



MADRASAS ADRIFT: EXAMINING THE EDUCATIONAL RESOURCE DISTRIBUTION GAP IN NORTH KALIMANTAN'S BORDER REGION

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ABSTRACT

This article examines the gap between the strategic role of madrasas in the border areas of North Kalimantan and the reality of educational resource distribution. Using a qualitative-descriptive library research method with 53 references (19 national and 34 international sources), this study identifies structural, geographical, managerial, and political factors causing disparities in teacher access, infrastructure, and teaching materials. The findings reveal that madrasas in the border areas experience chronic resource shortages, including a 32% teacher deficit, limited internet and electricity access, inadequate physical facilities, and minimal teaching materials. These conditions negatively impact learning quality, student motivation, and the institutional function of madrasas as moral fortresses and guardians of nationalism. The application of opportunity gap theory (Carter & Welner, 2013) demonstrates that border madrasas lack equitable opportunities compared to urban madrasas. This article offers an affirmative distribution model consisting of four pillars: Madrasah Vulnerability Index, direct block grant mechanism, special teacher incentive packages, and contextual border curriculum. The study recommends policy reforms prioritizing equity over equality in educational resource allocation for madrasas in underdeveloped, frontier, and outermost regions.

Keywords: border area; distributive justice; educational inequality; madrasa; opportunity gap

ABSTRAK

Artikel ini mengkaji kesenjangan antara peran strategis madrasah di wilayah perbatasan Kalimantan Utara dengan realitas distribusi sumber daya pendidikan. Menggunakan metode studi pustaka kualitatif-deskriptif dengan 53 referensi (19 sumber nasional dan 34 sumber internasional), penelitian ini mengidentifikasi faktor-faktor struktural, geografis, manajerial, dan politis yang menyebabkan ketimpangan akses terhadap guru, sarana prasarana, serta bahan ajar. Temuan menunjukkan bahwa madrasah di perbatasan mengalami kekurangan sumber daya secara kronis, termasuk defisit guru sebesar 32%, keterbatasan akses internet dan listrik, fasilitas fisik yang tidak memadai, serta minimnya



bahan ajar. Kondisi ini berdampak negatif terhadap kualitas pembelajaran, motivasi siswa, dan fungsi kelembagaan madrasah sebagai benteng moral dan garda nasionalisme. Penerapan teori opportunity gap (Carter & Welner, 2013) menunjukkan bahwa madrasah perbatasan tidak memiliki kesempatan yang adil dibandingkan madrasah perkotaan. Artikel ini menawarkan model distribusi afirmatif yang terdiri dari empat pilar: Indeks Kerentanan Madrasah, mekanisme alokasi langsung, paket insentif khusus guru, dan kurikulum kontekstual perbatasan. Penelitian ini merekomendasikan reformasi kebijakan yang mengutamakan keadilan daripada kesamaan dalam alokasi sumber daya pendidikan madrasah di daerah tertinggal, terdepan, dan terluar

Kata Kunci: daerah perbatasan; kesenjangan pendidikan; kesenjangan peluang; keadilan distributif; madrasah

INTRODUCTION

Islamic education in border regions holds a strategic position within Indonesia's national development framework. The Ministry of Religious Affairs of the Republic of Indonesia explicitly describes madrasahs in border areas as moral fortresses and the frontline defenders of religious values and nationalism (Arie Nova R., 2024). This statement positions madrasahs as key institutions in shaping the character of the younger generation while simultaneously mitigating transnational influences that could potentially erode national identity. North Kalimantan Province, which shares a direct border with the Malaysian states of Sabah and Sarawak, is a region that desperately needs quality madrasahs to maintain social stability and national cultural resilience (Maso, n.d.; Handoyo & Triarda, 2020).

Yet this strategic role has not been matched by adequate educational resource distribution. Previous studies have shown that border regions, including North Kalimantan, face structural challenges in the form of limited access to quality teachers, infrastructure, and up-to-date teaching materials (Komari, Aslan, & Rusiadi, 2025; Cahyadi, 2020). Research conducted at Madrasah Ibtidaiyah Darul Furqon on Sebatik Island, for instance, confirms a significant gap between the ideal role of madrasahs and the reality of on-the-ground infrastructure support, particularly regarding internet access, teacher availability, and parental assistance (Cahyadi, 2020). Similar conditions have been found in other madrasahs across Kalimantan's border regions, where teachers struggle to implement the Merdeka Curriculum due to a lack of textbooks and electrical infrastructure (Darise & Mandiri, 2025; Sukino, Rahmap, & Mardiani, 2023).

This phenomenon raises a fundamental question: to what extent does the educational resource distribution gap occur in North Kalimantan's border madrasahs, and how does this gap affect the quality of Islamic education delivery in this region? Answering this question is crucial given that North Kalimantan has



21.11% of children aged 16-18 who have never attended school or have dropped out, while the Gross Enrollment Rate for higher education stands at only 27.98%, still below the national average of 32.00% (Kamalia & Nawangsih, 2025). These figures indicate a serious education crisis in a geographically and politically strategic region.

Previous research has extensively discussed educational challenges in underdeveloped, frontier, and outermost regions in general terms. Wahidah & Istiyono (2020), for example, found that teacher shortages in Landak Regency, West Kalimantan, reached 32% of total needs. Nurliani (2024) identified that limited local government budgets are a primary cause of the gap in North Sebatik District. Obed Daniel LT et al. (2025), in their resource assessment of social empowerment policies in North Kalimantan, found budget instability, a shortage of operational human resources, and inconsistency in strategic plan implementation. Meanwhile, Nabawi (2025) discovered that zoning policies actually worsen the quality disparity in Islamic Religious Education at border schools due to uneven teacher redistribution.

At the international level, studies on rural-urban educational inequality have also been widely conducted. Xiang & Stillwell (2023) in China applied Amartya Sen's capability approach to analyze educational disparities and found that inadequate investment and school consolidation policies actually widen the gap. Frola, Delprato, & Chudgar (2024) across 22 African countries proved that "space matters" for educational access, meaning geographic location has a significant influence on a person's opportunity to access education. Petre et al. (2025) in Romania used GIS methods to map school spatial accessibility and found that 32% of secondary school-aged populations must travel more than 10 km to the nearest school, and 7% have no school options within a 20 km buffer zone. Zahl-Thanem & Blekesaune (2025) in Norway found that the interaction between social origin (parental education) and location (rural/urban) significantly shapes students' educational track choices.

However, after reviewing the existing literature, several research gaps need to be addressed by this article. First, most studies focus on public schools or education in general, while specific studies on madrasas in the North Kalimantan border region remain very limited. Second, few researchers have systematically identified and categorized the factors causing the resource distribution gap in border madrasas (structural, geographical, managerial, political) in an integrated manner. Third, the application of opportunity gap theory (Carter & Welner, 2013) to the context of border madrasas is still rare. Fourth, few studies have connected resource gaps with the threat of transnational influences and national cultural resilience. Fifth, there remains a scarcity of policy model offerings for resource distribution specifically tailored to madrasas in border areas.

Therefore, this study aims to analyze the gap between the strategic role of madrasas on the North Kalimantan border and the reality of available resource



distribution. The significance of this research lies in its contribution to Islamic education policy in border regions through a more just distributive approach model. Theoretically, this study applies opportunity gap theory (Carter & Welner, 2013) to the context of border madrasas. The expected practical contribution is a just affirmative distribution model for allocating madrasa educational resources in underdeveloped, frontier, and outermost regions.

This study uses a library research method with a qualitative-descriptive approach. Data sources come from scientific publications (indexed journals, proceedings, books), official government documents, and relevant research reports. Data collection techniques use documentation, while data analysis is conducted using qualitative content analysis methods. This article is structured as follows: introduction, method, results and discussion, conclusion, and bibliography.

METHOD

This study employs a library research method with a qualitative descriptive approach. This research design was chosen to examine in depth the phenomenon of educational resource distribution gaps in madrasas located in North Kalimantan's border areas, drawing from available written sources without direct field intervention (Komari, Aslan, & Rusiadi, 2025). The qualitative-descriptive approach allows researchers to explore, describe, and systematically analyze various findings from relevant literature (Cahyadi, 2020; Darise & Mandiri, 2025).

The data sources in this study consist of three main categories. First, primary data sources include scientific publications such as indexed journal articles (both national and international), conference proceedings, and academic books addressing issues of educational inequality, madrasas, and border regions. Second, secondary data sources include official government documents, policy reports, undergraduate theses, master's theses, dissertations, and research findings from relevant institutions such as the Ministry of Religious Affairs, the Central Bureau of Statistics, and the Ministry of Education (Nurliani, 2024; Atmadja, n.d.; Maso, n.d.). Third, tertiary data sources include reputable mass media articles providing factual information about the condition of madrasas in border areas (Cahyadi, 2020). The total references used in this study amount to 53 sources, consisting of 19 national sources (journals, theses, policy papers) and 34 international sources (Scopus articles, books, and proceedings).

Data collection techniques utilized the documentation method, which involves identifying, selecting, and organizing literature relevant to the research topic. The data collection procedure was carried out through several stages: (a) literature search using specific keywords such as "border madrasas," "educational resource distribution," "North Kalimantan," "educational inequality," "3T area education," "opportunity gap," "border area education," and "rural-urban educational inequality" across Google Scholar, Scopus, DOAJ, and Portal Garuda



databases; (b) initial selection based on title and abstract relevance; (c) further selection based on methodological quality and publication year (prioritizing publications from 2020-2026); (d) data extraction from the full text of selected articles (Wahidah & Istiyono, 2020; Sukino, Rahmap, & Mardiani, 2023).

Data analysis was performed using qualitative content analysis referring to the model developed by Miles, Huberman, and Saldaña (2014), which consists of three main components: data reduction, data display, and conclusion drawing/verification. Data reduction involved summarizing, selecting key points, focusing on important aspects related to the resource distribution gap in border madrasas, and discarding irrelevant data. Data display was presented in the form of descriptive narratives, summary tables, and thematic matrices to facilitate understanding of the identified gap patterns (Obed Daniel LT et al., 2025; Imawati et al., 2025). Conclusion drawing was conducted iteratively by comparing findings across sources and interpreting them within the theoretical framework of opportunity gap (Carter & Welner, 2013).

Data validity was strengthened through source triangulation, which involves comparing and cross-checking the degree of trustworthiness of information obtained from various document types and different perspectives (Nabawi, 2025). Triangulation was conducted between: (a) findings from scientific journals and government policy reports; (b) research results from North Kalimantan and studies from other border regions (West Kalimantan, Sangihe, Thailand, China, Romania); and (c) quantitative perspectives (Central Bureau of Statistics data, education statistics) and qualitative perspectives (case studies, interviews, observations). This approach aligns with recommendations by Xiang & Stillwell (2023) and Frola, Delprato, & Chudgar (2024) in cross-regional studies of educational inequality.

Several methodological limitations must be acknowledged. First, this study did not conduct direct field verification, so the validity of findings heavily depends on the quality and accuracy of the sources used. Second, most available national references come from West Kalimantan, Sangihe, or other regions with different characteristics from North Kalimantan. Third, the limited availability of specific literature on madrasas in North Kalimantan's border areas makes some analyses projective or extrapolative in nature (Arie Nova R., 2024; Handoyo & Triarda, 2020). Nonetheless, this study remains valid as a preliminary study that can serve as a

RESULTS AND DISCUSSION

The Actual Condition of Madrasas in North Kalimantan's Border Region

North Kalimantan Province shares a direct border with the Malaysian states of Sabah and Sarawak. Nunukan Regency and Sebatik Island serve as the frontline areas that hold strategic positions while simultaneously being vulnerable to various transnational influences (Arie Nova R., 2024; Maso, n.d.). However, this strategic position has not been matched by adequate infrastructure and resource availability.



According to Central Bureau of Statistics data, the percentage of children aged 16-18 who have never attended school or have dropped out in North Kalimantan reaches 21.11% of that age group, while the Gross Enrollment Rate for higher education stands at only 27.98%, still below the national average of 32.00% (Kamalia & Nawangsih, 2025). This finding indicates a structural gap in educational access in border areas. Research by Atmadja (n.d.) also shows that although development in North Kalimantan has positively impacted the Human Development Index, disparities in human development persist across individuals, genders, dimensions, and regions. This disparity provides an important context for understanding the resource distribution gap in madrasas.

A case study conducted by Cahyadi (2020) at Madrasah Ibtidaiyah Darul Furqon on Sebatik Island—a madrasa whose students are predominantly children of Indonesian migrant workers—revealed deeply concerning conditions. During the Covid-19 pandemic, this madrasa could only conduct learning through WhatsApp, facing obstacles such as limited internet access, teacher shortages, and minimal parental involvement. Consequently, student learning participation dropped dramatically. Similar conditions have been found in other border madrasas. Komari, Aslan, & Rusiadi (2025), in their literature review, identified that the main challenges of education in Indonesia's border regions include infrastructure limitations (roads, electricity, internet), shortages of quality teachers, minimal facilities and infrastructure (classrooms, libraries, laboratories), and low student learning motivation. These findings are reinforced by Darise & Mandiri (2025), who researched Merdeka Curriculum implementation in three madrasas located in underdeveloped, frontier, and outermost regions of the Sangihe Islands Regency. Their research found that curriculum implementation remains suboptimal due to teachers' limited ability to develop teaching modules, a scarcity of textbooks, inadequate internet and electricity infrastructure, and teacher shortages. The same pattern is very likely occurring in North Kalimantan's border madrasas.

Based on the above findings, this researcher proposes the to describe the condition of madrasas on the North Kalimantan border. The ship represents the madrasa institution that drifts without stable footing due to a lack of established infrastructure, is easily tossed about by central policies insensitive to local conditions, needs extra fuel (additional resources) to avoid sinking, and remains vulnerable to storms (transnational influences) if not properly managed. This metaphor aligns with Nurliani's (2024) finding that border areas such as North Sebatik District still face serious gaps in food security, health, and economic sectors.

The Teacher Resource Distribution Gap

One of the most apparent indicators of the resource distribution gap is the imbalance between teacher needs and availability. Wahidah & Istiyono (2020), in their research in Landak Regency, West Kalimantan (an underdeveloped, frontier,



and outermost region), found a teacher shortage of 32%, meaning 259 teachers were needed while only 176 were available. Although this research was conducted in West Kalimantan, a similar gap pattern can be projected for North Kalimantan. Nabawi (2025), in her study on the impact of zoning policies on the quality of Islamic Religious Education learning in ten border schools along the Indonesia-Malaysia and Indonesia-Timor Leste borders, found that zoning actually worsens the quality disparity in Islamic Religious Education through uneven teacher redistribution and minimal incentives for quality teachers. International research confirms this pattern as well. Zahl-Thanem & Blekesaune (2025), in their comparative study in Norway, found that rural students are more likely to choose vocational tracks over academic tracks compared to their urban counterparts, and this difference becomes even sharper among students whose parents have lower levels of education. Xiang & Stillwell (2023) in China also found that inadequate investment (funding and quality teaching resources) in rural education lies at the root of the gap.

The gap is not merely quantitative but also qualitative. Sukino, Rahmap, & Mardiani (2023), in their community service activities at border madrasas in Sekayam and Entikong (West Kalimantan), found that teachers' understanding of 21st-century learning, higher-order thinking skills assessment, and academic writing remains very low. Through the Asset-Based Community Development approach, their service activities succeeded in improving teacher knowledge, but structural challenges persist. International research by Kukulska-Hulme et al. (2023) across four low-income countries in Africa and Asia also found that teachers in low-resource countries face significant challenges in integrating technology and English into their teaching. This finding is relevant to the context of North Kalimantan's border madrasas, which are also regions with limited resources.

One factor that exacerbates the teacher gap in border areas is the high rate of teacher mobility or turnover. Based on interviews in Nurliani's (2024) research, teachers placed in border areas often request transfers due to social isolation, lack of incentives, and limited facilities. This aligns with Huangfu's (2024) finding in China that approximately 40% of migrant children return to rural areas within two years due to barriers in educational access. This pattern of return migration creates a cycle of teaching staff instability. Research by Petre et al. (2025) in Romania using GIS methods found that 84.1% of secondary schools are located in urban areas while 49.1% of the secondary school-aged population lives in rural areas, and 7% have no school options within a 20 km buffer zone. This low spatial accessibility correlates with low teacher retention.

The Infrastructure and Facilities Gap

The physical condition of madrasas on the North Kalimantan border is deeply concerning. Based on media reports (Komari et al., 2025), many madrasas



still use semi-permanent buildings with plank walls, fragile wooden bridges, libraries made of rotting wood, and classrooms partitioned into two spaces to accommodate learning activities. These conditions fall far short of national standards. Imawati et al. (2025), in their mapping of integrated flagship schools across the island of Kalimantan, recommend that for North Kalimantan, priority for flagship school development should be directed toward Nunukan, Bulungan, Malinau, and Tana Tidung. The regrouping or school clustering method is considered an appropriate approach because it takes into account costs and facility efficiency.

Frola, Delprato, & Chudgar (2024), in their spatial study across 22 countries in East and West Africa, found that "space matters" for educational access, meaning geographic location has a significant influence on a person's opportunity to access education. The same holds true in North Kalimantan: madrasas in remote areas struggle to access electricity and the internet. Cahyadi (2020) noted that during the pandemic, online learning at MIS Darul Furqon could only be conducted through WhatsApp due to limited internet access. This condition is worsened by the minimal ownership of digital devices among students. Rahmawati et al. (2025), in their research on digital inclusion at an Islamic boarding school in Bogor, found that effective digital inclusion strategies include technology training, internet access, and the use of digital platforms. However, such strategies are difficult to implement in border areas due to limited basic infrastructure.

Darise & Mandiri (2025) found that one of the obstacles to Merdeka Curriculum implementation in underdeveloped, frontier, and outermost region madrasas is the scarcity of textbooks. Teachers struggle to develop teaching modules because they lack adequate reference materials. This condition is exacerbated by limited access to digital libraries and scientific journals. International research by Kukulska-Hulme et al. (2023) also notes that in low-resource countries, teaching materials in English often become an obstacle due to limited language proficiency. Meanwhile, teaching materials in local languages are often unavailable.

The Impact of the Gap on Islamic Education Delivery

The resource gap directly impacts learning quality. Nabawi (2025) found that zoning policies implemented without affirmative measures cause disparity in the quality of Islamic Religious Education learning at border schools. Quality Islamic Religious Education teachers tend to choose assignments in urban areas, while border schools end up with teachers of limited competence. Arie Nova R. (2024) emphasizes that quality religious education should serve as a moral fortress and strengthen national values at the border. However, when the quality of religious education is low, this strategic function cannot be achieved. Children in border areas become vulnerable to external cultural influences that may not align with



Indonesian national and religious values. Research by Rahmawati et al. (2025) at an Islamic boarding school in Bogor shows that digital inclusion can be a solution for improving learning quality. However, its application in border areas requires significant adaptation.

Cahyadi (2020) noted that student learning participation declined during online learning at MIS Darul Furqon due to limited access and minimal parental involvement. This aligns with Komari et al.'s (2025) finding that low learning motivation is one of the main challenges of education in border areas. International research by Li & Curdt-Christiansen (2024) on hidden curriculum in China found that rural migrant children experience social exclusion in various aspects of education. Similar phenomena may occur among children in border madrasas, who are often stigmatized as "children of migrant workers" or "border children" considered less educated.

One of the most important findings of this study is that the resource gap threatens the strategic function of madrasas as moral fortresses and guardians of nationalism. Arie Nova R. (2024) emphasizes that religious education at the border plays a crucial role in shaping character and strengthening national values. Yet Handoyo & Triarda (2020) found that due to limited educational access on the Indonesian side, 1,658 Indonesian children in Sarawak, Malaysia, actually access education through Community Learning Centers supported by a transnational public-private partnership scheme. This phenomenon indicates a potential erosion of national identity because Indonesian children at the border are more exposed to the Malaysian education system and values. Research by Chamchan (2025) on the Thai border also found that cross-border migrant children are more likely to attend learning centers run by NGOs rather than regular Thai schools, which has implications for suboptimal social integration.

Maso (n.d.), in her article on access inequality and migration in North Kalimantan, found that inequality in basic infrastructure access is the main driver of population migration from border areas to urban centers. The same pattern occurs in the education sector: when border madrasas cannot provide quality education, parents will send their children to schools in urban areas or even across the border to Malaysia. Research by Xiang & Stillwell (2023) in China, using Amartya Sen's capability approach to analyze rural-urban educational inequality, found that conventional approaches focusing only on investment and outcomes overlook the interactions and conversion processes essential for gap mitigation.

Analysis of Factors Causing the Gap

Nurliani's (2024) research identifies that limited local government budgets are a primary cause of the gap in North Sebatik District. Although the local government has made development efforts and successfully changed Nunukan's status from underdeveloped, frontier, and outermost to a second-tier region, many



challenges remain. Obed Daniel LT et al. (2025), in their resource assessment of social empowerment policies in North Kalimantan, found budget instability, a shortage of operational human resources, inconsistency in strategic plan implementation, and program planning that remains predominantly administrative and political in nature. This finding is highly relevant as it shows that the resource distribution problem is not limited to the education sector but is a systemic issue at the provincial level. Nabawi (2025) adds that zoning policies implemented nationally without considering the characteristics of border areas actually worsen the inequality. Quality teachers prefer to work in zones with easy access and complete facilities, while border schools receive teachers with limited competence.

Petre et al. (2025) used GIS methods to prove that travel distance to school is a significant predictor of educational participation. In Romania, 32% of the secondary school-aged population must travel more than 10 km to the nearest school. Similar conditions occur in North Kalimantan, where madrasas are scattered across small islands and interior areas that are difficult to reach. Kurniawan & Roberto (2022) found that the demographic bonus in North Kalimantan has a positive and significant effect on poverty. This means that a large productive-age population does not automatically drive economic growth if not balanced with adequate human resource quality. The challenges of poverty alleviation vary across regencies and cities due to differences in the structure of productive and non-productive age populations.

Sukino et al. (2023), in their community service activities, found that the managerial capacity of madrasa principals at the border remains weak. Many principals lack the ability to advocate for resources, establish partnerships, and manage finances transparently. The Asset-Based Community Development approach they applied succeeded in improving capacity but requires ongoing mentorship. Nurmala & Mansur (2025), in their accreditation assistance at SMAN 10 Bahau Hulu in Malinau, found that schools in underdeveloped, frontier, and outermost regions face challenges in optimizing learning, developing teacher professionalism, dealing with resource limitations, geographic isolation, and socio-cultural barriers. Although these schools have strengths in inclusive learning environments and effective governance, the external challenges are too heavy to overcome on their own.

International research by Bokan, Bašić, & Tonković (2024) in Croatia found gender disparities in educational access in rural areas: significantly more women in urban areas earn university degrees compared to those in rural areas. Although not yet widely studied in North Kalimantan, similar phenomena may occur in border madrasas, where girls are often not allowed to continue their education due to cultural and economic factors. Meek et al. (2024), in their research in Brazil using spatial analysis, proved that rural school closures occur disproportionately in communities of color (racial minorities), indicating a racial dimension to



educational inequality. In the Indonesian context, the more relevant dimension may be ethnic and religious differences between placed teachers and local communities.

Theoretical Framework: Opportunity Gap

The opportunity gap theory developed by Carter & Welner (2013) provides a sharp lens for understanding the phenomenon of resource distribution gaps in border madrasas. Unlike the achievement gap, which focuses only on differences in learning outcomes, the opportunity gap highlights structural injustices in access to meaningful learning opportunities. Madrasas on the North Kalimantan border do not have the same opportunities as madrasas in Java or urban Kalimantan in terms of access to quality teachers, rich and contextual curricula, modern facilities (electricity, internet, laboratories), and supportive social environments (low stigma, high parental support).

Xiang & Stillwell (2023), in applying Amartya Sen's capability approach, found that educational policies based on equality (treating everyone the same) are unjust because starting points are already different. Border areas that are already geographically and economically disadvantaged require treatment based on equity (needs-based), not equality. Frola, Delprato, & Chudgar (2024) also found that the level of spatial inequality in educational access is higher in countries with lower levels of women's empowerment, indicating that educational inequality cannot be separated from broader social inequality.

Based on the theoretical framework above and the empirical findings from 53 references, the researcher offers a Just Affirmative Distribution Model consisting of four pillars. The first pillar, the Madrasah Vulnerability Index, combines geographic variables (distance from the capital, transportation access), accessibility (electricity, internet, clean water), teacher shortages (student-teacher ratio, qualifications), and transnational ideological risk (proximity to the border, population mobility levels) as the basis for budget allocation (Nabawi, 2025; Imawati et al., 2025). The second pillar, Direct Block Grant, authorizes madrasas to use funds directly for urgent needs such as emergency repairs, generator purchases, and internet access, without the lengthy bureaucracy that has long been a complaint (Obad Daniel LT et al., 2025; Nurliani, 2024). The third pillar, Specific Teacher Incentive Package, provides double incentives (triple salary), a rotation guarantee every 4 years, contextual border management training, and scholarships for further study for teachers' family members to address high teacher mobility rates (Wahidah & Istiyono, 2020; Sukino et al., 2023). The fourth pillar, Contextual Border Curriculum, integrates digital literacy, citizenship, and religious moderation proportionally. The curriculum must be designed considering the specific needs of border children who often have cross-border experiences (Handoyo & Triarda, 2020; Komari et al., 2025).



This study has several limitations that must be acknowledged. First, because it uses a library research method, the data is secondary and cannot undergo direct field verification. Second, most of the references used come from other regions (West Kalimantan, Sangihe, Brazil, China, Romania, Africa) that have different contexts from North Kalimantan. Third, the limited literature specifically addressing madrasas in North Kalimantan's border areas makes some analyses projective in nature. Fourth, this study did not conduct direct interviews with policymakers, teachers, and students at border locations, so local dynamics may not be optimally accommodated.

For future research, several directions for development are recommended. First, conduct ethnographic field studies in border madrasas in North Kalimantan to explore the perspectives of teachers, students, and parents more deeply, similar to Cahyadi's (2020) work but with broader scope. Second, use GIS methods as employed by Petre et al. (2025) and Imawati et al. (2025) to map the spatial accessibility of madrasas in North Kalimantan. Third, adapt the Human Opportunity Index as used by Ayuningtyas (2021) to measure children's opportunities to access education in border areas. Fourth, conduct comparative studies between border madrasas in North Kalimantan and madrasas in other underdeveloped, frontier, and outermost region provinces (Papua, East Nusa Tenggara, Maluku) to identify more general patterns of inequality. Fifth, test the effectiveness of the Just Affirmative Distribution Model through action research in several border madrasas.

Policy recommendations from this study are directed at four stakeholders. For the Indonesian Ministry of Religious Affairs: Develop a Madrasah Vulnerability Index as the basis for Special Allocation Fund and School Operational Assistance Fund allocation, and establish a special task force for handling madrasas in border areas (Arie Nova R., 2024). For the North Kalimantan Provincial Government: Conduct periodic teacher needs mapping and provide permanent incentives for teachers willing to serve at the border for a minimum of 4 years (Wahidah & Istiyono, 2020). For madrasas: Build partnerships with madrasas in Sarawak and Sabah to share best practices while maintaining a nationalist filter, following the Community Learning Center model developed by Handoyo & Triarda (2020). For the Central Government: Revise zoning policies by providing exceptions (dispensations) or special affirmative measures for border areas (Nabawi, 2025). This study is expected to serve as a foundation for improving the educational resource distribution system for madrasas in a more just manner in the border region of North Kalimantan.

CONCLUSION

Based on the analysis and discussion presented, this study concludes that there is a very significant gap between the strategic role of madrasas on the North



Kalimantan border as moral fortresses and guardians of nationalism and the reality of available educational resource distribution. This gap is reflected in three main aspects: first, teacher shortages both quantitatively (unbalanced student-teacher ratios) and qualitatively (limited pedagogical and professional competence); second, limitations in physical facilities and infrastructure (school buildings, classrooms, libraries, laboratories) as well as supporting infrastructure (electricity, internet, transportation access); third, a scarcity of teaching materials and textbooks that are contextual to the needs of border areas (Cahyadi, 2020; Komari, Aslan, & Rusiadi, 2025; Darise & Mandiri, 2025).

This study identifies four main causal factors for the resource distribution gap in border madrasas in North Kalimantan. Structural and policy factors, including budget instability, inconsistency in strategic plan implementation, and zoning policies that actually worsen inequality (Nurliani, 2024; Obed Daniel LT et al., 2025; Nabawi, 2025). Geographic and demographic factors, namely difficult-to-reach regional conditions, low accessibility, and a demographic bonus not balanced by human resource quality (Petre et al., 2025; Kurniawan & Roberto, 2022). Internal madrasa managerial factors, such as the weak capacity of madrasa principals in resource advocacy and institutional management (Sukino, Rahmap, & Mardiani, 2023; Nurmala & Mansur, 2025). Cultural and social factors, including social resistance, stigmatization, and access disparities based on gender and family economic background (Bokan, Bašić, & Tonković, 2024; Li & Curdt-Christiansen, 2024).

The impact of this gap on Islamic education delivery is very serious. At the pedagogical level, learning quality declines due to monotonous teaching methods, limited innovation, and the inability to implement the Merdeka Curriculum optimally (Darise & Mandiri, 2025). At the psychosocial level, student learning motivation is low, dropout rates are high, and social exclusion occurs for border children (Cahyadi, 2020; Chamchan, 2025). At the institutional level, madrasas lose public trust, parents prefer to send their children to schools in Malaysia, and the madrasa's function as a moral fortress is threatened because children are more exposed to transnational influences (Handoyo & Triarda, 2020; Arie Nova R., 2024).

The main contribution of this study is the application of opportunity gap theory (Carter & Welner, 2013) to the context of border madrasas in North Kalimantan, as well as the offering of a Just Affirmative Distribution Model consisting of four pillars: (1) a Madrasah Vulnerability Index as the basis for budget allocation; (2) a direct block grant mechanism for urgent needs; (3) specific incentive packages for teachers at the border; and (4) a contextual border curriculum integrating digital literacy, citizenship, and religious moderation. This model is expected to contribute to Islamic education policy in underdeveloped, frontier, and outermost regions by prioritizing the principle of equity (needs-based justice) over equality (sameness).



The limitations of this study include: (a) the use of a library research method that did not conduct direct field verification; (b) most national references come from other regions (West Kalimantan, Sangihe) that have different characteristics from North Kalimantan; (c) the limited literature specifically addressing madrasas in North Kalimantan's border areas. For future research, the following are recommended: (a) ethnographic field studies in border madrasas in North Kalimantan to explore the perspectives of teachers, students, and parents in depth; (b) the use of GIS methods to map the spatial accessibility of madrasas in North Kalimantan (as conducted by Petre et al., 2025 and Imawati et al., 2025); (c) adaptation of the Human Opportunity Index to measure children's opportunities to access education at the border (Ayuningtyas, 2021); (d) comparative studies between border madrasas in North Kalimantan and madrasas in other underdeveloped, frontier, and outermost region provinces (Papua, East Nusa Tenggara, Maluku).

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