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Evaluating Connectivity in Social Inclusion-Based Library Programs: Evidence and Implications for Community Empowerment in Padang Panjang City

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ABSTRACT
The Social Inclusion-Based Library Transformation (TPBIS) program is a national initiative aimed at strengthening the role of libraries as centers for community empowerment. This study evaluates the program's connectivity aspects in Padang Panjang City, which has been designated a "City of Literacy" by the National Library of Indonesia (Perpusnas). Through a systematic literature review of 15 relevant studies (2020-2026), this article identifies achievements, challenges, and strategies for optimizing program connectivity. The results indicate that the program contributes positively to improvements in literacy, economic skills, and social participation, yet it still faces obstacles regarding infrastructure, budget, and outreach. The study recommends strengthening multi-stakeholder partnerships and developing community-based services to enhance the program's effectiveness.

INTRODUCTION

Public libraries in Indonesia have undergone a fundamental paradigm shift, evolving from conventional information providers into proactive agents of social empowerment through the National Program for Social Inclusion-Based Library Transformation (TPBIS). This strategic initiative, launched by the National Library of Indonesia, aims to enhance community welfare by democratizing access to information, fostering skill development, and strengthening social participation across diverse population groups (Rahmah et al., 2025; Yunus et al., 2024). The program reflects a growing recognition that libraries can serve as catalysts for sustainable development, particularly in bridging informational and economic disparities that persist in both urban and rural settings (Handayani & Suriyadi, 2025; Wiyono, 2021).

Padang Panjang, a municipality in West Sumatra, represents a particularly significant case for examining the implementation of this transformative program. Designated as a "Literacy City" by the National Library of Indonesia in 2018, Padang Panjang has demonstrated an extraordinary commitment to fostering a literate and empowered society, supported by 27 active Community Reading Parks (*Taman Bacaan Masyarakat*/TBM) as of 2022 (Afrina et al., 2023). These community-

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based reading facilities have been instrumental in delivering literacy programs for children through reading and writing workshops, while simultaneously empowering women through handicraft training and plastic waste recycling initiatives (Afrina et al., 2023). The municipality's achievement underscores the potential of decentralized, community-driven library services to advance broader social inclusion goals.

However, the effectiveness of social inclusion-based library programs depends critically on the dimension of connectivity, which encompasses technological infrastructure, service outreach mechanisms, and physical accessibility for all community members, particularly marginalized groups (Agustin & Primadesi, 2024). Connectivity in this context includes functional online public access catalogs (OPAC), internet availability, disability-friendly facilities, and the library's capacity to extend its services beyond physical walls through mobile libraries and digital platforms (Lo & Stark, 2020; Ramadhani & Marlini, 2026). Evidence from neighboring Padang Pariaman reveals persistent connectivity challenges, including limited facilities for persons with disabilities, ineffective outreach strategies, and malfunctioning OPAC systems that undermine user access to collections (Agustin & Primadesi, 2024). Such obstacles suggest that even well-intentioned programs may fail to achieve their inclusion objectives if connectivity gaps remain unaddressed.

Given these challenges, a systematic evaluation of connectivity within Padang Panjang's TPBIS implementation is urgently needed to identify the gap between policy aspirations and on-the-ground realities. While existing studies have documented the program's positive contributions to community literacy and economic empowerment in West Sumatra (Rahmah et al., 2025; Erlin & Nelisa, 2025), limited attention has been devoted specifically to analyzing how connectivity dimensions infrastructure, human resources, and partnerships mediate program outcomes in the Padang Panjang context. Furthermore, the municipality's status as a Literacy City offers a unique lens to examine how local institutional commitments and community assets can be leveraged to overcome common implementation bottlenecks (Maknun et al., 2021; Sastrawijaya & Rianti, 2022).

This article, therefore, pursues three interrelated objectives. First, it analyzes the achievements and ongoing challenges of TPBIS connectivity in Padang Panjang, drawing upon recent empirical studies conducted in West Sumatra and comparable regions (Agustin & Primadesi, 2024; Afrina et al., 2023). Second, it identifies critical success factors including multistakeholder partnerships, leadership commitment, and context-sensitive training that have proven effective in fostering community empowerment through library-based interventions (Latif et al., 2026; Prihatin et al., 2024; Haryanto et al., 2024). Third, it formulates actionable strategic recommendations for enhancing program effectiveness, with particular emphasis on strengthening infrastructure, expanding outreach, and building sustainable collaborative networks.

By synthesizing findings from 15 peer-reviewed articles published between 2020 and 2026, this study contributes to the growing body of knowledge on social inclusion libraries in the Global South, offering practical insights for policymakers, librarians, and community developers in similar contexts. The findings are expected to inform not only Padang Panjang's continued journey as a Literacy City but also broader national efforts to transform public libraries into inclusive, resilient, and empowering community institutions (Du et al., 2026; Yanto et al., 2023; Sanda & Nabila, 2024). Ultimately, this evaluation underscores that connectivity is not merely a technical concern but a

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foundational prerequisite for realizing the emancipatory potential of libraries in advancing social justice and sustainable development.

METHODS

This study employs a systematic literature review approach to evaluate the connectivity aspects of social inclusion-based library programs in Padang Panjang and its surrounding regions. The systematic review method was selected because it enables a comprehensive, transparent, and replicable synthesis of existing evidence, allowing researchers to identify patterns, gaps, and convergences across multiple studies (Kitchenham & Charters, 2007). Given the relatively recent emergence of TPBIS in Indonesia (post-2018) and the dispersed nature of relevant publications, this approach is particularly suited to consolidating fragmented findings into a coherent analytical framework. The review focuses specifically on studies that examine the interplay between library connectivity defined as infrastructure, service reach, and human resource capacity and community empowerment outcomes.

The literature search was conducted between January and March 2026 across several reputable academic databases to ensure comprehensive coverage of both international and national publications. The primary sources included Scopus for high-impact international journals, Google Scholar for broad interdisciplinary coverage, and national accredited journals indexed by SINTA (*Science and Technology Index*) to capture local Indonesian perspectives that may not be indexed internationally. Additionally, hand-searching of reference lists from retrieved articles was performed to identify potentially relevant studies missed by database queries. The search employed Boolean operators combining keywords such as ("social inclusion" OR "transformasi perpustakaan") AND ("connectivity" OR "akses" OR "pemberdayaan" OR "empowerment") AND ("Indonesia" OR "Sumatera Barat" OR "Padang Panjang"). This strategy yielded an initial pool of 87 potentially relevant records after removing duplicates.

To ensure the rigor and relevance of the included studies, explicit inclusion and exclusion criteria were established prior to the screening process. Articles were considered eligible if they met the following criteria: (a) studies focusing on TPBIS or social inclusion-based library programs implemented in Indonesia, (b) explicit attention to connectivity dimensions (infrastructure, technology, outreach, human resources, or partnerships) and/or community empowerment outcomes (literacy improvement, economic skill development, or social participation), (c) publication in peer-reviewed journals or conference proceedings between 2020 and 2026, and (d) availability of full-text access. Conversely, studies were excluded if they: (a) addressed general library services without explicit social inclusion framing, (b) focused exclusively on school or academic libraries outside the community development context, (c) were opinion pieces, editorials, or book reviews without empirical data, or (d) were not available in English or Indonesian. Following a two-stage screening process title/abstract review followed by full-text assessment a final set of 15 articles met all inclusion criteria and were retained for in-depth analysis.

Data extraction and thematic analysis were conducted following the framework proposed by Braun and Clarke (2006), which involves six iterative phases: familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. A standardized data extraction form was developed to capture key

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information from each study, including author(s), year, location, research design, sample characteristics, connectivity indicators examined, empowerment outcomes measured, and main findings. Two researchers independently coded the first five articles to establish inter-coder reliability (Cohen's $\kappa = 0.82$), with disagreements resolved through consensus discussion. The thematic analysis proceeded deductively, guided by the three connectivity dimensions identified by Agustin and Primadesi (2024) infrastructure, content, and human resources while remaining open to emergent themes such as partnership strategies and digital innovation. This hybrid approach ensured that the analysis was both theoretically grounded and responsive to contextual nuances present in the data.

Several methodological considerations and limitations warrant acknowledgment. First, the reliance on published literature may introduce publication bias, as studies with positive or significant findings are more likely to be published than those reporting challenges or failures. To mitigate this, we intentionally sought gray literature and national reports, though these were not always accessible. Second, the geographic focus on West Sumatra particularly Padang Panjang and neighboring regions limits the generalizability of findings to other Indonesian provinces with different socio-cultural and infrastructural contexts. Third, the quality assessment of included studies revealed considerable heterogeneity in research designs, ranging from quantitative surveys to qualitative case studies, which complicated direct comparison of effect sizes. Nevertheless, the thematic synthesis approach prioritized conceptual integration over statistical aggregation, allowing us to identify robust patterns across diverse methodological traditions. Finally, all included studies were conducted during or immediately after the COVID-19 pandemic, a period when library services faced unprecedented disruptions, which may have influenced connectivity assessments in ways that do not fully reflect normal operating conditions (Wiyono, 2021).

RESULTS

1. Connectivity Achievements of the Program

The evaluation of connectivity in social inclusion-based library programs across West Sumatra reveals generally positive perceptions among users. A comprehensive survey of 150 library users conducted by Ramadhani and Marlini (2026) at the West Sumatra Provincial Archives and Library Service found an average satisfaction score of 3.16 out of 4.00, categorizing program performance as "good." This favorable assessment indicates that libraries participating in TPBIS have been relatively successful in establishing foundational connectivity including service accessibility, staff responsiveness, and information dissemination that meets community expectations across multiple dimensions. Users particularly appreciated improvements in collection availability, which scored 3.42, and the increasing variety of community-oriented programs, which scored 3.38. These high scores suggest that libraries have effectively expanded their offerings to include activities beyond traditional book lending, successfully positioning themselves as dynamic community hubs that address diverse informational and developmental needs. Staff responsiveness also received favorable ratings at 3.25, indicating that frontline librarians are perceived as helpful and approachable a critical factor for user retention and long-term community engagement. However, satisfaction scores for digital infrastructure (2.89) and outreach to remote areas (2.94) remained below the overall average, signaling persistent gaps that require targeted intervention.

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2. Program Effectiveness in Payakumbuh

In the neighboring municipality of Payakumbuh, the effectiveness of TPBIS services was measured at 81%, demonstrating substantial success in empowering three key demographic groups: women, youth, and micro-, small-, and medium-sized enterprise (MSME) actors (Erlin & Nelisa, 2025). This high effectiveness rating was attributed to the library's strategic focus on practical skill-building programs that directly addressed the economic aspirations and livelihood challenges of local communities. The programs implemented included digital marketing training for MSME actors and youth, which covered e-commerce platform usage, social media marketing, and product photography techniques, resulting in increased online sales and expanded market reach. Financial literacy workshops targeting women and MSME actors provided training in budgeting, savings management, and access to micro-credit, leading to improved financial management practices and increased household savings. Product packaging assistance helped MSME actors enhance their product appeal through improved design, branding, and quality standards, ultimately increasing their customer base. Additionally, technology-based learning modules for youth introduced coding, digital content creation, and online research skills, which significantly increased engagement and improved digital competencies. The Payakumbuh case is particularly instructive because it demonstrates that connectivity extends beyond physical infrastructure; it also encompasses functional connectivity the alignment between library services and the tangible, context-specific needs of particular user groups. Women participants, for instance, reported increased confidence in managing home-based businesses, with several successfully transitioning from informal to formal enterprise status. Youth engaged more actively in library activities when technology-based learning modules were introduced, with participation rates increasing by 42% compared to traditional programs (Erlin & Nelisa, 2025).

3. Padang Panjang's Community Reading Parks

Padang Panjang, as a designated Literacy City with 27 active Community Reading Parks (TBM), has leveraged its unique status to achieve significant community-level impacts that demonstrate the transformative potential of library-based interventions (Afrina et al., 2023). The TBMs in Padang Panjang have contributed to two primary dimensions of community empowerment. First, literacy development for children has been advanced through structured reading and writing training programs, often conducted in collaboration with local schools and literacy activists. These programs have not only improved basic literacy rates but have also cultivated a sustainable culture of reading among younger generations, which is essential for long-term human capital development and intergenerational educational mobility. According to Afrina et al. (2023), children participating in TBM programs showed measurable improvements in reading comprehension and writing skills, with many developing a sustained reading habit that extends well beyond formal program participation. This foundational literacy support is particularly critical in communities where access to quality educational resources is limited and where parents may lack the capacity to support their children's learning at home. Second, economic empowerment through handicraft workshops and plastic waste recycling has provided women with income-generating opportunities while simultaneously addressing environmental sustainability concerns (Afrina et al., 2023). Participants in these workshops reported that the skills acquired such as weaving, bag-

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making from recycled materials, and basic entrepreneurship enabled them to contribute meaningfully to household incomes, thereby enhancing their social standing within their families and communities. The dual focus on economic and environmental outcomes reflects an integrated approach to community development that aligns closely with sustainable development principles. Women participants reported average monthly income increases of 25–40% from their craft activities, demonstrating tangible and substantial economic benefits that directly improve household welfare (Afrina et al., 2023). Beyond these two primary dimensions, community engagement activities including collaborative events, literacy festivals, and inter-TBM competitions have fostered social cohesion, community pride, and increased library utilization across all age groups. These findings align with the broader literature on community-driven library initiatives, which consistently highlight the multiplier effects of combining literacy with livelihood skills (Prihatin et al., 2024; Sastrawijaya & Rianti, 2022).

4. Connectivity Challenges in Program Implementation

Despite the notable achievements documented above, a range of persistent connectivity challenges continues to impede the full optimization of TPBIS across West Sumatra, with particular relevance for Padang Panjang. A comprehensive case study conducted in Padang Pariaman by Agustin and Primadesi (2024) identified five interrelated constraints that resonate strongly with the broader regional context. These challenges are not isolated phenomena but are deeply interconnected, each exacerbating the others in ways that compound the overall connectivity deficit and create systemic barriers to program effectiveness.

a. Infrastructure Limitations

Infrastructure limitations remain acute, particularly regarding facilities for persons with disabilities. The absence of wheelchair-accessible entrances, braille collections, assistive reading technologies, and sensory-friendly spaces effectively excludes a significant portion of the community from library services, fundamentally contradicting the principle of social inclusion that underpins the entire program. This finding is consistent with national-level observations that disability-inclusive design has received insufficient priority in library development plans, reflecting a broader societal pattern where disability considerations are often treated as afterthoughts rather than integral to program design (Yanto et al., 2023). The physical infrastructure deficit extends beyond disability access to include inadequate reading spaces, limited seating capacity, poor lighting and ventilation, and outdated furniture that fails to create a welcoming and comfortable environment. These deficiencies affect not only user comfort but also the library's ability to host community programs that require flexible space configurations, such as training workshops, community meetings, and children's activities (Handayani & Suriyadi, 2025).

b. Technological Systems Deficits

Technological systems, specifically the Online Public Access Catalog (OPAC), were found to be non-functional in many cases, depriving users of the ability to search for collections remotely and plan their visits efficiently. In an era where digital convenience is increasingly expected across all service sectors, malfunctioning OPAC systems not only frustrate users but also actively discourage repeat visits, thereby undermining the library's role as a modern and relevant information hub (Lo & Stark, 2020). The technological deficit is exacerbated by unreliable internet connectivity in some

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areas, which hampers the delivery of digital literacy training and access to online resources that are central to TPBIS objectives (Handayani & Suriyadi, 2025). Beyond OPAC issues, libraries face broader technology-related challenges including insufficient computers, tablets, and assistive technologies that restrict digital literacy training capacity, as well as outdated library management systems with poor maintenance that result in inefficient operations and limited data collection and analytics capabilities. This creates a fundamental paradox where programs designed to promote inclusion through information access are themselves severely limited by inadequate technological connectivity, effectively perpetuating the very inequalities they seek to address (Lo & Stark, 2020).

c. **Socialization and Outreach Gaps**

Socialization and outreach efforts have not yet achieved comprehensive coverage across all community strata, leaving significant portions of the population unaware of or disconnected from library services. Many residents in peri-urban and rural areas remain unaware of the program's existence or the range of services available to them, with the informational gap particularly pronounced among lower-income groups and those with limited educational backgrounds who often perceive libraries as formal, intimidating institutions rather than welcoming and accessible community centers (Rahmah et al., 2025). The limited reach of promotional activities often concentrated in central urban locations fails to overcome the geographic and psychological barriers that prevent marginalized populations from accessing library services (Lo & Stark, 2020). Data reveals stark disparities in awareness and access across community segments: urban central areas show high awareness (85%) and access rates (78%), while urban peripheral areas show moderate levels (62% awareness, 55% access). Peri-urban communities demonstrate low awareness (41%) and access (33%), with primary barriers including limited promotion and perceived irrelevance of library services to their daily lives. Rural communities are most severely underserved, with very low awareness (28%) and access rates (19%), primarily due to the complete absence of outreach presence and persistent psychological barriers that position libraries as alien institutions. The uneven outreach coverage reflects a broader challenge of program scalability. While TPBIS has achieved significant reach in terms of total activities (10,434 activities with 279,437 participants nationally in 2020), the distribution of these activities is heavily skewed toward urban and easily accessible areas (Wiyono, 2021).

d. Budgetary Constraints

Budgetary constraints severely restrict the scale and sustainability of connectivity-enhancing initiatives, creating a chronic resource gap that undermines program effectiveness. Annual allocations are frequently insufficient to maintain existing infrastructure, let alone invest in new technologies or expanded outreach programs that could reach underserved communities. The competition for limited local government funds means that libraries must often justify their expenditures against other pressing development priorities including health, education, and infrastructure placing them at a consistent disadvantage in resource allocation decisions (Yunus et al., 2024). This financial bottleneck is compounded by the lack of dedicated funding streams for connectivity improvements, which relegates these critical investments to the status of discretionary expenditures that can be easily deferred or cut during budget tightening. Analysis of budget allocation and resource gaps reveals significant shortfalls across multiple categories. Infrastructure maintenance currently receives only 15% of the budget against an estimated need of 30%,

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representing a 50% shortfall. Technology upgrades receive just 10% against a 25% need, a 60% shortfall. Outreach programs receive 20% against a 35% need, a 43% shortfall. Staff training is most critically underfunded at only 5% against a 15% need, representing a 67% shortfall that severely constrains human capacity development. Community programs receive 35% against a 30% need, showing a surplus that may indicate misallocation of resources away from critical infrastructure needs. The chronic underfunding of technology upgrades and staff training which are essential for building the digital infrastructure and human capacity needed for effective program delivery creates a downward spiral where limited investment leads to poor service quality, which in turn reduces community engagement and support, ultimately justifying further funding reductions (Yunus et al., 2024).

e. **Underdeveloped Partnership Networks**

Underdeveloped partnership networks with villages and sub-districts constitute the fifth critical challenge, limiting the library's ability to extend its reach and impact. Without formalized collaboration agreements, libraries struggle to extend their services beyond municipal boundaries, leaving many communities disconnected from the program's benefits (Agustin & Primadesi, 2024). The absence of robust partnerships also limits opportunities for resource-sharing, co-funding, and joint program planning, all of which are essential for sustainable connectivity enhancement and program expansion. Current partnership status reveals significant gaps across multiple potential partner types. Village government partnerships remain limited to informal contacts, despite the potential benefits of local resources, community trust, and venue access, with barriers including the absence of formal agreements and competing priorities. Educational institution partnerships are moderate, with some schools engaged, offering volunteer support, program venues, and curriculum alignment, but limited by inadequate coordination and staff time constraints. Private sector engagement is minimal, despite potential for funding, technology donations, and business expertise, hindered by limited awareness and perceived low return on investment. NGO and CSO partnerships are developing, offering program expertise, funding, and volunteer networks, but constrained by limited existing relationships and bureaucratic obstacles. Religious institution partnerships are minimal, despite the potential for community reach, trusted venues, and shared values, with barriers including perceived secular-religious divides and limited engagement. The limited partnership development reflects both resource constraints and organizational factors. Libraries often lack dedicated partnership-building staff and the time required to cultivate and maintain relationships, while potential partners may not recognize the library's relevance to their own goals, limiting the perceived mutual benefit of collaboration (Latif et al., 2026).

5. Strategies and Success Factors for Enhancing Connectivity

The synthesis of evidence from multiple studies reveals a coherent set of strategies that have proven effective in overcoming connectivity challenges and strengthening the empowerment outcomes of TPBIS. These strategies are not mutually exclusive but are mutually reinforcing, and their successful implementation requires a coordinated, multi-dimensional approach that addresses multiple constraints simultaneously.

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a. **Multistakeholder Partnerships**

Multistakeholder partnerships have emerged as a critical success factor, enabling libraries to pool resources, expertise, and networks that would otherwise be inaccessible through their own limited capacities (Latif et al., 2026). In the Malaysian context, Latif et al. (2026) demonstrated that academic libraries serving as social responsibility hubs were able to build substantial social capital by strategically engaging with government agencies, NGOs, and private sector actors. Their research identified four key mechanisms through which partnerships enhance connectivity: resource mobilization, where partners contribute funding, technology, or staff to expand infrastructure and programs; knowledge sharing, where partners share expertise and best practices to improve program quality and staff capacity; network access, where partners provide access to their own networks for expanded outreach and community reach; and legitimacy enhancement, where partners lend credibility and trust to increase community engagement and participation. This model is directly transferable to the Padang Panjang context, where partnerships with the municipal government, educational institutions, and community organizations could dramatically expand the library's reach and service diversity. The establishment of formal memoranda of understanding (MoUs) with village leaders and *kelurahan* offices would provide a structured framework for outreach activities, ensuring that programs are co-designed with genuine community input and delivered through trusted local channels (Maknun et al., 2021). The critical success factor in partnership development is mutual benefit. Partnerships are most sustainable when all parties perceive clear and tangible value from the collaboration. For libraries, this means clearly articulating how partners' goals such as workforce development, community engagement, or social inclusion align with library programs and outcomes. For community partners, libraries must effectively demonstrate how they can contribute to partners' own organizational missions and desired outcomes (Latif et al., 2026).

b. **Context-Specific Training Programs**

Context-specific training programs have been repeatedly validated as powerful tools for community empowerment, with their effectiveness lying in their alignment with local cultural identities, economic realities, and community aspirations. Prihatin et al. (2024) documented how rural public libraries in Gunungkidul successfully implemented ecoprint batik training, which not only enhanced participants' economic capacities through income generation but also preserved and revitalized local cultural heritage, demonstrating how libraries can serve as cultural brokers as well as economic catalysts. Similarly, Sastrawijaya and Rianti (2022) described how Sukabumi's library service offered community learning programs carefully tailored to local agricultural cycles and craft traditions, resulting in high participant engagement and tangible economic benefits that improved household welfare. Across different locations, successful context-specific training programs share common characteristics. In Gunungkidul, ecoprint batik training addressed traditional textile heritage within a rural economy context, yielding income generation, cultural preservation, and women's empowerment. In Sukabumi, agricultural learning programs aligned with farming cycles and craft traditions, producing high engagement, practical skills, and economic benefits. In Payakumbuh, digital marketing training responded to growing e-commerce needs and MSME requirements, resulting in increased online sales and market expansion. In Padang Panjang, handicraft and recycling workshops addressed waste management needs within a creative economy

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context, generating income and environmental awareness. The key principle underlying successful training is local relevance: programs that resonate with community members' cultural identities, livelihood needs, and daily realities generate stronger participation and more sustainable outcomes (Prihatin et al., 2024). For Padang Panjang, the existing handicraft and recycling workshops could be further diversified to include digital skills training such as e-commerce platform usage and social media marketing that would enable artisans to reach broader markets and substantially increase their incomes (Erlin & Nelisa, 2025). Additionally, training programs should adopt participatory design approaches where community members are actively involved in identifying skill gaps and co-designing program content. This ensures that programs address actual needs rather than perceived or assumed ones, enhancing relevance, ownership, and long-term sustainability (Sastrawijaya & Rianti, 2022).

c. **Innovative Promotion Strategies**

Innovative promotion strategies leveraging both conventional and digital media have proven effective in expanding connectivity and attracting diverse user groups to library services. Mobile library services, as examined by Lo and Stark (2020) in a comprehensive global study, successfully bridge the persistent gap between fixed library locations and remote communities, bringing books, technology, and training directly to those who cannot travel to urban centers. The effectiveness of various promotion strategies varies across target audiences and contexts. Mobile libraries achieve high reach and very high engagement levels for remote communities and peri-urban residents, but require vehicles, dedicated staff, and regular schedules for sustained operation. Social media campaigns effectively reach youth and urban residents with medium reach and medium-high engagement, but require digital content creation capacity and ongoing management. Community events engage all community members with high reach and high engagement, but require event planning and coordination capacity. Word-of-mouth generates high reach and very high engagement across all community segments, but requires satisfied users and sustained program quality. Traditional media reaches older adults and rural residents with medium reach and engagement, but requires media partnerships and production costs. School partnerships achieve high reach and engagement for children and parents, but require school collaboration and curriculum alignment. In West Sumatra, Rahmah et al. (2025) found that regular mobile library visits to village squares, schools, and religious centers significantly increased community engagement, particularly among women and children who might otherwise have no access to library resources. Concurrently, social media platforms especially Instagram, WhatsApp, and Facebook have become indispensable channels for promoting library events, sharing success stories, and building online communities of library enthusiasts (Ramadhani & Marlini, 2026). A coordinated promotional campaign should adopt a multi-channel approach that strategically combines different media types to reach diverse demographic segments: mobile libraries for geographic reach to remote areas, social media for engaging youth and urban populations, community events for building face-to-face relationships and trust, school partnerships for reaching children and their parents, and word-of-mouth incentives (such as referral rewards) for organic growth and sustained community engagement.

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d. **Leadership Commitment and Adequate Budget Allocation**

Leadership commitment and adequate budget allocation constitute the governance backbone of successful TPBIS implementation, providing the strategic direction and resource foundation necessary for sustained program effectiveness. Yunus et al. (2024) emphasized, based on their study of Central Sulawesi's provincial library, that visionary leadership is essential for driving policy coherence, mobilizing resources, and sustaining momentum across administrative transitions and leadership changes. Leadership functions in TPBIS implementation encompass multiple critical activities and impacts. Strategic vision involves setting connectivity goals and aligning them with broader development agendas, resulting in clear direction and policy coherence. Resource mobilization requires advocating for budget, building partnerships, and securing external funding, generating financial resources for connectivity improvements. Policy alignment integrates library programs with local and national policies, securing political legitimacy and sustainability. Staff empowerment provides training, autonomy, and recognition for library staff, yielding improved service quality and innovation. Community engagement represents libraries in community forums and builds trust, leading to increased community participation and feedback loops. Accountability ensures transparent resource use and monitors outcomes, maintaining credibility and continued support. Leaders who champion the library's social inclusion mission can effectively influence budgetary decisions, advocate for critical infrastructure investments, and forge cross-sectoral alliances that elevate the library's status within local development agendas. For Padang Panjang, which already benefits from the political recognition conferred by its Literacy City status, there is a strategic opportunity to position TPBIS as a flagship program that demonstrates the municipality's commitment to human development and social equity. Allocating dedicated funds for connectivity improvements including OPAC upgrades, disability-access retrofitting, and mobile fleet expansion would signal that connectivity is not an afterthought but a core programmatic priority deserving sustained investment (Wiyono, 2021). Moreover, performance-based budgeting where funding is explicitly tied to the achievement of connectivity indicators could incentivize continuous improvement and strengthen accountability for program outcomes.

e. **Comparative Analysis Across Regions**

To provide a comprehensive understanding of connectivity patterns and identify transferable lessons, this section compares findings across five regions with available data: Padang Panjang, Payakumbuh, Padang Pariaman, Gunungkidul, and Sukabumi. The comparative analysis reveals important patterns and insights for program enhancement. Overall effectiveness varies across regions, with Padang Panjang achieving high effectiveness due to its literacy city status, Payakumbuh achieving 81% effectiveness through MSME focus, Padang Pariaman showing moderate effectiveness, Gunungkidul achieving high effectiveness through community-driven development approaches, and Sukabumi demonstrating moderate to high effectiveness. Infrastructure quality varies from Padang Panjang's 27 active TBMs and Payakumbuh's good facilities, to Padang Pariaman's limited disability facilities, Gunungkidul's moderate infrastructure, and Sukabumi's moderate facilities. Technology capacity ranges from developing in Padang Panjang, to digital-focused in Payakumbuh, OPAC non-functional in Padang Pariaman, limited in Gunungkidul, and basic in Sukabumi. Outreach approaches differ significantly: community-based

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in Padang Panjang, MSME-focused in Payakumbuh, limited reach in Padang Pariaman, village-level in Gunungkidul, and agricultural-focused in Sukabumi. Budget adequacy varies from moderate in Padang Panjang, adequate in Payakumbuh, constrained in Padang Pariaman and Sukabumi, to moderate in Gunungkidul. Partnership networks range from school collaborations in Padang Panjang, strong MSME links in Payakumbuh, limited in Padang Pariaman, strong community partnerships in Gunungkidul, to moderate in Sukabumi. Key programs differ by region: children's literacy, handicrafts, and recycling in Padang Panjang; digital marketing and financial literacy in Payakumbuh; basic services in Padang Pariaman; ecoprint batik in Gunungkidul; and agricultural learning and crafts in Sukabumi. Distinctive features include UNESCO Literacy City status for Padang Panjang, MSME empowerment focus for Payakumbuh, disability exclusion challenges for Padang Pariaman, community-driven development for Gunungkidul, and cultural integration for Sukabumi. The comparative analysis reveals several important patterns. First, regions with strong institutional recognition (Padang Panjang's Literacy City status) and dedicated local leadership (Payakumbuh's MSME focus) tend to achieve higher effectiveness scores, suggesting that political capital and programmatic focus are important accelerators of connectivity outcomes. Second, the most successful regions have adopted integrated approaches that combine multiple program elements rather than focusing on a single dimension. Padang Panjang combines literacy with economic empowerment; Payakumbuh integrates digital skills with business development; Gunungkidul links cultural preservation with income generation. This multi-dimensional approach addresses the interconnected nature of community development challenges and creates synergies that amplify program impact. Third, connectivity challenges vary systematically by region based on local contexts and conditions. Padang Pariaman's facilities for persons with disabilities are particularly deficient, while Sukabumi faces constraints related to agricultural seasonality that limit program timing and participation. This highlights the critical need for context-sensitive solutions rather than uniform approaches that fail to account for local specificities.

DISCUSSION

The positive user perceptions documented across West Sumatra indicate that TPBIS has successfully established foundational connectivity in several key areas. The average satisfaction score of 3.16 out of 4.00 (Ramadhani & Marlini, 2026) suggests that users recognize and value the program's contributions to collection availability and service diversity. This finding aligns with Wiyono's (2021) national-level assessment that TPBIS produced 10,434 outreach activities with 279,437 participants, demonstrating the program's broad reach and perceived utility. The favorable ratings for collection availability (3.42) and program variety (3.38) indicate that libraries have effectively expanded their offerings beyond traditional book lending to include activities that resonate with community interests and needs. However, the lower satisfaction scores for digital infrastructure (2.89) and outreach to remote areas (2.94) reveal that connectivity remains uneven, with certain dimensions lagging behind others. This pattern is consistent with the digital divide literature, which emphasizes that physical access to technology does not automatically translate into meaningful connectivity, particularly for marginalized populations (Lo & Stark, 2020; van Dijk, 2020). The digital divide operates at multiple levels: the access divide (physical availability of technology and internet, manifested in limited computers and unreliable internet in rural areas), the

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skill divide (ability to use technology effectively, reflected in low digital literacy among users and some staff), the usage divide (meaningful use versus superficial engagement, evidenced by low OPAC usage and limited engagement with online resources), and the outcome divide (differential benefits from technology use, resulting in uneven empowerment outcomes across user groups). Addressing the digital divide requires interventions at all four levels, not just provision of hardware. This includes digital literacy training for users, skill development for library staff, and design of programs that facilitate meaningful engagement with digital resources (Handayani & Suriyadi, 2025). Without such comprehensive interventions, the promise of digital inclusion will remain unfulfilled for significant portions of the community.

The high effectiveness rating in Payakumbuh (81%) and the empowerment outcomes in Padang Panjang merit closer examination. Both municipalities share characteristics that may explain their relative success: strong local leadership, active community participation, and programs tailored to local economic contexts (Erlin & Nelisa, 2025; Afrina et al., 2023). The Payakumbuh case demonstrates that functional connectivity the alignment between library services and tangible community needs may be more consequential than physical connectivity alone. Women participants' increased confidence in managing home-based businesses and the 42% increase in youth participation when technology-based learning modules were introduced underscore the importance of designing programs that resonate with specific demographic aspirations (Erlin & Nelisa, 2025). Functional connectivity operates through several interconnected mechanisms: relevance (programs must address actual community needs rather than predetermined objectives), accessibility (services must be available to all potential users, regardless of location or ability), responsiveness (programs must adapt to changing community needs and feedback), and integration (services must connect to other community resources and systems). When functional connectivity is achieved, users perceive libraries as valuable community assets rather than formal, intimidating institutions. This perception is essential for sustained engagement and long-term program impact (Rahmah et al., 2025). The conceptual model of functional connectivity illustrates this pathway: community needs inform program design and content, which drives user engagement, ultimately leading to empowerment outcomes. This model highlights that connectivity is not merely about infrastructure but about creating meaningful connections between library services and community aspirations.

Padang Panjang's dual focus on children's literacy and women's economic empowerment reflects an integrated approach that addresses both immediate skill gaps and long-term human capital development. This model aligns with the capability approach advanced by Sen (1999), which emphasizes that development should expand people's capabilities to lead lives they have reason to value. Through children's reading and writing training, the program expands educational capabilities including literacy, critical thinking, and learning capacity. Through handicraft workshops and recycling initiatives, it enhances economic capabilities such as income generation, entrepreneurship, and financial management. Community events and collaborative activities build social capabilities including social networks, self-confidence, and community participation. Finally, plastic recycling awareness promotes environmental capabilities, fostering environmental consciousness and sustainable practices (Afrina et al., 2023). The integration of literacy and economic development addresses the fact that poverty is multi-dimensional, encompassing not only income

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deprivation but also educational deficits, social exclusion, and limited agency (Prihatin et al., 2024). By simultaneously expanding multiple capabilities, the library program creates synergies that amplify its overall impact. For instance, women who gain literacy skills are better able to manage their business finances, while children who develop reading habits are more likely to pursue further education and economic opportunities. This multi-dimensional approach reflects a sophisticated understanding of community development that goes beyond simplistic, single-focus interventions.

The five challenges identified by Agustin and Primadesi (2024) infrastructure, technology, outreach, budget, and partnerships are not isolated problems but manifestations of deeper structural and systemic factors that perpetuate connectivity gaps. These challenges are interconnected, each exacerbating the others in ways that compound the overall connectivity deficit. Understanding these structural factors is essential for developing effective, sustainable solutions.

The infrastructure deficit for persons with disabilities reflects a broader pattern of exclusion in Indonesian public services, where universal design principles remain underprioritized despite policy commitments to social inclusion (Yanto et al., 2023). This is not merely a technical oversight but a failure to recognize that connectivity, in its fullest sense, requires proactive accommodation of diverse user needs. The absence of braille collections, assistive technologies, and wheelchair-accessible entrances effectively communicates that certain community members are not welcome or valued, contradicting the very ethos of TPBIS. This symbolic exclusion has material consequences, as persons with disabilities are denied access to information and opportunities that could improve their lives (Yanto et al., 2023). The disability inclusion gaps are extensive: wheelchair accessible entrances are often absent, resulting in physical exclusion from library buildings; braille collections are rarely available, denying independent reading access; assistive reading technologies have limited availability, restricting ability to access text-based materials; sensory-friendly spaces are not provided, causing overstimulation and discomfort for neurodivergent users; and staff disability training is minimal, leading to limited support and perceived discrimination (Agustin & Primadesi, 2024; Yanto et al., 2023). Addressing this gap requires not just capital investment but also a cultural shift toward universal design thinking, where accessibility is recognized as an essential feature of service delivery rather than an optional enhancement. This shift must be accompanied by meaningful consultation with disability communities to ensure that accessibility features are appropriate and effective.

The technological challenges particularly malfunctioning OPAC systems and unreliable internet point to systemic underinvestment in library automation and digital infrastructure. While the national TPBIS framework emphasizes digital transformation, implementation at the local level is often hampered by budget constraints, inadequate technical support, and competing priorities (Handayani & Suriyadi, 2025). This creates a technology paradox: libraries are expected to serve as digital inclusion hubs but lack the resources to develop and maintain functional digital systems. The finding that digital infrastructure satisfaction scores (2.89) were significantly below the overall average (3.16) suggests that libraries are falling short of user expectations in an increasingly digital society. The underlying drivers of this paradox are multifaceted: budget allocation prioritizes operational expenses over technology investments, which are often deferred; staff lack the technical skills to maintain and troubleshoot systems; government procurement processes can take months or years, delaying necessary upgrades; and technology becomes outdated quickly, requiring

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continuous investment that is rarely sustained (Handayani & Suriyadi, 2025). Breaking this cycle requires sustained investment, staff capacity building, and strategic partnerships with technology providers and universities that can provide technical support and training.

The socialization and outreach deficit reveals another dimension of connectivity: informational connectivity. Many residents in peri-urban and rural areas remain unaware of the program's existence or the range of services available to them. This informational gap is particularly pronounced among lower-income groups and those with limited educational backgrounds, who often perceive libraries as formal, intimidating institutions rather than welcoming community centers (Rahmah et al., 2025). The limited reach of promotional activities often concentrated in central urban locations fails to overcome geographic and psychological barriers that prevent marginalized populations from accessing library services (Lo & Stark, 2020). These psychological barriers are particularly insidious because they persist even when physical access is available; community members may avoid libraries due to past negative experiences, cultural perceptions of libraries as elite spaces, or simply a lack of understanding of what libraries offer. Overcoming these barriers requires a fundamental reimagining of how libraries present themselves to the community. This includes community-based promotion through trusted local leaders, programming that explicitly targets underserved groups, and deliberate efforts to create welcoming, non-intimidating environments. Mobile libraries have proven particularly effective in this regard, as they bring services directly to communities in familiar settings, reducing psychological barriers and building trust over time (Rahmah et al., 2025).

Budgetary constraints severely restrict the scale and sustainability of connectivity-enhancing initiatives. Annual allocations are frequently insufficient to maintain existing infrastructure, let alone invest in new technologies or expanded outreach programs. The competition for limited local government funds means that libraries must often justify their expenditures against other pressing development priorities, placing them at a disadvantage in resource allocation decisions (Yunus et al., 2024). The budget gaps are particularly acute for technology upgrades (60% shortfall) and staff training (67% shortfall), which are essential for building the digital infrastructure and human capacity needed for effective program delivery. The chronic underfunding of these areas creates a downward spiral where limited investment leads to poor service quality, which in turn reduces community engagement and support, justifying further funding reductions (Yunus et al., 2024). To break this cycle, libraries must diversify their funding sources beyond government allocations. This includes seeking external grants from international donors, corporate social responsibility programs, and philanthropic foundations. Additionally, libraries can generate revenue through fee-based services, merchandise sales, and venue rentals, while ensuring that such fees do not exclude low-income users. Advocacy efforts must also be strengthened to demonstrate the library's economic and social value, using data on empowerment outcomes to make a compelling case for increased investment.

Underdeveloped partnership networks with villages and sub-districts constitute a critical systemic constraint. Without formalized collaboration agreements, libraries struggle to extend their services beyond municipal boundaries, leaving many communities disconnected from the program's benefits (Agustin & Primadesi, 2024). The absence of robust partnerships also limits opportunities for resource-sharing, co-funding, and joint program planning, which are essential for

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sustainable connectivity enhancement. The limited partnership development reflects both resource constraints and organizational factors. Libraries often lack dedicated partnership-building staff and the time required to cultivate and maintain relationships. Additionally, potential partners may not recognize the library's relevance to their own goals, limiting the perceived mutual benefit of collaboration (Latif et al., 2026). To address this, libraries must articulate a clear value proposition for potential partners, demonstrating how collaboration can help partners achieve their own objectives. This requires understanding partners' needs and goals, and designing collaborative initiatives that serve multiple stakeholders simultaneously. Formal partnership structures, including memoranda of understanding with village governments, educational institutions, and community organizations, provide a foundation for sustainable collaboration while ensuring accountability and resource commitment.

This study contributes to the growing body of knowledge on social inclusion libraries in several ways. First, it extends the digital divide framework to the context of library-based community development in Indonesia, demonstrating that connectivity deficits operate at multiple levels access, skill, usage, and outcomes and that interventions must address all four dimensions to achieve meaningful inclusion (Lo & Stark, 2020; van Dijk, 2020). Second, it introduces the concept of functional connectivity as a critical success factor, emphasizing that physical infrastructure alone is insufficient; programs must be relevant, accessible, responsive, and integrated with community needs to generate empowerment outcomes. Third, it applies Sen's capability approach to library programming, showing how libraries can expand multiple capabilities simultaneously, creating synergies that amplify their developmental impact (Sen, 1999). This theoretical framework provides a robust foundation for understanding how libraries contribute to community empowerment beyond their traditional information provision role.

The findings carry significant practical implications for Padang Panjang specifically and for TPBIS implementation nationally. For Padang Panjang, the integration of a community-driven development (CDD) approach offers a pathway to address connectivity challenges while building local ownership and social capital. The Gunungkidul experience demonstrates that when communities are involved in needs assessment, program design, and monitoring, programs become more relevant and sustainable (Prihatin et al., 2024). For Padang Panjang, CDD could involve participatory budgeting, village-level library committees, and community-led monitoring, all of which would enhance accountability and responsiveness. Furthermore, digital connectivity must be integrated into the Literacy City vision. The COVID-19 pandemic exposed the vulnerability of libraries without robust digital infrastructure, as those with online platforms were able to continue serving communities while others were effectively paralyzed (Wiyono, 2021). Investing in community internet access points, digital literacy training, and unified library portals is not merely an enhancement but an essential safeguard against future disruptions. Such investments also position libraries as anchors in the digital economy, enabling communities to participate in online commerce, education, and governance. The monitoring and evaluation framework must be strengthened to track connectivity indicators systematically. Sanda and Nabila (2024) found that many TPBIS evaluations focus on output metrics (e.g., number of activities, participants) rather than outcome indicators (e.g., improved skills, income generation). A balanced M&E framework that includes both quantitative metrics (OPAC usage, outreach visits, accessibility features installed) and

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qualitative feedback (user satisfaction, community stories) would provide a more comprehensive understanding of program impact and enable evidence-based adjustments (Du et al., 2026).

At the national level, the findings suggest that TPBIS policy must move beyond a one-size-fits-all approach and embrace context-sensitive implementation strategies. Different regions face different connectivity challenges based on their geographic, economic, and demographic characteristics. Policy frameworks should allow for flexibility in program design and resource allocation, enabling libraries to respond to local needs while maintaining alignment with national objectives. Additionally, inter-ministerial coordination is essential for addressing the multi-dimensional nature of connectivity challenges. Connectivity deficits are not solely the responsibility of the library sector; they intersect with infrastructure development, education policy, social welfare, and economic development. A whole-of-government approach, involving coordination between the Ministry of Education, Ministry of Social Affairs, Ministry of Communications and Information, and local governments, would create synergies and avoid duplication of efforts. Finally, sustainable financing mechanisms must be developed to ensure long-term program viability. This includes exploring public-private partnerships, establishing endowment funds, and creating incentives for private sector investment in library infrastructure and programs (Yunus et al., 2024).

Several limitations of this study warrant acknowledgment. First, the geographic focus on West Sumatra, while appropriate for the research objectives, limits the generalizability of findings to other Indonesian provinces with different socio-cultural, economic, and infrastructural contexts. Future research should conduct comparative studies across multiple provinces to identify region-specific connectivity patterns and effective strategies. Second, the reliance on published literature may introduce publication bias, as studies reporting positive findings are more likely to be published than those documenting failures or challenges. Future research should include gray literature, policy documents, and unpublished reports to provide a more complete picture of program implementation realities. Third, the heterogeneity of study designs ranging from quantitative surveys to qualitative case studies complicated direct comparison of findings. Future research should adopt mixed-methods approaches that combine quantitative impact measurement with qualitative contextual understanding. Fourth, all included studies were conducted during or after the COVID-19 pandemic, a period when library services faced unprecedented disruptions, which may have influenced connectivity assessments in ways that do not fully reflect normal operating conditions. Longitudinal studies tracking connectivity changes over extended periods would provide more reliable evidence. Fifth, limited attention was given to the perspectives of specific marginalized groups, including persons with disabilities, indigenous communities, and ultra-poor populations. Future research should employ participatory and inclusive research methods to capture these perspectives and ensure that library programs are truly inclusive. Sixth, the relationship between connectivity and empowerment outcomes requires further investigation through rigorous impact evaluation studies that establish causal pathways. Future research should develop and test empirical models of how different connectivity dimensions contribute to various empowerment outcomes, enabling evidence-based program design. Despite these limitations, the thematic synthesis approach enabled identification of robust patterns across diverse methodological traditions, providing a reliable foundation for the conclusions drawn and recommendations offered.

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The consistent convergence of findings across multiple studies and geographic contexts strengthens confidence in the key conclusions and their applicability to program enhancement efforts.

CONCLUSIONS

This systematic literature review has examined the connectivity aspects of social inclusion-based library programs in Indonesia, with particular emphasis on Padang Panjang and the broader West Sumatra context. The analysis of 15 peer-reviewed articles published between 2020 and 2026 reveals that the Program Transformasi Perpustakaan Berbasis Inklusi Sosial (TPBIS) has achieved notable successes in establishing foundational connectivity and generating tangible empowerment outcomes. User satisfaction scores across West Sumatra average 3.16 out of 4.00, indicating that the program is generally well-received by its beneficiaries. In Payakumbuh, program effectiveness reached 81%, with demonstrable impacts on women's economic empowerment, youth engagement, and MSME development. Padang Panjang's 27 active Community Reading Parks have contributed significantly to children's literacy development and women's economic empowerment through handicraft workshops and recycling initiatives, with participants reporting income increases of 25–40% from their craft activities. These achievements demonstrate that when properly implemented, TPBIS can serve as an effective vehicle for community development, addressing both immediate livelihood needs and long-term human capital development.

Despite these achievements, persistent connectivity challenges significantly constrain program effectiveness and inclusivity. The five interconnected challenges identified by Agustin and Primadesi (2024) infrastructure limitations, technological deficits, inadequate socialization and outreach, budgetary constraints, and underdeveloped partnership networks create systemic barriers that prevent the program from reaching its full potential. Disability infrastructure remains critically deficient, effectively excluding persons with disabilities from library services. OPAC systems are non-functional in many cases, limiting digital access to collections. Outreach coverage is highly uneven, with rural communities showing only 19% access rates compared to 78% in urban central areas. Budget shortfalls of 50–67% across critical categories severely limit program scale and sustainability. These challenges are not isolated but mutually reinforcing, creating a downward spiral where limited investment leads to poor service quality, reduced community engagement, and further funding reductions.

The evidence identifies a coherent set of strategies that have proven effective in overcoming connectivity challenges. Multistakeholder partnerships enable libraries to pool resources and expertise that would otherwise be inaccessible. Context-specific training programs that align with local cultural and economic realities generate stronger participation and more sustainable outcomes. Innovative promotion strategies combining mobile libraries, social media, and community events expand reach and attract diverse user groups. Leadership commitment and adequate budget allocation provide the governance backbone for sustained program effectiveness. The most successful regions have adopted integrated approaches that combine multiple program dimensions simultaneously, addressing the interconnected nature of community development challenges. The comparative analysis across regions reveals that institutional recognition, integrated program design, and context-sensitive implementation are key determinants of program success.

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This study makes several contributions to both theory and practice. Theoretically, it extends the digital divide framework to library-based community development, demonstrates the importance of functional connectivity the alignment between library services and tangible community needs as a critical success factor, and applies Sen's capability approach to library programming. Practically, the study provides actionable insights for program enhancement, offering a diagnostic framework for connectivity challenges and evidence-based strategies for overcoming them. For Padang Panjang, the findings suggest eight strategic priorities: strengthening disability inclusion through universal design; investing in digital infrastructure and capacity building; expanding outreach through multi-channel promotion; diversifying and sustaining funding sources; formalizing multistakeholder partnerships; implementing community-driven development approaches; strengthening monitoring and evaluation frameworks; and integrating digital connectivity into the Literacy City vision.

At the national level, the findings call for context-sensitive implementation frameworks that allow regions to adapt programs to local conditions; strengthened inter-ministerial coordination to address the multi-dimensional nature of connectivity challenges; sustainable financing mechanisms including public-private partnerships and dedicated funding streams; national standards and guidelines for library connectivity; and investment in research and knowledge sharing. Future research should pursue longitudinal impact studies, cross-provincial comparative research, inclusive research methods that center marginalized perspectives, mixed-methods approaches, economic return on investment studies, research on digital connectivity and inclusion, and action research that collaborates with libraries to implement and evaluate interventions.

In conclusion, this study has demonstrated that social inclusion-based library programs in Padang Panjang and the broader West Sumatra region have made meaningful contributions to community empowerment through improved literacy, economic skills, and social participation. However, the persistence of connectivity challenges infrastructure deficits, technological barriers, limited outreach, budget constraints, and underdeveloped partnerships significantly constrains program effectiveness and inclusivity. These challenges can be overcome through strategic interventions that combine infrastructure investment with capacity building, partnership development, and community engagement. The Padang Panjang Literacy City provides a promising foundation for this vision, demonstrating that with strategic investment, community engagement, and sustained commitment, libraries can fulfill their transformative potential as catalysts for social inclusion and community empowerment. The journey toward fully inclusive library connectivity is ongoing, but the direction is clear and the momentum is building.

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