



## Integrating Population Education within Multilevel Governance in Indonesia: A Systematic Literature Review

Maulida Solekhah<sup>1</sup>, Vishnu Juwono<sup>2</sup>

<sup>1</sup>Program Pascasarjana Ilmu Administrasi, Universitas Indonesia, Depok, Indonesia

<sup>2</sup>Fakultas Ilmu Administrasi, Universitas Indonesia, Depok, Indonesia

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### ABSTRACT

*This study examines the integration of population education within Indonesia's multilevel governance (MLG) system, with a focus on formal, non-formal, and informal educational pathways. Using a systematic literature review (SLR) method guided by the PRISMA protocol, thirty peer-reviewed articles and national reports published between 2014 and 2024 were selected based on thematic relevance, empirical rigor, and regional applicability to Indonesia's decentralized context. The analysis reveals a governance imbalance: population education remains concentrated in formal institutions, indicating a dominance of top-down implementation. Conversely, non-formal and informal pathways, despite their potential for community-based innovation, are structurally marginalized. This study contributes new insights by extending Arthur Benz's MLG framework through an Indonesian lens, highlighting how political asymmetry, institutional fragmentation, and uneven intersectoral integration hinder policy adaptation. While coordination challenges persist, the study also identifies emergent opportunities in localized educational networks and digital monitoring platforms as enablers of inclusive governance. It concludes that reconfiguring population education through a multilevel governance perspective requires not only vertical alignment but also robust horizontal collaboration and adaptive linkages across levels of government.*

### ABSTRAK

Penelitian ini mengkaji integrasi pendidikan kependudukan dalam sistem multilevel governance (MLG) di Indonesia, dengan fokus pada jalur pendidikan formal, non-formal, dan informal. Metode yang digunakan adalah systematic literature review (SLR) yang mengikuti protokol PRISMA, dengan menyeleksi tiga puluh artikel ilmiah dan laporan nasional yang diterbitkan antara tahun 2014 hingga 2024 berdasarkan relevansi tematik, ketelitian empiris, dan keterkaitannya dengan konteks desentralisasi di Indonesia. Hasil analisis menunjukkan adanya ketimpangan tata kelola: pendidikan kependudukan masih terpusat pada institusi formal, mencerminkan dominasi pendekatan top-down. Sebaliknya, jalur non-formal dan informal, meskipun memiliki potensi untuk inovasi berbasis komunitas, masih terpinggirkan secara struktural. Studi ini memberikan kontribusi teoretis dengan memperluas kerangka MLG dari Arthur Benz dalam konteks Indonesia, dan

### Kata Kunci:

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\* Corresponding Author

Email : mrvinsa@yahoo.com

menyoroti bagaimana asimetri politik, fragmentasi institusional, serta lemahnya integrasi lintas sektor menghambat adaptasi kebijakan. Meskipun tantangan koordinasi masih dominan, penelitian ini juga mengidentifikasi peluang melalui jejaring pendidikan lokal dan pemanfaatan platform digital sebagai penguat tata kelola inklusif. Dapat disimpulkan bahwa reformasi pendidikan kependudukan dalam kerangka MLG tidak cukup hanya melalui penyelarasan vertikal, melainkan juga membutuhkan kolaborasi horizontal yang kuat dan keterhubungan antar-level pemerintahan yang adaptif.

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## A. INTRODUCTION

Indonesia, the world's fourth most populous country, faces significant demographic challenges (statista, 2024). As of 2024, its population has reached approximately 281.6 million, while the growth rate has exhibited a steady decline from 1.25% in 2020 to 1.11% in 2024. A large population, if effectively managed and developed into a skilled and productive workforce, has the potential to serve as a key driver of national development (BKKBN, 2024). These demographic trends present both challenges and strategic opportunities for Indonesia's population management efforts. Key indicators, such as the Population Growth Rate (PGR) and Total Fertility Rate (TFR), have shown positive trends, with TFR declining to 2.14 per woman of reproductive age (BKKBN, 2024). Despite the decline, Indonesia's TFR remains slightly above the replacement level, indicating the need for sustained policy interventions.

Ideally, public policies are designed to define key issues, establish clear objectives, and provide a structured framework for implementation (Rahayu & Juwono, 2023). The effectiveness of a policy can be evaluated, in part, by examining how it is carried out during the implementation phase (Rahayu & Juwono, 2018). In the context of population control, education has emerged as a preventive and long-term strategy to foster demographic awareness, particularly among youth. Recognizing this, Indonesia has institutionalized population education through various regulatory instruments, such as, such as Law No. 52 of 2009 concerning population development and family planning (Gischa, 2022) and Law No. 23/2014 specifically in Article 12, which stipulates that population control and family planning programs are among the mandatory governmental affairs under the jurisdiction of regional governments on Regional Government. Consequently, regional stakeholders and partner institutions are obligated to implement collaborative initiatives in population education across formal, non-formal, and informal channels, reflecting the central role of education in Indonesia's demographic strategy.

In response to national demographic challenges, population education has been gradually integrated into Indonesia's broader education and research agenda through formal collaborations between government agencies. One such initiative is the Memorandum of Understanding (MoU) between the National Population and Family Planning Board (BKKBN) and the Ministry of Research, Technology, and Higher Education (No. 21/M/NK/2016 & No. 450/KSM/G2/2016), which formalizes the integration of population, family planning, and family development programs (KKBPK) into research, communication, and education activities within higher education institutions. While not directly targeting primary and secondary curricula, this MoU reflects a strategic shift toward embedding population issues into the academic and institutional landscape of universities. It encourages interdisciplinary research, technological innovation, and advocacy to promote demographic literacy and informed policy-making. These efforts complement existing formal, non-formal, and informal education pathways, where population education is delivered through school curricula,

community-based youth programs, and family or media interactions. Together, these multichannel approaches highlight Indonesia's attempt to cultivate a population-aware citizenry through both top-down policy mechanisms and localized educational interventions.

In Indonesia, population education is delivered through three main educational pathways: formal, non-formal, and informal. Each pathway plays a complementary role in raising demographic awareness and shaping population-related behavior. Formal education integrates population topics into the national curriculum across all levels, from elementary to higher education, often through subjects such as reproductive health, sustainable development, and family planning. Non-formal education reaches out-of-school youth and professionals through community programs, training modules, and youth organizations such as Saka Kencana. Informal education, meanwhile, occurs organically within families, peer networks, and media environments, often facilitated by community leaders and cultural influencers. While this multichannel approach expands the reach of population education, it also introduces institutional complexity. Each pathway involves different managing bodies, funding mechanisms, and accountability structures, ranging from ministries and regional education offices to NGOs and local communities. These institutional distinctions require coherent governance coordination, which remains a persistent challenge within Indonesia's decentralized system.

Despite these institutional developments, the governance structure underlying population education in Indonesia remains fragmented and uneven. The decentralized nature of the education and population policy systems presents persistent coordination challenges. Multiple actors, ranging from national institutions such as BKKBN and the Ministry of Religious Affairs to regional education offices and local community organizations, operate across different administrative levels with overlapping mandates and limited inter-institutional synergy. These dynamics often result in inconsistent implementation, duplicated efforts, and reduced outreach, particularly in non-formal and informal learning environments where coordination is less structured. At the same time, extensive cross-national evidence confirms that increased female educational attainment is strongly associated with delayed age at first marriage, reduced fertility intentions, and greater utilization of reproductive health services (UNESCO, 2024; Bongaarts et al., 2017). This reinforces the critical role of population education as a long-term demographic investment. Yet, unless such education is integrated through coherent multilevel coordination mechanisms, its potential remains underutilized. These conditions highlight the need to examine population education not only as a pedagogical instrument, but as a governance concern situated within a complex multilevel structure.

To address these governance challenges, a more nuanced analytical lens is needed. One that captures both institutional complexity and inter-level dynamics. Multilevel Governance (MLG) provides a compelling framework to analyze the governance arrangements inherent in population education delivery. MLG conceptualizes policymaking and implementation as processes that are distributed across multiple tiers of government and shaped by the interaction of diverse institutional actors (Piattoni, 2010). The concept of Multilevel Governance (MLG) primarily engages with the restructuring of governmental systems, as well as the dynamics of competition and cooperation among different levels of government (Adriyana & Juwono, 2021). It emphasizes three core dimensions: vertical dynamics, referring to the coordination between central, provincial, and district authorities; horizontal dynamics, involving inter-agency collaboration within the same jurisdictional level; and the linkage between interlevel governance and domestic politics, which captures how policies are interpreted, negotiated, and reshaped by local actors based on context-specific values, power structures, and institutional capacities (Benz, 2024).

Population education in Indonesia is disseminated through three primary educational pathways: formal, non-formal, and informal. Each pathway plays a distinct role in fostering demographic awareness and literacy among different segments of the population. Formal population education is integrated into the national curriculum across various educational levels, including elementary schools (SD/MI), junior high schools (SMP/MTs), senior high schools (SMA/MA), and higher education institutions. The curriculum encompasses topics such as family planning, reproductive health, and sustainable development. Higher education institutions often incorporate population studies into courses like sociology, public health, and environmental science. Non-formal population education targets individuals outside the formal education system, including youth groups, community organizations, and professional bodies. Programs are delivered through workshops, training sessions, and community outreach initiatives. For instance, the Saka Kencana program under the Indonesian Scout Movement provides population education to adolescents, while training centers offer courses for civil servants to integrate population considerations into policy-making. Informal population education occurs within families and communities through everyday interactions and media exposure. This includes discussions on family size, health practices, and environmental stewardship. Community leaders and local influencers often play a pivotal role in disseminating population-related information, thereby shaping attitudes and behaviors at the grassroots level.

While MLG has been extensively applied in European settings, particularly within the context of EU policy harmonization and structural funds, its application in developing and decentralized contexts remains underexplored. Indonesia's governance landscape, which is characterized by asymmetric decentralization, uneven subnational capacity, and the active involvement of informal actors such as religious leaders, educators, and community facilitators, offers a distinctive empirical ground to extend the explanatory power of MLG. These features introduce institutional pluralism and overlapping authority structures that are rarely present in the highly structured governance models of Europe. By applying the MLG perspective to population education, this study seeks to uncover how national-level policy goals are interpreted, translated, or even contested across governance levels, and how coordination or the lack thereof shapes policy effectiveness on the ground. This theoretical lens enables a shift from viewing population education as a technical or curricular intervention to understanding it as a governance process influenced by institutional arrangements, actor networks, and multilevel political dynamics.

While population education has been widely studied in Indonesia, much of the existing literature tends to focus on curriculum integration, behavioral outcomes, or demographic indicators. These studies often examine education delivery as a pedagogical or programmatic issue, without systematically analyzing the governance structures and institutional coordination that underlie implementation across different levels. Moreover, very few studies have employed a governance lens, let alone the multilevel governance framework to assess how institutional fragmentation, unclear role divisions, or inter-sectoral disconnects shape the effectiveness of population education programs.

Given the dispersed and interdisciplinary nature of existing research, there is a need for a method that can consolidate diverse findings and evaluate them through a unified analytical framework. A Systematic Literature Review (SLR) offers such a method. As outlined by Keele (2007) and Fink (2019), SLR allows for a transparent, rigorous, and replicable process of identifying, selecting, and synthesizing scholarly literature. By employing SLR, this study is able to map thematic patterns, identify conceptual gaps, and critically assess the extent to which MLG principles have been reflected or neglected in the implementation of population education initiatives in Indonesia. This approach not only enhances the validity of findings but also contributes to theory development by applying MLG in a new policy and geographic setting.

Given the fragmented nature of governance arrangements in Indonesia and the limited application of multilevel frameworks to population education, there remains a need to understand how coordination challenges impact policy implementation. Addressing this knowledge gap is essential not only for improving population education outcomes, but also for refining governance strategies in decentralized systems more broadly. This study is therefore guided by the following research question: *What are the challenges and opportunities in integrating population education within Indonesia's multilevel governance framework?*. By answering this question, the study aims to offer practical insights for policymakers and governance stakeholders while contributing theoretical refinement to the application of MLG in decentralized developing country settings.

## **B. LITERATURE REVIEW**

Population control policies are typically designed to regulate demographic changes by influencing birth rates, migration patterns, and the pace of demographic transitions. These policies, often formulated and implemented by political authorities, are deeply intertwined with cultural, religious, and political contexts. This theoretical framework underscores the historical and socio-political dimensions of population control, providing a lens to critically analyze its implications and strategies within contemporary contexts (Freedman, 2014). According to May (2022), population policies can be defined as “actions taken explicitly or implicitly by public authorities, in order to prevent, delay, or address imbalances between demographic changes and socio-economic, environmental, and political goals”. This definition reflects the dual role of population policy as both a demographic intervention and a developmental strategy.

Global experiences further illustrate how these policies must adapt to diverging demographic realities. In sub-Saharan Africa, for example, persistently high fertility rates and rapid population growth have led to increased international support for family planning initiatives (May & Goldstone, 2022). In contrast, aging societies in Europe and East Asia such as Italy and Japan, grapple with shrinking workforces and rising old-age dependency ratios, prompting pronatalist policies like subsidized childcare and extended parental leave (UN DESA, 2024; Goldstone et al., 2019). These contrasting policy directions fertility suppression in some contexts and stimulation in others highlight the necessity of context-sensitive strategies. Indonesia, positioned between these demographic poles, must confront a dual challenge: reducing fertility rates in some regions while addressing early signs of population aging in others. In this context, population education becomes a strategic tool that fosters demographic literacy and encourages informed decision-making across the life course. It plays a pivotal role in shifting long-term reproductive behavior, enhancing civic awareness, and preparing citizens to engage with the demands of sustainable development.

These global demographic challenges not only demand policy adaptability but also underscore the importance of effective governance structures. Cross-national experiences highlight the diverse governance dynamics that shape education and population policies in decentralized settings. For example, Sicilia et al. (2016) examine how multi-level governance arrangements in Italy and Spain require not only formal coordination across government tiers, but also emphasize the role of co-production with civil society actors to ensure effective public service delivery. In the context of Canada, Tamtik and Colorado (2022) show how multi-level governance in education policy involves intergovernmental negotiation, institutional autonomy, and the strategic alignment of national priorities with local implementation, particularly in multicultural and linguistically diverse environments. Meanwhile, in the European Neighborhood countries, vocational education and training (VET) policies illustrate how MLG frameworks can either enable or constrain reforms depending on the balance of authority between national ministries, local actors, and international donors. These cases



underscore that the effectiveness of MLG does not lie solely in formal institutional design, but in how coordination mechanisms, policy capacities, and actor networks interact across levels. This reinforces the analytical relevance of MLG for understanding Indonesia's population education context, where decentralized governance, asymmetric local capacity, and informal actor involvement produce complex implementation outcomes.

In Indonesia, the shift toward population education reflects a broader transformation in population control strategies, moving from predominantly health-centered interventions to behavior-oriented, long-term approaches. Population education is now recognized as a foundational tool to build demographic literacy, empower reproductive decision-making, and prepare citizens for sustainable development challenges. It supports the realization of the demographic dividend by fostering informed behavior related to family planning, health, and environmental responsibility. This policy reorientation evident in regulatory frameworks and institutional commitments, demonstrates that education is not merely a vehicle for awareness, but a strategic investment in demographic resilience.

Translating population education policy into practice demands robust coordination across governance levels and institutional sectors. Multilevel Governance (MLG) offers a comprehensive analytical lens to understand how national agendas such as those formulated by BKKBN are interpreted, adapted, and implemented by subnational authorities and frontline actors, including schools. Based on Benz's MLG framework, this study explores three interrelated dimensions: vertical coordination between central and local governments; horizontal collaboration among agencies at the same level, such as education and family planning offices; and the linkage between interlevel governance and domestic political agency, particularly how schools and communities negotiate and localize national policy objectives. Despite Indonesia's formal commitment to decentralization, local actors frequently face institutional, financial, and capacity constraints that limit their ability to adapt and implement policies effectively. Nevertheless, frontline institutions occasionally exercise discretionary power, enabling localized innovations within the bounds of national policy. This analysis positions MLG as both a structural and relational tool to unpack the governance complexities of population education in decentralized contexts like Indonesia. In light of these conceptual foundations, the following section presents the systematic literature review method employed to examine how population education is governed across multiple levels in Indonesia.

### C. METHOD

This study employs a Systematic Literature Review (SLR) method guided by the PRISMA protocol to ensure transparency, rigor, and replicability. The SLR approach enables a structured process for identifying, evaluating, and synthesizing academic and institutional literature relevant to population education and multilevel governance in Indonesia. The literature search focused on peer-reviewed journal articles, policy papers, and institutional reports published in the last ten years (2015–2025) and written in English. Databases used for this search included Scopus, ScienceDirect, Taylor & Francis, SpringerLink, Sage Journal, JSTOR, and Oxford Academi. The keywords used included combinations of “population education,” “population policy,” “governance,” “multilevel governance,” “decentralization,” and “Indonesia.” The PRISMA flow diagram (see Figure 1) illustrates the process of identification, screening, eligibility, and inclusion of studies.

To analyze the selected studies, this review adopted a framework synthesis approach using Benz's (2024) Multilevel Governance (MLG) model as the analytical framework. The MLG framework consists of three key dimensions:

- a. Vertical coordination: interactions and policy alignment between national, provincial, and district authorities;

- b. Horizontal collaboration: inter-agency coordination at the same administrative level (e.g., between education offices and population agencies);
- c. Linkages between interlevel governance and local agency: how frontline actors such as schools or communities reinterpret and adjust national policies based on local political, institutional, and cultural contexts.

Each included study was reviewed and coded thematically to assess the extent to which these three MLG dimensions were explicitly addressed, implicitly present, or absent. Thematic synthesis was then conducted to map dominant governance patterns, coordination gaps, and conceptual tensions in the population education discourse. This analytical strategy enables the study to trace the presence or absence of MLG principles in the literature and to evaluate how these dynamics affect the effectiveness of population education implementation in a decentralized governance setting.

#### **D. RESULT AND DISCUSSION**

This section presents the findings from the systematic literature review (SLR) guided by the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) protocol. The results are categorized based on recurring themes identified across the academic literature and official institutional documents.

While the selected studies span multiple governance and education contexts, their theoretical and empirical contributions are particularly relevant for understanding the dynamics of multilevel governance in Indonesia. Several of the included works provide insight into coordination mechanisms, institutional fragmentation, and intergovernmental relations under decentralized systems. Factors that strongly mirror the challenges faced in Indonesian population education policy implementation. Therefore, although not all studies are directly situated in Indonesia, their findings offer transferable lessons and comparative perspectives that enrich the application of MLG theory in the Indonesian setting.

The primary objective of this section is to answer the research question and provide a structured interpretation of the key issues contributing to a deeper understanding of how MLG can be leveraged to address coordination challenges in population education efforts.

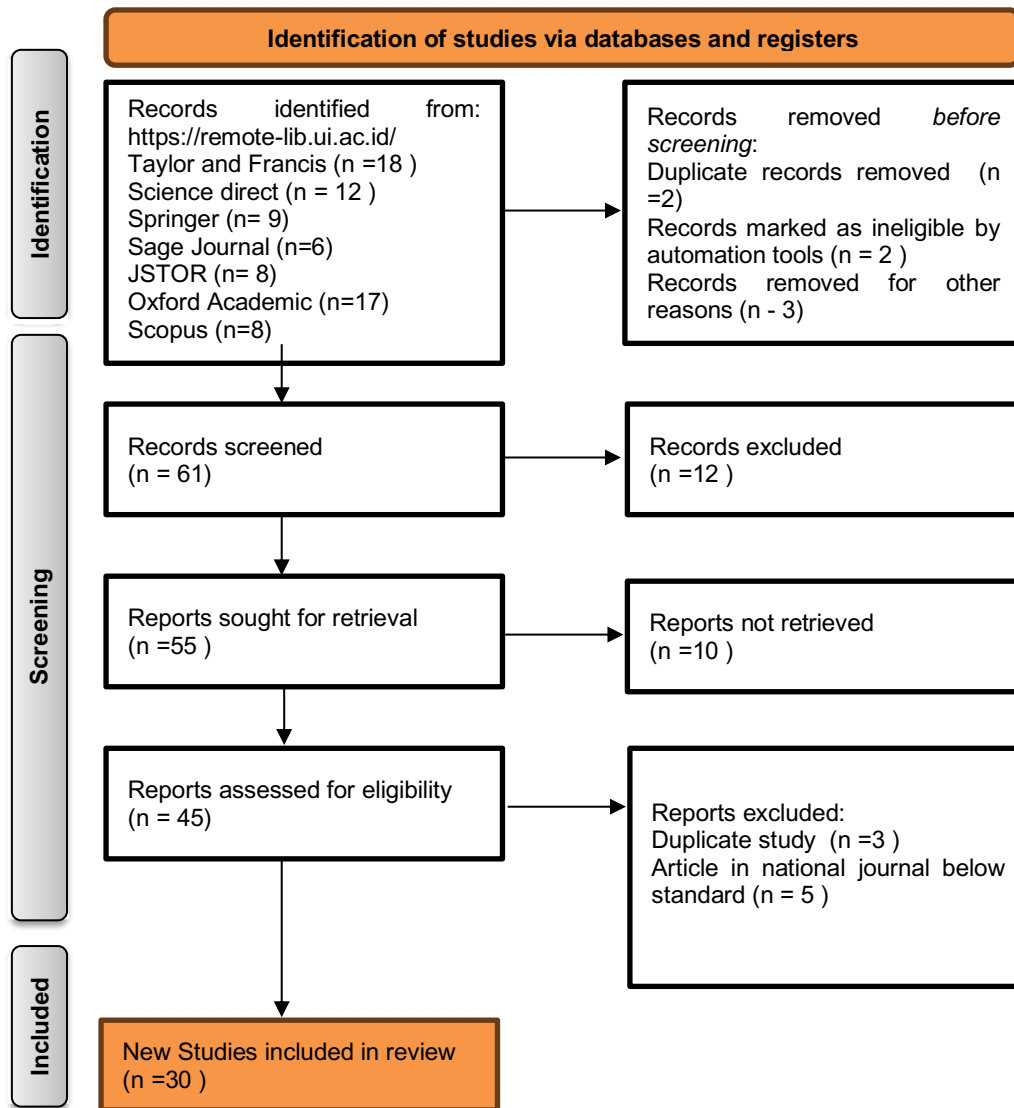


Figure 1. PRISMA Flow Diagram of the Systematic Literature Review on Population Education and Multilevel Governance

#### 4.1. Overview of Key Findings

The systematic review identified four interrelated thematic factors that shape the integration of population education within multilevel governance (MLG) frameworks, particularly under Indonesia's decentralized administrative context. These factors are not only recurrent across the 30 selected studies but also reflect structural tensions and institutional dynamics that resonate with Arthur Benz's (2024) analytical dimensions of vertical governance, horizontal coordination, and linkages between intergovernmental levels and domestic politics.

##### 1. Governance Fragmentation and Role Ambiguity emerged as a dominant theme.

Multiple studies (Tamtik & Colorado, 2022; Galvin Arribas, 2016; Feltenius, 2015) highlight persistent overlaps in institutional mandates and unclear jurisdictional boundaries, resulting in inconsistent policy execution across national, provincial, and local levels. This fragmentation exemplifies the weaknesses in vertical governance, where the absence of clearly institutionalized authority relations and insufficient mechanisms for



inter-level coordination lead to policy dilution. However, the Indonesian case may further complicate Benz's vertical logic by showing that fragmentation is not only a matter of design but also shaped by competing political interests and administrative inertia.

2. The Variation in local responsiveness and administrative capacity significantly influences implementation outcomes

As evidenced in studies of population education programs, (including Indonesia's own Population Alert Schools (SSK) initiatives), subnational actors often display differentiated capabilities in interpreting and adapting central policies (Abdiyah et al., 2020; Keyes & Benavides, 2017; Schapper, 2017). This reflects horizontal governance, where cross-sectoral collaboration and institutional flexibility are critical for contextualizing policies to local needs. While Benz underscores the importance of lateral coordination, the empirical findings suggest that the effectiveness of such governance is often contingent upon pre-existing bureaucratic cultures and the presence of localized leadership, thus calling for a more agency-sensitive interpretation of horizontal interactions.

3. Sociocultural Context and Political will deeply mediate the adoption and institutionalization of population education

Cultural attitudes toward demography, public discourse on family planning, and the ideological leanings of subnational elites affect how policy is received and reshaped (van Dalen & Henkens, 2021; May, 2017; Zhang, 2017). These dynamics correspond with what Benz terms the linkage between inter-level politics and domestic settings, where national directives must be translated and renegotiated within locally embedded norms and power structures. Unlike Benz's relatively neutral conceptualization, however, the Indonesian context reveals that political will both supportive and obstructive, functions as a gatekeeping mechanism that determines whether policy reform is performative or substantive.

4. Coordination failures cannot be solely attributed to governance design.

While MLG offers a robust heuristic for diagnosing structural and procedural gaps, several studies also point to alternative explanatory variables including political patronage, entrenched bureaucratic silos, and fiscal dependency that operate outside of MLG's core assumptions. These findings suggest the need to extend Benz's framework to better account for political economy constraints that intersect with governance architectures.

Table 1 provides a thematic synthesis of the 30 academic studies included in this systematic review. Each study is summarized based on its primary focus, relevant keywords, and contributions to understanding the governance dynamics surrounding population education. Rather than applying a fixed analytical framework, the table highlights recurring challenges such as institutional fragmentation, coordination deficits, and policy adaptability that inform the broader discussion on multilevel governance (MLG). This tabular overview supports the identification of key themes that will be further elaborated in the subsequent sections.

**Table 1.** Summary of Key Literature on Multi-Level Governance and Population Education (Structured Using Benz's Theoretical Framework)

Multi-level Governance source	Population Education Source	Integration factor	Relevance to Research
Merli Tamtik & Cara Colorado (2022)	Restu Ulfah (2021)	Education governance in decentralized systems	Demonstrates how stakeholder collaboration shapes education policies under MLG
J. Manuel Galvin Arribas (2016)	John Bongaarts et al. (2017)	Cross-level education governance supports policy flexibility and accountability, applicable to population education frameworks.	Shows how multilevel coordination can enhance the relevance of population education by aligning policy goals with demographic transitions.
Andrea Schapper (2017)	John F. May (2017)	MLG enables localization of international norms through multi-actor collaboration.	Highlights inter-level cooperation in rights-based education for children and how political will affect population policy success.
Laura Keyes & Abraham Benavides (2017)	Abdiyah et al. (2020)	Local responsiveness and multilevel collaboration in education delivery.	Illustrates effective grassroots policy making aligned with multilevel support
David Feltenius (2015)	Hendrik p,van dalen and Kène Henkens	Local actors bridge formal rules with demographic realities.	Reinforces the need for adaptive, context-driven governance in population education.
Maria Vincenza Ciasullo et al. (2020)	Junsen Zhang (2017)	Ecosystem-based MLG aligns stakeholder goals in social innovation.	Underscores the need for coordinated, long-term education strategies in population governance.

#### 4.2. Thematic Synthesis of Multilevel Governance Dimensions

Population education plays a vital role in shaping a demographically literate and development-oriented society. It empowers individuals, particularly youth with essential knowledge on family planning, reproductive health, and sustainable development. Within Indonesia's decentralized governance framework, the implementation of population education is mediated by complex and often fragmented institutional arrangements. This complexity positions Multilevel Governance (MLG) as a relevant analytical framework to explore the coordination challenges and actor dynamics involved.

Building on Arthur Benz's (2024) conceptualization, this section applies three interrelated dimensions of MLG as thematic anchors:

1. Vertical governance, referring to intergovernmental relations across different administrative levels (national, provincial, and local),
2. Horizontal governance, defined here as collaboration between institutions or sectors operating at the same governance level (e.g., education, health, religious affairs), and
3. Linkages, capturing the political, administrative, and social mechanisms that connect multilevel actors, including non-state entities and community stakeholders.

This section revisits the literature and empirical findings through these dimensions, not merely to confirm theoretical categories, but to reflect critically on the applicability and limitations of MLG when situated within Indonesia's unique governance ecology.

##### 1. Vertical Governance: Intergovernmental Coordination

Vertical governance is often presumed to rely on clearly defined mandates, top-down policy coherence, and regular intergovernmental communication. Studies such as Tamtik & Colorado (2022) and Restu Ulfah (2021) affirm that the absence of structured vertical coordination leads to inconsistent implementation across national and subnational actors. In

Indonesia, the education sector illustrates how national-level population education programs, such as standardized curricula or centrally designed demographic modules often fail to adapt to local conditions due to poor alignment between the Ministry of Education and local education offices. While Benz (2024) conceptualizes vertical governance as an institutional coordination problem, Indonesian decentralization reveals that vertical gaps are not only structural but also political. Local governments may selectively adopt central policies based on electoral incentives, bureaucratic inaction, or localized resistance. This suggests that vertical coordination must be understood not merely as a technical challenge, but as a contested space where authority is negotiated, and national intentions are refracted through complex local political dynamics. Benz's model may therefore require adjustment to fully account for these political economy realities in decentralized systems.

## **2. Horizontal Coordination: Intersectoral and Multiactor Synergy**

Horizontal governance refers to coordination among institutions at the same administrative level, such as education, health, youth, and religious affairs offices. In population education, such intersectoral collaboration enables policy flexibility and local adaptation, as shown by Bonagerts et al. (2017) and Abdiyah et al. (2020). Local innovations like partnerships with community and religious organizations, illustrate the potential of horizontal coordination to extend outreach beyond formal systems. However, implementation remains inconsistent. Studies note recurring barriers such as institutional silos, budget fragmentation, and weak participatory mechanisms. While Benz (2024) presents horizontal governance as a functional process among co-level actors, the Indonesian context reveals that coordination often arises from informal networks or project-driven alliances, rather than institutional design. This challenges the neutrality of Benz's assumption and suggests a need to integrate considerations of bureaucratic culture and inter-agency competition. Additionally, the reviewed literature shows conceptual inconsistency. Terms like "horizontal coordination," "multi-actor synergy," and "cross-sectoral collaboration" are used interchangeably, often without clarifying whether cooperation is formalized or ad hoc. Only a few studies, such as Abdiyah et al. (2020), offer empirical depth, while others rely on normative or descriptive accounts. These variations in analytical rigor underscore the need for a more critical understanding of how horizontal coordination functions in fragmented governance environments like Indonesia.

## **3. Linkages Between Levels: Political, Administrative, and Social Integration**

The third dimension, linkages between levels concerns the formal and informal connections that bridge national policy objectives with local implementation realities. Studies such as Feltenius et al. (2015) emphasize that local actors play a crucial role in translating high-level demographic goals into concrete strategies, particularly through community-based and non-state education initiatives. These linkages often reflect collaborative, adaptive forms of governance that operate outside traditional administrative hierarchies. However, the Indonesian context reveals that such cross-level integration remains uneven and poorly institutionalized. While community groups, women's organizations, and village-based actors often initiate valuable population education efforts, these initiatives frequently lack sustained support, monitoring, or feedback mechanisms to inform national planning. This calls into question the assumption within Benz's (2024) framework that inter-level linkages naturally emerge from shared objectives. In practice, linkages are contingent on local leadership, informal networks, and political incentives, which may or may not align with formal structures.

Furthermore, only a subset of the reviewed studies explicitly explore the quality or effectiveness of these linkages, with most accounts remaining descriptive or normative. This limits the generalizability of the findings and suggests that a more political economy-informed approach is needed to fully understand how demographic goals travel between levels of government in Indonesia. The following table provides a national snapshot of how population education is distributed across formal, non-formal, and informal education channels, offering an empirical entry point to analyze the presence and imbalance of multilevel coordination mechanisms..

Table 2. National Overview of Collaborative Frameworks for Delivering Population Education through Formal, Non-Formal, and Informal Educational Channels in Indonesia

Formal	Non-Formal	Informal	Total
2791	346	1309	4446

Source: <https://simonevpenduk.org/> (2025)

The data in Table 2 highlights a clear structural bias in the delivery of population education: formal education dominates with 62.8% of total initiatives, while informal channels account for 29.4% and non-formal education remains significantly underutilized at only 7.8%. These figures reflect more than administrative preferences, it indicates underlying governance patterns that correspond with Benz's dimensions.

The predominance of formal education aligns with vertical governance, where state-led and curriculum-based approaches are easier to institutionalize but often less responsive to local contexts. Conversely, the limited use of non-formal pathways suggests missed horizontal coordination opportunities, especially in engaging youth groups, religious organizations, and community learning centers that typically fall outside rigid bureaucratic structures. Most relevant to this dimension, however, is the role of informal channels, which illustrate both the potential and the limitations of inter-level linkages. These pathways are often grassroots-driven and locally embedded, yet poorly connected to formal monitoring systems or national planning cycles. While Benz's model acknowledges the importance of linkages, the Indonesian case shows they are not inherently systemic, but rather politically and socially negotiated and often fragile. Thus, the imbalance revealed in this data suggests that multilevel linkages in Indonesia's population education are not only structurally weak, but also depend heavily on contextual variables such as political will, resource distribution, and local institutional capacity factors that extend beyond the original assumptions of the MLG framework.

#### 4.3. Gap and Implications for Policy

Although population education is increasingly recognized as a strategic tool for promoting demographic awareness and sustainable development, its integration within Indonesia's multilevel governance (MLG) system remains inconsistent and under-theorized. Drawing on Benz's framework, this section highlights the systemic disjunctions between theoretical ideals and empirical realities across three core dimensions of MLG: vertical coordination, horizontal collaboration, and inter-level linkages.

##### 1. Fragmented Vertical Coordination

In theory, vertical governance within MLG entails coherent policy alignment and reciprocal communication between national, provincial, and local governments. However, in Indonesia's decentralized education system, vertical arrangements often suffer from role ambiguity, uneven authority, and sporadic coordination. Studies such as Tamtik and Colorado (2022) and Restu Ulfah (2021) point to a lack of institutional

clarity and fragmented planning structures. These findings suggest that Benz's conception of vertical governance may overlook how political discretion, resource asymmetries, and subnational electoral incentives influence the selective adoption or outright rejection of population education mandates at local levels.

## **2. Weak Horizontal Collaboration**

Population education is inherently cross-sectoral, intersecting with health, youth development, family planning, and community empowerment. While Benz frames horizontal governance as coordination among actors operating at the same level, Indonesian realities show that such coordination is often undermined by sectoral silos, incompatible planning cycles, and jurisdictional overlaps. The literature also reveals a lack of robust institutional platforms for cross-agency collaboration, which limits the effectiveness of integrated approaches. This exposes a limitation in MLG theory, which tends to assume the presence of enabling institutions for horizontal coherence, while in practice, bureaucratic culture, inter-agency rivalry, and political fragmentation often inhibit it.

## **3. Underutilized Inter-Level Linkages**

The third dimension, linkages between governance levels, assumes the presence of feedback loops that allow bottom-up learning and policy adaptation. Yet, in practice, Indonesia's decentralized governance rarely channels local innovations or grassroots knowledge into national policy design. Local actors such as school leaders, civil society organizations, or religious networks frequently operate in isolation from national decision-making. This challenges Benz's optimistic view of institutional coupling across levels and instead suggests that linkages are contingent, negotiated, and shaped by power asymmetries. Without deliberate mechanisms for two-way engagement, inter-level synergy remains aspirational rather than operational.

### **4.4. Policy Recommendations and Strategic Pathways**

To address the implementation gaps identified through the multilevel governance (MLG) lens, this section outlines a series of policy directions and institutional strategies aimed at strengthening population education in Indonesia. Rather than merely prescribing technical fixes, these recommendations are grounded in the broader political and governance realities that influence inter-level coordination, cross-sectoral collaboration, and policy adaptation.

#### **1. Strategic Policy Implications**

##### **1) Strengthen Vertical Alignment through Institutional Mandates**

Establish formal and recurring forums that connect national ministries (e.g., BKKBN and the Ministry of Education), provincial governments, and district-level actors. These platforms should not only align policy agendas but also create accountability mechanisms and feedback loops that accommodate local needs and constraints. Coordination must move beyond symbolic meetings to structured deliberation with clear policy outputs and follow-up processes.

##### **2) Promote Horizontal Integration Across Sectors**

Given the cross-cutting nature of population education, coordinated strategies across the education, health, environment, and youth development sectors are essential. This requires shared accountability frameworks and co-financing schemes to avoid siloed implementation and enhance policy coherence.

##### **3) Institutionalize Feedback Loops for Inter-Level Linkages**

To operationalize Benz's vision of reciprocal governance, national systems must incorporate mechanisms that translate grassroots innovations into formal policy adaptation.



This includes creating policy windows for local actors, schools, community educators, to influence central planning and receive institutional support.

4) Invest in Subnational Capacity for Adaptive Governance

Governance performance often falters not due to design but implementation. Subnational governments require capacity-building programs, particularly in data literacy, intersectoral coordination, and participatory planning. Empowering these actors enables more responsive and context-sensitive delivery of population education.

These implications collectively extend Benz's framework by demonstrating that MLG in Indonesia is not only a matter of coordination, but also of negotiating authority, incentivizing collaboration, and aligning institutional logic with local realities. While the reviewed literature offers valuable insights into population education and multilevel governance, there is notable variation in methodological rigor, contextual specificity, and theoretical contribution. Some studies adopt robust case study designs or comparative frameworks, offering deep institutional and policy insights. Others remain descriptive, with limited generalizability or weak analytical depth. Moreover, empirical research directly focused on Indonesia's governance landscape is comparatively scarce, with many references derived from broader Southeast Asian or global contexts. This unevenness highlights a critical gap in locally grounded, methodologically sound studies that can more directly inform Indonesian policy adaptation and theoretical refinement. Future syntheses should apply more stringent inclusion criteria or weighting mechanisms to account for such variation and strengthen the overall credibility of the review

## 2. Future Research Pathways

1) Assess Multilevel Outcomes in Demographic Education

Future studies should examine how MLG structures affect demographic learning outcomes, especially in regions with varied governance capacities and political dynamics.

2) Map Non-State Actor Influence in Governance Ecosystems

Understanding how civil society, religious institutions, and informal educators contribute to or challenge state-led initiatives can reveal hidden leverage points in policy networks.

3) Explore the Role of Digital Platforms for Coordinated Policy Action

Digital governance tools such as real-time dashboards and policy monitoring systems, warrant deeper investigation, particularly their potential to enhance transparency and facilitate inter-level responsiveness.

## E. CONCLUSION

This systematic literature review has explored how population education is situated within Indonesia's multilevel governance (MLG) architecture, drawing on Arthur Benz's tripartite framework of vertical, horizontal, and inter-level coordination. The findings reveal a structural imbalance: while formal education channels are prioritized, non-formal and informal pathways remain marginal, despite their potential for reaching underserved populations and fostering bottom-up innovation. Empirical patterns suggest that policy fragmentation, institutional silos, and weak intergovernmental linkages persist, hindering the translation of national demographic goals into context-sensitive educational practices. While Benz's framework is helpful in diagnosing coordination deficits, the Indonesian case extends it by foregrounding the role of political disincentives, capacity asymmetries, and bureaucratic fragmentation in shaping implementation.

This review is not without limitations. It draws primarily from secondary literature and aggregate monitoring data such as SIMONEV, which may underrepresent local practices or overstate formal program coverage. Additionally, the inclusion criteria while thematically relevant, capture diverse methodological qualities, with varying degrees of policy specificity.

Looking ahead, reforms should prioritize: Institutionalized coordination forums between national and subnational actors with clear mandates and follow-up mechanisms; Cross-sectoral integration of population education into health, youth, and environmental policies; Formal channels for local feedback to influence central strategy, particularly through the recognition of community-driven initiatives; Capacity-building investments for local implementers, especially in planning, monitoring, and inter-agency negotiation.

Ultimately, advancing population education requires moving beyond normative aspirations toward a more adaptive and inclusive MLG model, one that not only aligns institutional mandates but also empowers local actors, integrates diverse learning modalities, and embeds iterative feedback across governance levels.

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## **REFERENCES**

- Abdiyah, A., Sulistyorini, Y., & Hartanti, F. I. (2020). Implementation analysis of Sekolah Siaga Kependudukan (SSK) in East Java 2019. *Jurnal Biometrika dan Kependudukan*, 9(2), 137. <https://doi.org/10.20473/jbk.v9i2.2020.137-145>
- Ardiningsih, E. S., Agusbyana, F., & Shaluhiah, Z. (2024). Determinants Of Fertility Preference Among Women Aged 15-49 Years In Central Java Province (2022 Family Life Survey Analysis). *Jurnal Biometrika Dan Kependudukan*, 13(1), 38–50. <https://doi.org/10.20473/jbk.v13i1.2024.38-50>
- Arribas, J. M. G. (2016). Governance Dynamics and the Application of the Multilevel Governance Approach in Vocational Education and Training (VET) in the European Neighbourhood Countries: the case of the ENPI South region. *European Journal of Education*, 51(4), 495–512. <https://www.jstor.org/stable/26609341>
- Bahn-Walkowiak, B., & Wilts, H. (2017). The institutional dimension of resource efficiency in a multi-level governance system—Implications for policy mix design. *Energy research & social science*, 33, 163–172. <http://dx.doi.org/10.1016/j.erss.2017.09.021>
- Benz, A. (2024). *Rethinking Multilevel Governance*. Edward Elgar Publishing.
- BKKBN. <https://www.kemendukbangga.go.id/>
- Bongaarts, J., Mensch, B. S., & Blanc, A. K. (2017). Trends in the age at reproductive transitions in the developing world: The role of education. *Population Studies*, 71(2), 139–154. <https://doi.org/10.1080/00324728.2017.1291986>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Feltenius, D. (2014). Multi-Level Governance as ‘Post-Constitutional’ Politics: Subnational Actors and the Swedish Constitution. *Local Government Studies*, 41(2), 301–319. <https://doi.org/10.1080/03003930.2014.919267>
- Fink, A. (2019). *Conducting Research Literatur Reviews: From the Internet to Paper* (5th ed.). Thousand Oaks, CA: Sage Publications.
- Freedman, L. P. (1995). Reflections on Emerging Frameworks of Health and Human Rights. *Health and Human Rights*, 1(4), 314–348. <https://doi.org/10.2307/4065246>
- Government Regulation No. 87/2014 on Population Development and Family Development, Family Planning, and Family Information Systems
- BKKBN. (2019). *Guidelines for implementing Population Education*.
- Keele, S. (2007). *Guidelines for performing systematic literature reviews in software engineering* (Vol. 5). Technical report, ver. 2.3 ebse technical report. ebse.

- Keyes, L., & Benavides, A. (2017). Local Government Adoption Of Age Friendly Policies: An Integrated Model Of Responsiveness, Multi-Level Governance And Public Entrepreneurship Theories. *Public Administration Quarterly*, 41(1), 149–185. <http://www.jstor.org/stable/26383387>
- Gischa, S. (2022, 08 June). BKKBN: Sejarah, Tugas dan Fungsi. KOMPAS, [https://www.kompas.com/skola/read/2022/06/08/220000269/bkkbn--sejarah-tugas-dan-fungsinya?utm\\_source](https://www.kompas.com/skola/read/2022/06/08/220000269/bkkbn--sejarah-tugas-dan-fungsinya?utm_source)
- Law of The Republic of Indonesia Number 23 of 2014 About Local Government
- Law No. 52 of 2009 on Population Development and Family Development
- May, J. F. (2017). The Role of Public Population Institutions on Fertility Outcomes in Sub-Saharan Africa. *Population Horizons*, 4(1), 1–8. <https://www.ageing.ox.ac.uk/download/291>
- May, J. F., & Goldstone, J. A. (Eds.). (2022). *International handbook of population policies*. New York: Springer.
- Memorandum of Understanding (MoU) between BKKBN and the Ministry of National Education (No. 184/KSM/D3/2011 & 13/VIII/KB/2011).
- Min-kyung, K. I. M. (2019). The Comparative Analysis on the Population Control Policies in China and India. *World Economics*, 20(1), 119–142.
- Rahayu, A. Y. S., & Juwono, V. (2018). *Birokrasi dan Governance Teori, Konsep dan Aplikasinya*. Rajawali Pers. <http://lib.ui.ac.id/detail?id=20486322>
- Rahayu, A. Y. S., & Juwono, V. (2023). *Pelayanan Publik dan E-Government: Sebuah Teori dan Konsep*. PT. Raja Grafindo Perkasa.
- Schapper, A. (2017). Children's Rights Implementation as a Multi-Level Governance Process. *Human Rights Quarterly*, 39(1), 104–129. <http://www.jstor.org/stable/44488973>
- Statista. (2024). *Demographics of Indonesia*. <https://www.statista.com/study/102516/demographics-of-indonesia/>
- Tamtik, M., & Colorado, C. (2022). Multi-level governance framework and its applicability to education policy research - the Canadian perspective. *Research in Education*, 114(1), 20–44. <https://doi.org/10.1177/00345237221140141>
- Ulfah, R. (2021). Implementasi sekolah siaga kependudukan melalui pembelajaran geografi di MAN Insan Cendekia Tanah Laut. *Jurnal Geografika (Geografi Lingkungan Lahan Basah)*, 2(2), 91–100. <https://ppjp.ulm.ac.id/journals/index.php/jgp/article/view/5013/pdf>
- UNESCO. (2024). *Comprehensive sexuality education: For healthy, informed and empowered learners*. [https://www.unesco.org/en/health-education/cse?utm\\_source](https://www.unesco.org/en/health-education/cse?utm_source)
- Van Dalen, H. P., & Henkens, K. (2020). When is fertility too low or too high? Population policy preferences of demographers around the world. *Population Studies*, 75(2), 289–303. <https://doi.org/10.1080/00324728.2020.1784986>
- Zhang, Junsen. (2017). The Evolution of China's One-Child Policy and Its Effects on Family Outcomes. *Journal of Economic Perspectives* 31 (1), 141–60. <https://www.aeaweb.org/articles?id=10.1257/jep.31.1.141>