

Exploring the Impact of Household Head's Education and Occupation on Basic Education Financing

Basudeb Khanal

Department of Economics Education, Mahendra Ratna Campus, Tahachal, Tribhuvan University.

✉basudev.khanal@mrc.tu.edu.np

Submitted: March 13, 2024; Accepted: July 12, 2024; Published: January 31, 2025

Abstract

This study investigates the association between the education and occupation of household heads and household financing for basic education in Nepal. Utilizing a quantitative approach with a correlational and descriptive design, data was collected through structured questionnaires from 380 households in Ratuwamai Municipality of Morang district. The findings reveal significant differences in per-child household financing for basic education based on the occupation and education levels of household heads. Higher-paying professions and higher parental education levels are associated with greater household financial resources allocated to children's education. Conversely, households with low-income occupations and lower parental education levels face financial barriers, resulting in reduced prioritization of education. These findings underscore the association of socioeconomic factors on household financing decisions and highlight the importance of considering household head occupation and parental education in household financing on basic education.

Keywords: Household, Occupation, Education, Basic Education, Financing

Introduction

Education serves as a cornerstone for human development, nurturing the acquisition of knowledge and skills from early childhood throughout life. Echoing Aristotle's wisdom, it is through education that individuals cultivate a balanced mind and body, empowering them to ponder truth, goodness, and beauty, ultimately striving for happiness (Sharma & Sharma, 2020). This continual journey not only enriches individuals but also safeguards cultural legacies, ensuring their transmission to succeeding generations. Furthermore, education is instrumental in societal progress, fostering democratic values, upholding human rights, and advancing social equity. Consequently, governments worldwide prioritize providing various forms of education to their citizens, including primary, secondary, tertiary, technical, vocational, and non-formal learning pathways.

Basic education represents the foundational tier of formal education within a nation's educational framework. It encompasses primary education, the initial stage, and lower secondary education, the subsequent phase, aiming to address fundamental learning needs as outlined in the World Declaration on Education for All (Aluede, 2006). Whether delivered through formal channels or not, basic education encompasses all essential learning activities. In a formal educational context, basic education typically refers to the primary stage, though it extends beyond to include early childhood care and development, as well as junior secondary education, reflecting contemporary legislative trends (UNESCO, 2006).

Recognized as a fundamental human right globally, basic education holds particular significance in international conventions and declarations, including the Universal Declaration of Human Rights (1948), the Convention on the Rights of the Child (1989), and the Millennium Development Goals (MDGs) and Sustainable Development Goals (SDGs) (UNESCO, 2010). Despite this recognition, disparities persist, hindering universal access to quality basic education, a challenge particularly pronounced in developing nations like Nepal (Bennett, 2008).

In Nepal, the Constitution of 2015 enshrines education as a fundamental right, guaranteeing access to free and compulsory basic education up to the secondary level (Constitution of Nepal, 2015). The government's commitment to basic education is further evidenced through legislative measures, such as ("The Act Relating to Compulsory and Free Education, 2075 (2018)," 2018), which delineates basic education as encompassing free and compulsory up to grade eight.

Aligned with global initiatives like the SDGs, Nepal prioritises basic education as integral to achieving inclusive and equitable quality education for all (UNESCO, 2016). To this end, educational reforms and initiatives like the School Sector Reform Plan (SSRP) and School Sector Development Plan (SSDP) emphasize enhancing access, equity, and quality in basic education (UNESCO / IIEP - UIS, 2016). The government's recent enactment of the Compulsory and Free Education Act of 2018 underscores its commitment to ensuring universal access to basic education.

However, despite governmental efforts to provide free basic education, households still bear significant financial burdens associated with education, including expenses for uniforms, school supplies, meals, and transportation (Kushiyait, 2015). Parents, in particular, contribute a

substantial portion of education financing in Nepal (UNESCO / IIEP - UIS, 2016), underscoring the ongoing financial challenges faced by households in accessing quality education.

The Constitution of Nepal 2015 mandates free and compulsory basic education for children aged 5-12. However, 'free' only covers tuition fees and books in public schools. Despite substantial government funding in public education, basic education remains fully financed by households in private schools. Parents bear expenses for stationery, meals, uniforms, and extracurricular activities in the public school. Furthermore, household financing varies by income, ethnicity, gender, school type, head of household's occupation, and parental education level around the globe (Donkoh & Amikuzuno, 2011; Ebaidalla, 2017; Hao & Yeung, 2015; Mauldin et al., 2001; Qian & Smyth, 2011; Rizk & Owusu-Afriyie, 2014; Ulusoy & Yolcu, 2014; Yan et al., 2021). So, this study examines differences in household financing on basic education based on the education and occupation of the household head in the Nepalese context. Specifically, it seeks to determine the per-child household expenditure on basic education across different occupational and educational categories of household heads. By analyzing these factors, the study sheds light on the disparities in household financing for basic education and provides insights into the socio-economic determinants influencing educational expenditure within households.

Association of Household Financing With Education and Occupation of Household Head

Education financing entails public spending, managed by tax revenue, and household/private expenditure, sourced from household income (Reinikka & Smith, 2004). Both government and households contribute to education financing, reflecting an investment in long-term development (Wagley, 2006). Household education financing includes tuition fees, boarding fees, and other expenses, indicating households as the primary funding source (Zhang & Zhou, 2017). While household financing surpasses public funding and predominantly targets primary education (Foko et al., 2012), balancing investments between households and institutions is crucial for optimal social investment in education (Tilak, 1993). Although public spending may crowd out private contributions, it stimulates increased private financing, particularly in basic and secondary education, thus augmenting overall educational resources (Arcalean & Schiopu, 2010). Consequently, heightened government financing inspires greater household investment in education, fostering national development.

Household financing in education constitutes a substantial portion of overall household expenditure, with approximately half directed towards educational investments. Notably, private financing is particularly pronounced in expenditures for foreign language instruction and private schooling, demonstrating significant variations based on household location, total financing, and the educational and occupational background of the household head (Kanellopoulos & Psacharopoulos, 1997). Household education financing, especially prevalent in low-income countries, often exceeds that of middle- and high-income families and is disproportionately burdensome compared to household incomes. This disparity is evident globally, with households in developing countries allocating a significant portion of GDP per capita to education expenditures, further exacerbated by insufficient public investment (Huebler & McGee, 2019).

The financing burden on households often leads to adverse outcomes, such as children being unable to access education or dropping out prematurely, undermining educational goals worldwide. This burden is exacerbated by the multifaceted socio-economic factors influencing household education financing, including location, household educational background, parental occupation, family income, accommodation type, and the number of children attending school (Ulusoy & Yolcu, 2014). Despite education being theoretically free in many contexts, households often bear significant direct and indirect costs, such as purchasing stationery, and uniforms, and funding private tutoring, exemplified in rural India (Shariff et al., 2000).

In India, household financing for primary education is notably burdensome, surpassing costs for secondary and higher education, highlighting the disproportionate impact on low-income families (Rao, 2014). Furthermore, larger family sizes are associated with reduced per-child education financing, affecting indicators such as public education financing and private tutoring expenditures (Dang & Rogers, 2016). Despite the diverse patterns and levels of education financing across countries and societies, the overarching burden on households underscores the need for further research to understand and address the complex interplay of socio-economic factors shaping household education financing.

Mauldin et al. (2001) found that parents' education significantly influences spending on children's primary and secondary education, alongside factors such as income, region, and season. Ulusoy and Yolcu (2014) noted variations in household education financing for primary school students based on socio-economic and school-related variables. Qian and Smyth (2011) observed higher education and professional occupations of fathers correlating with increased

education spending. Similarly, Rizk and Owusu-Afriyie (2014) highlighted the impact of parental education and occupation on education financing. (Yan et al., 2021) found that households with college-educated heads allocate more resources to children's education. Ebaidalla (2017) emphasized the significance of household income, head education, and urban residence on education financing, while Donkoh and Amikuzuno (2011) reiterated the influence of household head occupation and education on education financing.

This study addresses the gap in understanding household financing for basic education in Nepal, focusing on factors like education and occupation of household head. Additionally, it aims to examine the per-student household financing for basic education in Nepal and the influence of the household head's occupation and education, thus fulfilling a significant research gap in the Nepalese context.

Methods and Materials

The research employed a quantitative approach with a correlational and descriptive design (Kerlinger, 2008) to investigate household financing for basic education. Utilizing survey methods and structured questionnaires, data was collected from respondents (Ngulube, 2015) to explore the relationship between occupation and education of household heads and educational financing in basic education (Young, 1966). The sample size was determined using Yamane's formula (1967), and cluster sampling was employed for the selection of the sample (Joncas, 2007). The population consisted of 7478 households in Ratuwamai Municipality with children in basic education (Ratuwamai Nagarpalika, 2022), while the sample size was 380.

A structured questionnaire, informed by UNESCO guidelines (Oseni et al., 2018), was developed for data collection in line with survey design. Input from education finance experts refined the questionnaire through iterative drafts. Focus group discussions with parents ensured content validity and reliability (Blažev et al., 2021). A pilot survey involving 38 households validated questionnaire items and improved clarity. Data collection involved visiting households and ensuring consent and confidentiality (Pant, 2010). Collected data were analysed using SPSS for insights into household financing on basic education.

Descriptive statistics, including mean, standard deviation, and frequency tables, elucidate data characteristics. For deeper insights, inferential statistics such as ANOVA tested the significance of differences in per-child household financing based on household occupation and

education. This methodological approach ensures a comprehensive understanding of household financing for basic education, facilitating the generalization of findings to the population.

Findings and Discussion

Demography of Respondents

Various respondents' demographic information was collected while collecting the entire data. Mainly, the respondents' demographic features include HH's occupation and education. Table 1 gives the descriptive figure of the occupation and education of HH.

Table 1. *Occupation and Education of HH*

Occupation of HH	Number of HH	Percentage
Agriculture	185	48.7
Job	92	24.2
Business	37	9.7
Foreign Employment	18	4.7
Labour	48	12.6
Total	380	100.0
Education level of HH	Number of HH	Percentage
Illiterate	21	5.5
Primary education	172	45.3
SLC education	92	24.2
Higher secondary education (+2)	39	10.3
University education	56	14.7
Total	380	100.0

Table 1 shows that the highest HH have agriculture occupation, which is nearly 50% followed by job, labour, business, and foreign employment. This trend of occupation in a community is similar to the national scenario. According to the Food and Agriculture Organization of United Nation (2023), 66% of people are engaged in agriculture to survive in Nepal.

Similarly, table 1 discloses that the highest HH (45.3%) has only primary education. Similarly, the second position is occupied by SLC, followed by university education, higher secondary education, and illiteracy. The obtained data shows that 5.5% of respondents are illiterate. However, at the national level, the literacy rate of people 15 years and older in Nepal is

67. 9 per cent (Sharma, 2022). It explores that the literacy rate of my respondents is more than the national literacy rate.

Per-Child Household Financing in Basic Education by Occupation of HH

The occupation of HH is an important determinant of household financing in education (Tilak, 2002). So, the computation of per-child household financing on basic education by the occupation of HH is worthy. Table 2 reveals the per-child household financing on basic education by the occupation of HH.

Table 2. *Per-Child Household Financing in Basic Education by Occupation of HH*

Occupation	Number of HH	Per-child household financing (in Rs.)
Agriculture	185	30117
Job	92	43612
Business	37	38426
Foreign employment	18	20121
Labour	48	12028
Total	380	31435

The highest financing on basic education is for that household whose HH has a job. Most job holder respondents are teachers in the study area in public schools. The teachers are more educated and aware of the importance of education for their children's bright future. So, they finance their children's education more. Similarly, business people invest their resources in their children's education in the second position, followed by farmers, foreign employees, and labourers.

Per-Child Household Financing in Basic Education by Education of HH

Academic qualification of HH significantly affects household financing in education. Moreover, those people are educated highly conscious of the education of their kids (Donkoh & Amikuzuno, 2011). Therefore, the per-child household financing on basic education may differ by the academic qualification of HH. So, the per-child household financing on basic education was calculated by the education of HH. Table 3 reveals the per-child household financing on basic education by the occupation of HH.

Table 3. *Per-Child Household Financing on Basic Education by Education of HH*

Education level	Number of HH	Per-child household financing (in Rs.)
Illiterate	21	16627
Primary education	172	22061
SLC education	92	37727
Higher secondary education (+2)	39	44113
University education	56	46608
Total	380	31434

The findings explore that the per-child financing on basic education increases with the increase in the education level of the household head. These findings are in line with Brown (2006). He explored a progressive relationship between HH's academic qualification and their children's education financing. Therefore, it is concluded that there is a direct linkage between HH's education and investment in their children's education.

Effect of Occupation of HH and Financing on Basic Education

Occupation, in this study, was divided into five categories: Agriculture, Job, Business, Foreign Employment, and Labour. The basis of the category was the information obtained from the questionnaire. Considering the different occupations and per-child financing on basic education differed through the ANOVA test, the result is presented in Table 4.

Table 4. *ANOVA Test of Per-Child Financing on Basic Education Concerning Different Occupational Groups*

Occupation	N	Mean	SD	F	Sig
Agriculture	185	30116.8	20585.5	22.3	0.000
Job	92	43611.5	23487.4		
Business	37	38425.7	21307.5		
Foreign employment	18	20121.1	11183.5		
Labour	48	12028.3	10591.4		
Total	380	31434.6	22276.1		

As shown in Table 4, the difference in per-child household financing on basic education is statistically significant among the different occupational groups ($F= 22.3$, $p =0.000$). It shows that the occupation of HH significantly affects per-child household financing on basic education. Moreover, household financing for basic education varies according to the occupation of the HH.

The household head's occupation significantly affects financing in basic education (Ebaidalla, 2017). Households where the head is employed in a high-paying profession, such job or business, are more likely to have the financial resources to pay for their children's education (Qian & Smyth, 2011; Ulusoy & Yolcu, 2014). On the other hand, households where the head is unemployed or employed in a low-paying profession, such as daily wage labour, may struggle to afford the cost of education. This can lead to less financing for basic education for children. So, the occupation of HH is strongly associated with household financing in school education at the basic level.

Effect of Education of HH and Financing on Basic Education

The education level obtained by HH in this study was categorized into five groups: Illiterate, Primary Education, SLC Education, Higher Secondary Education, and University Education. The basis of the category was the information obtained from the questionnaire. Considering the different levels of education and per-child financing on basic education differed through the ANOVA test, the result is presented in Table 5.

Table 5. ANOVA Test of Per-Child Financing on Basic Education Concerning Different Levels of Education of HH

Occupation	N	Mean	SD	F	Sig
Illiterate	21	16627.1	17601.8		
Primary education	172	22061.5	18121.8		
SLC education	92	37727.4	21009.7		
Higher secondary education (+2)	39	44113.5	16848.4	27.4	0.000
University education	56	46608.3	24210.9		
Total	380	31434.6	22276.1		

As shown in Table 5, the difference in per-child household financing on basic education is statistically significant among HH's different levels of education ($F=27.4$, $p=0.000$). It shows that the education of HH makes a significant difference in per-child household financing on basic education. Moreover, household financing for basic education varies according to the education of the HH.

The household head's education significantly affects basic education financing (Mauldin et al., 2001; Yan et al., 2021). A household head with higher levels of education is more likely to understand the importance of education and the long-term benefits it can provide. They may also have more access to resources and information on securing financing for their children's education (Ulusoy & Yolcu, 2014). Additionally, a household head with higher levels of education may have more earning potential, which can lead to an increased ability to afford education expenses. On the other hand, a household head with less education may face more financial barriers and not prioritize education as highly, leading to less financing for basic education. So, parents' education is crucial in determining the funding for children's education at the basic level.

The HH with different occupations and education may have different rationales for financing in education or other sectors (Arena & Caldari, 2019). So, family preference differs according to HH's occupation and education (Redmond, 2000). The HH with high education and high-income employment can give more emphasis on education and invest more in comparison to others. It means the rational choice of the family may differ according to HH's occupation and

education. So, they invest more in it. Consequently, there is a significant difference in the per-child cost of basic education across HH's different occupations and education. It means that parental education and household financing on basic education are intensely accompanying.

Conclusion

Household head occupation and household head's education levels are robustly associated with financing basic education. Higher-paying professions afford greater financial resources, while higher parental education levels correlate with increased understanding and access to resources. Conversely, low-income occupations and lower parental education result in financial barriers and reduced prioritization of education. The research highlights how rational decision-making processes vary among households, with some prioritizing education and allocating more resources to their children's basic education, while others do not. These insights emphasize the importance of considering socioeconomic factors, such as education and occupation of household heads in financing basic education.

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