

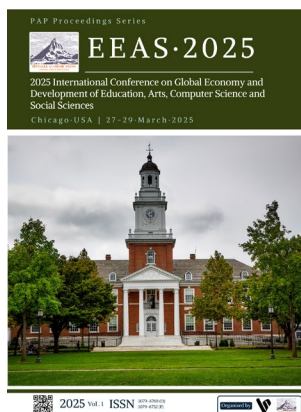
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# Education and Economic Development in Nepal: A Comprehensive Analysis and Case Study of Religion-Backed Schooling

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**Abstract:** Nepal, a landlocked South Asian nation characterized by significant social and geographic inequalities, continues to face deep-rooted challenges in its education sector. Despite notable improvements in literacy and primary school enrollment, systemic barriers hinder equitable access to quality education, especially at higher levels. This study aims to examine the structural and economic dimensions of Nepal's education crisis, assess the limitations of conventional funding models, and explore the potential of community-based educational initiatives with religious affiliation to address educational exclusion among marginalized populations. The paper adopts a qualitative case study approach, focusing on the Khawalung Girls' Education Program. It analyzes the program's structure, community role, and outcomes to evaluate how faith-based models operate in areas underserved by the state. Findings indicate that while conventional mechanisms, such as state funding, private investment, and international aid, have often struggled to adequately reach disadvantaged groups, such initiatives show potential in providing access to education by leveraging local trust, community participation, and cultural legitimacy. However, these programs face critical constraints, including financial instability, teacher shortages, and curricular limitations imposed by national regulations. The study highlights the need for a multidimensional education reform strategy that incorporates collaboration among public institutions, private stakeholders, and religious or community-based organizations. Such integrative approaches are essential for creating a more inclusive, resilient, and equitable education system in Nepal, with broader implications for national development and poverty reduction.

**Keywords:** education inequality; religion-backed schooling; Dalit girls' education; caste-based discrimination; economic development

## 1. Introduction

Nepal, a country with a population of approximately 29.16 million, is grappling with substantial economic and educational challenges. According to data from the World Bank Overview, the nation's GDP per capita stands at approximately \$1155, classifying it as a low-income country [1]. While Nepal has made significant progress in improving literacy rates and school enrollment over the past two decades, persistent challenges, such as high dropout rates, gender disparities, and inadequate educational infrastructure, continue to hinder national economic development. In particular, disadvantaged youth and girls face systemic barriers that prevent them from accessing quality education.

This paper aims to analyze Nepal's education crisis through a theoretical economic lens while discussing the role of religious institutions in providing educational opportu-

nities in areas where state intervention has faced limitations. Additionally, this paper presents an empirical case study of the Khawalung Girls' Education Program, in which the author and his team participated as teaching volunteers during the summer of 2024. Their engagement at a local Buddhist temple provided firsthand data and valuable insights into the program's impact. In recent years, global education systems have increasingly explored the integration of emerging technologies such as artificial intelligence to enhance accessibility and teaching effectiveness. For example, AI-supported instruction has been applied in teaching Chinese as a foreign language in online settings, revealing both the potential benefits and limitations of such approaches [2]. Although these innovations remain largely inaccessible in Nepal due to infrastructural limitations, they offer a broader perspective on how future educational interventions, particularly in remote or underserved regions, might evolve. By examining this case, the study contributes empirical insight into Nepal's education crisis and proposes practical solutions to address these challenges.

## 2. Nepal's Demographic, Economic, Cultural, and Educational Landscape

### 2.1. Demographic Overview

According to the Central Bureau of Statistics (CBS), Nepal has a total population of approximately 29.16 million, with 14.65 million males and 14.51 million females [3]. The country's median age is 24.6 years, indicating a relatively young population with the potential to drive economic growth if properly educated. However, the country's annual population growth rate has declined to 0.93% from 1.35% in the previous decade. Nepal's population distribution highlights disparities in access to education, with 6.73% of the population residing in the Mountain Region, 43.00% in the Hill Region, and 50.27% in the Terai (Plains) Region. The concentration of the population in the Terai region exacerbates educational disparities, as remote and mountainous areas face significant barriers to schooling.

### 2.2. Economic Overview

According to the World Bank 2021, Nepal's GDP in 2021 was approximately \$33.66 billion, with a per capita GDP of \$1155 [4]. The country's GDP growth rate was 3.9% in 2021, following a contraction of 2.1% in 2020 due to the COVID-19 pandemic. Compared to global standards, Nepal's GDP per capita remains significantly lower than the global average of \$12,263. Among South Asian countries, Nepal's GDP per capita is higher than Afghanistan's (\$509) but lags behind India's (\$2277) and Bangladesh's (\$2503). Despite economic growth, Nepal remains heavily dependent on agriculture and remittances. Agriculture employs approximately 60% of the workforce and contributes 27% to the GDP, while the service sector accounts for 57%, and industry constitutes 16%. The poverty rate stands at 17.4%, and remittances make up approximately 25% of Nepal's GDP, illustrating the country's reliance on foreign employment. Limited investment in education perpetuates a low-productivity workforce, hindering economic diversification and industrialization.

### 2.3. Education in Nepal

Education in Nepal has undergone gradual transformation over the past decades, with efforts from both the government and international organizations. While access to primary education has improved, significant disparities persist across different regions, ethnic groups, and genders. Rural areas often lack proper infrastructure and qualified teachers, making it harder for children to receive consistent education. Socio-cultural factors also influence educational participation, particularly for girls and marginalized communities. Despite these challenges, education continues to be viewed as a key tool for social mobility and national development.

### 3. Economic Theories and Their Applications to Nepal's Education Crisis

The role of education in economic development has been extensively analyzed within economic theory. Human Capital Theory, developed by Gary Becker in 1964 and Theodore Schultz in 1961, conceptualizes education as an investment that enhances an individual's productive capacity and economic potential. By equipping individuals with knowledge, skills, and competencies, education increases labor productivity and contributes to both individual earnings and overall economic growth. The theory suggests that, similar to physical capital investment, allocating resources toward education generates long-term economic returns [5,6].

A key model used to quantify the relationship between education and income is the Mincer Earnings Function, developed in 1974 [7]. This model estimates the returns on education by examining the correlation between wages, years of schooling, and work experience. It follows the functional form:

$$\ln(W) = \alpha + \beta S + \gamma E + \delta E^2 + \varepsilon \quad (1)$$

This extended Mincer Earnings Function models the natural log of wages  $\ln(W)$  as a function of years of schooling  $S$ , work experience  $E$ , and its square  $E^2$ , capturing both the positive returns to education and the diminishing returns to experience over time.

At the macroeconomic level, the Solow Growth Model, when augmented to incorporate human capital, provides further insights into the role of education in economic expansion [8]. The extended production function is represented as:

$$Y = AK^\alpha H^\beta L^{1-\alpha-\beta} \quad (2)$$

Where  $Y$  represents total economic output,  $A$  denotes technological progress,  $K$  signifies physical capital,  $H$  captures human capital, and  $L$  represents the labor force. The parameters  $\alpha$  and  $\beta$  reflect the output elasticities of physical and human capital, respectively. This model demonstrates that investment in education strengthens labor productivity and facilitates long-term economic growth by increasing the efficiency of capital and technological innovation.

The Poverty Trap Theory further explains how a lack of access to education perpetuates cycles of poverty, preventing low-income individuals and nations from achieving economic mobility. Scholars such as Jeffrey Sachs in 2005 and Daron Acemoglu and James Robinson in 2012 argue that without substantial external intervention, poverty persists across generations due to inadequate investment in education, healthcare, and capital accumulation [9,10]. In low-income settings, families frequently prioritize short-term labor over education, thereby reinforcing patterns of intergenerational poverty. This observation is particularly relevant to Nepal, where economic constraints force many families to withdraw children from school in favor of immediate income-generating activities. In such contexts, external financial support mechanisms, including targeted scholarships and tuition subsidies, are essential to enabling long-term human capital development and breaking the poverty cycle.

The Dual Equilibrium Theory, introduced by Arthur Lewis in 1954, further elucidates how economies may become trapped in a low-skill, low-wage equilibrium when educational attainment remains insufficient to support industrial growth [11]. This theory divides the economy into two sectors. The first is a traditional agricultural sector characterized by low productivity and subsistence-level wages, while the second is a modern industrial sector that demands a skilled labor force. Economic transformation occurs when labor transitions from low-productivity agricultural employment to higher-value industrial occupations. This transition is contingent on access to quality education, which equips workers with the technical and vocational skills required for employment in the industrial sector. A related model, the S-shaped growth trajectory proposed by Azariadis and Stachurski in 2005, illustrates how economies can stabilize at two distinct equilibria [12]. In the low-income equilibrium, families invest minimally in education due to financial constraints, thereby maintaining a cycle of poverty. Conversely, in the high-income

equilibrium, sustained investment in education results in higher earnings, greater economic stability, and long-term national prosperity. The Nepalese economy reflects elements of this framework, as many households remain in a low-income equilibrium unless external interventions, such as government-sponsored education initiatives and financial aid programs, are introduced to facilitate upward mobility.

Endogenous Growth Theory, formulated by Paul Romer in 1990 and Robert Lucas in 1988, underscores the role of education, research, and knowledge accumulation in driving sustained economic expansion [13,14]. Unlike exogenous models of growth, which attribute long-term economic development to external technological progress, endogenous growth frameworks emphasize that innovation and human capital development are intrinsic to economic advancement. This theory posits that increased investment in education fosters technological progress by enhancing the capacity for research and development, thereby enabling economies to achieve sustained productivity gains. In countries such as Nepal, where structural transformation and industrial diversification remain key policy objectives, prioritizing education can generate long-term economic benefits by fostering a more innovative and competitive workforce.

Beyond the general economic benefits of education, Returns to Education Theory highlights the differentiated impact of educational investment, particularly concerning gender disparities. Scholars such as Claudia Goldin in 1990 and Esther Duflo in 2012 demonstrate that investment in female education yields disproportionately high economic and social returns [15,16]. Research indicates that improved access to education for women enhances workforce participation, increases household income, and strengthens intergenerational wealth transfer. Additionally, higher levels of female education are associated with improved health outcomes, lower fertility rates, and greater economic resilience at the household and national levels. Despite these documented benefits, gender disparities in education persist in many developing economies, including Nepal, where cultural and economic barriers often limit female educational attainment. Addressing these disparities through targeted policies, such as conditional cash transfers and community-based education initiatives, is essential for achieving equitable economic development.

In summary, while each of these economic theories approaches the relationship between education and economic growth from a distinct perspective, they collectively reinforce the fundamental principle that education serves as a cornerstone of economic development. Human Capital Theory emphasizes the individual returns on education through increased earnings and productivity. The Poverty Trap Theory highlights the necessity of external intervention to ensure educational access for disadvantaged populations. The Dual Equilibrium Theory illustrates the structural role of education in facilitating the transition from a low-skill, low-wage economy to an industrialized economy. Endogenous Growth Theory underscores education's critical function in sustaining long-term innovation and technological progress. Returns to Education Theory further demonstrates that investing in female education generates significant social and economic benefits. Taken together, these theoretical perspectives provide a comprehensive framework for understanding the economic implications of education and underscore the urgent need for policy interventions that promote equitable access to quality education, particularly in developing economies such as Nepal.

#### **4. Nepal's Education Shortages—A Crisis in Access and Quality**

##### *4.1. Nepal's Education Shortage*

Nepal's education system faces a severe shortage of schools, teachers, and resources, limiting access to quality education for millions of students. Despite progress in enrollment rates, particularly at the primary level, secondary and higher education remain inaccessible to a significant portion of the population.

One of the most pressing issues is the insufficient number of schools, particularly at the secondary level. While Nepal has around 29,000 primary schools, the number of secondary schools is much lower, with only 6600 institutions available for millions of students [17]. This creates a bottleneck in educational progression, where many students complete primary education but struggle to continue their studies due to a lack of nearby schools. In rural and mountainous regions, children often have to travel long distances, sometimes several hours on foot, to reach a school, leading to high dropout rates, especially among girls. The net secondary enrollment rate stands at only 63.5%, meaning a large portion of students' never complete high school [18].

Another critical issue is the severe shortage of teachers in public schools. According to the World Bank Overview, with a student-teacher ratio of 46:1 in government schools, classrooms are overcrowded, reducing the quality of instruction [1]. The lack of trained educators, an estimated 25,000 more teachers are needed, further exacerbates the problem. Many teachers in rural areas lack formal training, and about 15% of public school teachers are regularly absent, leaving students with an inconsistent and subpar education. In contrast, private schools offer better teacher-student ratios (30:1) but remain financially out of reach for many families, as annual tuition costs range from \$500 to \$3000, a steep price in a country where the GDP per capita is only \$1155.

The education infrastructure crisis also contributes to low learning outcomes. More than 50% of public schools lack proper classrooms, and 30% of students in rural areas study in unsafe or temporary structures. Furthermore, only 24% of public schools have reliable electricity, and less than 15% have internet access, limiting digital learning opportunities. Sanitation facilities remain inadequate, with only 55% of schools having separate toilets for girls, leading to higher dropout rates among female students, particularly after puberty [19]. The lack of basic resources means that even students who attend school often do not receive a learning environment conducive to academic success.

#### 4.2. Comparative Analysis with Selected Countries

A comparative analysis of Nepal's economic and educational indicators of selected countries including Singapore, Thailand, Vietnam, China, India, Malaysia, and Indonesia reveals significant variations. These differences highlight the challenges Nepal faces in enhancing its educational outcomes and overall development (see Table 1).

**Table 1.** Economic Indicators.

Country	GDP per Capita (Current US\$)	GDP Growth Rate (%)	Human Development Index (HDI)
Singapore	\$64,010	3.5	0.939
Malaysia	\$14,442	4.5	0.803
Thailand	\$7750	3.2	0.800
China	\$12,720	5.5	0.768
Vietnam	\$4500	6.1	0.703
Indonesia	\$5250	5.0	0.718
India	\$2485	6.8	0.644
Nepal	\$1155	4.0	0.602

Sources [20]:

GDP per Capita: World Bank.

GDP Growth Rate: World Bank.

HDI: UNDP Human Development Reports.

We use Table 2 to compare Nepal's education and those selected countries by "Mean Years of Schooling", "Expected Years of Schooling" and "Literacy Rate".



**Table 2.** Comparative Analysis of Educational Indicators Across Selected Countries.

Countrys	Mean Years of Schooling	Expected Years of Schooling	Literacy Rate (%)
Singapore	11.5	16.2	97.5
Malaysia	10.2	13.7	94.9
Thailand	7.6	13.9	93.8
China	7.9	14.0	96.8
Vietnam	8.3	12.7	95.0
Indonesia	8.0	12.9	95.7
India	6.5	12.2	74.4
Nepal	5.0	12.2	67.9

Sources:

Mean and Expected Years of Schooling: UNDP Human Development Reports [21].

Literacy Rate: UNESCO Institute for Statistics [22].

From the comparative analysis, we find that Nepal's GDP per capita is significantly lower than that of its regional counterparts. For instance, Singapore's GDP per capita is approximately 55 times higher than Nepal's, reflecting a substantial economic gap.

The mean years of schooling in Nepal are the lowest among the compared countries, indicating limited access to education. This is further evidenced by Nepal's literacy rate of 67.9%, which is considerably lower than the rates in other countries listed.

Nepal's HDI is the lowest among the countries compared, underscoring challenges in health, education, and income.

#### 4.3. Disparities in Education Among Different Social Groups

Nepal's education system faces severe shortages, with significant disparities in accessibility that further disadvantage already marginalized groups. These disparities stem from multiple factors, including economic status, gender, and geography. Income-based disparities are particularly pronounced, as household contributions account for nearly half of total education expenditures, placing a disproportionate financial burden on families. Consequently, wealthier households can afford better educational opportunities, while low-income families struggle to keep their children in school. Gender-based disparities also persist, especially beyond the primary level. Although Nepal has achieved gender parity in primary school enrollment, factors such as early marriage, gender-based violence, and socio-cultural norms contribute to higher dropout rates among girls, particularly in rural areas. This issue will be examined in detail in the following chapter. Additionally, geographical disparities exacerbate educational inequalities, as urban areas have significantly higher literacy rates and school attendance compared to rural regions. For instance, while the literacy rate for women in urban areas is 65.8 percent, it drops to 39.1 percent in rural communities [23]. This urban-rural divide underscores the urgent need for targeted interventions in remote areas. The convergence of these factors not only deepens the crisis in Nepal's education system but also presents significant challenges to the country's long-term economic development by restricting human capital formation and perpetuating cycles of poverty.

### 5. The Most Severe Restrictions to Education on the Group of Girls-"The lower-caste individuals"

This section draws primarily on findings from Nepal's National Education Sector Plan, combined with observational insights from the Khawalung Girls' Education Program, to explore how caste, gender, and geography intersect to create extreme educational exclusion for marginalized girls in Nepal (see Appendix 1).

Among all the groups in Nepal, one that is discriminated the most and most desperately needs access to education is girls in marginalized communities, such as those living in mountainous and remote areas.

In addition to economic, geographic, and cultural barriers, Nepal's rigid caste system, which is a form of social hierarchy passed down through families that has existed for a long history, also plays a major role in restricting educational access for girls, particularly for those from marginalized communities. Despite constitutional guarantees of equal education, deeply ingrained caste-based discrimination and social biases continue to limit opportunities for lower-caste and disadvantaged girls.

The Dalit community, historically marginalized and comprising about 13% of Nepal's population, has historically been excluded from educational and economic opportunities [24]. In many rural areas, Dalit children, especially girls, are still denied enrollment in schools or treated as second-class students. Even when they attend school, Dalit girls often face bullying, exclusion, and unfair treatment from upper-caste teachers and classmates, leading to high dropout rates. Many Dalit parents hesitate to send their daughters to school out of fear that they will face humiliation or be mistreated.

Lower Caste girls are also denied education due to traditional labor roles. Many Dalit and lower-caste families work in agriculture, domestic labor, or traditional caste-based jobs (such as blacksmithing or tailoring). Instead of attending schools, girls from these families are expected to work from a young age, either at home or as laborers. Some girls are also forced into bonded labor systems (Kamalar system), where they serve as domestic servants in wealthy homes instead of receiving an education.

More restrictions facing this disadvantageous group also come from religions. In Nepal's southern Terai region, where the Madhesi and Muslim communities have a strong presence, many families restrict girls from attending school after puberty due to conservative cultural norms. In some cases, girls are forbidden from interacting with male teachers or classmates, leading to early dropout rates. A lack of female teachers in rural schools exacerbates this issue [25].

There are also traditional beliefs that girls don't need education. Some communities, particularly in rural Hindu and indigenous areas, still believe that girls should prioritize household work over schooling. The idea that "a daughter will marry and leave, while a son will stay and provide for the family" results in parents prioritizing education for boys over girls.

## **6. Existing Resources Addressing Nepal's Education Challenges**

Nepal has taken various steps to address its persistent education challenges, drawing on state mechanisms, private initiatives, international aid, and religious institutions. Yet, despite the diversity of resources, structural limitations continue to prevent meaningful progress.

The Nepalese government has launched several policy reforms and investment programs aimed at expanding access to education. Nevertheless, its efforts are often constrained by limited budget allocation, bureaucratic inefficiencies, and infrastructural gaps. Many public schools, particularly in rural areas, lack essential facilities such as functional classrooms, sanitation, and access to digital tools. A major issue remains the shortage of qualified teachers. According to government data, the average student-teacher ratio in public schools is approximately 46:1, with an estimated shortage of 25,000 teachers nationwide [26]. Low wages, poor working conditions, and a lack of professional training further undermine teacher retention and classroom effectiveness. Additionally, frequent political shifts result in unstable education policies, disrupting long-term planning and implementation.

Private schools have emerged to fill some of these gaps, particularly in urban areas. They typically offer better infrastructure and more favorable teacher-student ratios, averaging around 30:1. However, these institutions remain financially inaccessible to the majority of Nepali families. Annual tuition fees range from \$500 to \$3000, which is a significant burden in a country where the average GDP per capita is just \$1155 [27]. Moreover, private schools are heavily concentrated in urban regions, widening the disparity between

rural and urban educational opportunities. The profit-driven nature of many private institutions can also result in inconsistent quality and a lack of focus on equity or community development. Additionally, vocational education remains underdeveloped, leaving students ill-prepared for the labor market.

International organizations have played a significant role in supporting Nepal's education sector through financial aid, policy consultation, and pilot programs. While such efforts have contributed to important progress, they are often short-term, project-based, and insufficiently integrated into local systems. Over-dependence on external support has created sustainability concerns, and some aid initiatives have been criticized for failing to align with Nepal's socio-cultural context or long-term development priorities [28].

## 7. The Role of Religion-Based Education

Religious institutions in Nepal, such as Hindu temples, Buddhist monasteries, and Christian missions, have long provided alternative educational support, especially in areas underserved by the state and market. These institutions run schools, host literacy and vocational training programs, and distribute educational materials to children from marginalized backgrounds. They often operate with minimal resources, relying on donations and volunteers, and typically offer low-cost or free education that combines academic subjects with moral and ethical instruction.

One of the main strengths of religion-backed education is its accessibility. These schools are frequently located in remote or marginalized communities, where formal educational infrastructure is weak or non-existent. Their deep community roots foster trust and encourage parental involvement. Moreover, religious schools tend to remain operational during times of political instability or natural disasters, offering continuity when other systems falter. They also provide a holistic educational model that integrates spiritual values with formal learning, which many families find appealing.

However, religious education also faces critical limitations. Many of these schools struggle to incorporate modern curricula, particularly in science, mathematics, and technology. Their volunteer teaching staff often lack formal qualifications, and the institutions typically operate with outdated infrastructure and limited funding. Furthermore, religious schools are frequently excluded from government or donor-supported education frameworks, making it difficult for them to access additional resources or formal recognition.

In sum, while each of Nepal's education actors, public, private, international, and religious, offers distinct advantages, none can address the nation's challenges in isolation. A more integrated, collaborative approach is necessary, one that leverages the strengths of each sector and promotes equitable, context-sensitive education across the country.

## 8. A Case Study: Khawalung Girl's Education Program

### 8.1. Background of the Case Study

The author and a team of three high school students from Massachusetts, USA participated in a volunteer teaching program in Khawalung in the summer of 2024. During this period, they taught students in classes of Math, English, Chinese, and Science and spent significant amount of time communicating and playing sports with the students. They have also conducted study on the program's objectives, operations, challenges, and other important matters. This chapter is a summary to their findings in this case study. There is a Q&A section in the attachment that records more data points about this program and related educational situation in the region.

### 8.2. The Khawalung Girls' Education Program

The Khawalung Girls' Education Program is located in Kathmandu, Nepal, within the Khawalung Monastery, which was founded in 2005 by Vajra Master Jigme Dorje Rinpoche. The Monastery's primary purpose is to uphold, preserve, and disseminate the



Tibetan Buddhist traditions, teachings, and ritual practices of the Nyingma School of Vajrayana Buddhism. The school itself was established to provide education specifically to Dalit girls, a marginalized group in Nepal.

Dalits, who are often referred to as "lower-caste individuals" within the Indian caste system, occupy the lowest rung in society and face systematic exclusion and discrimination. Due to their caste status, Dalits are relegated to the most menial and undesirable tasks, such as cleaning latrines and manual labour. These practices are rooted in thousands of years of cultural and religious customs that sustain the caste system. For Dalit women, the situation is especially dire, as they face heightened vulnerabilities to sexual violence, discrimination, and even forced prostitution. The lack of education exacerbates these issues, perpetuating a cycle of poverty, exploitation, and social marginalization.

Despite efforts by the Nepali government to outlaw the caste system, Dalits continue to experience discrimination and exclusion due to deeply ingrained societal practices. In rural and remote regions of Nepal, especially in the Himalayas, Dalit girls are often denied access to education. Many face early marriage, child labour, or even human trafficking, leaving them with few alternatives for a better future. The Khawalung Girls' Education Program aims to break this cycle by offering education to these girls, providing them with an opportunity for a different life (see Appendix 1).

Unlike other monastery-backed programs that require students to become nuns, the Khawalung program offers secular education while incorporating elements of Tibetan Buddhist ethics and philosophy. This distinction provides Dalit girls with the chance to receive education without being forced into monastic life, which is a requirement in some other religious-backed institutions. The school currently serves 40 students, with plans to expand to 60 by the end of 2025. The expansion aims to further combat poverty, discrimination, and social exclusion through education.

The curriculum follows Nepal's national education standards, covering subjects such as mathematics, science, Nepali, and English. In addition, students receive moral education based on Tibetan Buddhist teachings, though this is non-compulsory. The school is focused on offering education up to the 8th grade, with plans to eventually offer high school and vocational training. The program also aims to establish higher education pathways through international partnerships, including with vocational schools in Japan and the U.S.

Graduates of the Khawalung program will be prepared to pursue higher education and job opportunities that were previously inaccessible to them. By equipping Dalit girls with education and skills, the program empowers them to contribute to Nepal's economic development and break free from the cycle of poverty and exploitation.

### *8.3. Key Findings of Specific Issues Facing the Program*

The Khawalung Girls' School addresses significant educational inequities faced by Dalit/Kami girls and over 10,000 impoverished households in Nepal. These barriers include caste-based discrimination, economic deprivation, and cultural barriers, which hinder school enrollment and retention. In interviews with key figures involved in the program, including Vajra Master Jigme Dorje Rinpoche and other school administrators (see Appendix 1), it was evident that the school is tackling not only educational disparities but also the social stigmas that Dalit girls face.

The school provides secular education that is distinct from other religiously affiliated programs, where students may be required to join religious orders. This is an important feature, as it allows students to benefit from ethical teachings without having to enter the monastic community. The staff includes seven full-time teachers and five part-time religious mentors, who together create an environment that promotes both academic learning and moral development. The school's goals include breaking the cycle of intergenerational poverty, enhancing employability, and promoting women's economic empowerment.

However, despite the program's success in providing much-needed education, the Khawalung Girls' School faces several critical challenges. Infrastructure expansion is a priority, with an estimated USD 150,000 required to build additional dormitories, classrooms, and other essential facilities. The school operates on an annual budget of USD 120,000, which covers costs for food, accommodation, study materials, and staff salaries. This budget is fully reliant on donations from international sources, including groups in New York and Shanghai, as well as fundraising efforts, but the Nepali government does not provide any financial support (see Appendix 1).

The school also faces urgent needs in expanding faculty, obtaining medical resources, and securing technological equipment such as computers and tablets. These challenges highlight the need for long-term, sustainable funding and support from a range of stakeholders, including governmental, non-governmental, and international organizations.

The Khawalung model of secular education in a caste-ridden context demonstrates the potential for positive change, but it also underscores the necessity of a multilateral approach. To ensure the program's sustainability and scalability, the involvement of the Nepali government is crucial, as is the creation of sustainable funding mechanisms. Strengthened partnerships with both international donors and local institutions will be key to ensuring the program's success and fostering lasting sociostructural transformation for Dalit girls in Nepal.

## 9. Conclusion

Nepal's economic underdevelopment is inextricably linked to its education crisis, a challenge widely recognized in economic research. The shortage of educational resources, both public and private, has hindered human capital formation, limiting the country's ability to transition toward a more diversified and productive economy. Conventional funding mechanisms, including government investment, market-driven initiatives, and international aid, have proven insufficient in addressing the vast educational disparities, particularly among marginalized groups. As demonstrated in the case study, religion-backed education programs offer a unique and valuable approach to bridging this gap, particularly for Dalit girls who face systemic barriers to schooling. While such initiatives have yielded tangible success, they continue to grapple with financial constraints, staffing shortages, and curriculum development challenges. Given their pivotal role in expanding access to education, greater attention and institutional support are necessary to enhance their impact and ensure sustainable educational opportunities for Nepal's most disadvantaged populations.

### **Appendix 1.** Interviews with the founder and managers and Trust sponsors of Khawalung Girls' School

The following communication is conducted during the summer of 2024.

Interviewees: Vajra Master Jigme Dorje Rinpoche, Michael Jiang, Principal of the Program.

Q1: What is the Khawalung Girls' School, and why was it established?

A: The Khawalung Girls' School is an educational initiative founded in 2023 to provide quality education to Dalit girls, a marginalized group in Nepal. It was established by the Khawalung Foundation to address systemic discrimination, gender inequality, and lack of educational access for girls from impoverished backgrounds.

Q2: How many students are currently enrolled, and how many more need such assistance by your knowledge?

A: Currently, 40 girls are enrolled in the school, with plans to expand to 60 by the end of 2025. However, estimates suggest that at least 3,000 Dalit/Kami girls and over 10,000 extremely poor village families require similar educational support.

Q3: How does this program compare to other religion-backed educational initiatives in Nepal?

A: Most monastery-backed education programs in Nepal require students to become nuns. Khawalung is unique because it provides secular education with optional religious teachings. This allows students to benefit from moral and ethical guidance without being obligated to join the monastic community.

Q4: What are the typical backgrounds of the students?

A: The students come from extremely impoverished families. Many are orphans, abandoned by parents, or raised by grandparents with little to no financial resources. Their families often lack literacy and education, making it difficult for them to access formal schooling.

Q5: If these girls did not attend Khawalung, what alternative education options would they have?

A: While public schools exist, many Dalit families do not send their daughters due to financial constraints, discrimination, and societal norms. Girls often drop out early to be forced into child labor, early marriage, or even trafficking.

Q6: What are the long-term consequences if these girls do not receive an education?

A: Without education, their lives follow a predetermined cycle:

- 1) Early marriage and childbearing at a young age.
- 2) Low-income labor as farmers or household workers.
- 3) Continued social exclusion and caste-based discrimination.

Q7: What does the school's curriculum cover, and how long is the program?

A: The school currently provides primary education up to 8th grade, following the Nepali government's standardized curriculum. It includes:

- 1) Core subjects: Math, Science, English, and Nepali.
- 2) Ethical and moral education based on Tibetan Buddhist teachings (non-compulsory).
- 3) Plans for high school and vocational training in the future.

Q8: How is the school staffed, and what role do volunteers play?

A: The school currently has

- 1) 7 full-time teachers.
- 2) 5 part-time lamas teaching both boys' and girls' programs.
- 3) Volunteers are welcomed, but their participation is sporadic and unstable for long-term educational support. The school aims to build a more stable and accountable volunteer program.

Q9: What will happen to the girls after they complete the program?

A: Graduates will have multiple paths:

- 1) Vocational training in Japan and the U.S. with job placement opportunities.
- 2) Further education if funding is available for high school and college.
- 3) Careers in teaching, healthcare, or Tibetan arts and crafts within the Khawalung system.

Q10: What are the school's current infrastructure and expansion plans?

A: The school can currently accommodate 40 girls, with plans to expand to 60 in 2025. The maximum current capacity (with additional funding) is 100 students. More dormitories, classrooms, and sanitary facilities are needed for further expansion.

Q11: How much investment has been made, and what is the annual budget?

A: See following numbers

- 1) \$150,000 USD has already been invested in school construction.
- 2) An additional \$150,000 is needed to complete the interior facilities.
- 3) Annual operating costs: \$120,000 USD (\$10,000 per month for food, accommodation, study materials, and staff salaries).

Q12: What are the school's most urgent needs?

A: there are following needs:

- 1) More qualified teachers, especially for high school expansion.
- 2) Medical care and nutritional support.
- 3) Sports equipment, IT resources (computers, tablets, internet access).

Q13: How is the school funded?

A: The funding comes from various sources

- 1) Half of the funding comes from monthly donations:
  - a) New York group: \$3000 per month
  - b) Shanghai group: \$2000 per month
- 2) Annual fundraising efforts raise about \$30,000–35,000 USD.
- 3) Each year, a \$30,000 funding deficit is covered by senior board members.

Q14: Does the Nepali government or international organizations provide any financial assistance?

A:

- 1) The Nepali government does not provide any funding to the school.
- 2) The school is seeking international support, including from the New York State government as part of a community and religious support initiative.

Q15: What are the school's long-term goals?

A:

- 1) Expand to accommodate 100+ students.
- 2) Establish a medical college and train female doctors within the Khawalung system.
- 3) Provide higher education and vocational training opportunities abroad.
- 4) Foster self-sufficiency and empowerment so that graduates can uplift their communities.

Q16: What can external donors or organizations do to support the program?

A:

- 1) Financial contributions to support student tuition, facilities, and staff salaries.
- 2) Sponsorship programs for students' higher education.
- 3) Technology and educational resource donations.
- 4) Medical aid and food security programs to improve student well-being.

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