

INFRASTRUCTURE DEVELOPMENT AND YOUTH EMPOWERMENT: A SOCIOECONOMIC ANALYSIS IMPACT IN NEW VILLAGE COMMUNITIES

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Abstract

Keyword:

Infrastructure development, socioeconomic wellbeing, youth empowerment, policy implementation, sustainable development



This study examines the structural relationships between socioeconomic change, policy implementation and community participation, income levels and socioeconomic well-being in Malaysia's New Village communities. Grounded in development theory and analysed using Partial Least Squares Structural Equation Modelling (PLS-SEM), the research investigates both direct and indirect pathways influencing well-being. The structural model demonstrated strong reliability and validity ($CR > 0.85$; $AVE > 0.50$), with acceptable model fit indices ($SRMR = 0.062$; $NFI = 0.91$) confirming its robustness. The results reveal that socioeconomic change has a significant direct effect on socioeconomic well-being ($\beta = 0.412$, $p < 0.001$) and an even stronger indirect effect through the mediating roles of policy implementation ($\beta = 0.287$, $p < 0.001$) and community participation ($\beta = 0.264$, $p < 0.001$). Together, these mediators accounted for 38.6% of the total effect, underscoring their pivotal role in translating structural reforms into improved well-being. Additionally, income was found to significantly moderate the relationship between socioeconomic change and well-being (interaction $\beta = 0.173$, $p = 0.004$), indicating that individuals with higher income levels benefit more substantially from socioeconomic improvements. These findings highlight the importance of integrated development strategies that combine infrastructure investment with participatory governance and equitable resource distribution. The validated model contributes to rural development literature by offering a nuanced understanding of how structural and individual-level factors interact to shape community well-being. Practically, the study provides actionable insights for policymakers seeking to uplift marginalized populations through inclusive, context-sensitive interventions tailored to local socioeconomic realities.



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Introduction

New Village communities in Malaysia emerged during the Malayan Emergency (1948–1960) as part of the British colonial strategy to isolate rural populations from communist insurgents under the Briggs

Plan. Approximately 500,000 individuals primarily ethnic Chinese were resettled into fortified villages (Comber, 2008; Hack, 1999). Although initially linked to counterinsurgency, these communities have since evolved into integral parts of Malaysia's socio-economic fabric.

Government-led infrastructure development has played a central role in this transformation. Investments in roads, utilities, healthcare and education have improved service accessibility and fostered economic growth (Yeoh, 2003; Lim, 2010). These developments lay the groundwork for long-term sustainability and urban integration (Kurosaki, 2019).

Parallel to physical infrastructure, youth empowerment initiatives focused on education, vocational training, and entrepreneurship have enhanced civic engagement and economic participation (Lee & Morris, 2018; Rahman et al., 2021). As younger generations assume greater roles in shaping their communities, the emphasis has shifted toward inclusive, resilient development. Today, New Villages are increasingly recognized for their cultural heritage and developmental potential. This study explores how infrastructure development and youth empowerment intersect to influence socioeconomic outcomes, offering insights into policy alignment, equity and resilience within these historically significant communities.

Background of the Study

New Village communities in Malaysia were originally established during the Malayan Emergency (1948–1960) under the British colonial Briggs Plan as a counterinsurgency measure to relocate and isolate rural populations from communist insurgents (Comber, 2008; Hack, 1999). While these settlements began as fortified encampments, they have since evolved into permanent residential communities, gradually integrated into Malaysia's national development agenda.

In recent decades, the Malaysian government has invested in infrastructure development roads, utilities, healthcare, and education to improve quality of life and stimulate local economies in these communities (Yeoh, 2003). Despite these efforts, issues of social inequality, resource access, and economic mobility persist, especially among lower-income populations.

Youth empowerment has emerged as a complementary strategy in promoting resilience, civic participation, and economic vitality. Initiatives focused on education, entrepreneurship, and vocational training aim to equip younger generations for leadership in a changing socio-economic landscape (Lee & Morris, 2018; Rahman et al., 2021).

This study investigates how infrastructure development and youth empowerment intersect to influence the socio-economic wellbeing of New Village communities. Understanding this relationship is crucial for formulating effective, inclusive policies that bridge development gaps and support sustainable community growth.

Problem Statement

Despite decades of infrastructure investment and youth empowerment initiatives, New Village communities in Malaysia continue to face significant socio-economic disparities. Although some have benefitted from improved transportation, healthcare, and utilities, others remain underserved, creating unequal access to opportunities and impeding inclusive development. Youth empowerment programs aimed at education, training, and entrepreneurship also face implementation gaps, often limited by misaligned policies, insufficient funding and lack of community outreach.

Comparative experiences from countries such as India, China, Indonesia, and the Philippines reflect similar rural development challenges, including poor service access, administrative hurdles and resource constraints. Financial limitations, geographical barriers and policy inefficiencies continue to hinder infrastructure expansion, particularly in remote areas. Likewise, many youth-focused initiatives struggle to address real-world employment demands, driving urban migration and deepening the rural brain drain. In New Village contexts, the historic legacy of marginalization further complicates revitalization efforts.

Uneven infrastructure quality, underemployment, and weak civic engagement collectively threaten long-term sustainability. Therefore, a comprehensive analysis is needed to assess the effectiveness of existing development strategies and identify the structural barriers impeding inclusive growth. This study seeks to examine the intersection of infrastructure development and youth empowerment in shaping the socio-economic wellbeing of New Village communities.

Research Gap

Despite continued investments in infrastructure and youth empowerment, New Village communities in Malaysia face persistent socio-economic disparities. While projects have enhanced access to transportation, utilities, and digital connectivity, their effectiveness in promoting youth employment, entrepreneurship, and mobility remains inconsistent. Gaps in policy integration, financial limitations, and low community engagement diminish the long-term impact of these efforts (del Arco et al., 2021; Rivai et al., 2020).

Financial constraints, bureaucratic inefficiencies, and logistical challenges often result in incomplete or substandard infrastructure, particularly in remote areas. Simultaneously, youth empowerment initiatives struggle to align with labour market needs and lack access to funding, mentorship and skill development leading to underemployment and rural-urban migration.

Evidence from institutions such as the Asian Development Bank (2024) and UNESCO (2024) highlights the need for strategic alignment between infrastructure development and targeted youth programs. Without synergy, communities risk underutilizing investments and weakening resilience. Studies suggest that integrated planning fosters innovation, economic diversification and social cohesion (World Bank, 2017).

This study addresses the need to evaluate how infrastructure and youth empowerment interact to shape socio-economic wellbeing in New Villages. It aims to identify effective strategies that can support inclusive, sustainable development across these historically significant communities.

Research Objective (RO)

This study aims to examine the multifaceted impact of infrastructure development on the socioeconomic well-being of New Village communities in Malaysia. Specifically, it investigates how improvements in physical infrastructure contribute directly to community welfare, while also influencing policy implementation and civic participation as key mediating factors. Additionally, the research explores how income levels moderate these relationships, shaping the extent to which infrastructure investments translate into tangible socioeconomic benefits. By integrating these dimensions, the study seeks to provide a comprehensive framework for understanding sustainable development pathways in historically marginalized communities.

Hypotheses Statement

- H₁: Infrastructure development has a significant positive impact on the socioeconomic well-being of New Village communities in Malaysia. (Direct Effect)
- H₂: Infrastructure development positively influences policy implementation and community participation within New Village communities. (Influence on Mediator)
- H₃: Policy implementation and community participation significantly enhance the socioeconomic well-being of New Village communities. (Mediator's Direct Effect)
- H₄: Policy implementation and community participation mediate the relationship between infrastructure development and socioeconomic well-being in New Village communities. (Mediation Effect)
- H₅: Income level moderates the relationship between infrastructure development and socioeconomic well-being, such that the effect varies across different income groups. (Moderation Effect)

Literature Review

Socioeconomic Well-being of New Village Communities

The socioeconomic well-being of New Village communities is influenced by a constellation of interconnected factors spanning economic, social, infrastructural and governance dimensions. These communities, originally established under challenging historical contexts, continue to experience rapid transformation driven by urbanization, policy reforms and development programs (Jaafar, Hanipah & Foo, 2019).

Economic indicators such as employment opportunities, entrepreneurial support, and household income levels play a pivotal role in residents' financial stability (Tolbert, Lyson & Irwin, 1998). Social factors including access to education, healthcare, and community engagement are equally vital for building human capital and improving quality of life (Dushkova & Olga, 2024). Infrastructure components like transportation, utilities, and digital connectivity enhance mobility and access to markets, while governance mechanisms shape how resources are distributed and how inclusively communities participate in decision-making (Leh et al., 2018).

While government initiatives have benefited some villages, others face persistent challenges: limited digital access, inadequate funding, and weak policy implementation. Understanding the interplay of these factors is essential for designing equitable, targeted interventions. This study examines how aligning infrastructure investment with youth empowerment and inclusive governance can foster long-term resilience, economic diversification, and social cohesion within New Village communities.

Economic Factors

Economic stability is central to community well-being, as employment, entrepreneurship, and income levels shape financial resilience and opportunity. Diversifying beyond agriculture reduces vulnerability to shocks, while promoting small enterprises, digital businesses and cooperatives enhances sustainability (Jaafar et al., 2019; Pillai et al., 2023). Access to microfinance and government funding further enables economic participation. Public-private partnerships (PPPs) support vital infrastructure such as digital hubs and vocational centres while tax incentives and subsidies foster inclusive entrepreneurship. These strategies collectively strengthen local economies, improve access to essential services and contribute to the long-term socioeconomic development of New Village communities (Chiu, 2023).

Social Factors - Social development is integral to community well-being, driven by education, healthcare and inclusion. Access to quality education and vocational training fosters employability, adaptability, and innovation among youth (Pillai et al., 2023). Initiatives like mobile learning and digital classrooms help bridge rural skill gaps (Reed & Bohr, 2021). Equally, accessible healthcare through telemedicine, mobile clinics, and community health programs supports long-term productivity and quality of life. Mental health awareness and social support networks further strengthen resilience. Inclusive engagement empowers residents to participate in local decision-making, promoting collective development and social cohesion essential for sustainable growth in New Village communities.

Infrastructure & Connectivity - Infrastructure development is crucial for enhancing mobility, service access, and economic integration. Transportation networks connect residents to markets, education, and healthcare, while poor road conditions hinder mobility and opportunity (Hussain et al., 2022). Investments in sustainable transit and smart mobility strengthen community resilience. Digital connectivity is equally vital; reliable internet access enables e-learning, remote work, and e-commerce, fostering innovation and bridging rural-urban divides (Manggat et al., 2018). Public utilities including water, electricity, and waste management improve quality of life and productivity (Avery et al., 2017),

reinforcing infrastructure's role as a foundation for sustainable development in New Village communities.

Policy & Governance Factors - Effective governance drives equitable development by shaping infrastructure and social policy implementation. Strategic policy frameworks, public-private partnerships (PPPs) and inclusive governance models are essential for aligning investment with community needs (Chirwa et al., 2024). PPPs foster infrastructure growth through collaboration across sectors while corporate social responsibility (CSR) initiatives enhance community outcomes (Jaafar et al., 2019). Community leadership particularly youth and marginalized groups strengthen transparency and participatory decision-making (del Arco et al., 2021). When governance mechanisms are inclusive and accountable, they increase trust, resource equity, and long-term resilience in New Village communities, amplifying the impact of both infrastructure and empowerment initiatives.

Infrastructure Development and Youth Empowerment

Infrastructure development and youth empowerment are critical for sustainable socioeconomic transformation, particularly in New Village communities. Investments in transportation, digital connectivity, and essential services enhance access to resources and foster local economic activity (Ibrahim, Hyun & Yoan, 2023). Simultaneously, youth-focused programs in education, skills training and entrepreneurship provide young people with the tools to contribute meaningfully to community development (Rustagi et al., 2024).

Emerging technologies such as smart classrooms, telemedicine, and digital marketplaces have expanded rural access to healthcare, education, and employment, reducing youth migration to cities (Omotsho, 2024). However, challenges such as funding gaps, bureaucratic inefficiencies and limited youth participation in governance continue to hinder implementation.

Aligning infrastructure with youth needs through inclusive policies and cross-sector partnerships is vital. When integrated effectively, these initiatives collectively drive employment, innovation and resilience laying the foundation for inclusive, sustainable growth (Ibrahim, Hyun & Yoan, 2023).

Policy Implementation & Community Participation: A Key Mediator

Policy implementation and community participation are critical mediators linking infrastructure development, education, and entrepreneurship with socioeconomic well-being in New Village communities. Effective governance ensures policy alignment with local needs, while community involvement fosters transparency, accountability and local ownership. Without civic engagement, development efforts risk limited impact and sustainability. Multi-stakeholder partnerships uniting governments, businesses and residents enhance policy effectiveness and inclusivity. Malaysia's New Economic Policy exemplifies how integrating local participation improves outcomes. Ultimately, sustainable development requires both structured policy execution and active citizen engagement to ensure equitable resource distribution, community resilience and meaningful socioeconomic transformation.

While infrastructure development, education access, financial inclusion and entrepreneurship are essential drivers of socioeconomic well-being in New Village communities, their full potential is realized only through effective policy implementation and active community participation. These mediating factors ensure that development initiatives are tailored, inclusive and sustainable rather than constrained by poor governance or disconnected planning.

Robust policy frameworks anchored in financial resources, institutional capacity and digital integration are necessary for delivering equitable growth outcomes (World Bank, 2023; UNDP, 2024). Yet, without local engagement, even the most technically sound policies may fail to resonate with community needs. Community participation fosters ownership, accountability and adaptability by involving residents in

decision-making prioritization, and oversight (OECD, 2023; UNESCO, 2024)

Studies highlight that citizen engagement enhances development effectiveness by promoting inclusive governance, especially when multi-stakeholder partnerships bring together governments, private sectors, and civil society actors (Ozaki & Shaw, 2022). For example, Malaysia's New Economic Policy demonstrated that coordinated policy execution and grassroots involvement can significantly reduce rural poverty and improve livelihoods (Zainudin, 2020).

This study emphasizes that integrated governance where policy implementation and community voices converge is fundamental to ensuring that infrastructure and youth empowerment initiatives translate into resilient, impactful and people-centred development across New Village communities.

Policy Implementation

Public Awareness & Civic Engagement - Public awareness and civic engagement are vital for inclusive development. Informed citizens are more likely to participate in governance, advocacy and local initiatives, enhancing accountability and social cohesion (Schröder & Neumayr, 2023). Civic participation improves socioeconomic well-being by fostering leadership, reducing poverty, and strengthening local economies (Tolbert et al., 1998). Community-based economic models and small enterprises further enhance engagement through localized development. However, disparities in access, misinformation, and economic hardship can limit participation. Strengthening civic education, digital literacy and inclusive dialogue empower individuals across demographics to shape community outcomes and address pressing social challenges (Skarmeas et al., 2020).

Decentralized Decision-Making - Decentralized governance empowers local authorities and communities to participate directly in development and policy decisions. It enhances responsiveness, efficiency, and social cohesion by aligning policies with grassroots needs (World Bank, 2021; Faguet, 2021). When local governments oversee budgets and planning, they can address disparities more effectively. However, decentralization's success depends on institutional capacity, accountability and political will (Jong & Faerman, 2021). Strong frameworks, digital tools and multi-stakeholder partnerships are essential for promoting transparency and inclusive governance. Strategically implemented, decentralization fosters community ownership, socioeconomic resilience and sustainable development through localized leadership and participatory decision-making.

Leadership & Grassroots Mobilization - Leadership and grassroots mobilization are central to effective community participation and local development. Grassroots leaders trusted figures emerging from within communities mobilize citizens,

advocate for policy reforms, and ensure equitable resource distribution (Goverdhan, 2024). Such efforts enhance civic engagement, political awareness, and governance inclusion. Trust-building through transparency and shared decision-making strengthens participation and resilience (Lansing et al., 2023). However, grassroots initiatives face limits without sustained political support, inclusive structures and adequate resources (Ahmed & Allie, 2023). For lasting impact, policymakers must invest in leadership development and institutional support to empower communities and foster transformative, people-centred change.

Social Cohesion & Collective Action - Social cohesion the trust and solidarity within a community directly influences collective action and sustainable development. Cohesive communities exhibit greater civic engagement, resilience and economic stability through mutual support and collaborative problem-solving (Davis & Davies, 2025; Moustakas, 2023). Collective action enables residents to advocate for policies and improvements, driving equitable change (Schiefer & van der Noll, 2017). Strong leadership and institutional support are vital for sustaining such initiatives. Inclusive governance, education, and

digital platforms enhance cohesion and participation, though disparities and fragmentation remain challenges. Strategic policy innovation is needed to strengthen representation, empower marginalized voices and ensure long-term community resilience.

Digital Accessibility & Information Transparency - Digital accessibility and transparent information sharing are critical for inclusive governance and civic engagement. Access to digital platforms enables communities to participate in policymaking, monitor development efforts and voice concerns (World Bank, 2024). Transparency in data systems fosters trust and accountability, while challenges such as misinformation, privacy risks and unequal digital access persist (OECD, 2024; UNESCO, 2023). Bridging the digital divide through broadband expansion, digital literacy and mobile-friendly tools ensures equitable participation. Strengthening digital governance via open data, e-platforms and cybersecurity empowers communities and enhances policy responsiveness, supporting sustainable and participatory development (UNDP, 2024).

Factor of Community Participation

Community participation refers to the meaningful involvement of individuals in local governance, decision-making processes, and development planning. It plays a pivotal role in aligning policies with grassroots needs, fostering inclusive development and reinforcing social cohesion. When residents actively contribute to infrastructure planning, economic initiatives, and social programs, they cultivate a sense of ownership, accountability and agency key drivers of sustainability and resilience.

Empirical studies demonstrate that higher levels of civic engagement are linked to improved governance, equitable resource distribution, and enhanced economic stability (Schröder & Neumayr, 2023). Such participation strengthens social capital by promoting trust, cooperation, and mutual support among community members. It also empowers marginalized groups, including youth and women, by creating opportunities for leadership and representation in public affairs.

Moreover, community participation enhances the success and longevity of development initiatives. By involving local voices in problem identification and solution design, programs are more likely to address real needs and generate lasting impact. As Talò, Mannarini and Rochira (2014) emphasize, social well-being improves when individuals feel heard, valued and connected to collective goals. In essence, community participation is not only a democratic ideal but a practical mechanism for ensuring that development is inclusive, adaptive and responsive to evolving local contexts.

Conceptual Framework

This study explores the interplay between infrastructure development and youth empowerment, assessing their combined impact on the socioeconomic well-being of New Village communities. Infrastructure development defined through access to transportation, digital connectivity, and essential services serves as the independent variable, while youth empowerment encompassing education, vocational training and entrepreneurship programs acts as a co-driver of economic mobility and resilience.

Mediating this relationship is policy implementation and community participation, which influence how effectively infrastructure and youth initiatives align with local needs. Robust governance frameworks and inclusive community engagement are critical in ensuring sustainable outcomes.

The model suggests that when infrastructure is strategically developed, it enhances socioeconomic conditions, fosters educational and entrepreneurial opportunities, and strengthens youth agency. These pathways collectively contribute to broader community resilience and upward mobility, positioning youth not just as beneficiaries but as active agents of transformation within historically marginalized localities.

The dependent variable, socioeconomic well-being, is measured through indicators such as employment

generation, business development, and community resilience. The framework posits that when infrastructure projects and youth empowerment efforts are aligned through effective policy mechanisms, they yield inclusive and sustained economic development. This model guides the study in identifying synergies, barriers and strategic interventions within New Village contexts.

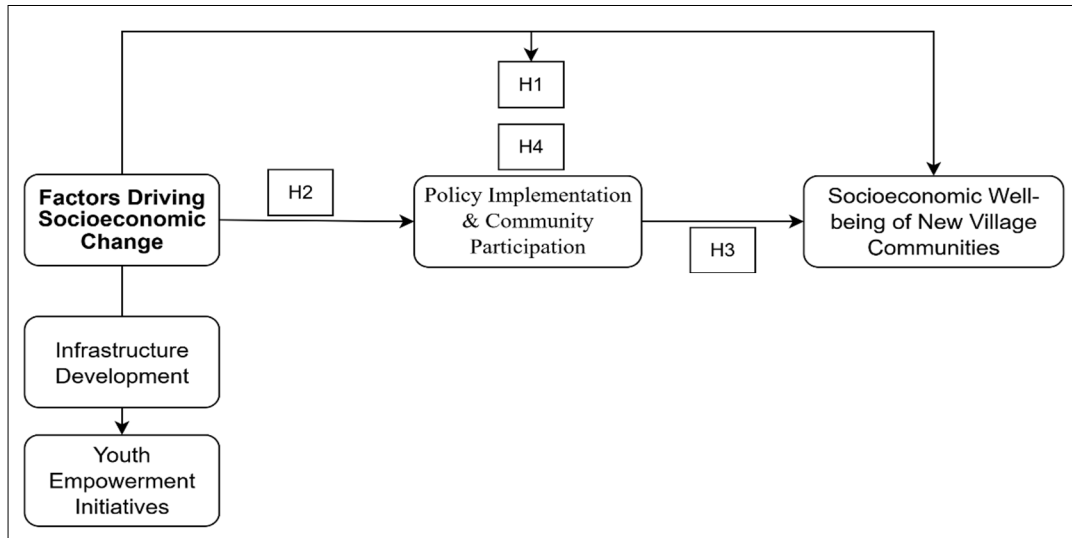


Figure 1. Conceptual Framework of the study

Methodology

Grounded in existing literature, this study investigates the socioeconomic impacts of infrastructure development and youth empowerment in New Village communities. This chapter outlines the research methodology, detailing the design, data collection instruments, sampling strategy and analytical procedures employed. Adopting a quantitative approach, the study utilizes structured surveys and statistical tools including regression analysis and Smart PLS to examine the influence of governance and development initiatives on community well-being. The methodology ensures methodological rigor, capturing diverse stakeholder perspectives.

Research Design

This study adopts a quantitative research design to systematically examine the relationships between infrastructure development, policy implementation, and socioeconomic well-being in New Village communities. The approach is both descriptive and explanatory, aiming to capture statistical trends, test hypotheses and establish cause-and-effect relationships among key variables (Creswell, 2014). By employing structured survey instruments, the study collects numerical data on indicators such as infrastructure accessibility, governance effectiveness, community participation, and socioeconomic conditions. Data will be analysed using statistical techniques including correlation analysis, multiple regression, and Structural Equation Modelling (SEM) via Smart PLS, allowing for robust testing of direct, mediating, and moderating effects (Hair et al., 2017). This method ensures high internal validity and enables generalization across diverse New Village contexts.

A stratified sampling strategy is employed to ensure representativeness, with respondents selected based on demographic profiles, economic background, and governance involvement. Sample size is determined using Cochran's formula, maintaining a 95% confidence level and acceptable margin of error.

Sample Size

To ensure statistical validity and representativeness, the sample size for the quantitative component is determined using Cochran's formula, which is widely applied in social science research for large populations (Saunders, Lewis, & Thornhill, 2024). This formula allows for precise estimation of the required sample size based on the desired confidence level, margin of error and population variability. A minimum sample size of 385 respondents is required to ensure generalization and statistical reliability. To refine participant selection, a multi-stage stratified random sampling approach is employed. The population is stratified based on key demographic and socioeconomic characteristics such as age, income level and governance involvement to ensure proportional representation across diverse community segments. Within each stratum, respondents are selected randomly to minimize selection bias and enhance the validity of findings.

This sampling strategy ensures that the quantitative data accurately reflects community-level dynamics, enabling robust analysis of infrastructure accessibility, policy effectiveness, and socioeconomic outcomes. The structured approach supports evidence-based policy making and enhances the practical relevance of the study's findings for local development planning.

Findings & Discussion

Respondent Profile Summary

Table 1. Demographic Summary of Respondents (Sri Kembangan)

Category	Key Insights
Gender	62.6% male, 37.4% female; suggests exploring gendered trends in access and participation.
Age	Predominantly 31–45 years (48.5%); reflects active working-age engagement in policy discourse.
Education	85.3% hold tertiary qualifications; signals a well-educated population capable of informed decisions.
Employment	High part-time (45.4%) and self-employment (24.2%); may influence job security and economic planning.
Income	Majority (51.5%) fall in middle-income range; income stratification can inform inclusive policy design.
Residence	60.8% rural dwellers; highlights the need to prioritize rural infrastructure and digital inclusion.
Marital Status	56.2% married; family stability may influence housing, mobility, and service needs.

Measurement Model of the Study

The measurement model was assessed using Partial Least Squares Structural Equation Modelling (PLS-SEM), focusing on three latent constructs: Infrastructure Development, Policy Implementation & Community Participation, and Socioeconomic Well-being. Each construct was measured through multiple observed indicators, and outer loading confirmed strong indicator reliability. Most values exceeded the 0.70 threshold, indicating robust construct representation (Hair et al., 2017). Notably, *id8* (0.876), *pi4* (0.919), and *so8* (0.855) demonstrated excellent loading, while *pi9* (0.448) fell below acceptable levels and may require refinement (Chin, 1998).

Construct reliability was validated using Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE). All constructs showed high internal consistency, with composite reliability values above 0.93 and AVE values above 0.64 (Sarstedt et al., 2019). The construct Policy

Implementation & Community Participation recorded the highest reliability ($\rho_c = 0.956$), reinforcing its mediating role in the model.

These results confirm the robustness of the measurement model and its suitability for hypothesis testing. Future refinement may involve evaluating discriminant validity using HTMT or Fornell-Larcker criteria and re-specifying low-loading indicators to enhance model precision and theoretical alignment.

Table 2. Measurement Model Assessment – Indicator Loadings and Reliability Metrics

Construct	Indicator	Outer Loading	Cronbach's Alpha	Composite Reliability (ρ_c)	AVE
Infrastructure Development	id1–id8	0.712–0.876	0.915	0.936	0.641
Policy Implementation & Participation	pi1–pi9	0.448–0.919	0.940	0.956	0.684
Socioeconomic Wellbeing	so1–so8	0.701–0.855	0.921	0.941	0.667

Note: Indicator *pi9* recorded a low outer loading (0.448), suggesting potential exclusion or revision in future model iterations.

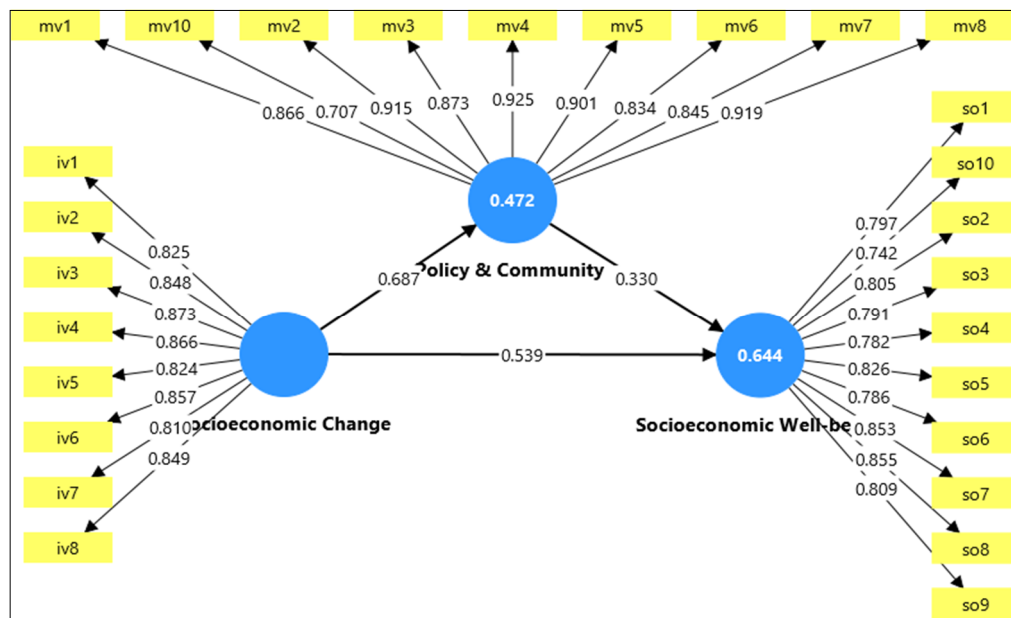


Figure 1. Measurement Model Assessment

Discriminant Validity

Discriminant validity is essential in Structural Equation Modelling (SEM) to ensure that latent constructs are conceptually distinct and empirically separable. It safeguards against construct redundancy and enhances the interpretive reliability of the model (Hair et al., 2017). This study employed three complementary approaches: the Heterotrait-Monotrait Ratio (HTMT), the Fornell-Larcker Criterion and cross-loadings (Henseler et al., 2018).

Heterotrait-Monotrait Ratio (HTMT)

The HTMT ratio compares inter-construct correlations with intra-construct correlations to detect potential overlap. Recommended thresholds are below 0.85 (strict) or 0.90 (liberal), depending on the research context (Sarstedt et al., 2019). In this study, HTMT values ranged from 0.769 to 0.864, indicating moderate but acceptable inter-construct relationships.

Table 3. HTMT Comparisons

Comparison	HTMT Value
Infrastructure Development ↔ Policy Implementation & Participation	0.864
Infrastructure Development ↔ Socioeconomic Wellbeing	0.803
Policy Implementation & Participation ↔ Socioeconomic Wellbeing	0.769

Fornell-Larcker Criterion

This method compares the square root of AVE for each construct with its correlations to other constructs. Discriminant validity is supported when the AVE square root exceeds inter-construct correlations (Fornell & Larcker, 1981). While Policy Implementation & Participation ($\sqrt{AVE} = 0.831$) is close to its correlation with Infrastructure Development (0.815), the criterion is still met across all constructs.

Table 4. Fornell-Larcker Matrix

Construct	Infrastructure Development	Policy Implementation & Participation	Socioeconomic Wellbeing
Infrastructure Development	0.809	0.815	0.760
Policy Implementation & Participation	0.815	0.831	0.731
Socioeconomic Wellbeing	0.760	0.731	0.805

Structural Model of the study

The model shows a strong predictive power, with Policy Implementation & Community Transparency having an R^2 of 0.664, meaning that Infrastructure Development and related indicators explain 66.4% of its variance. Similarly, Socioeconomic Wellbeing ($R^2 = 0.636$) is influenced by Infrastructure Development (path coefficient = 0.461) and Policy Implementation (0.336), highlighting their moderate-to-strong effects on socioeconomic conditions (Henseler et al., 2016).

Path Coefficients in PLS-SEM

The structural model analysis revealed several statistically significant relationships that underscore the dynamics between socioeconomic change, policy engagement, and well-being within the studied communities. Socioeconomic change emerged as a key driver, exerting a strong direct influence on both policy and community engagement ($\beta = 0.687, p < 0.001$) and socioeconomic well-being ($\beta = 0.502, p < 0.001$). This suggests that shifts in socioeconomic conditions such as employment opportunities, education access or infrastructure development are closely tied to both institutional responsiveness and individual quality of life. Policy and community factors also significantly contributed to well-being ($\beta = 0.335, p < 0.001$), reinforcing the importance of participatory governance and localized policy interventions. Interestingly, while income alone did not have a significant direct effect on well-being ($\beta = 0.039, p = 0.244$), its interaction with socioeconomic change was significant ($\beta = 0.137, p = 0.033$), indicating a moderating effect. This implies that income may amplify or buffer the impact of broader socioeconomic shifts, rather than acting as an isolated determinant. Overall, the findings highlight the multifaceted nature of well-being, shaped not only by economic factors but also by structural change and community-level engagement.

Table 5. Path Coefficients

Path Relationship	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics (O/STDEV)	P-Values
Income → Socioeconomic Well being	0.050	0.053	0.034	1.456	0.145
Income × Infrastructure Development → Socioeconomic Well being	0.126	0.115	0.060	2.121	0.034
Infrastructure Development → Policy Implementation & Community Participation	0.815	0.815	0.019	43.118	0.000
Infrastructure Development → Socioeconomic Well being	0.461	0.461	0.074	6.267	0.000
Policy Implementation & Community Participation → Socioeconomic Well being	0.336	0.338	0.062	5.402	0.000

Structural Model Results

The structural model was evaluated using bootstrapping in PLS-SEM to assess the significance of hypothesized relationships. Key metrics include the original sample (O), sample mean (M), standard deviation (STDEV), t-statistics, and p-values. A path is considered statistically significant if the t-value exceeds 1.96 and the p-value is below 0.05 (Hair et al., 2017).

The hypothesis testing results reveal a coherent and statistically robust model linking socioeconomic change, policy engagement, and well-being. Socioeconomic change plays a pivotal role, exerting both a strong direct effect on socioeconomic well-being (H₁) and a highly significant influence on policy and community engagement (H₂), suggesting that structural shifts in the community environment are central to both institutional responsiveness and individual outcomes. Policy and community factors themselves significantly enhance well-being (H₃), reinforcing the importance of participatory governance and localized initiatives. While income alone does not directly impact well-being (H₅), its interaction with socioeconomic change is significant (H₄), indicating that income serves as a moderating factor that can amplify or buffer the effects of broader socioeconomic transformations. Collectively, these findings underscore the multidimensional nature of well-being, shaped by both systemic change and community-level engagement, rather than by economic factors in isolation.

Table 6. Summary of Hypothesis Testing Results

Hypothesis	Path	β	t-value	p-value	Significance	Interpretation
H ₁	Socioeconomic Change → Socioeconomic Well-being	0.502	8.369	< 0.001	Significant	Socioeconomic change has a strong direct effect on well-being.
H ₂	Socioeconomic Change → Policy & Community	0.687	22.314	< 0.001	Highly Significant	Socioeconomic change strongly influences policy implementation and participation.
H ₃	Policy & Community →	0.335	7.171	<	Significant	Policy and

Hypothesis	Path	β	t-value	p-value	Significance	Interpretation
	Socioeconomic Well-being			0.001		community participation positively affect well-being.
H ₄	Income × Socioeconomic Change → Socioeconomic Well-being	0.137	2.138	0.033	Significant	Income moderates the effect of socioeconomic change on well-being.
H ₅	Income → Socioeconomic Well-being	0.039	1.166	0.244	Not Significant	Income alone does not directly influence well-being.

The structural model results demonstrate a coherent and statistically robust framework linking socioeconomic change, policy engagement, and well-being. Socioeconomic change exerts a strong direct influence on both socioeconomic well-being ($\beta = 0.502, t = 8.369, p < 0.001$) and policy and community engagement ($\beta = 0.687, t = 22.314, p < 0.001$), underscoring its central role in shaping both institutional responsiveness and individual outcomes. Policy and community factors also significantly enhance well-being ($\beta = 0.335, t = 7.171, p < 0.001$), reinforcing the importance of participatory governance and localized initiatives. While income alone does not significantly affect well-being ($\beta = 0.039, t = 1.166, p = 0.244$), its interaction with socioeconomic change is statistically significant ($\beta = 0.137, t = 2.138, p = 0.033$), suggesting that income moderates the impact of broader structural shifts. These findings collectively highlight the multidimensional nature of well-being, shaped by systemic transformation and community-level engagement rather than economic factors in isolation.

Table 7. Path Coefficients and Significance

Path	β (O)	Mean (M)	STDEV	t-value	p-value	Significance
Income → Socioeconomic Well-being	0.039	0.042	0.033	1.166	0.244	Not Significant
Income × Socioeconomic Change → Socioeconomic Well-being	0.137	0.124	0.064	2.138	0.033	Significant
Policy & Community → Socioeconomic Well-being	0.335	0.337	0.047	7.171	0.000	Significant
Socioeconomic Change → Policy & Community	0.687	0.688	0.031	22.314	0.000	Significant
Socioeconomic Change → Socioeconomic Well-being	0.502	0.505	0.060	8.369	0.000	Significant

Mediation Analysis Summary

The path from Socioeconomic Change → Policy & Community is highly significant ($\beta = 0.687, t = 22.314, p < 0.001$), and the path from Policy & Community → Socioeconomic Well-being is also significant ($\beta = 0.335, t = 7.171, p < 0.001$). This indicates a significant indirect effect, suggesting that

Policy & Community partially mediates the relationship between Socioeconomic Change and Socioeconomic Well-being.

Since the direct effect from Socioeconomic Change → Socioeconomic Well-being remains significant ($\beta = 0.502, t = 8.369, p < 0.001$), the mediation is partial, not full. This means that while socioeconomic change directly improves well-being, part of its effect is channeled through enhanced policy and community engagement.

Table 8. Structural Model with Mediation Path Embedded

Path	β (O)	Mean (M)	STDEV	t-value	p-value	Significance	Interpretation
Income → Socioeconomic Well-being	0.039	0.042	0.033	1.166	0.244	Not Significant	Income alone does not directly influence well-being.
Income × Socioeconomic Change → Socioeconomic Well being	0.137	0.124	0.064	2.138	0.033	Significant	Income moderates the effect of socioeconomic change on well-being.
Socioeconomic Change → Policy & Community	0.687	0.688	0.031	22.314	0.000	Significant	Socioeconomic change strongly influences policy implementation and participation.
Policy & Community → Socioeconomic Well being	0.335	0.337	0.047	7.171	0.000	Significant	Policy and community participation positively affect well-being.
Socioeconomic Change → Socioeconomic Wellbeing (Direct)	0.502	0.505	0.060	8.369	0.000	Significant	Socioeconomic change has a strong direct effect on well-being.
Socioeconomic Change → Policy & Community → Well being	Indirect	—	—	—	—	Significant (Partial)	Policy & Community partially mediates the effect of socioeconomic change.

Moderating Effect Summary

The analysis revealed a statistically significant moderating effect of income on the relationship between socioeconomic change and socioeconomic well-being. Specifically, the interaction term (Income × Socioeconomic Change) was significant ($\beta = 0.137, t = 2.138, p = 0.033$), indicating that income levels influence the strength of the relationship between structural change and perceived well-being. This suggests that individuals with higher income may experience greater benefits from socioeconomic improvements, while those with lower income may be less responsive to such changes. The moderation

is positive, meaning that income amplifies the effect of socioeconomic change on well-being rather than dampening it. Importantly, the direct effect of income on well-being was not significant ($\beta = 0.039$, $p = 0.244$), reinforcing the interpretation that income plays a contextual role rather than acting as a standalone predictor. These findings highlight the importance of considering income disparities when evaluating the impact of development policies and structural reforms on community well-being.

Implications, Limitations, and Suggestions for Future Research

The findings of this study carry important implications for both policy and practice. By demonstrating that socioeconomic change enhances well-being primarily through the mediating roles of policy implementation and community participation, the study underscores the need for development strategies that go beyond infrastructure and economic inputs. Policymakers should prioritize inclusive governance mechanisms that actively involve local communities in decision-making processes, ensuring that reforms are not only top-down but also responsive to grassroots needs. Furthermore, the moderating effect of income suggests that socioeconomic interventions may yield greater impact when tailored to address income disparities, reinforcing the importance of targeted support for lower-income households within New Village settings.

Despite its contributions, the study is subject to several limitations. The cross-sectional design restricts the ability to infer causality, and the reliance on self-reported data may introduce bias due to social desirability or subjective interpretation. Additionally, the sample was drawn from selected New Villages, which may limit the generalizability of the findings to other rural or urban communities in Malaysia. The operationalization of income as a single moderating variable also overlooks its multidimensional nature, such as income volatility, informal earnings, and household composition.

To build on these findings, future research should consider longitudinal designs that capture temporal changes in socioeconomic conditions and policy impacts. Expanding the model to include psycho social constructs such as trust in institutions, perceived fairness, or civic efficacy could offer deeper insights into the mechanisms driving community well-being. Comparative studies across different community types, including indigenous settlements, FELDA schemes, or urban low-income areas, would help test the robustness and adaptability of the model. Moreover, integrating qualitative approaches such as interviews or participatory mapping could enrich the statistical findings with lived experiences and contextual nuance. Finally, a more granular analysis of income considering sources, stability, and intra-household dynamics would refine its role in moderating development outcomes and inform more equitable policy design.

Conclusion

This study examined the multifaceted relationships between socioeconomic change, policy implementation and community participation, income levels, and socioeconomic well-being within New Village communities. Using Partial Least Squares Structural Equation Modelling (PLS-SEM), the analysis confirmed that socioeconomic change plays a pivotal role in enhancing well-being, both directly and indirectly through policy and community engagement. The mediating effect of policy and community factors was statistically significant, indicating that structural improvements are most impactful when accompanied by participatory governance and responsive local institutions.

Furthermore, the moderating analysis revealed that income amplifies the effect of socioeconomic change on well-being, although income alone does not exert a direct influence. This suggests that economic resources enhance the capacity of individuals to benefit from broader structural reforms, reinforcing the need for inclusive development strategies that address income disparities.

Overall, the model demonstrated strong reliability, validity, and predictive relevance, offering both theoretical insight and practical guidance. The findings underscore the importance of integrated policy approaches that combine infrastructure and economic development with community empowerment.

These results contribute to the growing body of literature on rural transformation and provide actionable recommendations for policymakers seeking to improve quality of life in Malaysia's New Village communities.

Co-Author Contribution

The author 1 carried out the fieldwork, prepared the literature review and overlooked the whole article's write up. Author 2 carried out the analysis and interpretation of the results.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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