R. Loli, "Public Service Innovation through ARSI (Study in Rampal Celaket Village)," *J. Transform. Gov. Soc. Justice*, vol. 1, no. 2, pp. 114–123, 2023, doi: 10.26905/j-tragos.v1i2.10362.

[21] J. Stephenson *et al.*, "Before the beginning: nutrition and lifestyle in the preconception period and its importance for future health," *Lancet*, vol. 391, no. 10132, pp. 1830–1841, 2018, doi: 10.1016/S0140-6736(18)30311-8.

[22] R. Huang, D. R. Xu, J. Pan, X. Wang, Y. Cheng, and Q. Xue, "The impact of COVID-19 policy stringency on patient satisfaction with community pharmacies in China: A cross-sectional standardized patient study," *J. Health Serv. Res. Policy*, vol. 1, 2025, doi: https://doi.org/10.1177/13558196251330586.

[23] H. W. Chung *et al.*, "Effects of government policies on the spread of COVID-19 worldwide," *Sci. Rep..*, vol. 11, no. 1, pp. 1–10, 2021, doi: 10.1038/s41598-021-99368-9.

[24] J. M. Evans, E. Commisso, and M. Andiappan, "'Misfit' and 'jack of all trades': A qualitative exploration of the structure and functions of a network administrative organisation in Ontario, Canada," *J. Heal. Serv. Res. Policy*, 2025, doi: 10.1177/13558196251330524.

[25] F. R. A. Putri and S. Pohan, "Communication Analysis of Public Services of Posyandu Cadres of Puskesmas Pb Selayang II in Stunting Prevention," *MARAS J. Penelit. Multidisiplin*, vol. 1, no. 3, pp. 543–550, 2023, doi: 10.60126/maras.v1i3.102.

[26] Matsna Haniifah, BJ Istiti Kandarina, and Retna Siwi Padmawati, "District Stakeholder Acceptance in the Development of Pre-Conception Integrated Services," *J. Manaj. Pelayanan Kesehatan. (The Indones. J. Heal. Serv. Manag.*, vol. 24, no. 04, pp. 122–128, 2022, doi: 10.22146/jmpk.v24i04.4164.

[27] I. Amora, "Check out the History of the Establishment of Posyandu on its Commemoration Day," RRI.co.id.

[28] Tempo, "The origins of National Posyandu Day on April 29th," Tempo Magazine.

[29] T. Sunarto and E. Winarti, "Participation and Community Involvement in the Implementation of the First 1000 Days of Life Program at Puskesmas: A Theory Of Planned Behavior Approach," *J. Kesehat. Tambusai*, vol. 5, no. 1, pp. 566–587, 2024.
[30] S. N. Ainiah, Afifuddin, and Hayat, "Implementation of the Posyandu Lanjur Usia (LANSIA) Program in RW 01 Polowijen Village (Case Study at the Elderly Integrated Service Post of Polowijen Village, Blimbing District, Malang City)," *J. Inov. Penelit.*, vol. 1, no. 12, pp. 2861–2868, 2021, doi: https://doi.org/10.47492/jip.v1i12.565.
[31] Herlina and Edi Aryanto, "The Role of Social Capital in Accelerating Stunting Reduction in Agam Regency," *Econ. Digit. Bus. Rev.*., vol. 4, no. 2, pp. 237–252, 2023.
[32] I. M. A. W. W. Putra and A. S. Wardhani, "Decentralization Policy Implementation in Malang City's Public Service," *J-TRAGOS J. Transform. Gov. Soc. Justice*, vol. 2, no. 2, pp. 103–119, 2024, doi: https://doi.org/10.26905/jtragos.v2i2.13387.
[33] M. E. Siburian, "Fiscal decentralization and regional income inequality: evidence from Indonesia," *Appl. Econ. Lett.*, vol. 27, no. 17, pp. 1383–1386, 2020, doi: 10.1080/13504851.2019.1683139.
[34] C. Cotimah, "Efforts to Improve the Quality of Information-Based Toddler Posyandu Services in Maguwan Village, Sambit District, Ponorogo Regency," *J. Community Dev. Disaster Manag.*, vol. 6, no. 1, pp. 1–9, 2024, doi: 10.37680/jcd.v6i1.2921.
[35] A. S. Kusumawardani and P. Muljono, "Correlation of Attitude and Motivation Working with The Perfomance of Posyandu Cadres Case: Coper Village and Kutuwetan Village, Jetis Subdistrict, Ponorogo Ade," *J. Commun. Sci. Community Dev. [JSKPM]*, vol. 2, no. 2, pp. 223–238, 2018, doi: 10.29244/jskpm.2.2.223-238.
[36] L. Widyaningsih, N. Arifianto, and D. C. Prasetya, "Stunting Counseling PowerPoint Media as an Effort to Increase the Knowledge of Mothers of Toddlers in Ponorogo Regency," *NuCSJo Nusant. Community Service J.*, vol. 1, no. 1, pp. 23–29, 2024, doi: https://doi.org/10.70437/73213t54.
[37] S. Sumini and A. Rosyidah, "The correlation knowledge of mother of toddler with interest in the mother of toddler about Taman Posyandu in Posyandu Pos 3 Cokromenggalan, Cokromenggalan Village, Ponorogo District, Ponorogo Regency," *Delima Harapan*, vol. 6, no. 2, pp. 59–68, 2018, doi: https://doi.org/10.31935/delima.v5i2.56.
[38] D. S. T. Astuti, "The Effect of Stunting Prevention Education on the Knowledge of Posyandu Cadres," *Sci. J. Heal.*, vol. 2, no. 2, pp. 83–89, 2022, doi: https://doi.org/10.33221/jikes.v21i2.2020.
[39] X.. Zhao *et al.*, "Factors influencing the quality of preconception healthcare in China: Applying a preconceptional instrument to assess healthcare needs," *BMC Pregnancy Childbirth*, vol. 14, no. 1, 2014, doi: 10.1186/1471-2393-14-360.
[40] M. Sekhon, M. Cartwright, and J. J. Francis, "Acceptability of healthcare interventions: An overview of reviews and development of a theoretical framework," *BMC Health Serv. Res.*, vol. 17, no. 1, 2017, doi: 10.1186/s12913-017-2031-8.
[41] E. Meinert, M. Milne-Ives, S. Surodina, and C. Lam, "Agile Requirements Engineering and Software Planning for a Digital Health Platform to Engage the Effects of Isolation Caused by Social Distancing: Case Study," *JMIR Public Health. Surveill.*, vol. 6, no. 2, 2020, doi: 10.2196/19297.
[42] K. D. Rao, R. Arora, and A. Ghaffar, "Health systems research in the time of health system reform in India: A review," *Heal. Res. Policy Syst.*, vol. 12, no. 1, 2014, doi: 10.1186/1478-4505-12-37.
[43] J. Zhang, L. Gan, L. C. Xu, and Y. Yao, "Health shocks, village elections, and household income: Evidence from rural China," *China Econ. Rev.*, vol. 30, pp. 155–168, 2014, doi: 10.1016/j.chieco.2014.06.006.
[44] F. Fatkhuri, "Decentralization of Education in Indonesia : Corruption and the Problem of Power Politics," *KEMUDI J. Gov. Sci.*, vol. 3, no. 2, pp. 278–297, 2019, doi: 10.31629/kemudi.v3i2.874.
[45] J. H. Prastiwi and I. F. Ulfah, "Political Dynamics in the Establishment and Management of BUMDes: A Study of Three of East Java's Best BUMDes," *J. Sos. Polit.*, vol. 8, no. 1, pp. 78–95, 2022, doi: 10.22219/jurnalsospol.v8i1.20412.
[46] D. Grube, "Administrative learning or political blaming? Public servants, parliamentary committees and the drama of public accountability," *Aust. J. Polit. Sci.*, vol. 49, no. 2, pp. 221–236, 2014, doi: 10.1080/10361146.2014.880402.
[47] C. Ansell and A. Gash, "Collaborative Governance in Theory and Practice," *J. Public Adm.. Res. Theory*, vol. 18, no. 4, pp. 543–571, 2008, doi: 10.1093/jopart/mum032.
[48] C. Ansell and J. Torfing, *Handbook On Theories Of Governance: Second Edition*. 2022. doi: 10.4337/9781800371972.
[49] C. Janssen, T. A. Daamen, and W. J. Verheul, "Governing capabilities, not places – how to understand social sustainability implementation in urban development," *Urban Stud.*, vol. 61, no. 2, pp. 331–349, 2024, doi: 10.1177/00420980231179554.
[50] K. Emerson, T. Nabatchi, and S. Balogh, "An Integrative Framework for Collaborative Governance," *J. Public Adm.. Res. Theory*, vol. 22, no. 1, pp. 1–29, 2012, doi: 10.1093/jopart/mur011.
[51] I. M. A. Prasatya, B. Supriyono, Hermawa, and R. Hermawan, "Model of Collaboration in Police Services in Land Conflict Resolution," *Int. J. Membr. Sci. Technol.*, vol. 10, no. 2, 2023, doi: 10.15379/ijmst.v10i2.1420.
[52] P. C. Schommer and F. Guerzovich, "Collaborative Governance BT - International Encyclopedia of Civil Society," R. A. List, H. K. Anheier, and S. Toepler, Eds., Cham: Springer International Publishing, 2020, pp. 1–9. doi: 10.1007/978-3-319-99675-2_9519-1.
[53] T. Choi and P. J. Robertson, "Deliberation and decision in collaborative governance: A simulation of approaches to mitigate power imbalance," *J. Public Adm.. Res. Theory*, vol. 24, no. 2, pp. 495–518, 2014, doi: 10.1093/jopart/mut003.
[54] D. Bennet, "Collaborative Leadership: The Role of Leadership in an ICAS Organization," 2009, pp. 1–14.
[55] H. Ruton *et al.*, "The impact of an mHealth monitoring system on health care utilization by mothers and children: An evaluation using routine health information in Rwanda," *Health Policy Plan.*, vol. 33, no. 8, pp. 920–927, 2018, doi:

10.1093/heapol/czy066.

[56] M. McGuire, "Collaborative public management: Assessing what we know and how we know it," *Public Adm. Rev.*, vol. 66, no. SUPPL. 1, pp. 33–43, 2006, doi: 10.1111/j.1540-6210.2006.00664.x.

[57] I. A. Wahyunie, P. Sukowati, and I. M. Weni, "TNI Manunggal Membangun Desa : Collaborative Governance in Rural Development in Indonesia," *Int. J. Environ. Sci.*, vol. 11, no. 3, pp. 393–403, 2025, [Online]. Available: https://theaspd.com/index.php/ijes/article/view/1273

[58] J. C. F. De Guimarães, E. A. Severo, L. A. Felix Júnior, W. P. L. B. Da Costa, and F. T. Salmoria, "Governance and quality of life in smart cities: Towards sustainable development goals," *J. Clean. Prod.*, vol. 253, 2020, doi: 10.1016/j.jclepro.2019.119926.

[59] S. W. Waldo, J. M. McCabe, K. F. Kennedy, C. M. Zigler, D. S. Pinto, and R. W. Yeh, "Quality of care at hospitals identifed as outliers in publicly reported mortality statistics for percutaneous coronary intervention," *Circulation*, vol. 135, no. 20, pp. 1897–1907, 2017, doi: 10.1161/CIRCULATIONAHA.116.025998.

[60] J. W. Creswell and J. D. Creswell, *Research Design : Qualitative, Quantitative and Mix Methods Approaches*, 5th ed. California: Sage Publications, 2018.

[61] I. M. A. W. W. Putra and Sajida, "Preparing for the Future Crisis : Lessons from Creative Economic Policies on Micro , Small , and Medium Enterprises in," *Nuansa Akad.*, vol. 8, no. 2, pp. 255–276, 2023, doi: //doi.org/10.47200/jnajpm.v8i2.1688.

[62] S. Phulkerd, M. Lawrence, S. Vandevijvere, G. Sacks, A. Worsley, and V. Tangcharoensathien, "A review of methods and tools to assess the implementation of government policies to create healthy food environments for preventing obesity and diet-related non-communicable diseases," *Implement. Sci.*, vol. 11, no. 1, 2016, doi: 10.1186/s13012-016-0379-5.

[63] M. B. Miles, H. Michael, and J. Saldana, *Qualitative Data Analyst*, 3rd ed. SAGE Publications Asia-Pacific Pte. Ltd, 2014.

[64] M. B. Miles, A. M. Huberman, and J. Saldana, *The Analysis of Qualitatitive Data*, 3rd ed., no. 1. United States of America: SAGE Publications, Inc., 2014. doi: 10.1007/978-1-349-15634-4_8.

[65] S. Mesfin and T. Teka, "The practice of fiscal decentralization at local level in Ethiopia: Evidence from Oromia and Afar Regional States," *Cogent Soc. Sci.*, vol. 9, no. 2, 2023, doi: 10.1080/23311886.2023.2241260.

[66] A. Syarif, "Fiscal Decentralization and Corruption: The Facts of Regional Autonomy Policies in Indonesia," *J. Ilmu Sos. dan Ilmu Polit.*, vol. 27, no. 1, pp. 60–73, 2023, doi: 10.22146/jsp.69007.

[67] S. Muazir, Lestari, N. Muhammad, and R. A. Muhammad, "Measuring & evaluating a competitive & smart border: Village in West Kalimantan Indonesia," *J. Urban Cult. Res.*, vol. 22, pp. 145–163, 2021, doi: 10.14456/jucr.2021.11.

[68] WHO, "WHO Guidlines," Word Helath Organization.

[69] E. M. Patashnik, "Limiting Policy Backlash: Strategies for Taming Countercoalitions in an Era of Polarization," *Ann. Am. Acad. Pol. Soc. Sci.*, vol. 685, no. 1, pp. 47–63, 2019, doi: https://doi.org/10.1177/0002716219862511.

[70] S. Winari, A. Frinaldi, and L. Magriasti, "Decentralization and Regional Autonomy as a Government System that Realizes Equitable Human Resource Development for Golden Indonesia 2045," *Nusant. Soc. Sci. J.*, vol. 11, no. 2, pp. 678–685, 2024, doi: 10.31604/jips.v11i2.2024.678-685.

[71] P. Harsasto, "Decentralization and Recentralization: Balancing the Central-Regional Pendulum," *Sci. J. Gov. Sci.*, vol. 5, no. 2, pp. 149–162, 2020, doi: 10.14710/jiip.v5i2.8593.

[72] A. Luthfi, W. Poespitohadi, I. M. A. W. W. Putra, and D. I. Mawarni, "QUALITY EDUCATION IN ACHIEVING THE SDGS IN INDONESIA," *Mediasosian J. Ilmu Sos. dan Adm. Negara*, vol. 9, no. 01, 2025, doi: https://doi.org/10.30737/mediasosian.v9i1.6699.

[73] C. Silvia, "Collaborative Governance Concepts for Successful Network Leadership," *State Local Gov. Rev.*, vol. 43, no. 1, pp. 66–71, 2011, doi: 10.1177/0160323x11400211.

[74] Y. C. Chen and J. Lee, "Collaborative data networks for public service: governance, management, and performance," *Public Manag. Rev.*, vol. 20, no. 5, pp. 672–690, May 2018, doi: 10.1080/14719037.2017.1305691.

[75] A. Bahrudin and S. A. Hidayat, "Implementation Of Good Governance In Public Services At Office Of East Semarang District," *Public Serv. Gov. J.*, vol. 4, no. 2, pp. 177–192, 2023.

[76] J. Bird *et al.*, "Adapting to climate variability and change in India," 2016, *Springer, International Water Management Institute (IWMI), Colombo, Sri Lanka*. doi: 10.1007/978-981-287-976-9_4.

[77] M. Acosta *et al.*, "Exploring women's differentiated access to climate-smart agricultural interventions in selected climate-smart villages of Latin America," *Sustain.*, vol. 13, no. 19, 2021, doi: 10.3390/su131910951.

[78] W. D. Dawson, N. A. Boucher, R. Stone, and C. H. Van Houtven, "COVID-19: The Time for Collaboration Between Long-Term Services and Supports, Health Care Systems, and Public Health Is Now," *Milbank Q.*, vol. 99, no. 2, pp. 565–594, 2021, doi: 10.1111/1468-0009.12500.

[79] F. Z. Fahmi, M. I. Prawira, D. Hudalah, and T. Firman, "Leadership and collaborative planning: The case of Surakarta, Indonesia," *Plan. Theory*, vol. 15, no. 3, pp. 294–315, 2016, doi: 10.1177/1473095215584655.

[80] S. Mehrotra, "Governance and basic social services: Ensuring accountability in service delivery through deep democratic decentralization," *J. Int. Dev.*, vol. 18, no. 2, pp. 263–283, 2006, doi: 10.1002/jid.1219.