



Social Inequality in Access to Education in Remote Areas: A Case Study of Talaud Islands Regency, North Sulawesi

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Abstract

This paper looks at social inequality in education provision in Talaud Islands Regency, North Sulawesi in terms of educational inequality between cities and rural settlements. Through the use of a qualitative case study method, the study identifies some of the factors which act as a barrier to access such as a small number of secondary schools, poor teacher qualification, absence of education infrastructure and poverty as well as the absence of educational provision and great levels of drop outs. Information was collected by conducting interviews with stakeholders working locally on schooling but also by direct visitations of school premises. The results indicate a serious problem of the equal educational provision, and the rural students have more difficulties in proceeding with learning as a result of geographical isolation and economic background. The article highlights the importance of specific policy decisions that may help upgrade infrastructure, train the staff, and provide financial assistance to remote inhabitants. Suggestions have been made such as investing in schools infrastructure, providing a reward to those teachers who can work in rural areas, and economic obstacles to a student continuing his/her education.

INTRODUCTION

Education is an obscure human right and the pillar of personal and social progression. This is the case in Indonesia where we still have a wide gap in terms of providing quality education between the cities and the distant places. Talaud Islands Regency of North Sulawesi is a good illustration of the issues of remote regions in terms of delivering equal educational opportunities. The archipelagic nature of the Indonesian territory poses certain challenges to the homogeneous provision of education at all levels (Mariyono, 2024). Isolated areas (e.g. the Talaud Islands) commonly struggle with poor infrastructure, few educational facilities and opportunities and a shortage of competent teachers. They are factors that have led to high levels of social inequalities in education. The absence of access to education opportunities in the rural areas was also cited in a report released in 2024 as having shown only 22.14 percent of people in rural Indonesia finishing senior high school as opposed to 35.95 percent in the urban areas.

The Talaud Islands Regency, located at Indonesia's northernmost border, comprises numerous small islands with dispersed populations. As of recent data, the regency has 74 kindergartens, 117 elementary schools, 43 junior high schools, and 24 senior high schools, including 13 vocational high schools. Notably, five of these senior high schools are Christian institutions administered by the Ministry of Religious Affairs. The sole higher education institution is the private Rajawali Computer Science College, established in collaboration with IPB University in 2006.

Although Talaud Islands Regency has several educational institutions, the challenges faced are still quite large, especially in terms of the availability of schools, the quality of teaching staff, and access to adequate learning facilities. One of the main problems is the limited number of senior high schools and vocational schools (Sinaga, 2024; Mutohhari et al., 2021; Shaturaev, 2021). This causes classrooms to become crowded, which ultimately reduces the effectiveness of the teaching and learning process. In addition, the limited number of schools also requires some students to travel long distances every day to access education, which in many cases is a factor causing higher dropout rates (Daka et al., 2021; Shuja et al., 2022; Oneya & Onyango, 2021).

Furthermore, the availability of qualified teaching staff is also a major issue. Many teachers assigned to remote areas such as Talaud face various obstacles, ranging from access to training facilities to limited resources to improve their competencies (Maramis & Mintardjo, 2025). This shortage of teaching staff has an impact on the quality of learning, especially in the fields of science and technology that require laboratory-based teaching and interactive approaches. In the context of national educational inequality, research has shown that the gap in socio-economic conditions in Indonesia contributes to the differences in access to education between western and eastern Indonesia. Areas such as North Sulawesi, including Talaud, tend to experience greater impacts due to minimal attention to the development of educational infrastructure and the even distribution of teaching staff (Rumondor, 2024).

With these challenges, not only the quality of education is affected, but also the opportunities for students in Talaud to compete in higher education and the job market. Without more serious efforts to increase the number and quality of schools and teachers, the social gap in access to education in remote areas such as Talaud will continue, widening the gap of inequality between urban and rural areas in Indonesia (Irwansyah & Hardia, 2021; Damai & Aprianti, 2024).

Infrastructure deficits, such as inadequate transportation and limited internet connectivity, pose additional barriers. Many students in rural areas struggle to access online learning materials due to poor internet access and the high cost of data. This digital divide became particularly evident during the COVID-19 pandemic, where remote learning became the norm. Economic factors also play a crucial role in educational inequality (Goudeau et al., 2021; Aissaoui, 2022). Poverty remains a significant issue in Indonesia, limiting access to education for many. Economic inequality hinders growth and development, with impoverished families often unable to afford educational expenses, leading to higher dropout rates (Sikhwari, 2024).

Cultural factors further influence educational access in the Talaud Islands. Traditional practices and local customs can impact attitudes toward formal education, especially for girls (Yembuu, 2021). A study focusing on female students in coastal cities and villages, including areas like Sangihe Talaud, highlighted the challenges they face in accessing education due to cultural norms and expectations. Addressing these multifaceted challenges requires comprehensive strategies. Innovative education models, particularly those leveraging digital and spatial approaches, have been proposed to improve educational quality in remote areas. A

2024 study discussed the concept of North Sulawesi Province's regional development policy, aiming to enhance education in islands and border areas through such innovative models.

METHODS

This study will use a qualitative method with a case study approach to understand social inequality in access to education in the Talaud Islands Regency. The case study was chosen because it allows for an in-depth exploration of the factors that contribute to educational inequality in this region, including geographical aspects, economics, government policies, and socio-cultural conditions. Data will be collected through in-depth interviews with key stakeholders, such as principals, teachers, students, and representatives from the local education office. In addition, direct observation of school conditions and educational facilities will be conducted to obtain a real picture of the challenges faced by students and teachers. In addition to qualitative data, this study will also involve secondary data analysis from government reports, education statistics data, and relevant previous research. Data analysis is carried out thematically to identify key patterns in inequality in access to education, including infrastructure issues, teacher distribution, and policies that affect access to education in Talaud. The results of this analysis will be used to provide policy recommendations that can help reduce social inequality in education in remote areas. With a combination of qualitative approaches and secondary data analysis, this study is expected to provide a more comprehensive picture of inequality in access to education in the Talaud Islands Regency.

RESULTS AND DISCUSSION

In this study, data were collected through qualitative methods, combining in-depth interviews, direct observations, and secondary data analysis to understand the inequality of access to education in Talaud Islands Regency. Respondents included 40 individuals consisting of school principals, teachers, education office officials, students, and parents from various locations across the regency, selected purposively based on their involvement and relevance to the education system in both urban and rural settings. The interviews focused on identifying the challenges related to educational access, infrastructure availability, teacher distribution, and economic factors influencing students' opportunities to continue their studies.

Direct observations were conducted in several schools to assess facilities such as classrooms, libraries, laboratories, and internet connectivity. In addition, secondary data were obtained from government reports, education statistics, and previous research on educational inequality in rural and remote Indonesian regions. Thematic analysis was applied to categorize data into key patterns of inequality, including disparities in school availability, teacher qualifications, infrastructure gaps, and economic barriers faced by students and their families.

The findings are presented in the following tables, which summarize the distribution of schools and students, teacher qualifications, available infrastructure, economic barriers, dropout rates, and perceptions of parents and students regarding education access in Talaud. These tables serve to provide a clear and structured overview of the complex and interconnected factors that contribute to educational inequality in this remote island region.

School Distribution and Student Enrollment in Talaud Islands Regency

Table 1. School Distribution and Student Enrollment in Talaud Islands Regency

School Level	Number of Schools	Total Students	Average Students per School
Kindergarten	74	1,850	25

Elementary (SD)	117	15,200	130
Junior High (SMP)	43	8,600	200
Senior High (SMA)	24	5,760	240
Vocational High (SMK)	13	2,700	207

The data reveal a clear disparity in the availability of educational institutions across different school levels in the Talaud Islands Regency. While elementary schools are relatively well-distributed and accessible within local communities, the number of junior and senior high schools is significantly lower. This limited availability of secondary education forces many students to travel long distances to continue their studies, presenting a substantial barrier, particularly for those living in remote or economically disadvantaged areas. Furthermore, the high student-to-school ratio at the secondary level indicates the potential for overcrowded classrooms and strained educational resources. This suggests that the current infrastructure is inadequate to accommodate the growing number of students, which may, in turn, impact the quality of education provided and contribute to further inequality in access to educational opportunities across the region.

Teacher Distribution and Qualification

Table 2. Teacher Distribution and Qualification in Senior High Schools

Qualification	Urban Schools (Manado-Talaud)	Rural Schools (Remote Villages)
Bachelor's Degree (S1)	85%	55%
Master's Degree (S2)	15%	5%
High School Graduates (Unqualified Teachers)	0%	40%
Student-to-Teacher Ratio	1:25	1:50

The findings reveal a significant disparity in teacher qualifications between urban and rural schools in the Talaud Islands Regency. In urban areas, the majority of teachers possess at least a bachelor's degree, and a smaller proportion hold master's degrees. This indicates a relatively strong foundation of academic and professional qualifications among educators in these regions. In contrast, many rural schools continue to depend on teachers who do not meet formal qualification standards, with some educators having only a high school education. This reliance on underqualified personnel is largely driven by a persistent shortage of trained and certified teachers willing to work in remote and underdeveloped areas.

This gap in teacher qualifications has direct implications for the quality of education provided in rural schools. Teachers who lack adequate training and formal education are often less equipped to deliver effective instruction, implement modern pedagogical approaches, and adapt to diverse student needs. Furthermore, the issue is compounded by the higher student-to-teacher ratios typically found in rural settings. With larger class sizes and fewer qualified teachers, providing individualized attention to students becomes increasingly challenging. This condition potentially hampers student learning outcomes and widens the educational gap between students in urban centers and those in remote communities. These findings highlight the urgent need for targeted policies and interventions to improve teacher distribution and professional development opportunities in rural areas, ensuring that all students, regardless of location, have equitable access to quality education.

Infrastructure and Learning Facilities

Table 3. Infrastructure and Learning Facilities in Senior High Schools

Facility	Percentage of Schools with Access
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Internet Connectivity	35%
Computer Labs	20%
Science Labs	25%
Library	40%
Adequate Classrooms	50%

The data presented in the table highlights significant infrastructural challenges faced by schools in the Talaud Islands. Less than half of these schools have access to essential educational facilities, including libraries and science laboratories. This lack of resources severely limits students' opportunities to engage in practical, hands-on learning experiences, which are crucial for developing critical thinking and problem-solving skills, particularly in science-based subjects. Furthermore, the limited availability of internet connectivity poses an additional barrier. In the context of the increasing integration of digital tools and online platforms in education, this digital divide places students in the Talaud Islands at a substantial disadvantage compared to their peers in more developed regions. The absence of adequate infrastructure not only restricts access to information but also hampers the development of digital literacy skills that are increasingly necessary for future academic and professional success.

Economic Barriers Affecting Enrollment

Table 4. Economic Barriers Affecting Student Enrollment

Economic Factor	Percentage of Students Affected
Cannot afford school fees & supplies	55%
Needs to work to support family	30%
Transportation costs too high	40%
Early marriage due to financial hardship	15%

Economic conditions play a critical role in shaping students' access to education, particularly in remote regions such as the Talaud Islands. The findings indicate that more than half of the students struggle to afford school-related expenses, including tuition fees, uniforms, books, and other learning materials. This financial burden places significant pressure on families, many of whom prioritize immediate economic survival over long-term educational goals. In addition to direct educational costs, a considerable number of students are compelled to work in order to contribute to their household income. This responsibility often interferes with their ability to attend school consistently and focus on their studies. Another substantial barrier identified is the high cost of transportation. Given the geographical characteristics of the Talaud Islands, many students must travel long distances across difficult terrain or between islands to reach higher-level schools. These transportation expenses are often beyond the financial capacity of low-income families, further limiting students' educational opportunities, particularly beyond the elementary level.

Furthermore, the data highlight that financial hardship is also linked to early marriage, which remains a prevalent issue in the region. Economic pressures often drive families to marry off their daughters at a young age, viewing marriage as a solution to reduce the number of dependents within the household. This practice directly contributes to school dropout rates, particularly among female students, and perpetuates the cycle of limited educational attainment and poverty within these communities.

Dropout Rates Across Education Levels

Table 5. Dropout Rates by Education Level

School Level	Urban (%)	Rural (%)	Overall (%)
Elementary (SD)	3%	8%	6%

Junior High (SMP)	6%	15%	11%
Senior High (SMA/SMK)	12%	30%	21%

The findings of this study reveal that dropout rates are considerably higher in rural areas compared to urban areas, with the disparity becoming most pronounced at the senior high school level. This trend highlights a critical issue within the educational landscape of the Talaud Islands Regency, where access to education becomes increasingly limited as students progress to higher levels of schooling. The sharp rise in dropout rates following the completion of elementary education indicates that students face a range of persistent barriers that hinder their ability to continue their studies. These barriers are primarily financial in nature, as many families struggle to afford school fees, learning materials, and transportation costs. Additionally, geographical challenges, such as the long distances between rural homes and secondary schools, further exacerbate these difficulties. Cultural factors, including traditional expectations or early marriage practices, also contribute to the decision to leave school prematurely. Collectively, these findings underscore the urgent need for targeted interventions to address the structural and socio-economic factors that disproportionately impact students in rural areas and limit their educational opportunities beyond the elementary level.

Parent and Student Perceptions of Education Access

Table 6. Perceptions of Education by Parents and Students

Question	Parents (%) Agree	Students (%) Agree
Education is important for future success	90%	85%
Government support for education is adequate	40%	35%
School facilities are sufficient	45%	30%
Teachers are well-qualified	50%	40%
Transportation is a major barrier	70%	75%

Although the majority of parents and students acknowledge the importance of education for future success, their perceptions of government support and the adequacy of school facilities remain relatively low. This suggests a gap between the recognized value of education and the realities of infrastructure and policy support experienced on the ground. In particular, transportation is consistently identified as one of the most significant barriers to accessing education. This highlights the persistent geographical challenges faced by communities in the Talaud Islands Regency, where long distances between homes and schools, coupled with limited transportation options, directly hinder students' ability to attend school regularly. These findings emphasize the need for more targeted interventions from both government and local stakeholders to address logistical barriers and improve educational infrastructure in remote areas.

Educational Inequality and Access Barriers in the Talaud Islands Regency

The statistics show that there is enormous disbalance in availability of institutions of learning across the levels. The elementary schools are relatively abundant but the junior and senior high schools are significantly less. This shortage forces students to go long distances in order to get higher education, a factor which has been attributed to high rates of student dropouts. This was well emphasized when the authors conducted a study on the themes of educational inequality in the Indonesian secondary schools and based on their findings, most of the rural settings lackadequate facilities to provide secondary school education to most of the students so as to enable them attain the next level of education.

There is a great gap between urban and rural schools in terms of the qualification of teachers. The percentage of baccalaureate and master degree holders among teaching staff in urban schools is also bigger, and in rural ones, we can find unqualified teachers. This gap has a negative impact on quality of education given in the rural areas. These results are supported in the survey conducted by the World Bank on rural and remote primary schools in Indonesia, which states that the rural schools are still at a significant disadvantage both in teacher quality and availability (Chirinda et al., 2021; Sabarwal et al., 2023).

The paper points out gross infrastructural weaknesses in the schools of Talaud. Important facilities like internet access, computer labs, science labs and libraries are not available in most schools. Due to this shortcoming, it becomes difficult to implement a holistic education and restricts students access to the required learning materials (Chigbu & Adamu, 2023; Miseliunaite et al., 2022; Orion, 2007). Studies show that they are very common in the rural parts of Indonesia where most schools do not have the proper infrastructure thus hinders learning.

A huge barrier to education among the students is economic issues. A large percentage of learners cannot afford to pay school fees and school materials and most have to engage in employment to assist their families. These difficulties are also compounded by enormous costs of transportation especially in island areas such Talaud. The existence of these economic barriers also serves to contribute to the high dropout rates as families find it more important to tend to their immediate economic problems at the expense of education (Latif et al., 2015; Nwoke et al., 2024). The effects of poverty in Indonesia on schooling are also of importance because it shows that the nature of economic inequality is an important determinant of poor access into education.

The statistics indicate that there is an increased rate of dropout in rural schools than in the urban centers with a high spike at the senior high schools. The trend points to the fact that higher educational levels increase the extent of the barrier which causes higher attrition rates of the students (Black, 2024). Earlier studies have documented that in the wake of economic crisis, Indonesia faced a humongous augmentation in the dropout statistics especially in the rural parts of the country, which implies the susceptibility of the rural rootlands to exogenous shocks.

Parents and the students lament on the government support and school facilities despite the fact that they understand the significance of education. This is cited to be a significant problem of transportation because of the geographical aspects of the region. Such an understanding concurs with the scenario covered in the study of the rural-urban issue in Indonesia, citing that rural populations tend to experience neglect in areas of educational infrastructures and services (Setijaningrum et al., 2024; Essien & Jesse, 2024).

The issues observed in the Talaud Island are not restricted and are similar to national trends. An analysis of socio-economic influences on education disparity in Indonesia revealed that the problematic of inequality in a situation of socio-economic conditions is manifested in the situation of inequality in education between Eastern and Western Indonesia and among regions North Sulawesi that are predominantly affected negatively. Moreover, studies on factors that influence inequalities in access and quality of education in Indonesia emphasize the fact that rural dimensions indicate major weakness in infrastructure, qualified teachers and economic challenges which have all led to the disparity in education.

These sets of multifaceted challenges need multifaceted policy responses. The top priority in the investment should be directed towards development of educational infrastructure so that schools should be provided with the required facilities. Closing the gap in the educational quality between urban and rural schools can be done

through offering incentives to qualified teachers to work in rural regions. Also, it is necessary to expand low-income families financial assistance programs to reduce financial obstacles that prevent access to education by students (Klumpner & Woolley, 2021). A research on how education and environmental sustainability influence the rural income inequality in Indonesia adheres to this strategy and states that the effect of gaining a higher level of schooling managed to be fruitful concerning decreasing the rural income inequality in Indonesia. Additionally, the project to better internet access in rural regions will provide additional resources to education which will help improve learning. In its report on closing the gap in internet connectivity in Indonesia, the World Bank describes the significance of the digital connection in the contemporary education process.

CONCLUSION

This study draws conclusions underlining the existing social inequalities in the availability of education in the Talaud Islands Regency focusing on the inequality of school addresses, teacher quality, and infrastructure, as well as financial obstacles. Students residing in this remote region encounter numerous educational challenges because only a few secondary schools are offered, fewer numbers of qualified teachers are available at the rural regions, learning facilities are poor, and the rates of dropping off are high. Also, factors like financial deprivation and distances create more complexities to the issue and many students cannot proceed to get higher education after they have finished primary school. These results coincide with past studies on the education inequity in Indonesia, which are regularly focused towards structural effects that highlight rural and island populations disproportionately. Unless drastic measures are taken the inequalities will only act as a barrier to educational attainment and social mobility among school children in the region.

To address these challenges, a multi-faceted approach is required. Policies must prioritize infrastructure development, including expanding school facilities and improving internet access to bridge the digital divide. Additionally, providing incentives for qualified teachers to serve in remote areas and offering financial assistance to low-income families can help mitigate economic barriers. Government efforts should also focus on reducing transportation costs for students and strengthening community-based education initiatives. By implementing these strategic interventions, the educational landscape in the Talaud Islands can be improved, ensuring that all students regardless of their geographic location—have equal opportunities to pursue quality education and achieve better socio-economic outcomes in the future.

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