

ISSN 2382-5227

**Journal of
Tikapur Multiple Campus**
A Multidisciplinary Peer Reviewed Journal

Volume 9

2026 February



Published by

**Research Management Committee (RMC)
Tikapur Multiple Campus**

Tikapur, Kailali, Nepal

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Price: Rs. 300 (Individual) / 500 (Institutional)

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ISSN 2382-5227 (Print)

Printed in Nepal

Journal of Tikapur Multiple Campus

Volume 9, 2026

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Editorial

It is with immense pride that the Research Management Committee (RMC) of Tikapur Multiple Campus presents the *Journal of Tikapur Multiple Campus, Vol. 9, 2026* to its esteemed readership. This edition underscores our steadfast commitment to advancing academic excellence, fostering research, and enhancing professional knowledge and skills. Through a rigorous process of double-blind peer review, intensive editing, and meticulous copyediting by a team of dedicated scholars, this volume showcases high-quality research and scholarly contributions. We believe such initiatives are pivotal in cultivating a robust research culture among teaching professionals and scholars, inspiring them to engage in meaningful academic inquiry and dissemination. We extend our gratitude to all contributors, reviewers, and readers for their support and hope this volume serves as a catalyst for further intellectual exploration and innovation.

For this volume, a total of 32 articles were received, of which eight were rejected during the initial screening for failing to meet submission guidelines. The remaining 24 articles underwent a rigorous double-blind peer review process, resulting in the rejection of 2 articles due to quality or relevance concerns and 3 were not submitted in time. Ultimately, 19 articles were selected for publication, reflecting the high standards upheld by the journal. The corpus comprises nineteen articles including English Language Teaching (ELT), agriculture, economics, sociology, and health education. The authors exhibit heterogeneous institutional affiliations and academic ranks, encompassing PhD scholars, PhD holders, freelance researchers, and associate professors affiliated with various universities. This diversity in professional and scholarly backgrounds underscores the multidisciplinary and multilingual nature of the collected works.

We extend our sincere gratitude to Far Western University, Kanchanpur, and the University Grants Commission, Sanothimi Bhaktapur, for their generous support in fostering the growth of Tikapur Multiple Campus and facilitating the publication of this journal. We are deeply indebted to Tikapur Multiple Campus for prioritizing this scholarly endeavor and providing essential financial support. Our heartfelt thanks go to Associate Professor Dhavindra Rawal, Campus Chief, Tikapur Multiple Campus; Dr. Bishnu Bilash Adhikari, Dean of the Faculty of Agriculture at Far Western University. We extend special appreciation to Associate Professor Tilak Dev Giri, Member Secretary of the Research Management Committee at Tikapur Multiple Campus, for his exceptional coordination and unwavering support. We are profoundly grateful to the contributing scholars for providing their valuable articles for dissemination through this platform and acknowledge the esteemed reviewers, both from home and abroad, for their critical insights, rigorous evaluations, constructive feedback, and timely responses. Special thanks are also due to the editors and copy editors for their unwavering dedication and exceptional efforts in shaping this issue into its final form. Their contributions have been invaluable in ensuring the quality and coherence of the published work. Lastly, we express our sincere appreciation to Mr. Prithvi Dhungana for his timely and aesthetically pleasing layout design and staff of Shubhalaxmi offset Press, Tikapur, for ensuring the successful publication of this journal. We have left no stone unturned to bring the issue errorless. However, the chances of human error cannot be denied. We will heartily appreciate and welcome comments and suggestions for the improvements in the next issue from the valued readers.

Editorial Board
February 2026

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Public Perception of Multiple VAT Rates in Nepal: An Analytical Study

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DOI: <https://doi.org/10.3126/jotmc.v9i9.90410>

Abstract

The aim of this research is to investigate the perspectives of taxpayers, traders, experts, and consumers on the implementation of multiple VAT rates in Nepal's tax system. This study investigates how individuals in Nepal perceive multiple Value Added Tax (VAT) rates. This study employs a unique and descriptive approach with data from 120 participants from the different field, including tax officials, experts, traders, and consumers. Multiple VAT rates are intended to eliminate cascade effects, improve transparency, increase revenue mobilization and broaden the tax base. However, respondents expressed worries about stability, and numerous major points were made regarding the complexity and cost of managing multiple VAT rates. All alternative hypotheses were accepted at significant levels of significance, and the statistical analysis validated the significance of these impressions. The results are helpful for policymakers trying to balance Nepal's VAT system's administrative viability, efficiency, and transparency.

Keywords: Multiple VAT rates, Tax perception, Transparency, Tax compliance, Fiscal policy

Introduction

Value-Added Tax (VAT) is an important aspect of how modern governments raise money. What distinguishes it from a conventional sales tax? Traditional sales taxes are only collected at the final place of sale. However, VAT is charged in phases throughout the whole manufacturing and distribution process. This multi-stage method reduces tax evasion and distributes the tax burden across the supply chain rather than placing it only on the end customer (Zhou et al., 2013). VAT is often returned on exports to make them competitive on the international market, avoiding double taxation.

Nepal implemented VAT on November 16, 1997, as a major tax reform. It replaced various older taxes, including the sales and hotel taxes (Dahal, 2009). The objective was to develop a more comprehensive, equitable, and efficient tax system. However, the adjustment was met with opposition. Many enterprises, particularly in the primary sector, said that VAT raised expenses and caused uncertainty about their tax duties (Devi, 2016). Political instability and economic

constraints also hampered complete implementation in the early years, particularly 1998/99 (Khadka, 1989).

Using different VAT rates allows governments greater flexibility in responding to economic trends and revenue requirements. This strategy, like any other policy instrument, has both advantages and disadvantages. On the positive side, reducing VAT rates on specific commodities might improve consumer spending, increase manufacturing, and even assist generate employment (Basila, 2010). Of course, how effectively this works is totally dependent on what is taxed and how the tax system is structured. As a result, when a government decides to implement various rates, it must carefully weigh the possible advantages and costs.

On the other side, having multiple rates might complicate life for everyone. For firms, changing tax responsibilities raises administrative costs and increases the chance of errors. Consumers may find the final prices unclear (Zu, 2017). There is also a risk of economic distortion, in which businesses alter their products just to qualify for a lower tax rate, reducing government revenue and making the entire VAT system less efficient (Dangal, 2018).

Multiple VAT rates have a basic design: different tax rates are applied to different categories of goods and services. Lower or zero rates on essentials like food and medicine are prevalent, with the goal of making living more affordable for low-income families (Acharya, 2016). However, because consumption taxes, such as VAT, are regressive, meaning that poorer households spend a greater part of their income on these necessities, the policy's effectiveness is questioned. Interestingly, evidence suggests that wealthier households often benefit more from these tax breaks since they purchase more (Wanhill, 1995). This reality brings up critical questions:

Research Question

This study is showed by the following research question:

- How do people perceive multiple VAT rates in Nepal?

Objective of the Study

The specific objective of this study is:

- To analyse the perception of multiple VAT rates in Nepal.

Significance of the Study

When Nepal implemented VAT, the intention was to develop a stronger, more reliable mechanism to pay the country's requirements by increasing domestic revenue. However, the public's impression of VAT continues to vary. Many people still don't understand how it works, and one common concern is that it raises costs immediately, causing inflation (Chapagai, 2021).

So, why does this matter? This research is valuable for a wide range of people, including researchers, students, tax officials, and businesses, who want to better understand how VAT works in Nepal. For policymakers, the findings may give significant, evidence-based guidance for improving how VAT is planned, administered, and, most importantly, communicated to the public.

On a practical level, the study seeks to provide clear guidance to anyone who finds VAT complicated. The recommended ideas could help make the entire VAT system more efficient and

effective. Despite being a part of the economic landscape for over two decades, there is still a major lack of understanding about what VAT accomplishes, its benefits, and drawbacks.

This study, therefore, focuses on the real-world workings of VAT. It investigates its administrative structure, how much it contributes to national revenue, the practical difficulties it encounters, and what could be done to enhance it. Finally, the paper investigates the relationship between VAT and the broader economy, emphasizing its potential to help Nepal become more self-sufficient and alleviate resource constraints. (Upadhyay, 2019).

Methods and Procedures

Research Design

Analytical and descriptive research design was employed in the study. Primary data was gathered using Likert scales in organized opinion surveys to determine people's actual perceptions regarding multiple VAT rates. A simple five-point rating system was employed in the survey, enabling participants to indicate whether they "strongly agree" or "strongly disagree." In social research, this approach is a significant and popular tool to gauge attitudes and views (Wipulanusat et al., 2020).

Population and Sample

The study included individuals who were directly or indirectly involved with the VAT system. A non-random judgmental sampling strategy was used to choose 120 respondents from different parts of Nepal. The sample was drawn from a variety of groups, including tax officers, traders, experts, and consumers, as shown in Table 1.

Table 1
Groups of Respondents and Size of Samples from Each Group

S.N.	Groups of the respondents	Sample size
1	Tax officers	30
2	Businessman/traders	30
3	Experts/Economists	30
4	Consumers	30
Total		120

Sources of Data and Data Collection Tools

Five-point Likert scale being used to collect primary data. The scale was designed as follows: 1 = strongly disagree, 2 = disagree, 3 = indifferent, 4 = agree, and 5 = strongly agree. Likert scale used to know the perception or belief of any specific problem or issue. In this study, the Likert scale provided valuable insights into how individuals perceive and respond to the concept of multiple VAT rates.

To make sense of the survey replies, this study used two important statistical methods: factor analysis and t-tests. Consider factor analysis to be a tool for identifying common themes among diverse perspectives. In contrast, the t-test determines whether or not the observed patterns are

statistically significant. This technique enables us to compare and contrast the perspectives of the many groups involved, ranging from tax authorities and policy experts to traders and consumers. This study aims to determine how each group perceives multiple VAT rates as a mechanism for obtaining funding from the government. Aside from that, the study assessed people's awareness of the multiple VAT rates and their perceptions of the policy's influence on Nepal's economy.

Results

Factor Analysis

To really understand how individuals in Nepal feel about multiple VAT rates, this study employed a statistical technique known as factor analysis. Simply put, this strategy allows us to go through an extensive amount of survey questions to identify the key themes that influence people's attitudes. It reduces all of the different responses to a smaller collection of core components, making the data easier to deal with while retaining the main meaning (Wasylenko, 2007). This paper employed it to reveal the hidden factors that influence the attitudes of four major groups: tax officials, tax experts, traders, and consumers.

Before going into it, the following two tests must be run: The Bartlett sphericity test yielded a statistically significant result ($p = .000$), while the Kaiser-Meyer-Olkin (KMO) measure was 0.697. This KMO score is higher than the acceptable minimum of 0.6 (Coakes & Ong, 2011), indicating that our data was appropriate. This study examined the determinant of the correlation matrix (0.089), which was much higher than the crucial value of 0.00001. This suggests there was no problem with multicollinearity, which means the variables were unique enough to allow for confident analysis (Gujarati et al., 2012). With these positive signals, this study utilizes factor analysis to identify the underlying factors that influence how different stakeholders perceive multiple VAT rates.

Table 2

KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.697
Bartlett's Test of Sphericity	Approx. Chi-Square	274.223
	df	91
	Sig.	.000

a. Determinant = .089

Note: Researcher's calculation based on field survey, 2019

Principal Component Analysis (PCA)

Table 3

Principal Component Analysis (PCA) Communalities

	Initial	Extraction
Multiple VAT rate enhances the resource mobilization in the economy.	1.000	.724
Multiple VAT rate reduce the burden of tax rate.	1.000	.602
Multiple VAT rate is progressive, i.e. its burden falls proportionately on the various income group people.	1.000	.636
Multiple VAT rate is too difficult to operate from the position of both the tax administration and business.	1.000	.653
Multiple VAT rate avoid cascading effect of taxation.	1.000	.678
Multiple VAT rate is an avenues of the tax reform in Nepal.	1.000	.575
Multiple VAT rate enhances transparency in the tax structure.	1.000	.641
Multiple VAT rate broaden the tax base.	1.000	.421
Multiple VAT rate would be applicable to all transactions of goods and services	1.000	.382
Multiple VAT rate discourages the illegal business.	1.000	.449
Multiple VAT rate is costly to collect and comply with.	1.000	.537
Multiple VAT rate as an anti-inflation fiscal stabilizer.	1.000	.549
Multiple VAT rate is inflationary.	1.000	.786
In a federal country like Nepal, it may be ideal to have multiple VAT rate	1.000	.551
Extraction Method: Principal Component Analysis.		

Note: Researcher's calculation based on field survey, 2019

According to Table 1.3, the most common application of principal component analysis is the visualisation of trends, leaps, clusters, and anomalies in a multivariate data table as a reduced set of variables. This framework can disclose the connections between observations and variables and among the variables. It can also be utilised to mitigate multicollinearity. Communalities define the quantity of variance in a considered individual variable. Initial communalities approximate the difference between each variable that all its components or factors can explain. For correlation analysis, this is always set to 1.0 for principal component extraction. The nature of the variance ranges from .382 to .786. The variance ranges from 38.2 per cent to 78.6 per cent, implying a range of 38.2 per cent to 78.6 per cent. This variance indicates that factor segmentation is important, as evidenced by the fact that the total variance of multiple VAT rates improves resource mobilisation in the economy by .724. The variance range is, therefore, 72.4 per cent. Similarly, having multiple VAT rates lowers the tax burden by .602. This means the variance range is 60.2 per cent, and additional variables can be defined.

Total Variance Explained in the Context of Multiple VAT Rates

Table 1.4 found that 15 variables are convenient to five major factors with individual Eigenvalues of 3.226, 1.521, 1.220, 1.181, and 1.037 and individual variance of 23.042, 10.863, 8.718, 8.433, and 7.406. The 15 variables explained 58.462 per cent of the variance, which is significant to segregate factors.

Table 4
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.226	23.042	23.042	3.226	23.042	23.042	2.195	15.679	15.679
2	1.521	10.863	33.905	1.521	10.863	33.905	1.667	11.907	27.587
3	1.220	8.718	42.623	1.220	8.718	42.623	1.577	11.261	38.848
4	1.181	8.433	51.056	1.181	8.433	51.056	1.539	10.991	49.839
5	1.037	7.406	58.462	1.037	7.406	58.462	1.207	8.622	58.462
6	.983	7.020	65.482						
7	.938	6.700	72.182						
8	.764	5.457	77.639						
9	.704	5.026	82.665						
10	.635	4.538	87.203						
11	.556	3.969	91.172						
12	.439	3.136	94.308						
13	.412	2.943	97.251						
14	.385	2.749	100.000						
Extraction Method: Principal Component Analysis.									

Note: Researcher’s calculation based on field survey, 2019

The variables loading on the represented in table 1.5 Rotated Compounded Matrix.

Perception of Multiple VAT Rates Using a Rotated Component Matrix

Table 5
Rotated Component Matrix

	Component				
	1	2	3	4	5
Multiple VAT rate enhances the resource mobilization in the economy.	.785				
Multiple VAT rate is an avenues of the tax reform in Nepal.	.625				

Multiple VAT rate is progressive, i.e. its burden falls proportionately on the various income group people.	.599				
Multiple VAT rate discourages the illegal business.	.550				
Multiple VAT rate avoid cascading effect of taxation.		.765			
Multiple VAT rate enhances transparency in the tax structure.		.620			
Multiple VAT rate broaden the tax base.		.565			
Multiple VAT rate as an anti-inflation fiscal stabilizer.			.686		
In a federal country like Nepal, it may be ideal to have multiple VAT rate			.613		
Multiple VAT rate would be applicable to all transactions of goods and services			.585		
Multiple VAT rate is too difficult to operate from the position of both the tax administration and business.				.730	
Multiple VAT rate is costly to collect and comply with.				.724	
Multiple VAT rate reduce the burden of tax rate.					
Multiple VAT rate is inflationary.					.858
Note: Researcher's calculation based on field survey, 2019					

Factor 1 included four components with factor loadings between 0.550 and 0.785 after using the Varimax Rotation Method with Kaiser Normalisation. First, consider the following items: multiple VAT rates enhance resource mobilisation in the economy; multiple VAT rates are an avenue of the tax reform in Nepal; multiple VAT rates are progressive, i.e., their burden falls proportionately on the various income groups, and multiple VAT rates discourage illegal business. Here, these four items generate a new variable, which is multiple VAT rates for the new tax system in Nepal.

Factor 2 comprises three items with factor loadings ranging from 0.565 to 0.765. The items in factor 2 are: multiple VAT rates avoid the cascading effect of taxation, multiple VAT rates enhance transparency in the tax structure, and multiple VAT rates broaden the tax base. These three items construct a new variable multiple VAT rate system to avoid cascading effects, enhance transparency, and broaden the tax base.

Factor 3 comprises three items with factor loadings ranging from 0.585 to 0.686. Factor 3 is multiple VAT rates as an anti-inflation fiscal stabiliser in a federal country like Nepal, it may be ideal to have multiple VAT rates, and multiple VAT rates would apply to all transactions of goods and services. These three variables combine to create a new variable, which is multiple VAT rates, which is ideal, a fiscal stabiliser, and applicable to all goods and services.

Factor 4 consists of two components whose factor loadings range from 0.724 to 0.730. The items in Factor 4 multiple VAT rates are too difficult to operate from the position of both the tax administration and business, and multiple VAT rates are costly to collect and comply with. A new variable can be generated from factor four: multiple VAT rates are difficult and costly to comply with.

It is concluded that this survey questionnaire is reliable and suitable for this study. It is appropriate to do factor analysis to investigate the factors influencing the perception of multiple VAT rates by the tax administration, specialists, traders, and consumers. Rotated component matrix gives four new variables out of fifteen variables (see Appendix I).

One-Sample T-Test

The respondents expressed their perceptions about multiple VAT rates and their different aspects: multiple VAT rates reform the tax system in Nepal; multiple VAT rates avoid cascading effects; multiple VAT rates enhance transparency and broaden the tax base; multiple VAT rates are ideal, a fiscal stabiliser, and applicable to all goods and services and multiple VAT rates are difficult and costly to comply with. These four new variables are constructed out of fifteen items. The tax administrators, experts, traders, and consumers expressed their perceptions on Likert's five-point scale, ranging from strongly agree to disagree strongly. The following hypotheses are formulated to be verified empirically in this study:

H1: Respondents agree about multiple VAT rates for the new tax system in Nepal.

H1: Respondents agree on the need for multiple VAT rates to avoid cascading effects and improve transparency.

H1: Respondents agree about multiple VAT rates being ideal, fiscal stabilisers, and applicable to all goods and services.

H1: Respondents agree that multiple VAT rates are difficult and costly to comply with.

The application of the t-test exactly ascertains the opinion of the implementation of multiple VAT rates on tax administrators, experts, traders, and consumers. The following are the results of the t-test.

Table 6

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Multiple VAT rates for the new tax system in Nepal.	120	3.7583	.61659	.05629
Multiple VAT rate system to avoid cascading effects, enhance transparency, and broaden the tax base.	120	3.6139	.67224	.06137
Multiple VAT rates, which is ideal, a fiscal stabiliser, and applicable to all goods and services.	120	3.4833	.68851	.06285
Multiple VAT rates are difficult and costly to comply with.	120	3.7833	.86416	.07889

Note: Researcher's calculation based on field survey, 2019

Table 7
One-Sample Test

	Test Value = 3					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Multiple VAT rates for the new tax system in Nepal.	13.473	119	.000	.75833	.6469	.8698
Multiple VAT rate system to avoid cascading effects, enhance transparency, and broaden the tax base.	10.004	119	.000	.61389	.4924	.7354
Multiple VAT rates, which is ideal, a fiscal stabiliser, and applicable to all goods and services.	7.690	119	.000	.48333	.3589	.6078
Multiple VAT rates are difficult and costly to comply with.	9.930	119	.000	.78333	.6271	.9395

Note: Researcher's calculation based on field survey, 2019

The Tables 1.6 and 1.7 describes that examining the views of Nepal's tax administrators, experts, traders, and consumers concerning multiple VAT rates. Using a five-point Likert scale that goes from strongly agree to strongly disagree, the study aims to investigate four hypotheses. The study uses the t-test to analyse the respondents' data. The t-test findings are shown in the above two tables: Tables 1.6 and 1.7.

From Table 1.6 the one-sample statistics for the four variables. Each variable shows the number of respondents, the mean value, the standard deviation, and the standard error mean. The mean value reveals that the average of the five-point Likert scale responses. The standard deviation reflects the degree of variance in the responses, whereas the standard error mean value represents the accuracy of the mean score.

The test results for the four variables can be found in Table 1.7 In this case set the test value to 3 which represents the point, on a five-point Likert scale. The table offers the information on the t value degrees of freedom (df) and significance level for each variable. To calculate the t value, this study divides the difference between the sample score and the test result, by the error mean. The degrees of freedom indicate the number of observations that can change. The significance level shows the likelihood of getting the observed t-value by chance.

The table also shows the mean difference between the mean group score, the test number, and the confidence interval of 95 per cent. The range within which the actual population's mean score is anticipated to fall is indicated by the 95 per cent confidence interval. If the test value is not included in the confidence range, it means that the mean sample score is very different from the test value.

Overall, the t-test findings suggest that the data supports all four hypotheses. The mean score for each variable is much higher than the test value of 3, showing respondents agree with the statements about using multiple VAT rates for different reasons. The confidence intervals do not contain the test value, which adds to the importance of the findings.

This paper gives empirical evidence that supports the use of multiple VAT rates for tax reform, including avoiding cascading effects, increasing transparency, and applying it to all goods and services. The t-test analysis demonstrates that Nepalese tax officials, experts, traders, and consumers have opinions that are in line with these objectives.

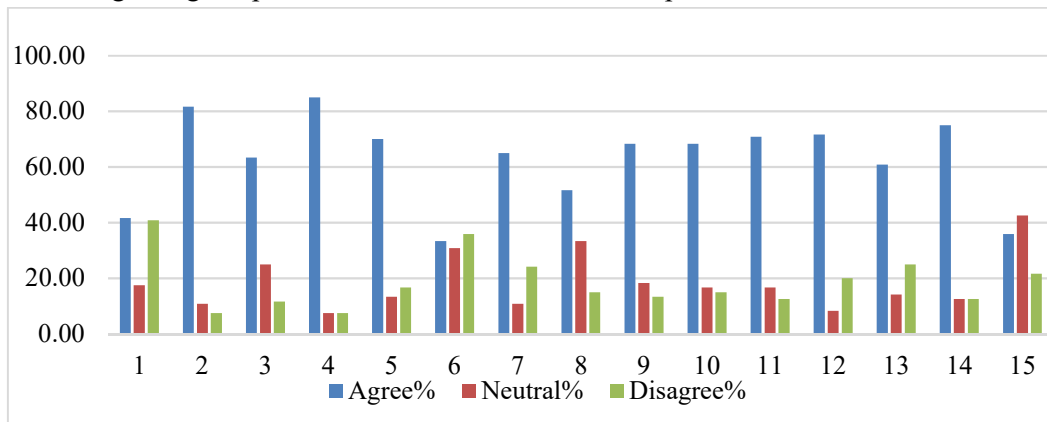
Finally, from tables 1.6 and 1.7, it is found that multiple VAT rates for the new tax system in Nepal.; multiple VAT rates avoid cascading effects; they enhance transparency and broaden the tax base; multiple VAT rates are ideal, a fiscal stabilizer, and applicable to all goods and services; and multiple VAT rates are difficult and costly to comply with. With t-values of 13.473, 10.004, 7.690, and 9.930, respectively, with significant p-values, all five alternative hypotheses are accepted, which is desirable.

Respondents' Perceptions Towards Multiple VAT Rates

Appendix II presents the perceptions of respondents towards multiple VAT rates. The most key points come out after the analysis: multiple VAT rates are progressive, i.e., their burden falls proportionately on the various income groups with a mean value of 4.04; multiple VAT rates enhance resource mobilisation in the economy with a mean value of 3.87; multiple VAT rates are costly to collect and comply with a mean value of 3.87; and multiple VAT rates broaden the tax base with a mean value of 3.73; The other important fact about perceptions towards multiple VAT rates that have come out after analysis is that multiple VAT rates enhance transparency in the tax structure with a mean value of 3.71. The perception of respondents that multiple VAT rates would apply to all goods and services transactions is equally impressive, with a mean value of 3.68.

Figure 1

Responses Regarding Respondents' Attitudes Towards Multiple VAT Rates Related Statements



Note: Based on appendix III

Note: Five scales converted into three scales Agree (Strongly Agree + Agree), Neutral and Disagree (Disagree + Strongly Disagree)

According to Appendix III and Figure 1.1, the following result was found using a Likert scale:

Statement 1 (The existing single VAT rate is to be continued) reveals that 41.67 per cent of respondents agree that the existing single VAT rate should be continued, 40.83 per cent of respondents do not agree the existing single VAT rate should be continued, and 17.50 per cent of respondents remain neutral.

Statement 2 (Multiple VAT rates enhance resource mobilisation in the economy) demonstrates that 81.67 per cent of respondents believe that multiple VAT rates enhance resource mobilisation. It is a significant percentage favouring multiple VAT rates, which can enhance economic resources. Only 7.50 per cent of respondents do not agree with this, and 10.83 per cent have no opinion.

Statement 3 (Multiple VAT rates reduce the tax rate burden) shows that 63.33 per cent of respondents believe that multiple VAT rates reduce the tax rate, 11.67 per cent do not agree with this, and 25 per cent do not have any response on it.

Statement 4 (Multiple VAT rates are progressive, i.e., their burden falls proportionately on the various income group people) reveals that just over half of the respondents, 85 per cent believe that multiple VAT rates are progressive, i.e., their burden falls proportionately on the various income group people. Only 7.50 per cent of respondents believe that they do not agree with it, and 7.50 per cent have no opinion. So, most respondents agreed that multiple VAT rates are progressive and will bring social equality to the economy.

Statement 5 (In a federal country like Nepal, having multiple VAT rates in the state and central government to replace the single VAT rate on goods and services may be ideal). A significant finding was that most respondents (70%) believe that in a federal country like Nepal, having multiple VAT rates in the state and central government, substituting for the single VAT rate on goods and services may be ideal. At the same time, 16.67 per cent disagree, and 13.33 per cent remain neutral.

Statement 6 (Multiple VAT rates are inflationary) shows that 33.33 per cent of respondents believe multiple VAT rates are inflationary. About 35.83 per cent of respondents do not agree with this, and 30.83 per cent remain neutral. Most respondents believe that multiple VAT rates will bring inflation to the economy.

Statement 7 (Multiple VAT rates are too difficult to operate from the position of both the tax administration and business) shows that a relatively high percentage of the respondents, 65 per cent, are of the view that multiple VAT rates are too difficult to operate from the position of both the tax administration and business. A total of 24.17 per cent of respondents do not agree with this, and 10.83 per cent do not have any opinion. This data reveals that implementing multiple VAT rates is not easy from the position of tax administration and business.

Statement 8 (Multiple VAT rates avoid cascading effects of taxation) states that 51.67 per cent of the respondents believe that multiple VAT rates avoid the cascading effects of taxation, 15 per cent do not agree with this, and 33.33 per cent have no opinion.

Statement 9 (Multiple VAT rates are an avenue of the tax reform in Nepal) reveals that 68.33 per cent of respondents said that multiple VAT rates are an avenue of tax reform in Nepal, 13.33 per cent disagree with it, and 18.33 per cent have no opinion. Most respondents agreed that multiple VAT rates could bring about tax reform in Nepal.

Statement 10 (Multiple VAT rates enhance transparency in the tax structure) demonstrates that 68.33 per cent of respondents believed multiple VAT rates enhance transparency in the tax structure, 15 per cent disagreed with it, and 16.67 per cent of respondents remained neutral.

Statement 11 (Multiple VAT rates broaden the tax base) shows that 70.83 per cent of respondents believed multiple VAT rates broaden the tax base, 12.50 per cent disagreed with it, and 16.67 per cent remained neutral.

Statement 12 (Multiple VAT rates would apply to all transactions of goods and services) shows that the majority of the respondent 71.67 per cent believe that multiple VAT rates would apply to all transactions of goods and services, 20 per cent disagree with this, and 8.33 percent remain neutral.

Statement 13 (Multiple VAT rates discourage illegal business) reveals that 60.33 per cent of respondents agree that multiple VAT rates discourage illegal business, 25 per cent disagree, and 14.17 per cent have no opinion.

Statement 14 (Multiple VAT rates are costly to collect and comply with) reveals that 75 per cent of respondent responses say that multiple VAT rates are costly to collect and comply with, 12.5 per cent disagree with this, and 12.50 per cent remain neutral.

Statement 15 (Multiple VAT rates as an anti-inflation fiscal stabiliser) shows that 42.50 per cent of respondents have no opinion that multiple VAT rates are an anti-inflation fiscal stabiliser, 35.83 per cent of respondents believe this, and 21.67 per cent of respondents disagree.

Discussion

This study presents empirical data that supports using multiple VAT rates for tax reform, avoiding cascade effects, increasing transparency, and applying it to all goods and services. The t-test study reveals that the perceptions of Nepalese tax officials, experts, traders, and consumers are consistent with the objective.

Multiple VAT rates reform Nepal's tax system; multiple VAT rates avoid cascading effects, improve transparency, and broaden the tax base; multiple VAT rates are ideal, a fiscal stabiliser, and apply to all goods and services; multiple VAT rates are difficult and costly to implement; multiple VAT rates are inflationary; and multiple VAT rates are undesirable.

A total of 41.67 percent of respondents agreed that the current single VAT rate should be continued, 40.83 percent did not agree that the current single VAT rate should be continued, and 17.50 percent remained neutral. About 81.67 per cent of respondents believe that multiple VAT rates enhance resource mobilisation in the economy. It is a significant percentage favouring multiple VAT rates, which can enhance economic resources. Only 7.50 per cent of respondents do not agree with this, and 10.83 per cent have no opinion. 33 per cent of respondents believe that multiple VAT rates reduce the tax rate burden, 11.67 per cent agree with this, and 25 per cent responded. About half of the respondents, 85 per cent, believe that a multiple VAT rate is progressive, i.e., its burden falls proportionately on the various income groups. Only 7.50 per cent of respondents believe they disagree with it, and 7.50 per cent have no idea. As a result, most respondents agreed that a multiple VAT rate is progressive and will increase economic and social equality.

A total of 51.67 per cent of the respondents believe that multiple VAT rates avoid the cascading effect of taxation, 15 per cent do not agree with this, and 33.33 per cent have no opinion. 68.33 per cent of respondents said that the multiple VAT rate is an avenue for tax reform in Nepal; 13.33 per cent disagreed with it; and 18.33 per cent of respondents had no opinion. Most respondents agreed that multiple VAT rates could bring about tax reform in Nepal. 68.33 per cent of respondents believed multiple VAT rates enhance transparency in the tax structure; 15 per cent disagreed with this; and 16.67 per cent of respondents remained neutral. 70.83 per cent of respondents believed multiple VAT rates broadened the tax base, 12.50 per cent disagreed, and 16.67 per cent remained neutral.

Most respondents (71.67%) believe that a multiple VAT rate would apply to all goods and services transactions, while 20 per cent disagree and 8.33 per cent remain neutral. Multiple VAT rates discourage illegal business; 60.33 per cent of respondents, 25 per cent disagree, and 14.17 per cent have no opinion. 75 per cent of respondent respondents said that a multiple VAT rate is costly to collect and comply with, 12.5 per cent disagree with this, and 12.50 per cent remain neutral. 42.50 per cent of respondents have no opinion on the multiple VAT rate as an anti-inflation fiscal stabiliser, 35.83 per cent of respondents believe this, and 21.67 per cent of respondents disagree. This study presents empirical data that supports using multiple VAT rates for tax reform, avoiding cascade effects, increasing transparency, and applying it to all goods and services. The t-test study reveals that the perceptions of Nepalese tax officials, experts, traders, and consumers are consistent with these objectives.

Conclusion

Based on result and discussion the conclusions, the following policy implications have been developed to improve the functioning of the multiple VAT rate system and generate additional revenue from multiple VAT rates. The multiple-VAT-rate system will accomplish the stakeholders' objectives and implement that policy implication.

The study focuses on switching from a single VAT rate to multiple VAT rates, which may reduce revenue mobilization distortions and promote consumer fairness and justice. So, before jumping into the multiple VAT rate system, the government should start a comprehensive study.

Implementing multiple VAT rates is not easy; it needs a complete tax infrastructure, including well-trained human resources. So, before setting up multiple VAT rates, the government should build all of the infrastructure that will be needed.

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Appendix I : Composite Variables after Performing Rotated Component Matrix

Respondents	Composite Variable 1	Composite Variable 2	Composite Variable 3	Composite Variable 4
1	3.75	3.67	4	4
2	4.25	4.67	4.67	2.5
3	2.75	3.33	4.33	3
4	4.5	4.67	4	4.5
5	4	4.67	2.67	3.5
6	4	3.67	1.67	3.5
7	4.5	4.67	4	3
8	4.25	4.33	3.67	4.5
9	5	4	4.67	3
10	3.5	3.67	3.67	4
11	4	4.33	3.67	4
12	4.5	4.33	4	2.5
13	3.25	3.33	3	2
14	3.5	3.33	3.67	3.5
15	4	4	3.33	4
16	3.5	3.33	4	4.5
17	4.25	3.33	3	4
18	4	3.33	3.67	4
19	4	4	4	5
20	3.25	2.67	3	4
21	3	3	3.33	4
22	3	3	2.67	4.5
23	3	2.33	2.67	4.5
24	3.25	3.33	2	4
25	4	3.33	3.33	4
26	4	4.67	3.67	4
27	4	4	4	5
28	4.5	4	3.33	5
29	3.75	3.67	3.33	4
30	3	4	3.67	4.5
31	3.5	3.33	4	3
32	2.5	2.67	2	3.5
33	4.5	4.33	4	4.5
34	4	3.67	3	5
35	2.5	4.33	2.67	4
36	3.25	2.67	2.33	3.5

37	3.5	2.33	3	5
38	3.75	2.67	4	4.5
39	3.5	3.67	3.33	4.5
40	4.25	3.67	4.33	2.5
41	4	3.67	3	3.5
42	3.75	4	3	3.5
43	2.25	2.67	2.33	5
44	4.25	3.67	3	5
45	4	4	4	4
46	4	4	3.33	4.5
47	4	3.67	3.33	4
48	3.75	4	3	5
49	3.25	4	3.33	4.5
50	3.75	3.67	3.67	4.5
51	3.5	3.67	4.67	4.5
52	4.25	3.33	3.67	3
53	4.25	3.67	3.67	4
54	4	3.67	3.67	2
55	4	4	4	3
56	4	4.67	4.33	4.5
57	4.25	4.67	4	4.5
58	3.25	2.67	4	5
59	3.25	4	4.33	4
60	3.5	4	4	3
61	2.5	3.33	3.33	3
62	4.5	4.33	4.33	4.5
63	4	4	4	4
64	3	4	4	4
65	2.5	4	3.33	4.5
66	4.75	4	4.33	3.5
67	3.5	3.67	4	4.5
68	4	4.33	4	3
69	4.5	4.67	4.33	2.5
70	5	3.67	3.33	3.5
71	4.25	3.33	3.67	4.5
72	3.75	3.67	4.33	4
73	3.25	2.33	3.67	5
74	4	3.33	3.33	2.5
75	4.5	3.33	3.67	5

76	3.25	2.67	3	3.5
77	3.25	4	3.67	4
78	3.5	4	2.67	4.5
79	3.75	2.67	3.67	2
80	4	3	2.67	4
81	4	4.67	3.33	3.5
82	4.5	4.33	2	3.5
83	4.5	3.33	4	4
84	3.5	2.33	3.67	3
85	3	4.33	3.67	4
86	4.25	4.33	2.33	5
87	3.75	4.67	3.67	3.5
88	4	2	2.67	3
89	4.5	3.67	3.67	2
90	3.75	3.67	3.67	2.5
91	4.25	4	3.67	2.5
92	4.25	3.67	3.33	3
93	4	4.33	3.67	2.5
94	3.25	4	4	2
95	2.25	2.33	4	2
96	4.5	3.67	4.67	3
97	4	3.67	3.33	4
98	3.25	3.67	1.67	4
99	4	3.67	3.33	3
100	4	4	2	2
101	4	2.33	3.67	3.5
102	1.75	1	1	5
103	4.25	3.67	4.67	2.5
104	4	4	3.67	3.5
105	3	2.33	2	4.5
106	4.25	3.67	3.67	3
107	4	3.67	3.67	3
108	2	2.33	3.33	5
109	4.25	2.67	3	3
110	4.25	3.67	3.67	5
111	4.25	3.67	3.67	4
112	4	4	3	4.5
113	3.25	3.67	3.67	4.5
114	4	3.67	4	4.5

115	4	3.67	4	4.5
116	2.75	3.33	3	4
117	3.75	3.67	3.67	3
118	4	3.33	4	2.5
119	4	3.33	3.67	4
120	3.25	3.67	3.67	5

Source: Researcher's Calculation

Note: Composite Variable 1: Multiple VAT rates for the new tax system in Nepal

Composite Variable 2: Multiple VAT rate system to avoid cascading effects, enhance transparency, and broaden the tax base

Composite Variable 3: Multiple VAT rate, ideal, a fiscal stabiliser, and applicable to all goods and services

Composite Variable 4: Multiple VAT rates are difficult and costly to comply with

Appendix II : Perception of Respodents towards Multiple VAT Rate

Statements	N	Mean
S1. The existing single VAT rate is to be continued	120	3.10
S2. Multiple VAT rate enhances the resource mobilization in the economy.	120	3.87
S3. Multiple VAT rate reduce the burden of tax rate.	120	3.62
S4. Multiple VAT rate is progressive, i.e. its burden falls proportionately on the various income group people.	120	4.04
S5. In a federal country like Nepal, it may be ideal to have multiple VAT rate	120	3.64
S6. Multiple VAT rate is inflationary.	120	2.98
S7. Multiple VAT rate is too difficult to operate from the position of both the tax administration and business.	120	3.70
S8. Multiple VAT rate avoid cascading effect of taxation.	120	3.40
S9. Multiple VAT rate is an avenues of the tax reform in Nepal.	120	3.66
S10. Multiple VAT rate enhances transparency in the tax structure.	120	3.71
S11. Multiple VAT rate broaden the tax base.	120	3.73
S12. Multiple VAT rate would be applicable to all transactions of goods and services	120	3.68
S13. Multiple VAT rate discourages the illegal business.	120	3.46
S14. Multiple VAT rate is costly to collect and comply with.	120	3.87
S15. Multiple VAT rate as an anti-inflation fiscal stabilizer.	120	3.13
Valid N (list wise)	120	

Source: Field Survey, 2019

Appendix III : Responses regarding respondents' attitudes towards multiple VAT rates related statements

Statements	Agree%	Neutral%	Disagree%
1. The existing single VAT rate is to be continued.	41.67	17.50	40.83
2. Multiple VAT rate enhances the resource mobilization in the economy.	81.67	10.83	7.50
3. Multiple VAT rate reduce the burden of tax rate.	63.33	25.00	11.67
4. Multiple VAT rate is progressive, i.e. its burden falls proportionately on the various income group people.	85.00	7.50	7.50
5. In a federal country like Nepal, it may be ideal to have multiple VAT rate in the state and central substituting the single VAT rate on goods and services.	70.00	13.33	16.67
6. Multiple VAT rate is inflationary.	33.33	30.83	35.83
7. Multiple VAT rate is too difficult to operate from the position of both the tax administration and business.	65.00	10.83	24.17
8. Multiple VAT rate avoid cascading effect of taxation.	51.67	33.33	15.00
9. Multiple VAT rate is an avenues of the tax reform in Nepal.	68.33	18.33	13.33
10. Multiple VAT rate enhances transparency in the tax structure.	68.33	16.67	15.00
11. Multiple VAT rate broaden the tax base.	70.83	16.67	12.50
12. Multiple VAT rate would be applicable to all transactions of goods and services.	71.67	8.33	20.00
13. Multiple VAT rate discourages the illegal business.	60.83	14.17	25.00
14. Multiple VAT rate is costly to collect and comply with.	75.00	12.50	12.50
15. Multiple VAT rate as an anti-inflation fiscal stabilizer.	35.83	42.50	21.67

Source: Field Survey, 2019

Appendix IV : Perception of People Towards Multiple VAT Rates in Nepal

Statements	Strongly Agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly Disagree (1)
1. The existing single VAT rate is to be continued.					
2. Multiple VAT rates enhances the resource mobilization in the economy.					
3. Multiple VAT rates reduce the burden of tax rate.					
4. Multiple VAT rates is progressive, i.e. its burden falls proportionately on the various income group people.					
5. In a federal country like Nepal, it may be ideal to have multiple VAT rates in the state and central substituting the single VAT rate on goods and services.					
6. Multiple VAT rates is inflationary.					
7. Multiple VAT rates is too difficult to operate from the position of both the tax administration and business.					
8. Multiple VAT rates avoid cascading effect of taxation.					
9. Multiple VAT rates is an avenue of the tax reform in Nepal.					
10. Multiple VAT rates enhances transparency in the tax structure.					
11. Multiple VAT rates broaden the tax base.					
12. Multiple VAT rates would be applicable to all transactions of goods and services.					
13. Multiple VAT rates discourages the illegal business.					
14. Multiple VAT rates is costly to collect and comply with.					
15. Multiple VAT rates as an anti-inflation fiscal stabilizer.					



Assessing Beneficiaries' Perception towards National Health Insurance Scheme in Nepal

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DOI: <https://doi.org/10.3126/jotmc.v9i9.90411>

Abstract

Financial risk protection and efficient use of healthcare resources remain critical challenges for Nepal as a low-income country. This study examines beneficiaries' perceptions of financial risk protection and service coverage under the National Health Insurance Scheme (NHIS) from a health economics perspective, with a focus on optimizing limited resources. The study aims to capture beneficiaries' perception on satisfaction, challenges, and gaps in scheme implementation within the study area. Primary data were collected during the first quarter of 2025 from 62 NHIS-enrolled households across nine wards of Tikapur Municipality, Kailali district, using a structured questionnaire. Proportionate stratified sampling based on ward-level enrollment was applied, with purposive sampling within each stratum. The findings indicate that beneficiaries generally rate the NHIS positively in terms of financial security. However, notable weaknesses persist, particularly regarding emergency care support and the availability of health services. A major concern expressed by respondents is the exclusion of several essential medicines from the benefit package, especially those needed by vulnerable populations. In addition, the current annual coverage ceiling of NPR 100 thousand is widely perceived as insufficient to meet actual healthcare costs. These gaps highlight the need for operational and policy reforms. Expanding benefit packages and increasing coverage limits could enhance enrollee satisfaction, reduce out-of-pocket payments for healthcare, promote equity, and support Nepal's progress toward universal health coverage.

Keywords: Health insurance, Universal health coverage, financial risk protection, Service coverage, Beneficiary perception analysis

JEL Classification: I13, I18, H51

Introduction

Nepal, being a low-income country, healthcare expenditure optimization is a pertinent development issue. Perception of financial risk protection and service coverage core proposition within the realm of health economics meant for optimization of limited and scarce resource. Nepal has begun systematic financial protection mechanism effectively by establishing the National Health Insurance Scheme (NHIS) only after a decade or so. The initial attempt at health insurance in Nepal can be traced back to 1976 at Patan Hospital located in the Lalitpur District. Subsequently, in 2000, the BP Koirala Institute of Health Sciences launched a second initiative across 17 distinct communities in the Morang and Sunsari districts. However, by establishing the Social Health Security Development Committee in 2015 and the Social Health Insurance Program in 2016, Nepal started a health insurance scheme. Nepal has embarked on the ambitious journey of implementing a national health insurance program aiming to provide universal health coverage (UHC) to its population (Pradhan et al, 2022).

Health care financing has an important role to play in transforming the health care system into one which provides efficient and effective health care to poor and vulnerable people in Nepal (Subedi, 2018). Despite this effort to enhance financial risk protection, many Nepali beneficiaries remain unclear about the adequacy and limitations of coverage, hindering effective utilization of healthcare service. Moreover, service coverage is a pressing issue in Nepal's NHIS and seriously affecting trust and stake of beneficiary to ensure comprehensive healthcare access with quality. This issue is to be resolved urgently and consistently to ensure to meet the requirement of UHC, ensuring access to quality healthcare without financial hardships, covering all essential services. This is instrumental to ensure financial risk protection and reduce out-of-pocket (OOP) payments for healthcare to protect from catastrophic healthcare expenditure (NHRC, 2022). Evidently, macroeconomic data on healthcare shows that OOP payment for health ranges around 60 percent of current health healthcare expenditure in Nepal. This clearly indicates that patients are out of financial protection mechanisms and severely affected by catastrophic healthcare expenditure (Sapkota et al., 2023).

In this context, the NHIS is structured to address two primary concerns. Firstly, financial risk protection of beneficiaries and secondly, adequate healthcare service coverage to ensure better healthcare utilization (Kruk et al., 2018). Moreover, financial risk protection is instrumental to ensure that health services do not lead beneficiaries into poverty due to high OOP payment for health. Furthermore, service coverage pertains to the range and quality of services that beneficiaries can access under the insurance scheme (Subedi & Adhikari, 2025; Frenz & Vega, 2010).

This paper is focused to assess beneficiaries' perception towards NHIS in Nepal for ensuring their financial protection and ensuring overall healthcare coverage based on the survey data of Tikapur municipality of Kailali district. In this regard, this paper aims to fill the knowledge and evidence gap by identifying challenges faced by the beneficiaries of NHIS based on their survey data in the study area. Moreover, within the realm of health economics and social protection theories, it explores how perceptions of financial risk protection and service coverage are formed. Therefore, the general aim of the study was to assess the contribution of NHIS to ensure financial protection to access the healthcare utilization from the prospective beneficiary. Based on the empirical evidence from Tikapur Municipality, the study assesses how NHIS enrollment influences

healthcare utilization and addresses the broader issue of healthcare affordability of households in the low-income country like Nepal. In this context, the pertinent research questions are: What is the socio-economic and demographic status of the beneficiary households in the study area? How are the beneficiaries' perception of financial risk protection and service coverage among National Health Insurance Beneficiaries in the study area? Why are the financial risk protection and service coverage among National Health Insurance beneficiaries not sufficient in the study area? Thus, the research questions provide a clear framework for investigating the perception of impact of NHIS to ensure financial protection in Nepal.

Review of Related Literature

Theoretical Foundation

Perception of financial risk protection and service coverage core proposition within the realm of health economics meant for resource optimization given the healthcare utility maximization. Therefore, this current study draws upon the theories from health economics, and social protection to explain how beneficiaries form perceptions of financial risk protection and service coverage under the NHIS in Nepal. In this regard, theoretical frameworks explain beneficiaries' perceptions of national health insurance through access, beliefs, and trust. Andersen's behavioral model links predisposing, enabling, and need factors to enrollment and utilization (Andersen, 1995). Health Belief Model highlights perceived susceptibility, benefits, and barriers shaping attitudes toward scheme uptake (Rosenstock, 1974). Local socio-cultural norms and prior experiences mediate perception differences in Tikapur and require context-specific assessment for targeted policy responses.

Empirical Review

The perception of financial risk protection under Nepal's NHIS is critical, given the dominance of informal labor and widespread household financial instability. Evidence shows that programs like the NHIP can reduce OOP payments for healthcare, thereby improving healthcare utilization and outcomes (Khatri et al., 2025). However, the NHIS scheme effectiveness depends largely on beneficiaries' awareness and perception of its benefits (Saksena et al., 2014). In this regard, service coverage is equally vital, as timely access to essential care without unnecessary referrals determines satisfaction and trust (Timsina et al., 2024).

Moreover, the scope and quality of healthcare services significantly shape perceptions towards NHIS (Lagomarsino et al., 2012). The studies conducted earlier present mixed findings on the issue. In general, many beneficiaries appreciate the reduced financial burden during emergencies, others highlight limited healthcare service coverage and administrative hurdles. Likewise, the perceptions are also influenced by socio-economic status, education, and prior healthcare experiences (Alhassan et al., 2016). To address these disparities, there requires contextualized analysis across diverse populations.

Intuitively, continuous stakeholder engagement and adaptive policies are desirable to strengthen financial protection and healthcare service delivery (Ranabhat et al., 2019). Therefore, NHIS sustainability depends on integrating beneficiary feedback to align financial protection and

coverage with population healthcare needs (Chokshi et al., 2016). However, limited empirical research on beneficiary perceptions creates a knowledge gap that constrains policy advancement.

The perception analysis is focused on the six key dimensions that cover all aspects of the perception analysis the health insurance service receives (Andersen, 1995). The study is grounded in health economics, developed by several scholars. Moreover, it is grounded on the Structure-Process-Outcome framework Donabedian (1988) to evaluate health insurance performance, and Expectation-Confirmation Theory (Oliver, 1980) to explain enrollee satisfaction. The theories are consistent with health financing theory (Arrow, 1963), enrollee perceptions that reflect financial protection, access efficiency, and welfare outcomes of insurance systems. They are financial protection that focus on the reduction in personal health expenditure burden, access to health services that assess improved physical and financial access to health facilities, coverage adequacy that emphasizes satisfaction with the breadth & scope of services covered. Likewise, perception analysis is also regarding process quality that focuses on transparency, claims process, information flow, received effectiveness and gives emphasis to perceived improvement in health care quality and service effectiveness and satisfaction and continuity considering beneficiary satisfaction, willingness to renew and recommend insurance. The summary of thematic review is presented subsequently.

Financial Risk Protection

Perceived financial risk protection refers to beneficiaries' sense of being protected from high OOP payments for healthcare. In this regard empirical studies show mixed evidence. The insurance schemes in Ghana, Rwanda, and Vietnam have lowered catastrophic health expenditure (Giedion et al., 2013), beneficiaries often report residual costs due to partial coverage or exclusions (Chankova et al., 2008). Paudel et al. (2021) study identified interconnected challenges in Nepal's health insurance, including poor awareness, delayed reimbursement, weak coordination, fraud, and limited political support. The studies complied the suggested solutions that include the arrangement of digital enrollment, programme integration, better human resource management in healthcare, legal reforms, and early site evaluation, underscoring solution from institutional level.

Access to Healthcare Services

Perceived access of NHIS enrollee encompasses both physical availability of healthcare services and the ease of healthcare utilization. In this context, Wagstaff et al. (2009) underscored that insurance has been linked to increased service utilization in several low- and middle-income countries. However, this does not always translate to better access. In this regard, there are several barriers such as travel distance, overcrowding, and limited provider choice undermine the benefit. In Nepal, logistical challenges and lack of trust in listed facilities deter some from using insured services (Paudel et al., 2021).

Coverage Adequacy

There are several types of healthcare issues that a person comes across during life time and they are termed as healthcare coverage adequacy. Therefore, coverage adequacy reflects to what extent the benefit package of NHIS meets healthcare needs of beneficiaries. In this regard

Mathauer et al. (2017) stated that inadequate coverage of NHIS is a matter of serious criticism from the side of beneficiaries, especially for the patients that require specialist care due to chronic conditions, and expensive medicines. Similarly, the study of Jehu-Appiah et al. (2011) in Ghana reported serious dissatisfaction when essential services were either excluded or inconsistently provided or both. There is wide spread general perception amongst Nepalese that the benefit ceiling is inadequate and an extremely narrow package.

Process Quality

In the context of NHIS, the process quality implies experience of NHIS enrollee during service delivery, such as healthcare provider's behavior, waiting time for healthcare service, and administrative clarity on the service delivery. In this regard, empirical studies reveal that insured patients mostly face longer waiting times and are sometimes treated less favorably than paying patients (Chankova et al., 2008). The poor and weak arrangement for claim processing and referral inefficiencies further seriously erode trust. Likewise, Nunnally and Bernstein (1994) emphasized that reliable perception measurement of enrollee should include such subjective experiential dimensions.

Perceived Effectiveness

In the context of NHIS perception analysis, perceived effectiveness refers to whether beneficiaries believe the scheme has improved their healthcare security. The evidence supports the increased use of healthcare services (Giedion et al., 2013), and the perceptions of effectiveness of service quality are affected by system-level weaknesses such as drug stockouts, non-responsive care, and referral breakdowns. In Nepal, people often express doubt about the insurance's role in improving health outcomes (Paudel et al., 2021).

Satisfaction and Continuity of Enrollment

In the context of NHIS beneficiary perception, beneficiary satisfaction determines whether they will continue the NHIS enrollment. Empirical studies underscore that satisfaction correlated with service quality and financial relief and positive outcome enhances the enrollment (Wang et al., 2012). However, the studies of Jehu-Appiah et al. (2011) and Khanal et al. (2021) underscored that dissatisfaction due to limited coverage and poor service has led to the dropout from NHIS and non-renewal in countries like Ghana, Tanzania, and Nepal. The continuity NHIS enrollment is also shaped by awareness, and trust of enrollee, and administrative efficiency of the supply side.

The literature reveals the mixed effect of NHIS on financial protection across its selected construct and beneficiaries' perceptions remain conflicted across all six dimensions. Moreover, the financial risk protection is often incomplete, inadequate, and access is compromised by logistical, geographical, and systemic factors. Similarly, coverage is seen as inadequate when essential healthcare services and medicines are excluded. In addition, the process quality and perceived effectiveness are neglected and undermined by the bureaucratic inefficiencies and poor service experiences. Consequently, the studies have gauged low and moderate level satisfaction, threatening the continuity of enrollment. Therefore, there is gap between the policy promises and implementation of realities. In Nepal, context-specific insights across the proposed construct

remain scarce, making knowledge and evidence gap for policy refinement aimed at improving financial protection, healthcare utilization, and sustainability of enrollment in the NHIS scheme.

Data and Methodology

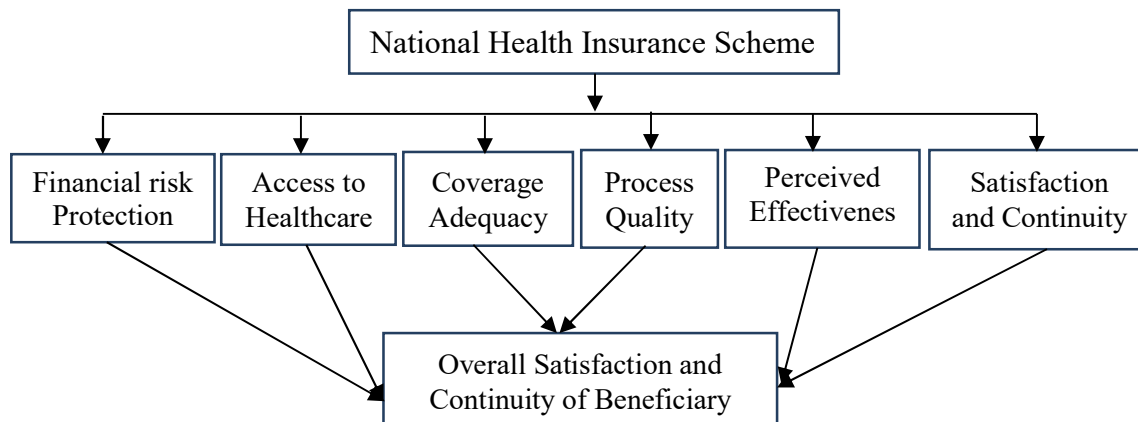
The study adopts cross-sectional design in terms of number of contacts with respondents to conduct surveys on their perception analysis. In terms of nature of data, it is a quantitative design that examines beneficiary perceptions on the contribution of National Health Insurance Scheme (NHIS) on the financial risk protection on healthcare expenditure and summarizes the data to draw inference. In this regard, the population of the studies were all the HHs of Tikapur Municipality that are enrolled in NHIS as this municipality was selected in the first phase by the Government of Nepal to introduce the NHIS scheme. To fulfil research objectives, primary data were collected during the first quarter of 2025 from 62 NHIS-enrolled households across nine wards of Tikapur Municipality, Kailali district, using a structured questionnaire. Moreover, proportionate stratified sampling based on ward-level enrollment was applied, with purposive sampling within each stratum. Moreover, out of 21,638 enrolled households in the Fiscal Year 2023/24, as a sample 62 households were selected for perception analysis using purposive sampling. The sample size was deemed sufficient to capture in-depth insights across key dimensions of service quality, financial protection, and satisfaction, consistent with exploratory perception studies in health insurance and service evaluation (Parasuraman et al., 1988; Sharma et al., 2024; Oliver, 1980). The relevant data were collected using a structured questionnaire administered through Google Forms, supplemented by trained enumerators. The survey focused on household healthcare expenditure, demographic and socioeconomic characteristics, and experiences with health insurance. A five-point Likert scale measured six key dimensions of service perception to assess the scheme's impact. Moreover, limited qualitative inputs were also gathered to capture challenges and contextual insights.

The research takes post-positivist instances in the context of this research. In this regard, the constructs such as NHIS enrollment, financial burden, and service perceptions are observable and measurable realities and value ranges within a certain scale of measurement and reflecting healthcare and economic conditions in Nepal. Moreover, the epistemological instance of the study is objectivism as the findings are reliable and generalizable, based on rigorous data collection and hypothesis testing. Furthermore, the study maintains value neutrality by analyzing relationships objectively and avoiding subjective bias of the researchers, followed by the ethical safeguards, including informed consent, confidentiality, and privacy of respondents. Pilot testing of questionnaire was done. Finally, Cronbach's alpha value was estimated to ensure the internal consistency and reliability of a set of scales and constructs and items used as survey tools.

Conceptual Framework of the Study

The conceptual framework was constructed based on the literature survey to identify the construct of the survey. Figure 1 demonstrates the complete conceptual framework.

Figure 1
Conceptual Framework of the Study



Note. Figure 1 demonstrates the key Construct for Beneficiary Survey.

Result and Discussion

This section is outlined as per the objectives of the paper. Moreover, it presents socio-economic and demographic information of the respondents, followed by the descriptive analysis of the data to arrive at a conclusion as per the paper objectives. They are discussed subsequently.

Economic and Demographic Profile of Respondents

Table 1 below presents the socio-economic and demographic profile of households enrolled in the National Health Insurance Scheme (NHIS) and provides important insights into the economic capacity, healthcare behavior, and willingness to pay (WTP) for improved insurance services among respondents.

Table 1
Socio-economic and Demographic Profile of Respondents

Particular	Mean	SD
Income per HH members (NPR)	8814.93	365.29
HH OOP payments for healthcare (NPR)	2645.02	586.90
Household Size	4.45	1.54
Average age of HH head (in years)	52.10	14.68
Annual Hospital visit rate	10.35	0.84

Note. Table 1 shows the summary of key socio-economic and health-related statistics HHs.

Source: Field Survey, 2025.

Table 1 presents key socioeconomic and healthcare-related indicators among the sampled households. The average monthly per HH member income was NPR 8,814.93 with Standard deviation (SD) 365.29. The distribution of income as measured as mean and standard deviation, is relatively uniform income levels across respondents. Similarly, mean OOP payments for healthcare was NPR 2,645.02 with Standard Deviation (SD) 586.90. On average, this accounts for roughly 30 percent of household income spent for OOP payments, which is a clear indication of catastrophic healthcare expenditure. In other words, this highlights a considerable financial burden even for insured families, consistent with findings by Karan et al. (2017). The average household size was 4.45 with SD 1.54, reflecting Nepal's common multi-generational family structure has changed. The average age of household heads was 52.10 years with (SD) 14.68. This figure clearly suggests that a predominantly elderly population with higher healthcare needs are serving the HH heads. With an annual hospital visit rate of 10.35 times (SD = 0.84), healthcare utilization was notably high, likely supported by NHIS coverage.

Table 2
Respondents Status WTP, Education and Chronic Disease

Particular	Response Category	
WTP for increased health insurance premium	Yes	79.04
	No	20.96
Threshold of WTP for Increased Premium Health Insurance in percent	6.98	4.22
Education level of HH head (in Percent)	Illiterate	16.10
	Basic and Primary	32.30
	Secondary	27.40
	Bachelor	16.10
	Masters	8.10
Gender of HH Head (in Percent)	Male	61.16
	Female	38.84
Chronic Disease in HH	Yes	51.60

Note. Table 2 presents social and household characteristics of respondents.

Source: Field Survey, 2025.

Table 2 shows that 16.10 percent of household heads were illiterate, 32.30 percent had attained basic and primary education, 27.40 percent HH heads secondary education graduate, 16.10 percent HH heads have bachelor level education, and only 8.10 percent held a master's degree. Essentially, this educational distribution reflects a predominantly low to moderately educated population and this may influence understanding and perception of health insurance benefits. Likewise, the gender distribution of household heads shows that 61.16 percent were male and 38.84 percent female, which is in line with the patriarchal structure of many Nepali households, where males traditionally assume the role of household heads. Finally, 51.60 percent

of households reported the presence of chronic diseases, while 48.40 percent did not. The high prevalence of chronic illness underscores the importance of health insurance in managing long-term healthcare costs.

Perception Analysis of NHIS Beneficiaries

The perception analysis is focused on the six key dimensions that covers all aspects of the perception analysis the health insurance service receives. They are financial protection that focus on the reduction in personal health expenditure burden, access to health services that assess improved physical and financial access to health facilities, coverage adequacy that emphasizes satisfaction with the breadth & scope of services covered.

Reliability of Measurement Scales

Table 3 presents the reliability analysis results in terms of Cronbach's Alpha for the perception scale items used to assess key six dimensions encompassing 33 constructs of health insurance among the enrollees in the study area.

Table 3

Cronbach's Alpha for Item used to Perception Analysis of Health Insurance Enrollee

Dimensions of analysis	Number of items	Cronbach's Alpha	Interpretation
Financial Protection	7	0.846	Very good reliability
Access to Healthcare Service	6	0.811	Good reliability
Coverage Adequacy	5	0.798	Acceptable
Process Quality	5	0.859	Very good reliability
Perceived Effectiveness	6	0.874	Excellent Reliability
Satisfaction and Continuity	4	0.889	Excellent Reliability
Overall	33	0.846	Very good overall consistency

Note. Table 3 shows Cronbach's Alpha for Item used Perception Analysis of Health Insurance Service Receiver in the Study area.

Source: Field Survey, 2025.

Evidently, the results indicate that the Cronbach's Alpha values range between 0.798 and 0.889 for all six dimensions, indicating acceptable to excellent internal consistency. Comparatively, the dimension 'Coverage Adequacy' has the lowest Cronbach's Alpha value 0.798. The overall scale reliability Cronbach's Alpha values is 0.846 suggests that the instrument is consistently measuring the basic constructs related to health insurance perception. These results align with the previous studies such as Alhassan et al. (2016) and Kim et al. (2010), which reported similar Cronbach alpha values in health insurance perception surveys. However, few contrasting findings are also evident based on contexts like rural India (Aggarwal et al., 2020), and Ghana (Nguyen et al., 2011). These studies highlight the importance of policy environment and beneficiary understanding in shaping perception consistency.

Perception of National Health Enrollee on Financial Security

Table 4 below summarizes perception analysis results using descriptive statistical tools. The dimension of perception on financial security from health insurance enrolment was surveyed based on the six constructs as displayed in Table 4.

Table 4

Perception on Financial Security from Health Insurance Enrolment

Financial Protection	Mean	SD
NHIS has reduced my OOP payments for healthcare	4.06	0.248
NHIS has supported me to manage my health expenses.	3.89	0.680
NHIS has reduced my stress during medical treatments.	3.58	0.897
NHIS enrollment has made my financial burden is bearable.	3.79	0.727
NHIS has increased my healthcare service utilization	3.89	0.515
Without NHIS my health care costs would have been unbearable.	3.85	0.507

Note. Table 4 above shows perception of NHIS beneficiaries on financial security.

Source: Field Survey, 2025.

Table 4 shows that mean scores ranged from lowest 3.58(SD =0.897) to highest 4.06 (SD0.248), all above the neutral value of 3.0, indicating positive perceptions. The highest mean was for the statement, “Health insurance has reduced my OOP payment for health,” suggesting strong agreement. This re-emphasizes that financial protection with health insurance dominates. Though Nepal’s National Health Insurance Scheme caps OOP payment for health, the beneficiaries still find that the coverage breadth and depth of the scheme are limited. The results are consistent with Fang et al. (2010), whose research found that financial demands were significantly reduced among the beneficiaries of Korea’s National Health Insurance.

Chankova et al. (2008) in the research undertaken on West African Mutual Health Organizations likewise discovered that coverage through insurance significantly led to a reduction of OOP payment for health accompanied by increased financial predictability.

However, the long-term inability of insured members to afford health care validates warnings provided for Ghana by Alhassan et al. (2016) and for India by Aggarwal et al. (2020), that benefit limits, co-payments, and uninsured services blocked insurance schemes from having their full protective impact.

Perception on Improvement of Access to Healthcare Services

Table 5 below shows the perception analysis result on the contribution of NHIS Programme to improve access to health services in the study area. Evidently, the result indicate that Nepal’s National Health Insurance Programme significantly increased the accessibility of health service ranging the mean score of the construct in lowest 3.39(SD=0.930) to highest 3.97(SD=0.254), which indicates that overall respondents agreed that health insurance increased their accessibility of primary health service and motivated towards utilization of medical care.

Table 5

Contribution of Health Insurance Programme to Improve Access to Health Services

Access to Health Service	Mean	SD
Health insurance has increased my access to basic health services.	3.92	0.454
With health insurance, I am more willing to seek medical treatment.	3.94	0.475
Health insurance has increased the number of available health service providers for me.	3.85	0.560
My health insurance enables me to visit nearby hospitals or clinics.	3.87	0.495
I am satisfied with the scope of health services covered by national health insurance.	3.97	0.254
Health insurance provides an appropriate coverage limit for my health needs.	3.39	0.930

Note. Table 5 shows perception of NHIS beneficiaries regarding improvement in the healthcare access.

Source: Field Survey, 2025.

However, the perceived adequacy of coverage limits scored lower (Mean = 3.39, SD = 0.930, $p < 0.01$), reflecting concerns about whether the financial ceiling sufficiently addresses household health needs. Moreover, this concern is important in the context of rising healthcare costs and persistent OOP payment for healthcare. Likewise, coverage ceilings of NPR 100,000 per family per year have been criticized as inadequate, particularly for chronic and catastrophic illnesses. Similar trends in the perception analysis are confirmed in LMICs like Vietnam and Ghana, where health insurance improved access and reduced financial barriers. Pandey et al. (2023) confirmed improved service utilization among insured households in Nepal. However, the result is contrasting with the findings by Wolf et al. (2012), who argued the improvement in the benefits of comprehensive coverage.

Healthcare Service Coverage Adequacy by National Health Insurance Scheme

Table 6 demonstrates perception of NHIS enrollee regarding the adequacy of healthcare service coverage under Nepal's NHIS. Evidently, the mean score for across overall coverage adequacy perception ranges higher than average. Moreover, mean and standard deviation (SD) from 3.55 (0.843) to 3.97(0.254). Having estimated mean score above 3.0, it can be stated that respondents have a positive perception regarding the coverage adequacy of NHIS.

Table 6

Healthcare Service Coverage Adequacy

Coverage Adequacy	Mean	SD
National health insurance generally provides the necessary health services for me.	3.55	0.843
National health insurance covers most of my medical expenses.	3.69	0.759
NHIS health service coverage is satisfactory to me.	3.97	0.254
The process of claiming NHIS is easy and effective.	3.94	0.356
NHIS program provides transparent information about covered and uncovered expenses.	3.97	0.254

Note. Table 6 shows perception of NHIS beneficiaries on the adequacy of healthcare service coverage.

Source: Field Survey, 2025.

Table 6 clearly shows that perception of the NHIS enrollee on service coverage is moderate, with a mean score of 3.55 and SD 0,843. Likewise, the mean score and standard deviation for perception analysis of respondents for NHIS coverage of medical expenses 3.69, and 0.759 respectively. Though the moderate SD indicates differing experiences based on healthcare utilization and coverage limits. Similarly, perceived satisfaction with the scope of overall coverage is also high with mean 3.97, and SD 0.254. This construct indicates relatively strong and consistent perception. Likewise, the claim process of NHIS was rated positively with mean 3.94, and SD 0.356. This also suggests ease and satisfaction with administrative procedures. Chankova et al. (2008) also confirm these results and reported enhanced access and satisfaction in West Africa. But a study of Alhassan et al. (2016) in Ghana found an albeit contrasting result stating that variability in perceptions echoes concerns in the perception analysis. In contrast, Savitha and Banerjee (2020) noted lower satisfaction in India's fragmented micro-insurance schemes.

Perceived Process Quality of Health Insurance Service

This Table 7 below presents the perception of health insurance enrollees regarding the process quality of services offered by the NHIS, based on four constructs. The overall mean and SD of perception of healthcare service process quality ranges between 3.44 to 3.97. This indicates that the respondents generally have a positive perception towards the process quality of the NHIS. The mean score above 3.0 suggests agreement with the statement, indicating higher than average satisfaction with process-related aspects of health insurance services.

Table 7

Perception of Health Insurance Enrollee on Process Quality of Health Insurance Service

Process quality	Mean	SD
Customer service provided by the health insurance program responds promptly.	3.94	0.356
The health insurance program provides clear and helpful information about my benefits.	3.82	0.615
The health insurance program assures me of support during medical emergencies.	3.44	0.898
Health insurance provision has increased my financial security regarding health expenses.	3.97	0.254

Note. Table 7 shows perception of NHIS beneficiaries on process quality of care providers.

Source: Field Survey, 2025.

Table 7 reveals that perception of respondents on NHIS customer service is also with mean 3.94, and SD 0.56). This indicates strong and consistent satisfaction with the service promptness of the caregiver. Similarly, the perception on the construct of clear and helpful information is also high with mean of 3.82, and SD 0.615). This implies general agreement, though the higher SD reflects some variation perhaps due to unclear communication for some enrollees. The perceived score for the construct on emergency support assurance is relatively the lowest with mean 3.44, followed by highest SD 0.898. Intuitively, this highlights mixed perceptions and uncertain scenarios of support during emergencies. Notably, perception on the statement on financial security scored the highest mean 3.97, followed by lowest SD 0.254. This indicates widespread agreement and positive outlook of NHIS enrollee on improved financial protection. These results and findings echo with Kim et al. (2010) regarding customer service satisfaction in Korea. Moreover, Chankova et al. (2008) also aligns results on financial security in West Africa. Concerns on emergency response align with Alhassan et al. (2016), while Aggarwal et al. (2020) found lower satisfaction in India's fragmented schemes.

Perceived Effectiveness

Table 8 below provides insight into the construct of perceived effectiveness of the NHIS based on the responses of enrollees. The mean and SD values across the six indicators of perceived effectiveness range from 3.66 to 3.97 and 0.254 to 0.788 respectively. This indicates that the respondents generally hold a positive view of the effectiveness of NHIS to ensure access to quality healthcare and reducing financial vulnerability. Essentially, a mean score above 3.5 on five-point Likert scale suggests that the majority of respondents agree or strongly agree with the positive statements regarding the NHIS.

Table 8

Perceived effectiveness of the National Health Insurance Scheme

Perceived Effectiveness of Service	Mean	SD
Due to health insurance coverage, I am less likely to need loans or sell property for medical expenses.	3.97	0.254
The scope of my health insurance allows me to receive good quality health care.	3.68	0.742
Health facilities I can access provide better services because they are insured.	3.66	0.788
Because of health insurance, it has become easier and more desirable for me to seek health services.	3.84	0.549
The services covered by health insurance encourage me to undergo health check-ups.	3.81	0.596
Because of health insurance, I am motivated to consult a health service provider as soon as symptoms appear.	3.94	0.356

Note. Table 8 shows perception of NHIS beneficiaries on the effectiveness of the programme.

Source: Field Survey, 2025.

The statement “Due to health insurance coverage, I am less likely to need loans or sell property for medical expenses” received a high mean score of 3.97 (SD = 0.254), indicating strong consensus on NHIS’s role in offering financial protection. This aligns with findings from Chankova et al. (2008) and Ekman’s (2004) on the financial protection offered by community-based health insurance in low-income countries. The statement “Because of health insurance, I am motivated to consult a health service provider as soon as symptoms appear” scored a mean of 3.94 (SD = 0.356), showing NHIS’s positive influence on early health-seeking behavior, consistent with Kimani et al. (2014) in Kenya. However, the mean score of 3.66 with SD 0.788 for perceptions of better services in insured facilities show higher variability. Likewise, perceived mean score 3.68 with SD 0.742 for quality care access reflect high variability. In this context, Alhassan et al. (2016) and Kusi et al. (2015) raised concern for deeper inquiry.

Perceived Satisfaction and Continuity of NHIS

Table 9 below displays perception of NHIS enrollee on the analysis dimension perceived satisfaction and continuity of enrollment based on the 4 constructs across the dimension. The mean scores for across four constructs range between 3.52 to 3.71 respectively. Essentially, overall positive attitude but higher variability as indicated by standard deviation implies that the NHIS experience is not uniform across enrollees of health insurance. It provides clues for potential areas of inquiry for improving the service.

Table 9

Perception Analysis of Perceived Satisfaction and Continuity of NHIS

Satisfaction and Continuity of Enrollment	Mean	SD
I plan to continue my NHIS in the coming years.	3.66	0.957
Based on my experience of reduced OOP payments or health, I recommend health insurance to others.	3.52	1.112
I am willing to pay a reasonable amount to continue my health insurance.	3.69	0.879
I believe the cost of NHIS is reasonable compared to its benefits.	3.71	0.894

Note. Table 9 shows perception of NHIS beneficiaries about satisfaction and continuity of the enrolment.

Source: Field Survey, 2025.

Table 9 shows that the construct on continuing NHIS in future has mean score 3.66 with SD 0.957, reflecting general optimism with noted variability, echoing Mebratie et al. (2015) in Ethiopia. Notably, the construct “I believe the cost of health insurance is reasonable compared to its benefits” has the highest mean 3.71 with SD 0.894 across the dimension. This finding is supported by Wagstaff et al. (2018), who found affordability and perceived value crucial for enrollee satisfaction and retention in Low and Middle Income Countries. Similarly, the construct “I am willing to pay a reasonable amount to continue my health insurance” has mean 3.69 and SD 0.879. This implies that beneficiaries are ready to increase NHIS premium to maintain coverage. This result is consistent with Jehu-Appiah et al. (2011) in Ghana where beneficiaries showed a positive outlook on the same. Intuitively, the lowest mean score for beneficiaries' readiness to recommend others to enroll in NHIS is 3.52, followed by highest SD 1.112 is a matter of serious concern. In general, it suggests more varied opinions, likely due to inconsistent service experiences. In fact, this finding also aligns with the findings of Alhassan et al. (2016).

Problem Encountered by Health Insurance Enrollee in the Study Area

Table 10 below presents perceived problems faced by the enrollee during the process of service receiving within certain themes that are derived from semantic similarities across respondents' statements. In this regard, the responses mostly relate to waiting time, availability of medicines, service quality, staff behavior, and cost issues.

Table 10

Problem Encountered by NHIS Enrollee

Theme / Category	Representative Statements	Frequency
Long waiting time	Long waiting time; Problems with queues; Elderly have difficulty standing in line	25
Unavailability of medicines	All medicines not available; Essential medicines unavailable; Distribution of low-quality medicines	15
Service not fully available	Not all treatments provided; Some services unavailable; Not all services accessible	10
Bias in Staff behavior	No time for staff to handle queues; Staff show favoritism; Staff behavior lacks empathy	7
Financial burden / Extra cost	10% payment required; Problems if money is insufficient; Some medicines must be bought outside at higher prices	6
Overcrowding / Congestion	Overcrowding; Standing in line all day; Sometimes services take 2–3 days	5
Need to visit other facilities	Must go outside for complex health problems; Need to go to other pharmacies if medicine unavailable	3
Administrative delays / Reports	Reports not delivered on time; Not all services available in one place	3

Note. Table 10 above summarizes the problem encountered by health insurance enrollee in the Study Area,

Source: Field Survey, 2025.

Based on the field survey, problems faced by NHIS enrollee are discussed in some key themes as presented in Table 10. Most of the respondents reported standing in long queues for registration, check-ups, tests, and medicines, often spending the entire day to access basic insured services. Beneficiaries expressed frustration over the unavailability of essential medicines, forcing them to purchase costly alternatives outside the insurance network. Respondents noted that major surgeries and complex treatments were either not covered or required referrals without proper documentation or clarity. Complaints included inadequate skilled personnel, delayed service, and perceived discriminatory behavior toward insured patients compared to non-insured ones. Mandatory co-payment, OOP payment costs, and fragmented service requiring multiple counter visits created stress, especially for the elderly and vulnerable groups.

Conclusions and Policy Implication

The NHIS in Nepal has improved healthcare access and reduced financial barriers, yet concerns remain regarding the adequacy of financial protection. To strengthen impact, the government should raise benefit ceilings and expand the scope of covered services. Based on the perception analysis, customer service and financial security are well-rated, inconsistencies in emergency support and service availability highlight the need for operational improvements. Addressing gaps in the benefit package and ensuring equitable delivery across regions will boost

enrollee satisfaction and confidence. The scheme must broaden coverage to include preventive, curative, rehabilitative, and palliative care for all groups, aligned with evolving health needs. This expansion is expected to promote universal health coverage and reduce OOP payments for health. Furthermore, ensuring the continuous availability of all prescribed and essential medicines is vital. Current shortages essential medicine force beneficiaries to make OOP payment to purchases, undermining the scheme's goals. Policy reforms targeting these issues will ensure sustainability and better health outcomes. Therefore, results are expected to inform policymakers and assist service users by providing evidence on how health insurance influences access, affordability, and satisfaction without causing harm.

Limitations

The limitations of the study are:

- The small sample size limits the statistical power and generalizability of the findings.
- The intertemporal dynamics during the sampling period i.e. January and April 2025 may limit ability to infer causality and observe changes over time.
- The study may suffer from recall bias and social desirability bias from the part of respondents.
- The study may not have fully captured information on alternative health-seeking behavior such as informal care, traditional healing practices, potentially affecting the accuracy of estimated effects.
- The study findings from Tikapur municipality may not reflect conditions in more urbanized and remote rural areas of Nepal, having different settings of healthcare infrastructures and insurance coverage levels.

Acknowledgements

Authors express gratitude to Tikapur Multiple Campus Research Management Cell (RMC) for providing this academic work in terms of Faculty Research financial support that facilitated field work and completed the research work. Moreover, we affirm that there is no conflict of interest regarding any matters.

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Trend and Growth of Religious Tourist Arrivals in Nepal: A Time Series Overview

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DOI: <https://doi.org/10.3126/jotmc.v9i9.90417>

Abstract

Religious tourism is a part of overall tourism industry and is a significant driver of Nepalese economy, spurring substantially to the creation of employment, foreign exchange reserve, and promoting cultural exchange. Despite its immense contribution, the systematic study and analysis in this regard is still sparse, scant and even neglected in the Nepalese context. The aim of this paper is to examine the trend and pattern of the tourist arrival and specially focusing on the religious tourist arrivals in Nepal, and discuss its association with business growth of local economy. This study uses the time series data spanning between 1993 to 2023 on the total tourist and religious tourist arrival to examine the trend of religious tourist arrival. The evidence suggests that during the period 1993–1997, the share of religious remained quite low, ranging mostly between one percent to three percent, whereas the late 1997 to early 2000s saw a gradual increase, but the most notable change is observed between the period 2002 and 2004. However, religious tourist arrival between the period 2011 and 2016 showed considerable volatility, with multiple sharp drops, possibly due to disruptive events such as natural disasters or socio-political upheavals seen during the period of constitution of Nepal Promulgation. The period between 2016 to 2020, strong recovery could be observed, ranging religious tourist arrival 14-16 percent, showing optimistic scenario after full-fledged declaration Federal Democratic Republic of Nepal. But, a sharp dip occurred in 2021 due to COVID-19 lockdown and global travel restrictions, but a recovery followed in 2022–2023, with percentages climbing back above 14 percent. The trend of religious tourist shows a steady upward indicating, potentiality for Nepalese economy. It also suggests policy implications for boosting pilgrimage and cultural tourism. The findings highlight that several religious sacred sites including Pashupatinath's, accounting for a significant proportion of international arrivals.

Keywords: Religious tourist, growth of tourist inflow, trend and pattern, economic implication

Introduction

Nepal, a landlocked country located in the snowcapped Himalayas, boasts a unique diversity in terms of culture, ethnicity, spiritual traditions and natural flora and fauna. Nepal being situated from the perennial snow-covered peaks in the north to the subtropical lowlands towards south makes Nepal one of South Asia's most unique travel destinations in natural and cultural perspectives. Similarly, according to the World Travel and Tourism Council (WTTC, 2023), tourism contributed 6.7 percent to Nepal's GDP and supported over one million jobs in recent years, marking its crucial role in national development (World Travel and Tourism Council, 2023). Nepalese tourist inflow consists of mix of natural site seeing, religious, cultural, and adventure. Nepal is rich various holy sacred sites including the Pashupatinath Temple in Kathmandu, Muktinath of Mustang, Janaki Temple of Janakpur, Lumbini the birth place Gautam Buddha and so on. Obviously, the Pashupatinath Temple renowned as a prime attraction for devotees of Hindu religion, reflecting profound spiritual significance. Apart from this, it attracts scholars of ancient's Hindu civilization to deep dive on the content based on lively experience the sacred site visitors.

Nepal's diverse flora and fauna, rich culture, spiritual sacred sites and heritage also adds attraction for travelers around the world. Moreover, Pashupatinath Temple, as a UNESCO World Heritage Site since 1979 and a sacred Hindu pilgrimage destination, attracts thousands of religious devotees annually. In this context, Bhatt et al. (2025) stated that pilgrimage sites and shrines attract millions of tourists based on their religious faith, thereby creating employment opportunities, and substantial scope for income as well as income generation. In this regard, it is pertinent to have better understanding of the tourist arrivals in general and religious tourist arrival in particular in Nepal, especially in the popular sites like Pashupatinath, is critical for tourism planning and cultural conservation. Therefore, Nepalese tourism sector has evolved into a key pillar of the national economy over the last few decades.

Moreover, religious tourism, especially pilgrimage tourism, has been regarded as a cornerstone of Nepal's tourism economy. Furthermore, Pashupatinath Temple, dedicated to Lord Shiva, is not only the most revered Hindu site in Nepal but also one of the most sacred Shiva temples globally. The temple draws pilgrims and tourists from Nepal, India, Sri Lanka, Mauritius, and across the Hindu diaspora, locating on the banks of the Bagmati River in Kathmandu (Sharma, 2021). Notably, Pashupatinath Temple is renowned not just for its spiritual magnetism but also for its rich architecture, and cremation ghats that reflect the spiritual acceptance of life and death in Hinduism philosophy. Most importantly, the events like Maha Shivaratri attract over 700,000 domestic and international religious visitors annually, highlighting its pilgrimage tourism potential (NTB, 2023).

Tourism in Nepal has not followed a linear trajectory through the study period. The development of the tourism sector of Nepal has been shaped by a mix of ups and downs caused by enablers and constraints. Obviously, political instability during the armed conflict launched by Maoist during 1996–2006, the 2015 earthquake, and the COVID-19 pandemic (2020–2022) are found to be cause of sharp declines in total tourist arrivals as well religious tourist arrival (Ghimire, 2020). Despite these ups and downs, Nepalese tourism business has witnessed noticeable recovery and resilience, particularly religious tourism related with visiting sacred sites. The facts and figures indicate a strong recovery after Covid 19, surpassing tourist arrival figure one million in 2023.

Moreover, it went up to more than 577,000 arrivals as per the record of the first half of 2025 (NTB, 2025).

Religious sacred sites also meeting points to promote human fraternity meant for cultural diplomacy and interfaith exchange (Morpeh, 2007). The popular religious and spiritual sacred sites also serve the same can be instrumental bridging the relation amongst neighboring nation sharing common culture and tradition. Therefore, his analogy is useful to formulate appropriate strategy and policy to deepen cultural integrity.

Rich cultural capital and endowment including several world-renowned religious heritage sites, there remains a notable evidence gap in the longitudinal analysis of tourist arrival patterns. It is pertinent to have better understanding of trend and patterns in a time-series context that can offer important insights for policymakers and planners. In this regard, the paper tries to seek the answer of the following pertinent research questions:

- a. How is the trend of international tourist arrival in general and religious tourist arrival in particular?
- b. What are factors associated with the fluctuation in tourism arrival in Nepal?
- c. What would be the trend of tourist arrival in next 25 years?

The general objective of this study is to assess the trend of tourist arrival in time-series framework in Nepal, with a special emphasis on Pashupatinath Temple, to assess historical patterns, disruptions, and recovery trajectories. The specific objectives are:

- a. To examine longitudinal trends of total international tourist arrivals and religious tourist arrival in Nepal.
- b. To identify potential major factors influencing fluctuations in pilgrimage tourism.
- c. To estimate and forecast the total tourist arrival and religious tourist arrival for next 25 years.

Limitations of the Study

The authors acknowledge the following limitations relating to this study:

- a. This study entirely relies on secondary data, which may have gaps or inconsistencies.
- b. This study focuses on the trend and pattern of total tourist arrival and religious tourist arrival.
- c. The study excludes arrival of Indian nationals from some datasets.
- d. The study is absence of primary fieldwork.
- e. The study uses annual time series data to present trend and pattern of tourist arrival.

Literature Review

Theoretical Review

Tourism is seen as a stimulus for the economy as well as a sociocultural force. Scholars from various disciplines including economics, anthropology, geography, and pilgrimage studies are drawn to the multifaceted concept of tourism. Within the larger field of pilgrimage tourism research, with a particular emphasis on the economic lens, the current study has theoretical and practical value. A more comprehensive understanding of how religious tourism survives in the face of sociopolitical upheavals and pandemics is made possible by the combination of resilience theory, place attachment frameworks, and cultural heritage views. By doing this, the study

advances scholarly knowledge of pilgrimage tourism as a robust socio-cultural and economic phenomenon.

pilgrimage tourism has strong theoretical underpinnings from several disciplines including sociology, psychology, and tourism studies. In this context, Push-pull theory postulated that push factors consist of internal, psychological motives for spiritual growth, peace, cultural curiosity, or even escaping the banality of routines. On the other hand, pull factors means the external attributes that characterize a destination and therefore attracts numerous visitors with its architectural beauty, pilgrimage significance, cultural heritage, and perceived sanctity. In this setting, Pashupatinath Temple, with its recognition as a globally religious site of sacredness and a UNESCO World Heritage Site status, presents a very important pull destination for Hindu pilgrims around the world (Dann, 1977).

Staged Authenticity Theory suggested that modern tourists seek authenticity in their experiences, especially in a world increasingly marked by commodified and staged attractions (MacCannell, 1976; MacCannell, 2018). Theory of collective effervescence asserts that the role of pilgrimage tourism to promote social unity and spiritual fulfillment thereby overall social cohesion. The theory argues that participation in collective rituals and sacred gatherings creates a sense of communal belonging and emotional betterment (Durkheim, 2016; Turner & Turner, 2011).

Rite of Passage Theory underscore that pilgrimage as a liminal experience a transition phase in which religious devotees symbolically leave their everyday roles and enter a sacred space (Ibarra & Obodaru, 2016; Turner & Turner, 1978). Moreover, religious tour is not merely a journey; it is an experience where participants immerse themselves in rituals, sacred meanings of life, and symbols. Therefore, religious tourism provides multidimensional experience combining spiritual, emotional, and sometimes even economic as well as physical transformation (Pine & Gilmore, 1999).

In the Nepalese context, these theoretical underpinning are path finders and instruments that help to explain the sustained attraction of Pashupatinath Temple to both domestic and international tourists. Essentially, religious tourists or pilgrims do not visit only for sightseeing; rather they seek healing of their inner core wound, fulfillment, bestowed with blessings, and connections to the almighty God, and to make history. Hence, religious tourism is a blend of motivation, ritual, symbolism, and authentic cultural performance that requires a theoretical framework rich in both psychological and sociological interpretations.

Empirical Review

Empirical research on pilgrimage tourism in Nepal has grown significantly in recent decades, paralleling the rise of tourism as a development strategy. Much of the earlier academic work focused on the general tourism statistics, economic benefits, and infrastructure development. The majority of the existing studies found to be emphasizing general tourism trends focusing on short-term fluctuations, few have systematically explored the long-term evolution of pilgrimage tourism at a sacred site of such cultural magnitude (Timothy & Olsen, 2006). Similarly, the studies have also focused on the aggregate annual figures or short-term fluctuations rather than systematic examination on how various events and crises such as natural disasters, armed conflict, political unrest, and pandemics affected both general tourism and site-specific religious tourism. Evidently,

Nepal has experienced sharp declines in international tourist arrivals during the shocks like Maoist armed conflict period 1996–2006, the last devastating earthquake event of 2015 with Gorkha as epicenter, and the global COVID-19 pandemic. In this context, there has been limited scholarly inquiry into how sites like Pashupatinath perform during and after aforementioned shocks (Ghimire, 2020; Sharma, 2021). This study, therefore, seeks to fill that gap by analyzing historical data on total tourist arrivals, religious tourist arrival, careful examination of fluctuations, and assessing the factors that influence these trends over time. Pilgrims of the sacred sites, including the Pashupatinath Temple sacred site, are often motivated by spiritual or ritual obligations rather than leisure preferences. Intuitively, their travel decisions may be less susceptible to economic uncertainty or political instability (Raj & Morpeth, 2007).

Baniya and Paudel (2019) study found that religious tourism, particularly visiting frequency to Pashupatinath and Lumbini remained comparatively resilient even during socio-political instability, indicating that religiously and spiritually motivated tourist are less influenced by socio-political factors.

Ghimire (2020) revealed that pilgrimage tourism, while a smaller segment in terms of luxury expenditure, provides substantial and stable economic input due to high volume and frequency. Pant and Basnet (2018) found that pilgrimage tourism promotes local business like small-scale entrepreneurship, especially among women and marginalized groups who set up stalls, run guesthouses, or offer pilgrimage paraphernalia. However, the findings highlighted the challenge of seasonal income, lack of training, and poor infrastructure as barriers to maximizing benefits.

Sharma et al. (2021) study focused specifically on religious tourist arrival at Pashupatinath Temple concluded that religious ambiance, ritual authenticity, and spiritual appeal rank high among tourists' satisfaction indicators, several problems persist. The study also indicated key issues as inadequate waste management, lack of guided interpretation, and poor crowd control during peak times.

Kunwar and Thapaliya (2021) conducted a preliminary assessment of the socio-economic impacts of Barahachhetra pilgrimage site on the local community, focusing on aspects like employment generation, local business development, and infrastructure growth. The study also highlights the challenges faced by the residents of the area, including inadequate infrastructure, environmental degradation, and lack of proper management hampering hinder its potential for sustainable tourism development.

Singh (2023) examined the behaviour of Indian pilgrims at Pashupatinath and discovered that more than 60 percent of Indian visitors to Nepal do so for pilgrimage. The study concludes that bilateral visa convenience, language familiarity, and shared cultural history all strengthen their allegiance. But in order to keep and expand this group, Singh identified crucial advancements in transportation, sanitation, and pilgrim-friendly services. Urban planners, tourist officials, and cultural asset managers may all benefit from the study's practical, evidence-based ideas. Therefore, it is crucial for stakeholders to comprehend the historical trends and recovery paths of pilgrimage tourism in order to create stronger frameworks for resource allocation and contingency planning. Furthermore, this study is particularly relevant in light of the COVID-19 pandemic's disruptions, which brought attention to the vulnerability of the global cultural tourism industry (Gossling et al., 2020).

Thus, the study serves as a useful instrument for guaranteeing the long-term sustainability and resilience of holy heritage tourism in Nepal in addition to enhancing academic scholarship. In general, the comprehensive knowledge of religious tourism in Nepal is supported by empirical literature. Economic systems, political environments, and infrastructure realities all play a role in spiritually driven tourism. It is essential for maintaining regional economies, protecting intangible cultural assets, and promoting cross-cultural ties. However, focused investments in site management, environmental sustainability, and community-based tourism are necessary to fully realize its potential.

Oli and Woli (2024) study discusses considerable potential as a religious tourism destination in Nepal and indicated inadequate infrastructure, limited marketing and promotion, and a lack of coordination among stakeholders as challenges that hinder its development. Moreover, the study emphasizes the need for investments in infrastructure, enhanced marketing strategies, and improved collaboration among stakeholders. The study highlights religious tourism's potential as a means to promote economic development and support cultural preservation in the region.

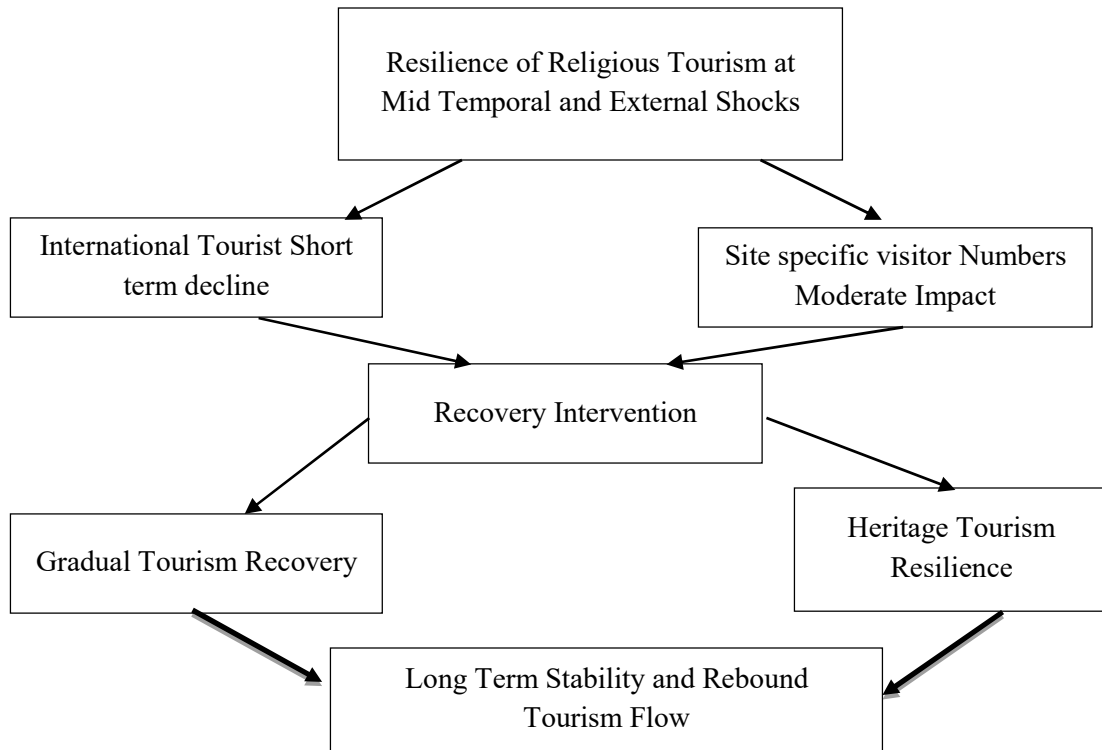
Pradhan and Koirala (2024) findings indicate the significance of international tourism for Nepalese economy, which has suffered a significant decline due to the pandemic. The study provides insights for policymakers and stakeholders in the tourism sector, highlighting the necessity for sustainable tourism development and infrastructure investment to recover and capitalize on Nepal's tourism potential. Similarly, the review paper of Bhatt et al. (2025) underscore that pilgrimage tourism arrival sites are significant economic drivers, attracting millions globally through religious faith and essentially creating substantial employment and local business growth.

Pandey (2025) study estimated long-run coefficients for government consumption expenditure, gross fixed capital formation, and total trade volume, and found positive and statistically significant association, indicating a positive relationship with economic growth.

Conceptual Framework of the Study

Based on the literature review, the authors have developed a conceptual framework to proceed the overall complete overall article composition. Figure 1 below demonstrates the conceptual framework precisely.

Figure 1
Conceptual Framework of the Study



Source: Basnyat et al., 2020

Data and Methodology

Research Philosophy

The study relies on observable numerical data on pilgrimage tourist arrivals over a long period and uses statistical tools to detect trends, growth patterns, and structural changes. This indicates that it follows a positivist research philosophy. The aim is to explain trends and patterns through empirical data rather than subjective interpretation. The researcher applies objective analytical procedures. In ontological perspective, the study adopts an objectivist ontology, relating to trends and growth patterns in total tourism arrival with special focus on religious tourism. In this regard tourist arrival data are treated as real, measurable phenomena that exist independent of the researcher. In other words, variables such as annual tourist arrival figures, trends, and growth rates are considered external facts that can be quantified, analyzed, and compared over time.

Moreover, in epistemological perspective, the study uses a positivist epistemology, emphasizing measurable knowledge derived from statistical analysis. Obviously, valid knowledge comes from the concrete data collected through official sources such as published sources and government authority. Essentially, verification is based on empirical evidence, not subjective judgment. Furthermore, from an axiological perspective, the research maintains value neutrality with best effort. In this regard, the researchers avoid introducing personal or cultural bias regarding

specific religions, sacred sites, and tourism policies. The focus is strictly on empirical patterns within the data. In this regard, the scope of ethical considerations is limited because the study employs secondary data, but transparency, accuracy, and responsible reporting of findings. Finally, the study adopts a quantitative, annual secondary data on religious tourist arrivals from 1993 to 2023. Likewise, the data are displayed using line graphs, descriptive statistics, growth analysis, and statistical summaries.

Research Design

This study is descriptive and analytical and summarizes trends and patterns in tourist arrival using quantitative data of time series nature. In this regard, the special focus is on the religious tourist arrival in annual basis in Nepal and general international tourist arrival patterns, especially during the periods of crisis, shocks and recovery.

Nature and Sources of Data

This study is entirely based on the secondary time series data collected from Nepal Rastra Bank and other government authority. In this regard, the study used data spanning from 1993 to 2023, to conduct trend, pattern and growth analysis. This comprehensive dataset supports a robust exploration of the resilience and adaptability of religious tourism in Nepal.

Tools and Techniques of Data Analysis

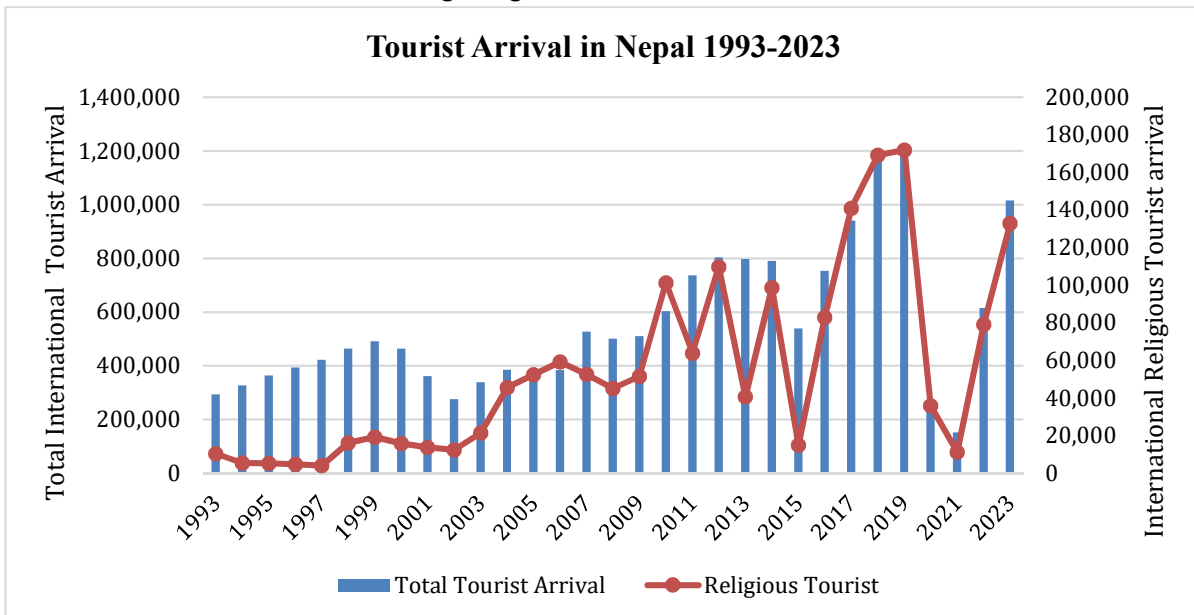
The study used MS Excel to analyze the secondary time series data which contains with 31 data points on annual basis. The quantitative analysis is focused on trend, pattern, and growth of total tourist arrival and religious tourist arrival. The analysis of the is associated with Nepal's socio economic, political, and natural ups and downs that was observed during the period that can be various types of shocks causing sharp fall in tourist arrival due to pessimism followed by recovery due to optimism.

Results and Discussion

Trend of Pilgrimage Tourist Arrivals in Nepal

Figure 2 below demonstrates Nepal's total tourist arrivals and religious tourist arrivals data in annual basis spanning from 1993 to 2023. Moreover, the figure demonstrates three types of data; total tourist arrival, percentage of religious tourist/ pilgrimage tourist arrival of total tourist and tourist other than pilgrimage. with a particular focus on the percentage share of religious tourists. The trend analysis of this data reveals several important insights into the evolution and role of pilgrimage tourism within the broader context of Nepal's tourism industry. Based on the trend and pattern, we can draw some valuable insights.

Figure 2
Scenario of Total Tourist Arrival, Pilgrimage Tourist Arrival



Note. Figure 2 demonstrates total tourist arrival, and religious tourist arrival in Nepal from 1993-2023.

Source, Nepal Rastra Bank 2025.

Low and Gradual Increase: Early Period (1993–2003)

Figure 2 demonstrates total tourist arrival, and religious tourist arrival in Nepal from 1993-2023. Evidently, the figure shows that total tourist arrival is less than 5 hundred thousand and religious tourist arrival fluctuated below 30 thousand. The figure of religious tourist arrival fluctuated less than 5 percent during the period 1993- 2002. This period is regarded as a beginning phase of religious tourism development of Nepal. This is possibly due to weak promotion of religious sacred sites, limited infrastructure, and political instability in the country. However, by 2003, there was a noticeable rise, with pilgrimage tourists making up 6.33 percent of total arrivals. Evidently, the data suggests that pilgrimage tourism started gaining momentum during the early 2000s, setting the stage for more substantial growth in the following years.

Period of Growth and Consolidation (2004–2010)

Evidently, the sharp rise in the proportion of religious tourist arrival in 2004, that jumped to 11.85 percent, followed by the further rise to 15.45 percent in 2006. This dramatic and optimistic rise is likely associated with the improved recognition of Nepal's pilgrimage sites and spiritual destinations, especially Pashupatinath, Muktinath, and Lumbini particularly from India. Moreover, the period from 2006 to 2010 marks a consolidation phase, where the share of religious tourists remained consistently high. The figure reached to 16.81 percent in 2010, demarcating peak point so far (Figure 2).

Fluctuation and Rebalancing (2011–2015)

This period witnessed turbulence in terms total tourist arrival and religious tourist arrival both. Evidently, the percentage of religious tourists declined after 2010, gone down to 8.66 percent in 2011 and high fluctuation till 2015. Moreover, percentage of religious tourist arrival dropped to 5.10 percent in 2013. This figure went even as low as 2.78 percent in 2015 (Figure 2). Possibly, this decline in religious tourist arrival is due to several factors, including the impact of the 2015 earthquake in Nepal, which damaged many pilgrimage and heritage sites, reducing tourist confidence and accessibility. However, even during this period of fluctuation, the absolute number of pilgrimage tourists remained significant, showing that pilgrimage tourism retained its relevance despite broader challenges in the tourism sector.

Rebound and Sustained Growth (2016–2019)

The evidence also shows a clear rebound of tourist arrival and religious tourist arrival both from 2016 to 2019. In other words, the share of pilgrimage tourists rose again to 11 percent in 2016, and remained between 14-15 percent from 2017 to 2019. This consistent growth is reflective of the national prioritization of cultural and religious heritage, improved sacred site infrastructure, and an increase in faith-based travel globally. Notably, in the year 2019 there was sudden rise of religious tourists over 171,000, out of 1.2 million total tourists which is around 14.36 percent.

COVID-19 Impact and Post-Pandemic Recovery (2020–2023)

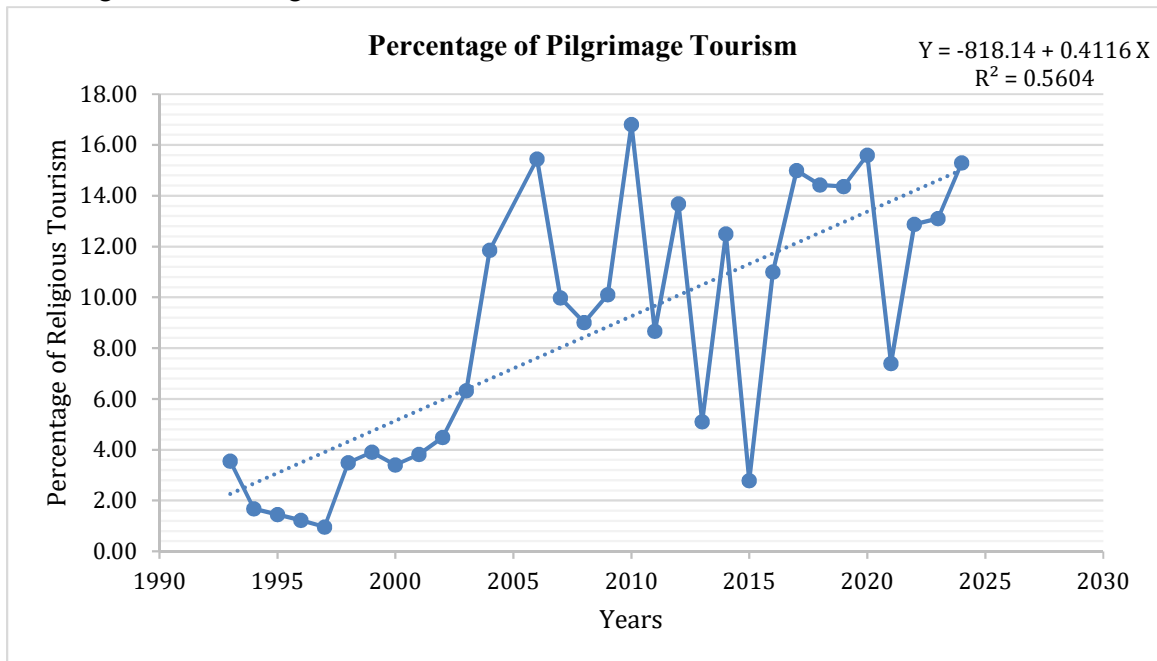
Evidently, following the previous trend, in 2020, religious tourist climbed over 230,000 which is 15.60 percent of total tourist arrival. This indicates the persistent nature of religious motivations even during crises. After Covid 19 pandemic period (2021–2023), pilgrimage tourism has shown strong recovery. The percentage of religious tourists rose steadily 7.40 percent in 2021, 12.87 percent in 2022, and 13.10 percent in 2023. In summary, the percentage share of religious tourists has shown a long-term increasing trend, from under 2 percent in the mid-1990s to over 15 percent in 2010. Hence, religious tourism in Nepal has demonstrated resilience, especially post-COVID, and contributes meaningfully to the country's tourism industry.

Trend of Religious Tourist Arrivals in Nepal

The figure 3 demonstrates trend and growth of religious tourist arrival in Nepal during the period 1993-2023.

Figure 3

Percentage Share of Religious Tourists from Total Tourist Arrival



Note. Figure 3 demonstrates Percentage Share of Pilgrimage Tourists (1993–2023)
Data Source, Nepal Rastra Bank 2025.

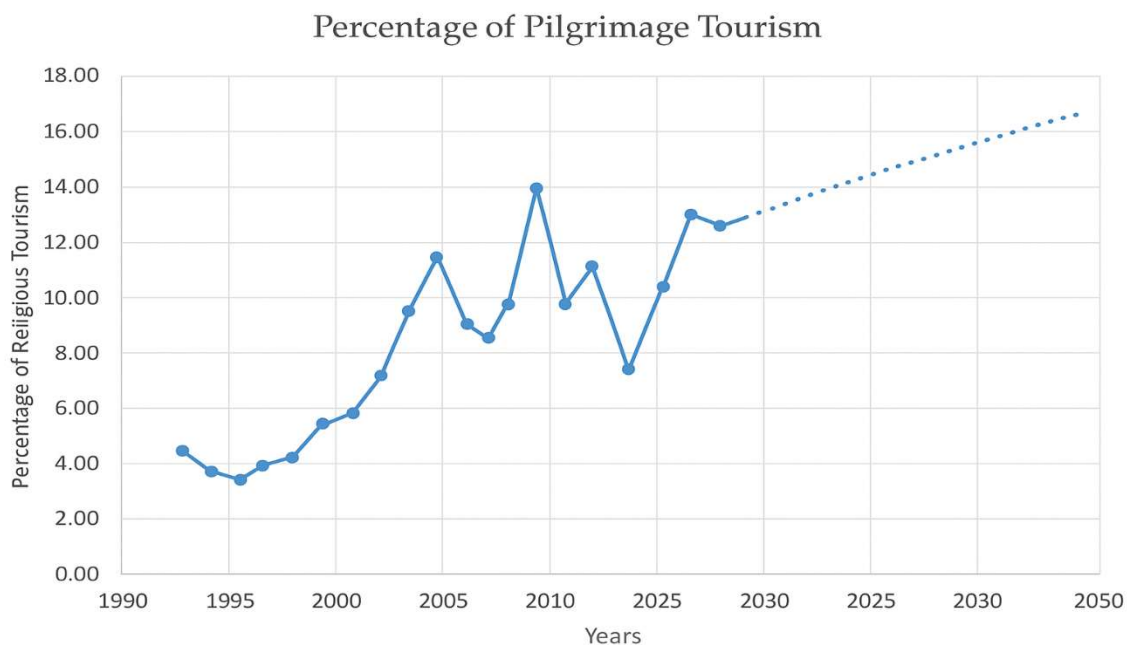
Figure 2 above demonstrates the percentage of pilgrimage tourists of total tourist arrival in Nepal from the period 1993 to 2023. Evidently, during the period 1993–1997, the share of religious tourist arrival remained quite low, ranging mostly below 3 percent. Likewise, from 1997 to early 2000s, the figure witnessed a gradual increase. However, the most notable change can be observed between 2002 and 2004. During the period, the percentage sharply rose from below 6 percent to over 12 percent. Notably, the figure rose sharply and reached to 15.81 percent in 2006, followed by a sharp surge in 2010 pushed the value to around 17 percent marking the highest point in the entire series. This indicates exceptional growth for entire study period. However, the period between 2011 and 2016 was full of considerable volatility, notably in 2015, falling close to 2 percent. This implies that during the period, Nepal faced some disruptive events such as natural disasters and prevalence of socio and political instability. All of a sudden, COVID-19 lockdown and global travel restrictions caused sharp fall in 2020 and 2021. Fortunately, a recovery followed in 2022–2023, with percentages climbing back above 14 percent. To sum up, the data reflects three distinct phases of ups and down in the religious tourist arrival. An initial low and stable period, a sharp growth phase with high volatility, and a recent recovery toward pre-decline stability. This volatility highlights both the resilience and sensitivity of religious tourism to external shocks.

Forecast of Religious Tourist Arrivals (2023–2050)

The figure 4 below demonstrates possible scenario of religious tourist arrival for coming two and decades based on the past trend during the period 1993-2023. In other words, it is a statistical projection on the assumption of all things remaining the same or status quo.

Figure 4

Forecast of Religious Tourist Arrivals (2025–2050)



Note. Figure 4 demonstrates forecasting of percentage share of religious tourist arrival based on past data of 1993–2023.

Data Source, Nepal Rastra Bank 2025.

Figure 4 above demonstrates projection of religious tourist arrival in Nepal from 2024 to 2050 suggests a steady upward trend in the percentage of religious tourism. The projection is made based on the assumption that at policy scenario will remain the same. Essentially, the share is forecasted to grow gradually from about 13 percent to nearly 17.5 percent by 2050, following the recovery seen around 2023. Moreover, the projection assumes fewer disruptions, pointing to a more resilient sector.

Conclusion and Implication

The study finds notable fluctuation and disruption in the total international tourist arrival and religious tourist arrival both during the study period 1993-2023. Moreover, Nepal's international tourist arrivals declined sharply during crises such as the Maoist armed conflict (1996–2006), the 2015 earthquake, and the COVID-19 pandemic. Evidently, religious tourism especially to culturally significant sites exhibited greater stability and faster recovery. Despite the fluctuation

and disruption, tourism industry of Nepal maintained commendable resilience and recovery in the industry.

Policy Implication

Nepal has huge potential for religious tourism growth and its contribution to the economy as a whole. Intuitively, Nepal has several religious sacred sites that are revered by the followers of Hinduism and Buddhism. These both religions are popular in neighboring country India, China and many other South east Asian nations. In this context, Nepal need make unique package of foreign religious tourist attraction to harness the benefit of having world famous religious sacred sites of Hindu and Buddhist. In this regard, policy to be formulated to capitalize holy belief of people from around the world by increasing their frequency of visits by investing in destination management, cross-border pilgrimage routes and packages, infrastructure around and religious sacred sites for unique spiritual experience.

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Mimetic Rivalry and Violence in William Shakespeare's *Othello*

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DOI: <https://doi.org/10.3126/jotmc.v9i9.90418>

Abstract

This study examines rivalry, mimesis and violence in William Shakespeare's play *Othello* through the lens of mimetic desire. It explores how the play articulates the dynamics of desire, imitation and rivalry and how these forces culminate in violence. The central focus of the article hinges on finding the interaction between desires, rivalry and violence in the play which not only illuminates the motivations and actions of the characters but also offers insights into broader human tendencies towards conflict. Drawing on the theoretical framework of mimetic desire, the study demonstrates that *Othello* functions as a powerful representation of mimetic rivalry, wherein characters model their desires on others, leading to escalating antagonism between the characters in the play. The analysis shows that mimetic desire drives the conflicts in the play and ultimately results in the sacrificial deaths of Desdemona and Othello. The study concludes that Shakespeare's play serves as a compelling testimony to the destructive potential of unchecked mimetic desire and rivalry.

Keywords: mimetic desire, violence, sacred, multitude, Othello

Introduction

William Shakespeare's *Othello* is one of his greatest tragedies ever produced. The play has received wide acclaim ever since it was staged in 1604. Shakespeare's *Othello* stands as one of the most intense dramatic explorations of desire, rivalry, and violence in early modern literature. While the play has been widely interpreted through lenses such as race, gender, jealousy, and power, its tragic force ultimately arises from the contagious nature of desire and the rivalries it generates. The relationships among the characters are not governed by autonomous motivations but are shaped through imitation, comparison, and competition, creating a volatile network of desires that steadily escalates into conflict. In this sense, *Othello* offers a compelling literary site for examining mimetic rivalry, a concept theorized by René Girard, which explains how desire is mediated by others and how such imitation produces antagonism and violence.

The play centers on Othello, a Moorish general serving in Venetian army, secretly marries Desdemona, a noblewoman of Venice. Their marriage becomes vulnerable to manipulation by Iago, who serves under Othello. In *Othello*, Othello sets the contest for rivalry promoting Michael Cassio, the accountant, as a lieutenant which Iago disapproves as he desires the same position. Besides, Rodrigo's passion for Desdemona turns into his ambition which brings him in contest with Othello. Brabantio, the senator, wishes to end his daughter's inter-racial marriage with Othello. In addition to this, Desdemona's decision of marrying Othello serves as her mutiny against her own evil body, the burning passion. Brabantio, her father, provides the evidence, "O treason of the blood!" (1.1.66) and verifies that her motion "blushed at herself" (1.3.96-97). Othello longs fidelity and chastity from his wife and the Duke of Venice has larger contest with the Turks, then Ottoman Empire. All these conflicting desires culminate into rivalry among the characters of the play which lead to the tragic murder of Desdemona and suicide of Othello afterwards. In short, the characters in *Othello* compete for power, position and self as well as for love, lust and sanctity. While the play is often discussed through the themes of jealousy and race, René Girard's theory of mimetic desire offers a deeper way to understand the forces that drive Othello's downfall. Girard argues that desire is not autonomous but imitative- we desire what others appear to desire. This creates rivalry because our model of desire becomes an obstacle too. In *Othello*, Iago acts as the mediator of Othello's desire, subtly suggesting that Cassio desires Desdemona.

Review of Literature

There have been numerous attempts to analyze the play from different perspectives. *Othello* involves the issue of nationalism, militarism, race and gender.¹ The play has been a goldmine for sociologists, anthropologists, naturalists, psychologists and many others because of the treasures it holds and the multiple vantage points it offers. Over the centuries, critics have returned to *Othello* because it not only depicts individual tragedy but also exposes the deeper social anxieties embedded within early modern Europe.

A.C. Bradley, in his lectures on *Shakespearean Tragedies*, consents, "conflict" as the "main cause of the painful tension" in *Othello*; it arises out of "sexual jealousy" that turns Othello's human nature into chaos, releasing "beast in man [Othello]" (Bradley, 1906, p.177). Bradley regards sexual jealousy as the key factor behind the conflict in the play, emphasizing the psychological descent that transforms Othello from a noble general into a violent and irrational husband.

Similarly, the critical engagement with *Othello* has long emphasized the centrality of its plot and narrative structure also. As Lloyd Davis argues in "The Plots of *Othello*: Narrative, Desire, Selfhood," responses to the play from the seventeenth century onward reveal a sustained

In *Othello: A Contextual History* (1994), Virginia Mason Vaughan argues that play deals about nationalism showing concern over threat from Ottoman Empire, the Turks/Muslims, about military and its role in society. He argues that Othello being adherent to professionalism becomes more vulnerable to Iago's plot, about race with exploration and exploitation of nonwhites; race was becoming a global concept during renaissance and about marital and sexual relations. See page 4- 8.

preoccupation with its plot as both structural design and motivating intrigue. Davis notes that narrative, in *Othello*, functions as a powerful force that shapes relationships, actions, and desires among characters. Davies concludes that Shakespeare's narrative can both construct and destabilize selfhood, ultimately directing desire toward tragic outcomes (Davis, 1999, p.20)

Similarly, Mohssine Nachit, in his article "*Shakespeare's Othello and the Challenges of Multiculturalism*", reads that *Othello* highlights the timeless dangers of ethnocentrism, prejudice, and fanaticism that still divide multicultural societies today (Nachit, 2016, p.105). He suggests that the play's tragic lessons should inspire intercultural dialogue and mutual understanding to prevent destructive conflicts. This perspective broadens the significance of *Othello*, framing it not only as a Renaissance tragedy but as an enduring social critique relevant to contemporary debates about identity and coexistence.

Likewise, Sunita B. Nimavat, in her analysis of women in Shakespeare's plays, regards the tragic murder of Desdemona by her husband Othello as a result of jealousy and the "cruelty of the patriarchal system" (Nimavat, 2017, p.150). Her reading highlights how Desdemona's fate exposes the vulnerability of women trapped within male-dominated structures that silence their voices and disregard their innocence.

Similarly, Cassidy Crosby reads *Othello* as a testimony of domestic violence. He contends, "Domestic violence is an obvious vehicle of tragedy . . . and the tragedy [in *Othello*] is ultimately carried out through domestic violence" (Crosby, 2021, p.46). Crosby shifts the focus from external forces to the intimate sphere, suggesting that the home becomes the site where patriarchal power, jealousy, and manipulation erupt most violently.

Furthermore, Kyle Gaydo examines the intersections of race, racism, and violence in *Othello*. He notes that Shakespeare's tragedy upholds the system of white power and its supremacy (Gaydo, 2021, p.11). His analysis foregrounds how Othello's racial difference is exploited to justify violence, mistrust, and ultimately his downfall.

Together, these diverse interpretations demonstrate the richness of *Othello* and its ability to engage with complex themes that continue to resonate across time and disciplines. While the existing scholarship explores *Othello* through lenses like nationalism, race (Gaydo), gender (Nimavat), domestic violence (Crosby), multiculturalism (Nachit) and psychological jealousy (Bradley), none of these readings frame the tragedy through Rene Girard's Mimetic Theory

Statement of the Problem

William Shakespeare's *Othello* has been extensively examined through diverse critical frameworks, including nationalism, race, gender, domestic violence, multiculturalism, and psychological jealousy. While these approaches have generated valuable insights into the play's social, cultural, and psychological dimensions, they largely overlook the dynamics of desire as a relational and imitative force that generates rivalry and violence. In particular, existing scholarship has not sufficiently engaged with *Othello* through the theoretical framework of René Girard's Mimetic Theory, which foregrounds mimetic desire, rivalry, and the scapegoat mechanism as central causes of conflict and violence. This absence constitutes a significant critical gap, as Girard's theory offers a coherent model for understanding how imitated desires escalate into rivalry and culminate in sacrificial violence. Addressing this gap, the present study applies Girard's

concepts of mimetic desire, violence, and scapegoating to *Othello* in order to reinterpret the tragic conflict and the sacrificial deaths of Desdemona and Othello as outcomes of mimetic rivalry. This study invokes Rene Girard's notion of mimetic desire, violence and scapegoat mechanism to read Shakespeare's *Othello* with the objective of examining how conflict in Shakespeare's *Othello* serves as the function of totality of desires that leads to sacrificial death of both Desdemona and Othello.

Methodology

This study adopts René Girard's mimetic theory as its primary analytical framework to interpret *Othello*. Girard's theory posits that human desire is imitative- individuals desire objects not autonomously but because others desire them. This imitation generates rivalry, which can escalate into conflict and culminate in scapegoating and violence. The methodology begins with a close textual reading of *Othello* to trace patterns of mimetic desire and rivalry among key characters, especially Othello, Iago, Cassio, and Desdemona. First, the analysis identifies scenes where desires appear to be mediated by another character's influence. The study examines how Iago, as a mediator, channels and manipulates Othello's desire for certainty and possession, transforming it into destructive jealousy. Dialogue, metaphor, and symbolic actions are scrutinized to reveal signs of mimetic doubling, rivalry, and escalating conflict. Second, character relationships are mapped to demonstrate the triangular structure central to Girard's theory: subject–mediator–object. Third, the analysis interprets the tragic outcome as a result of the mimetic crisis and scapegoating mechanism. Girard's notion that communities restore order by expelling or sacrificing a scapegoat is applied to Othello's killing of Desdemona and his own suicide as acts intended to purge the perceived disorder. Throughout, secondary literature on mimetic theory and Shakespearean tragedy is consulted to contextualize the findings. This methodological approach has aimed to illuminate how *Othello* dramatizes the universal dynamics of imitation, rivalry, and sacrificial violence, offering fresh insight into its enduring tragic power.

Result and Discussion

In *Othello*, William Shakespeare, through Iago, establishes desire as the foundation for the rivalry among the characters. Iago affirms, "Our bodies are gardens, to which our wills are gardeners" (1.3.320). Iago believes wills cultivate desires in bodies that spring up spontaneously, yet he addresses Othello as "my [Iago's] mediator" (1.1.14) and accepts him his master: "We cannot all be masters" (1.1.43). However, soon, it becomes clear that Iago despises Othello; he takes him as obstacle in his promotion. For Iago, Othello sets the context as his model and also assumes the role of an adversary on the road to his success. Rene Girard in *Deceit, Desire, and the Novel: Self and Other in Literary Structure* maintains that birth of desire also gives the birth of jealousy, envy and hatred and ultimately to violence. Girard notes: "For hatred transfigures individuals no less than does desire and like desire sets us thirsting for human blood"(41). If inevitable consequences of desire are envy, jealousy, and hatred then the question of violence in Shakespeare's *Othello* is embedded in mimetic desires. Desire, claims Rene Girard in his widely acclaimed work *Deceit, Desire, and the Novel: Self and Other in Literary Structure*, "is always spontaneous It can always be portrayed by a simple straight line which joins subject and object"(2). Between subject and the object of desires, there are mediators, the models, the obstacles and the villains which

according to Girard form metaphorical "triangle" of desire (Ibid). Iago desires to gain the post of lieutenant from Cassio. Othello as a go between thwarts the zeal of Iago since he holds the power to take decision. Othello at once assumes the source for Iago's desire and at the same time becomes the object of hatred, the rival because he disapproves his ascent into the post. Harold Bloom observes that Iago has "fierce motive" (1) of rivalry after being passed over by Othello. Right above the line of desire between Iago the subject and the post as object of desire, which Cassio holds, Othello resides as an obstacle which forms the first metaphorical 'triangle' of desire in the play. Cassio also assumes the role of Iago's rival since he becomes the obstacle to Iago's promotion. Cassio comes in-between Iago and his desire forming the second metaphorical 'triangle' of desire in the play.

Furthermore, another triangular desire is formed between Rodrigo, Othello and Desdemona. Rodrigo as a subject desires Desdemona, the object of desire. Rodrigo wishes to marry Desdemona but fails since she elopes with Othello. Now, the passion of Rodrigo over Desdemona becomes his ambition. He fancies Othello as his rival and confesses to Iago, "I rather would have been his hangman" (1.1.52). Rodrigo envies what Othello possess, "What a full fortune does the thick lip [Othello] owe . . ." (1.1.64). In corroboration with Girard's notion of triangle of desire, Othello acts as a mediator of desire as a "model" who puts desires into the head of his imitator Rodrigo. Rodrigo considers himself a more descent candidate for Desdemona's love than 'a thick lipped' Negro. Othello as a Moor achieves the position of general out of his hard work and bravery. He wins the heart of Desdemona. He accepts, "She loved me for the dangers I had passed" (1.3.167). But a Moor marrying a white girl becomes a matter of contempt and unacceptability to Rodrigo and Iago. Iago expresses his racial hatred evoking sexual imagery when he tells Brabantio, "Even now, now, very now, an old black ram is tugging your white ewe" (1.1.85-86). He confirms his jealous nature, as he confesses, "it is my nature's plague/ To spy into abuses, and of my jealousy" (3.3.146-147). Iago's sexual jealousy surfaces in his remark, "Your daughter and the Moor are now making the beast with two backs" (1.1.115-116). Rodrigo not only approves what Iago says but also persuades Brabantio to discover Othello and release Desdemona from his grip. The two rivals of Othello decide, "Let us be conjunctive in our revenge against him" (1.3.363-364). In Girardian sense, desire is not which surfaces out of the dark cave of the unconscious, as Freud assumes², but something the "Other" "invokes" in the subject. ". . . A little desire," writes Girard, "is enough to arouse desire in the creature of vanity" (7). His creature of vanity, the *vaniteux* is a vain person who "cannot draw his desires from his own resources; he must borrow them from others" (6). Rodrigo, in Girardian vein, is a true *vaniteux* since his desire is relational; it is induced on him by beautiful Desdemona via Othello and further intensified by Iago, the catalyst. Rodrigo does what Iago incites him to. In this sense, desire in Rodrigo is neither resides in him nor in the object of desire, Desdemona. It is constituted by Othello and Iago. However, Rodrigo, Othello and Desdemona

² In their article "Awareness, desire, and false beliefs: Freud in the light of modern neuropsychology" (*Cortex*, 2007, Vol 43, No 8, 1083-1090) Oliver H. Turnbull and Mark Solms invoke Freud's view that most mental activity occurs outside conscious awareness and reassert his claim unconscious motivational and emotional factors as the forces that shape conscious mental life in the establishment of the relation between awareness, desire and false belief (1083-1090)

form another metaphorical triangle of desire with Othello on top both as a source and hindrance of Rodrigo's desire.

In this light, Desdemona is the most prized object of desire for Othello and Rodrigo. Othello as an Elizabethan husband expects fidelity and chastity from her. Unlike Othello, Rodrigo cannot express his desire for Desdemona, "What should I do? I confess it is my shame to be so fond, but it is not in my virtue to amend it" (I.3. 317-318). Despite the sense that it is a matter of guilt to desire somebody's wife, Rodrigo acknowledges his inability to resist his passion for Desdemona. He knows, "It is silliness to live when to live is torment" (1.3.309), yet, he wishes to "drown myself [himself]" (1.3.309) loving Desdemona. Even Iago fails to put forth his repressed angst to Othello; proclaim his position for the lieutenant in place of Cassio. He concedes, "I will wear my heart upon my sleeve" (1.1.62). Living with unexpressed mimetic desires, the people in the world of *Othello* hatch conspiracy to one another. Girard believes that the distance between the imitator and the model in triangular desire determines the intensity of the rivalry between the imitator and the model. The mediator in the course of time becomes a "diabolical enemy" of the subject and he tries to "rob the subject of his most prized possessions; he obstinately thwarts his most legitimate ambitions" (11). In the play, longing of Iago and passion of Rodrigo are internally mediated; therefore, there exists no gap/distance between the rivals. This makes the chances of direct confrontation between the subject and the model. The imitator, unlike externally mediated desire where he "proclaims the true nature of his desire", consciously "hides them [his desires]" (10). Rodrigo never reveals his desire to his model instead he hides them and expects them to be fulfilled with the assistance of Iago.

Unlike the desires of Iago and Rodrigo discussed above, desires of Othello towards Desdemona; of Senator Brabantio towards his daughter's marriage and of the Duke of Venice are not mediated desires. Instead, they form the spontaneous or linear desires. Hence, they bear no chances of confrontation because there exists no "third person" (21), as Girard believes, between the subject and the object of desire. Othello as a warrior, noble servant of Venice, serves the state of Venice. He believes that he is rewarded by Desdemona for his hard work, "She gave me for my pains a world of kisses" (1.3.159). And Desdemona accepts in front of the Duke: "My heart's subdued/ Even to the very quality of my lord" (1.3.251-252). However, Janette Dillon perceives that Othello is not the "welcome son in law for a Venetian Senator" (78). Brabantio expresses the sadness over the decision of her daughter, "O unhappy girl/ With the Moor . . ." (1.1.161-162). He declares, "She is abused, stol'n . . . and corrupted/ By spells and medicines" (1.3.61-62). Othello is a Moor, an outsider for the Venetians. In addition to this, Desdemona's transgression and Othello's passing over of Iago in promotion establish the fertile ground for "envy, jealousy, and impotent hatred" (Girard 41) making them potential sacrificial victims, the scapegoats.

Having established the relation between mimetic desire and rivalry, William Shakespeare in *Othello* presents both subjective and objective violence.³ Othello as an outsider suffers symbolic

³ Slavoj Žižek in *Violence: Six Sideways reflections* forwards two kinds of violence-subjective violence and objective violence. According to him, Subjective violence is visible and performed by identifiable subject whereas objective violence is invisible. He identifies two kinds of objective violence-symbolic and systematic violence. The first one is associated with language whereas the second one is linked with ideology (1-2)

and systemic violence. Although Othello is a perpetrator of direct violence on Desdemona, he is also sufferer of indirect violence i.e. racial discrimination. This could be taken as one of the reasons that lead Othello to become a murderer of his beloved. Othello in Shakespeare's play is a Moor, a Negro, an outsider. Despite his loyalty and service to the state of Venice, Othello is not integrated to English community. Othello, thinks Brabantio, is a "foul thief " who practiced "magic" to "enchant" his daughter Desdemona (1.2.60-64). He orders to "call up all my [White] people" (1.1.139) against a single black man. Rodrigo regards him " a wheeling stranger" (1.1.134) and "a lascivious Moor" (1.1.124). Iago thinks, " These Moors are changeable in their wills" (1.1.344). Even Othello affirms his inferiority, foreignness and uncultivated manner when he asserts: "I do confess the vices of my blood" (1.3.124) and acknowledges:

Haply for I am black,
And have not those soft parts of conversation
That chamberers have, or for I am declined
Into the vale of years (3.3. 263-264)

Othello makes a crucial remark on his deprivation as a foreigner. This suggests the systemic violence he undergoes under white supremacy that declines blacks or minorities from their status and rights and imposes discriminations. It is firmly set in Othello's psyche that he belongs to the inferior race and lacks polished and cultivated language and manners of "chamberers." Besides, Othello suffers what Slavoj Zizek calls a "symbolic" violence embodied in language (1). Laurence Lerner calls Othello "the story of a barbarian who (the pity of it) relapses" and concludes that Shakespeare "suffered from colour prejudice" (quoted in Berry 316). Othello is not only mocked for his race but also projected with negatively charged words- foul, filthy, devil, savage, passionate- that project him as an ugly, immoral, irrational and evil person. Rene Girard in his seminal work *Violence and Sacred* sees such deprivation and marginalization resulting to sacrificial ending. Girard concedes, "Exterior or marginal individuals, incapable of establishing or sharing the social bonds that link the rest of the inhabitants" as the possible pharmakos or scapegoat available immediate at hand for the community (12). Thus, from the very onset of the play, Othello also holds the possibility of becoming a "future victim" (Ibid); someone Iago and Rodrigo wish to 'sink' their 'teeth into'.

Taking writing as a representation of contemporary time, then, was Shakespeare affirming his Elizabethan reader that punishment to Desdemona then to Othello would safeguard the values of contemporary Elizabethan society and establish the order? The answer to my question calls for understanding the attitudes of Elizabethan people towards inter racial marriages and analysis of the testimonies Shakespeare presents in *Othello*. Girard takes purpose of the sacrifice as the restoration of "harmony to the community, to reinforce the social fabric"(8). In this regard, Mohammad Allibaih argues, "The Moor's interracial marriage potentially guarantees a better integration in the Venetian society for an outsider" (49). He further notes, "Marriage was meant to preserve the order and hierarchy in rigidly and highly stratified societies, both the Venetian and English ones" (51). Elizabethan society was highly stratified and social practices like marriage was supposed to maintain the hierarchies. The marriage between Othello and Desdemona was against the values of Elizabethan society. Conversely, Edward Berry identifies Othello as an alienated character as he takes Shakespeare's protagonist as "complicated but individualized" who are set apart from

Venetian society in almost every respect(316). The arguments of Allibaih and Berry do not corroborate with each other. Also, in *Othello*, the evidence that Desdemona elopes with Othello without her father Brabantio's knowledge, "O heaven! How got she out?" (1.1.167) and "O, she deceives me" (1.1.163), testifies that interracial marriage was unacceptable to the contemporary society. For Rodrigo, the marriage was a revolt against the values of the society:

Your daughter – if you have not given her leave,
I say again – hath made a gross revolt,
Tying her duty, beauty, wit, and fortunes
In an extravagant and wheeling stranger
Of here and everywhere. (1.1. 131-135)

Rodrigo holds the opinion that Desdemona's elopement with Othello is her mutiny against the values of the society. It is supposed to destabilize the order in society. Iago takes it further by designating a non- human status to Othello and Desdemona, "Even now, now, very now, an old black ram/ Is tugging your white ewe" (1.1.85-86). The image of ram and ewe suggests innocence and the sacrificial animal god chooses for men in biblical text. Except the Duke's consoling words that his "son-in-law is far more fair than black" (1.3.291) no one supports the union. And for the Duke, he has reasons to do so because Othello is about to set for Cyprus to fight the Turks. How could the Duke betray his ablest warrior general? But to others, Othello's interracial marriage sparks internal violence- rivalries, jealousies, and quarrels within the Shakespearean community. Iago's narrative of false love scene hurts the ego of Othello. Now, his love towards Desdemona is replaced by hatred. Iago testifies the decline, "The Moor already changes with my poison" (3.3.324). Besides, it brings his racial inferiority into the surface. Othello, the noble warrior, concedes:

My blood begins my safer guides to rule
And passion, having my best judgment collid,
Assaysn to lead the way. (2.3.188-191)

Although Shakespeare lends Othello 'passion' to justify his downfall and murder of Desdemona, the deep underlying patriarchal and racial issues that treated both women and the blacks as inferior or the "other" seems to be the latent reason behind Othello's murder of Desdemona and suicide of himself afterwards. This, Iago testifies, ". . . the blood and baseness of our natures would conduct us to most preposterous conclusions" (1.3.327-329). Iago accuses "blood", the origin for the outcomes of every action one does. Once Othello falls the victim of overwhelming passion, he fails to distinguish good from the bad; he loses rationality, logic and capacity of verifying the false accusation of Iago on Desdemona. Desdemona accuses Othello, "Some bloody passion shakes your very frame" (5.2.44). Iago's fabricated story of Desdemona's infidelity hurts the male ego of Othello. Filled with hatred towards Desdemona, he turns aggressive and violent. Othello concedes, "She shall not live /No, my heart is turned to stone" (4.1.175). Othello declares cold blooded murder of Desdemona, "I will chop her into messes. Cuckold me?" (4.1.192). Iago adds to his fury,"Strangle her in her bed . . . bed she hath contaminated" (4.1.97-98). In the last scene, Othello tells his intension of killing Desdemona to her. Desdemona fears Othello, "I fear you . . . you are fatal . . . your eyes roll so" (5.2.37-38). Othello stabs her in her

own bed. And later on kills himself. Killing of Desdemona overshadows all the brawls and rivalries in the play since it forms the climax of the action.

Conclusion

In conclusion, *Othello* powerfully illustrates how mimetic desire and rivalry shape human conflict and tragedy. Othello, as the only black character, embodies both the outsider and the self-made hero who strives to integrate into a society that continues to view him as the “other.” His marriage to Desdemona challenges the deep-seated cultural and racial norms of Elizabethan society, provoking envy, anxiety, and resentment among those who cannot accept their union. Yet his downfall is not merely the result of racial prejudice or personal flaws alone, but of desires that are imitated, manipulated, and ultimately weaponized. Through Iago’s cunning strategies, Othello’s longing for love, honor, belonging, and certainty becomes entangled in a web of rivalry. Desdemona is transformed from a loving partner into the central object through which mimetic tensions unfold, making her innocence tragically irrelevant. Iago’s role as mediator fuels Othello’s suspicion of Cassio as a rival, converting marital love into obsessive jealousy and moral confusion. As Othello increasingly internalizes Iago’s suggestions, his sense of identity becomes unstable, fragmented, and driven by fear of dishonor. The brutal murder of Desdemona, though impossible to justify by logic or morality, stands as the tragic culmination of escalating mimetic pressures—pressures that expose how fragile human relationships become when desire is rooted in imitation rather than understanding. Through this trajectory, Shakespeare reveals the destructive power of manipulated desire and highlights how easily trust, love, and reason can collapse under the weight of rivalry. In this sense, the play becomes a powerful dramatization of mimetic desire itself: individuals lose control over their emotions because those emotions no longer originate within them but are shaped by a deceptive mediator. Othello does not desire truth, certainty, or even Desdemona freely; he desires what Iago leads him to desire. The tragedy emerges not from inherent evil but from the human vulnerability to imitate the fears and suspicions of others. Thus, *Othello* ultimately suggests that when desire is mimetic—borrowed, distorted, and redirected—it transforms love into violence and identity into ruin.

Acknowledgement

I would like to express my sincere gratitude to the University Grants Commission (UGC), Nepal, for the generous support to me through the Research Grant and Research Fellowship. The financial assistance provided by UGC has been invaluable in enabling me to pursue my research with dedication and focus. The grant has not only facilitated access to necessary resources but also encouraged me to advance my academic journey with confidence. I deeply appreciate UGC’s commitment to fostering research and higher education in Nepal.

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Beyond Enrollment: Unpacking the Dropout Crisis in Nepalese Universities

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DOI: <https://doi.org/10.3126/jotmc.v9i9.90419>

Abstract

Dropout is defined as the act of leaving an educational institution or program before its completion or university without earning the degree. This is reflecting as a growing trend in the universities and higher institutions in Nepal. This study is an attempt to find out the major causes behind the students' dropout from university courses and to find the solutions to this growing trend. The research adopted a mixed-method research design. The quantitative data were collected from forty teachers involved in teaching and learning at Tribhuvan University and Far Western University using a Google Form with questions that had multiple checkboxes to choose from. The collected data were analyzed using simple statistical tools. For the qualitative information, the researchers asked open-ended questions and conducted a focus group discussion among ten teachers selected using a purposive non-random sampling procedure. The collected data were then analyzed to find out the themes of the causes and solutions to the dropout. Significant findings suggested that migration abroad, academic failure or difficulty, financial hardships, and family responsibilities, a mismatch between students' expectations and the college environment, heavy-loaded course content, and the duration of the academic degree are the significant causes of the students' dropout. To reduce the dropout, counseling and job placement support, curriculum update, collaboration with industries, connecting learning to earning, and providing scholarships and financial aid to the students are measures that can be applied to reduce the dropout of students.

Keywords: Student enrollment, dropout, learn and earn, scholarship practices, preventing dropout

Introduction

Education plays an essential role in the socio-economic development of any nation, and Nepal is no exception. Over the years, there has been a growing concern about the increasing trend in student dropout rates at the college level in Nepal. The growing dropout rate demands a careful investigation of the root reasons and potential solutions to deal with this pressing problem.

The education system in Nepal has made remarkable progress in spreading its education system at the higher levels. The government has started many schemes and projects that promote higher education including the establishment of new colleges and universities (Bhatt, 2022). Despite these efforts, current years have observed a growing trend of students dropping out. Several factors have contributed to this trend, necessitating an in-depth analysis to understand the complex nature of the issue. Economic challenges, demographic shifts, changing societal expectations, and the impact of global events such as the COVID-19 pandemic are likely to be influencing factors.

The universities are facing problems both in enrollment and in the dropout of students before the completion of the degree. Camelia and Ramona (2018) present this situation in their words as ‘The phenomenon of university dropout is met in all universities in the world and its effects are felt both at the economic level, at the level of society, and at the personal level of students who abandon the university.’ If the problem is not identified and addressed on time, the situation of the universities is going to be very alarming.

Dropout is generally defined as students leaving their university or studies before completing the program and obtaining a degree. Dropout is a widespread issue in Nepalese institutions, especially in rural areas (Lagun & Sah, 2024). Dropout is a growing apprehension in the field of educational institutions. (Ghimire, 2024). Research has shown that dropout rates are higher in rural areas than in urban areas (Lagun & Sah, 2024). At the university level, we find dropouts in two different forms. One is leaving the program that one has joined and continuing the other program. It is very important to distinguish this from transfer, which is changing subjects within an institution, often taken as a voluntary dropout, whereas involuntary dropout usually leads to leaving university studies altogether (Kehm, Larsen, & Sommersel, 2019). University dropout is a phenomenon taken as problematic due to high rates, where students fail to complete tertiary studies. Dropout is recognized as a complex and multidimensional issue. Formal dropout is the process of leaving university studies altogether before degree completion and transferring to a different subject and/or institution before completion of the degree. Dropout can be categorized as involuntary dropout, which is mainly caused by academic failure, and voluntary dropout, which is caused by transfer to another institution or another subject (Larsen, Sommersel, et al, 2013). Internal drop-out occurs when a student who has previously exited a degree program subsequently enrolls in another Program within the same university or college. This phenomenon predominantly manifests during their initial semester and is often attributed to students selecting different degree paths based on misplaced motivations or inadequate guidance received from advisors or peers. (Hernández-Jiménez et al. 2020). Moreover, leaving the program or the course in one college/ university and starting another outside the institution is termed as the external dropout. The student may be in the same degree program, but they may transfer to a different university due to life circumstances or internal or external reasons. Additionally, the student may continue their education at a lower level than university by pursuing different kinds of courses.

There are many causes behind the dropouts of students in the university. Some causes for the dropout are financial problems, lack of parental support, academic struggles, boredom, pregnancy, and parenthood (Lorenzo-Quiles, Galdón-López, & Lendínez-Turón, 2023). Robbins et al. (2004) listed the following reasons for dropout motivation for student success: academic goals,

institutional commitment, perceived social support, social involvement, self-assessment ability, self-perception, academic abilities, and contextual influences. According to Kehm et al. (2019), dropout rates in higher institutions are widespread worldwide and are brought on by a number of similar elements, such as motivation, sociodemographic circumstances, social integration, study environments, and other external circumstances. There are push and pull factors in dropout (Rouse, 2019). The factors originating within the chosen university or degree program related to student interests and competencies are the push factors, and the factors outside the university or degree program related to job offers, financial issues, or family problems are pull factors. Dropout has specific consequences for society, the university, and the student personally. University dropout has complex results that affect individual person, institution, and society at large, with implications ranging from personal psychological distress to Systemic economic insufficiencies (Trusty et al., 2025).

In academic discourse student dropout from higher education is now commonly referred to as a multi-dimensional phenomenon with long ranging effects on diverse levels. On a community level, dropout adds to social inequality because dropouts often have fewer job prospects, earn less income and reduces upward mobility. This further exacerbates cycles of poverty and inequality, especially in low-income areas. Dropout undermines the national development of human capital (Lorenzo- Quiles, Galdón-López & Lendínez-Turón, 2023) and undermines the labor market's ability to absorb skilled workers. At an institutional level, there are a number of effects that universities themselves could face, which policies towards drop out might cause them to have lower funding, negotiated performance measurement results and damage to reputation. Most world universities utilize a 4-year scheme that is based. In many countries, universities are in a large part funded by the round on enrollment, so in case of attrition there is a financial loss that impacts staffing and common infrastructure as well as program sustainability (Organisation for Economic Co-operation and Development, 2025). Graduation rates have negative implications for the rankings and accreditation results of institutions, which also affect the prospective recruitment or stakeholder confidence (Rahmani et al. 2024). Individually, students frequently postponed their studies and struggled with psychological and self-conceptual issues such as doubtfulness, a sense of loss of selfhood and self-worth.

On a personal level, students would often cease their studies and struggle with psychological consequences, self-doubt, loss of identity, and diminished self-efficacy. These emotional burdens are heightened by differential costs incurred in tuition fees, leaving expenses, and opportunity costs without the compensatory benefit of a degree. Lamichhane et al. (2025) found in their study of Nepal University students that dropout not only leads to wasted resources but also erodes students' motivation and long-term aspirations. In conclusion, dropout is not only seen as an academic problem but also as a multidimensional challenge that requires corresponding involvement across policy, pedagogy, and psychological support systems.

Causes of dropouts

Students dropping the course/university is not affected by a single factor. It is the result of the factors associated with academic, economic, psychological, and institutional aspects. However, one single factor may not be applicable to all and there may be more than one factor for each of the

person who drop the course. For Lamichhane et al., (2025) the main cause of the student dropout is differences in school-level instruction and restricted access to high-quality learning resources, many students who joins the higher education academically without preparing academically may lead to take decision to drop the course. Financial difficulties account for 30% of college dropouts in the US, whereas academic disqualification accounts for 28%, according to Craft (2021). Similarly, Vlasova (2023) mentioned that the majority of the undergraduate 40% drop out due to financial issues and their timing issues to manage work and college life.

Due to financial limitations, a lack of scholarships, and pressure to contribute to household income, students from low-income and rural families frequently drop out of school before completing their degree, which is a significant contributing factor to socioeconomic adversity (Karki & Parajuli, 2023). Another major factor that influences dropout rates is issues related to psychology of the learners. These include stress, anxiety and low self-efficacy, this is mainly found among the participants who migrate from rural areas and struggle to adapt to urban academic environments (Sharma & Dachary, 2024). Occupational mismatch also contributes to student discontent and attrition because students often engage in programs based more on availability or parental pressure than on personal motivation (Kappa 2023). The other factor that is responsible for dropping the course is related to the curriculum and the structure that the students are supposed to study. The limitations generated in the institution, lack of academic support and having no proper counselling services does also deteriorate the conditions of dropout in the universities (Luitel & Pant, 2022). Some other minor causes of dropout may also be generated based on the personal aspects that are concerned to family obligations, issues related to health, migration and lack of employment issues (Evans & Tragant, 2020; Anne Houde, Richter, & Zimányi, 2023). In Nepal's socio-cultural context, adding to the dropout burden, particularly among first-generation learners (Lamichhane et al. 2025). These interlinked factors highlight the urgent need for context-sensitive interventions in the Nepalese higher education system, including financial aid reform, academic mentoring, and career guidance.

Methods and Procedures

To study the issues related to the dropout we adopted a mixed-methods research design. The study incorporated both quantitative and qualitative approaches to get the inclusive understanding of the issues related to student dropout in higher education institutions in Nepal. Mixed methods allowed us to triangulate and maintain the validity and reliability of the results. To obtain the quantitative data a survey research design was adopted and the qualitative data was collected through a focused group discussion. The survey was designed to collect teachers' perceptions on student dropout, and the focus group discussion was mainly targeted to explore in-depth perspectives, experiences, and interpretations of the teachers on the issues. The teachers teaching in Far Western University and Tribhuvan University were sent the questionnaire prepared in the Google Form and the responses were recorded till the forty teachers responded. The survey was closed when the responses reached the target. The sample was taken using non-random purposive sampling method, which was appropriate because the study sought participants who were directly engaged in teaching and had firsthand experiences with student issues. Out of the forty teachers who responded to the questionnaire 10 were requested to participate in the focused group

discussion. These participants represented different faculties and disciplines within higher education, so that they can provide a diverse perspective on the area under study. Quantitative data were collected using a structured survey questionnaire administered through Google Form, with items having a single option to choose and multiple checkboxes. The questionnaire included both closed-ended and open-ended items designed to explore teachers' perceptions of the causes and possible solutions to dropout problems. For qualitative data, a focus group discussion was conducted with 10 participants. The discussion was guided by a semi-structured set of questions that encouraged reflection on institutional conditions affecting the retention of the students. The FGD sessions were recorded both manually and digitally. Then the transcription of the record was generated and analysed by creating the themes.

Results and Discussions

The study aimed to find out the causes of student dropout and devise a solution to the issue. Based on the survey data collected from forty teachers and the focus group discussion with ten teachers, the following results have been derived.

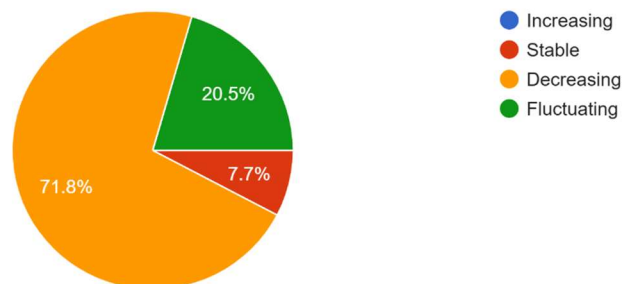
Students Enrolment Status

The informants were asked about the current trends of student enrollment, and the following table represents the information collected from the informants.

Figure 1

Student enrollment trend

How would you describe the current student enrollment trend in Nepalese college/university?
39 responses



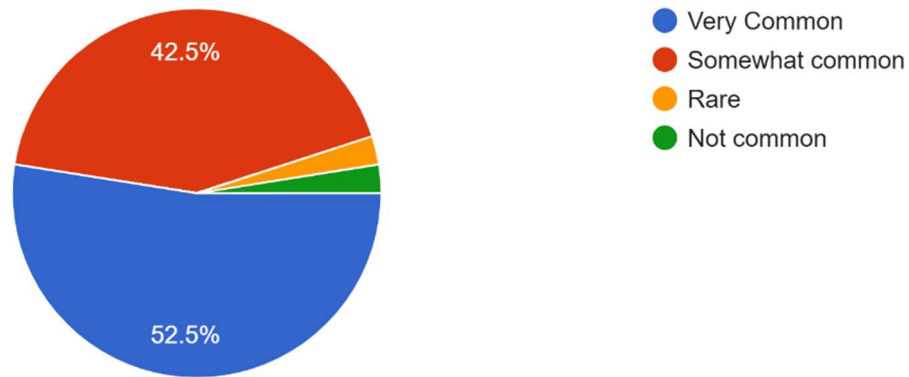
In response to the questions to determine whether the rate of students' enrollment has been going, the responses show that 71.8 percent have reported that it is decreasing, 20.5 percent mentioned that it is fluctuating, and 7.7 percent mentioned that it is stable. So, from this data, it can be claimed that the number of students showing interest in enrolling in a university-level degree has been decreasing.

Dropout Issue

The survey questions were intended to explore the issue related to student dropout, and the informants were asked how common the issue of student dropout is; the responses showed that dropout is very common in the institution where they teach.

Figure 2

Dropout situation



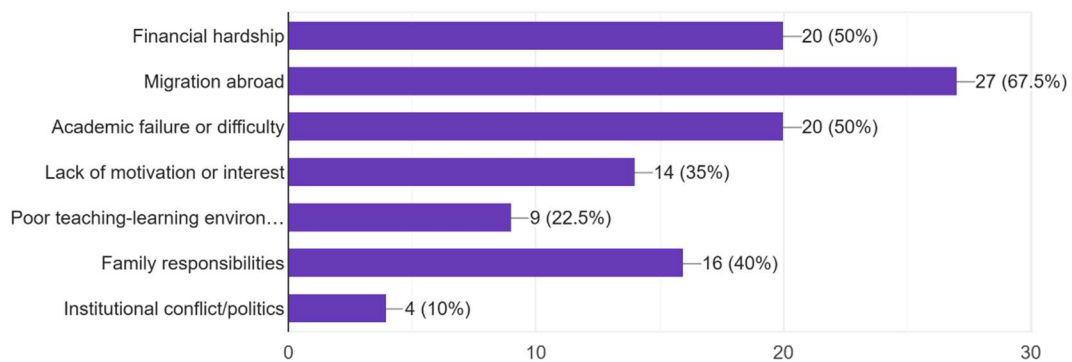
The figure above shows the issue of dropout, and it is reported that 52.5 percent of the participants have claimed that dropout is very common, and 42.5 percent have mentioned that it is somewhat familiar. It shows that the number of students enrolling in the particular program and dropping the course without completing is common and it is a growing phenomenon.

Reasons behind Dropout

To find out the most striking reasons for dropout, the informants are asked to select the reasons behind the dropout through multiple checkbox options, and the following table graph represents the findings regarding the causes of student dropout.

Figure 3

Reasons behind dropout



The data collected from 40 respondents shows that migration abroad is the most significant reason for student dropout at the university level in Nepal, reported by 67.5% of participants. This shows that many students leave their studies in search of better educational and empowerment opportunities overseas(Mulmi, 2024;Shrestha, 2023) .The second most reported causes were financial hardship and academic failure or difficulty (Lorenzo-Quiles, Galdón-López, & Lendínez-Turón, 2023), each mentioned by 50% of respondents, suggesting that both economic constraints and academic challenges play an important role in discouraging students from completing their degrees. Additionally, family responsibilities were cited by 40% teachers as another contributing factor, reflecting how personal and household obligations affect students' continuity in higher education. Almost 35 % of respondents mentioned lack of motivation or interest as a reason for dropout, showing a need for higher academic engagement and support. Meanwhile, a poor teaching-learning environment is mentioned by 22.5% of respondents, and institutional conflict or politics is noted by only 10 % of informants as a reason for dropping the course. Overall, the findings indicate that student dropout in Nepalese universities is due to a combination of many factors that can be united as economic, academic, and social factors, with external migration emerging as the most dominant influence.

Based on the ideas generated from the Focused Group Discussion, the following reasons were identified as the causes behind the dropouts.

Mismatch between Students' Expectations and the College Environment

Students enroll in higher education with lots of high expectations they will get from the higher education institutions. This period is an excellent transition for the students; they get shifted from school education and feel proud to be a part of higher education. However, in contrast with their expectations, they do not get an appropriate environment and feel that their expectations are not met. During FGD, one of the participants [P2] expressed,

In the university, students get admission with lots of desires and wish to get knowledge and become capable of getting a job, but when they get involved in the environment, they become fed up with the political and other kinds of environment and decide to terminate their degree and search for other alternatives.....

From this statement, it can also be interpreted that there is a mismatch between students' expectations and the environment in the colleges. Most of the participants shared that due to the politics in the college, students become frustrated with the college environment. Students want to be independent and get knowledge to utilize it to sustain their life, but they do not see such certainty after completing their degree, and they decide to terminate their studies. This represents the primary cause of the students' dropout for Maloshonok, & Terentev, (2017) as well.

Heavy-loaded Course Content

Another cause of dropout was overloaded course content. Mainly in semester students, there are overly loaded courses that should be completed within 45 hours. Some of the participants said that the courses offered by the university cannot be finished within the given time, and teachers and students are constantly under pressure to complete the course. They do not think of maintaining the quality and focus on just completing the courses. In this context, [P 1] expressed, "Our students are

habituated to listening to the teachers; they do not engage in self-study. As a result, teachers have to complete the course by hook and crook." In this situation, students feel overloaded and cannot do well in preparation for their exam, which causes failure in the exam, and finally, students make the decision to leave the college. Some of the participants also shared that Nepalese universities design the courses with lots of theoretical content within a course, which students can not finish reading within the given time. Most of the participants suggested that students need to feel relaxed during their study rather than pressure, so that they can be motivated to complete their degree. The finding correlates with the findings generated by Borchers, Xu, and Pardos (2025).

Duration of the Academic Degree

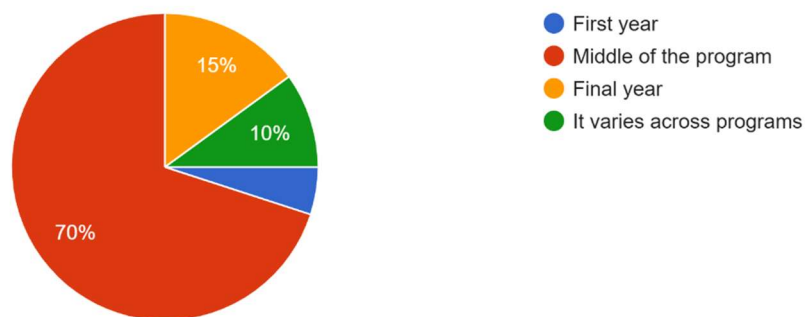
In the context of Nepal, undergraduate degrees are of four years, which are equivalent to the world standard, but the main problem was the time or duration students spend completing the degree. If we see the general tendency of Nepalese universities, students spend five to six years to complete their four-year degree. After the intermediate or school degree, students again need to engage in their studies without getting time to earn money to manage their study expenses. In this context, [P3] said, " Students will not be self-dependent after adult age and earn money to manage all the expenses of themselves, but this is not possible in our context." In contrast to this expectation, students do not get the opportunity to earn money, which forces them to take alternative options in their lives. They think that spending six years in their study is a waste of time because the theoretical education they have received will not be helpful in making money in their life. Some of the participants suggested that the four-year courses should be completed within four years, so that students will be engaged in other kinds of life-sustaining activities. So, considering the above expressions of the participants, it can be said that the duration of completing their academic degree is the leading cause of dropout. The finding aligns with Lorenzo-Quiles, Galdón-López, and Lendínez-Turón (2023), who claimed that if the courses last longer, the students attempt to drop the courses, and the dropout rate goes higher.

Dropout Stage

The participants were asked about the stage at which dropouts mostly occur, and the findings suggested the following results.

Figure 4

Dropout stage

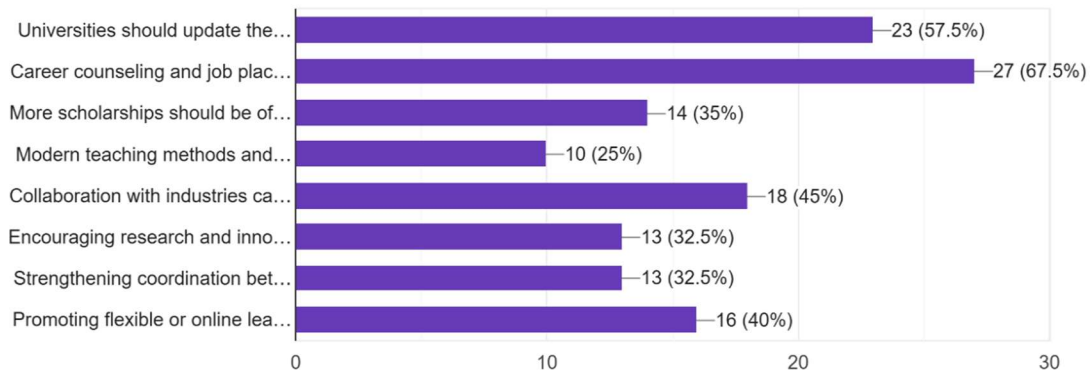


The above pie chart shows that 70 % of participants reported that the dropout is most likely to occur in the middle of the program. Similarly, 15 % participants have reported that dropout occurs in the final year of the degree. However, a surprising 5% of participants have reported that dropouts even occur in the first year.

Solutions to Dropout

The informants were requested to respond to the suggestions that can lead to reducing the dropout in the university, and the following graph represents the findings based on the responses.

Figure 5
Solutions to dropout



The data show that teachers view several strategies as effective in reducing dropout rates at the university level in Nepal. The majority of respondents, i.e., 67.5% agreed that career counseling and job placement support are crucial in attracting and retaining students (Borchers, Xu, & Pardos 2025) showing a strong belief in the need to connect education with job opportunities. Similarly, 57.5% of participants emphasized the importance of regular curriculum updates, suggesting that academic programs must update the curriculum to the changing needs of students and the job market (Watermark Insights, 2023; Khatri, 2023). About 45% of respondents agreed that collaboration with industries can help maintain the student dropout rate. To make the university programs more practical and job oriented the institutions must collaborate with industries and factories. Similarly, 40% of the participants flexible or online learning options could make higher education more reachable to learners. Similarly, 35% of teachers noticed that scholarships and financial aid can help in reducing the dropouts in the institutions and 32.5% stressed the role of research and innovation culture, as well as better coordination between schools and universities in encouraging continuous learning. Overall, it can be concluded that to reduce the dropout rates in the higher education institutes the universities in Nepal should target career-relevance courses that generate better opportunity in the market in the future, curriculum modernization must be done keeping the technological advancement that take place in this growing era of technological development, financial support, and flexible learning opportunities.

Strategies to Reduce Dropout Rates in University

The results of the open-ended responses indicated that there is a close relationship between education and the market. If the degrees and the education we are attempting to impart can be connected to the market needs, it can be stopped. The majority of participants emphasized that professional development and placement opportunities should be closely linked to university degrees. The participants suggested that skill based and career focused programs should be introduced in the courses which leads students to develop actual, real world skills and prepare them off the workforce. Teachers argued for practice oriented, need-based professional courses that satisfy the needs of the global economy which emphasize the necessity of curricular change. The need of the programs like 'Learn and Earn' would enable students to obtain financial advantages and work experience as they pursue their education

The most important approach to retaining students is to provide financial aid along with scholarships and programs for job placement. The responses of the participants indicate that students need robust mentorship and counseling, which can support them in academic and emotional areas. Some of the participants have noted that this helps reduce uncertainty and dropout rates. Such efforts would involve revising regulations for higher education. Collaboration with businesses companies will help to improve pathways to employment for graduates. This could also help reduce brain drain.

The data has indicated the importance of enhancing teaching method and enhancing institutional dependability. In a similar vein, a few participants mentioned that there should be less political interference in academia is required to manage this issue. Additionally, the respondents recommended efforts to increase awareness and encouraging parents and students look for higher education back home. Instructional strategies and using flexible learning environments through online and blended learning seem to be beneficial for increasing student engagement. They focus on that higher education in Nepal should be linked to research, occupational skills and more general national development goals.

In conclusion, the study shows that weak links between education and employment are the main cause of declining student enrollment and rising university dropout rates in Nepal. According to the findings, colleges should provide learn-and-earn possibilities as well as skill-based, practical, and career-oriented programs backed by financial aid. Retention of students also depends on improving teaching quality, ensuring curriculum change, and fortifying counseling and mentoring programs. Furthermore, to strengthen institutional governance, generate employment opportunities, and advance high-quality, relevant, and skills-based higher education, universities, businesses, and the government must work together effectively.

Policy Reform as a Strategy to Reduce University Dropouts

The responses from participants reveal that policy reform is viewed as a critical and immediate need to address the challenges of decreasing student enrollment and rising dropout rates in Nepalese universities. Most of the teachers focus on the fact that current higher education laws and policies are not enough. A majority of teachers emphasize that the existing higher education policies are outdated and have failed to meet the current academic, professional, and socioeconomic needs of the students. They demanded the change of national education policy,

focusing on relevance, quality assurance, practical knowledge, and accountability within higher education institutions. One of the participants suggested that policy should emphasize life skill-based and vocational education, enabling students to develop practical competencies that directly support their employability.

The majority of the respondents emphasized the importance of need-based scholarships, financial support, and student support policies to ensure access and retention for learners. They also recommended that the government should increase funding for higher education to ensure accessible and balanced education and promote learn and earn programs that combine student and work opportunities. The participants also stressed the need for flexible academic structures such as a credit transfer system and part-time or online learning options to accommodate diverse needs and reduce dropouts.

Furthermore, respondents pointed out that universities should formulate policy to collaborate with industries and the private sector for job placement and internship opportunities, thereby connecting learning with employment. Policies should encourage students for career counseling, student mentorship, and awareness programs as an important factor for motivating students to continue their studies. Some participants called for the eradication of political influence in educational institutions and the establishment of a transparent, professional governance system. In conclusion, it can be inferred that policy reform must move beyond the structural changes and focus on creating an education system that is inclusive, market-oriented, and aligned with national development priorities. Strengthening institutional integrity, promoting research and innovation, and ensuring that education policies respond to the life situation and aspirations of youth are identified as key steps towards improving enrollment and reducing dropout rates in the Nepalese university sector.

Conclusion

Student dropout is a burning issue in higher education in Nepal. The study tried to explore the causes and solutions to students' dropout. As it is a pressing issue at present, the research was oriented to collect data from teachers who were teaching at the college level. The study collected data using both qualitative and quantitative data and analyzed them thematically and statistically.

From the above discussion, it was found that the most influential cause of student dropout is student migration to foreign countries after they have joined a course in Nepal. Many students are looking for opportunities, and after joining the university, they look for opportunities to go abroad. Similarly, financial hardship, academic difficulties, and family responsibilities emerge as primary reasons that push students to abandon their studies. The mismatch between students' expectations and the actual learning environment, heavy course load, and lengthy degree completion times also discourage them from continuing their education. These issues collectively point to weaknesses in how higher education connects to students' personal ambitions and the realities of the job market.

Teachers' responses in this study also show that dropout is not a sudden decision but a gradual process that often starts with loss of motivation and a sense of isolation from the system. Most dropouts occur during the mid-year when students face academic pressure and uncertainty about their future.

The study highlights the immediate need for systemic reform. Participants strongly believe that universities must update their curriculum according to the updated technology to make it more relevant, skill-oriented, and aligned with employment needs. Creating the link between the universities and industries can help students to remain in the program and ultimately complete the degree. Financial support programs and supporting the learner with a scholarship can also add beauty to retaining the students.

In conclusion, this study suggests that reducing dropout in Nepalese universities requires a holistic approach that addresses both academic and socioeconomic challenges. Education must be connected to employment based on practicality and supported by strong institutional and policy frameworks.

Acknowledgements

This study was funded by the University Grants Commission (UGC), Nepal, through the Faculty Research Grants for the fiscal year 2080/081 (2023/24) under Award No: FRG-080/81-EDU-08. The authors extend their heartfelt gratitude to UGC for its generous support, which was instrumental in the successful execution and completion of this research.

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**Addressing Supervisory Feedback: An Autoethnographic Account of a
Doctoral Candidate in Nepal**

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Abstract

Supervisory feedback serves as a central mechanism for academic growth guiding doctoral students towards producing a dissertation with scholarly standards. However, there is a little focus in Nepali higher education context on how doctoral candidates experience, interpret and transform by engaging with supervisory feedback. This study explores my lived experiences of addressing and engaging with supervisory feedback in the final year of my PhD. It further investigates how this engagement with feedback of supervisor broadened my understanding of the research process and transformed my scholarly identity as a doctoral researcher. The data sources for this autoethnographic study included supervisor's comments and feedback texts supplemented by my memory, and dissertation drafts and revisions. The analysis proceeded chronologically, chapter by chapter. It traced my major responses thematically, generating interpretive categories that illuminated my transformation and scholarly becoming. Through this journey of engaging with supervisory feedback—from restructuring the research problem to refining the findings—I experienced a persistent cycle of rereading, revisiting, reflecting, rewriting, and realizing. Each round of comments required me revise more precisely, think more deeply and write more responsibly. The feedback process itself became as Adams (2018) stated as 'a flowing conversation' through which doctoral identity is shaped. The process not only refined my dissertation but also transformed me into a more reflective scholar and emerging academic writer.

Keywords: Academic writing, doctoral supervision, autoethnography, doctoral identity

Introduction

Supervisory feedback plays a crucial role in enhancing scholarly engagement of doctoral students, their learning trajectories, and guiding them toward successful completion of the degree. Feedback operates as a dialogic space where ideas are tested, reshaped, and refined through ongoing academic discourse between supervisor and student (Adams, 2018). It sustains motivation,

builds confidence, and supports the development of a researcher's identity as they navigate complex theoretical, methodological, and ethical grounds. Recent studies also emphasize the transformative potential of supervision when feedback is experienced as a collaborative and reflective process (Caldwell et al., 2025).

However, limited research has examined the lived experiences of doctoral candidates as they rigorously address supervisory comments over time in Nepali context. Most existing studies have focused either on the quality and nature of feedback (Neupane Bastola, 2020; Chugh et al., 2022) or on the perceptions and engagement patterns of supervisors and students (Neupane Bastola & Hu, 2024; Goundar et al., 2025). How doctoral researchers experience and transform by engaging with supervisory comments and feedback across an extended period remains underexplored. Furthermore, there remains a lack of analytic autoethnographic study capturing each and every steps of addressing supervisor's comments, navigating research process, and construction of scholarly identity during feedback engagement particularly in Nepali contexts, where this dimension of doctoral learning has not been well explored.

This study, therefore, addresses these gaps by presenting an analytic autoethnographic inquiry into my own experience of working with supervisory feedback during the final year of my doctoral research. Over the past year, I have intensively engaged with my supervisor's comments on my full dissertation draft. This study analyzes my lived experiences of addressing those comments, the academic practices and research activities involved during this period, and the transformations that emerged through this iterative process. Specifically, it explores how engaging with supervisory feedback broadened my understanding of the research process and reshaped my scholarly and academic writer identity. Through this reflective and analytic account, the study contributes to the growing scholarship on doctoral learning, feedback engagement, and transformative becoming (Zhang & Hyland, 2022; Bearman et al., 2024), by offering insights into how doctoral supervision can cultivate deeper reflexivity and researcher development within a doctoral program. Therefore, I specifically, address the following single question:

1. In what ways did my lived experiences of addressing supervisory feedback broaden my understanding of the research process and contribute to identity construction as a doctoral researcher and an emerging academic writer?

Supervisory Feedback and Doctoral Students' Experiences

The doctoral journey is an intellectually rigorous process. Students continuously navigate emotional turmoil, intellectual self-doubt, and the need for self-regulation as they engage with supervisory feedback. Chen (2023) highlights how doctoral study indicates both anxiety and enjoyment-fluctuating of emotions, co-occurring, and reciprocal. Similarly, Caldwell et al. (2025) show that doctoral students' emotional balancing act who manage multiple roles, emphasizing that wellbeing and identity construction are integral to their development. Supervisory feedback is not merely a technical exercise to complete but a dialogic process that shapes doctoral learning. Adams (2018) describes feedback as "a kind of flowing conversation," emphasizing its role in fostering scholarly reflection and resilience. However, as Lee (2018) observes, feedback can also generate self-doubt and feelings of inadequacy when interpreted as a judgment of competence. Thus, responding to supervisory feedback becomes both a cognitive and affective efforts, where doctoral

researchers learn to balance critique and confidence. This complex negotiation of meaning, emotion and action transforms feedback into a central mechanism through which doctoral students cultivate reflexivity, academic maturity, and scholarly agency.

Engaging with supervisory feedback is a relational and identity-forming practice that shapes doctoral students' sense of scholarly self. Ivanič's (1998) framework of writer identity describes the discursive construction of authorship, allowing students to negotiate their academic voice in textual form amidst of institutional expectations. Empirical studies show that this negotiation involves both compliance and self-assertion, as doctoral writers rework feedback to align with their scholarly stance (Zhang & Hyland, 2022; Adams, 2018). Through such iterative dialogue, students are "rewritten" across timescales (Burgess & Ivanič, 2010), learning to inhabit the epistemic and rhetorical norms of their disciplines while developing autonomy and authority as emerging scholars. From a sociocultural perspective, Wenger's (1998) concept of communities of practice indicates engaging with feedback as a participatory process of scholarly becoming as "learning changes who we are by changing our ability to participate, to belong, and to make meaning" (p. 226). It specifies that supervisory feedback and interactions serve as sites of apprenticeship where students move from peripheral toward full participation in academic discourse. Feedback fosters "reflexive growth" (Bearman et al., 2024), enabling doctoral researchers to think critically, act ethically, and internalize disciplinary norms. However, this transformation involves negotiation, emotional effort and resistance (Adams, 2018; Goundar et al., 2025). Eventually, sustained engagement with supervisory feedback represents a process of becoming—a gradual transformation through which doctoral students construct scholarly independence, academic authority and belonging within their scholarly and disciplinary communities.

Theoretical Underpinnings

My study primarily draws on Wenger's (1998) concept of identity as becoming and Ivanič's (1998) notion of writer identity construction. Drawing on Wenger's (1998) conceptualization of identity as becoming, I interpret my engagement with supervisory feedback as a process of transforming me as a researcher and my scholarly self. Wenger emphasizes that learning is a process that "changes who we are by changing our ability to participate, to belong, and to make meaning" (p. 226). Through such participation, doctoral researchers negotiate new ways of being, aligning with his notion that identity is "not an object, but a constant becoming" (p. 151). At the same time, I draw on Ivanič's (1998) perspective that writing is a site of identity construction, where each text reflects a negotiation between my personal voice and institutional expectations. Ivanič resonates that writer identity is not fixed but negotiated in a particular sociocultural settings through writing practices and feedback processes. She states that "writing involves positioning oneself within the possibilities made available by the discourse" (p. 32). She explains that writers "struggle with the voices of authority" in academia, continually negotiating between conformity and self-expression (pp. 35–37). This tension reflects doctoral students' experiences with supervisory feedback—balancing their emerging scholarly voices against supervisory and institutional expectations. Through this lens, I interpret my engagement with supervisory comments not merely as textual revision but as an act of constructing and reconstructing my 'self as author'.

These both theoretical frameworks helped me to understand how feedback shaped my academic growth, theoretical insight, and sense of identity as an emerging researcher.

Research Context

I enrolled in the Teaching English to Speakers of Other Languages (TESOL) program at the Faculty of Education in one of the national universities of Nepal in 2021. The doctoral program duration was four to five years. I set my research agenda to explore master's level students' academic writing experiences and their writer identity construction during their master's study. In 2025, when I submitted the very first draft that included all required chapters of the dissertation, I received comprehensive comments and feedback on almost all chapters. Then, I began addressing those comments one by one. The process was highly inspiring and transformative for me as a doctoral researcher. At the end, when I submitted the revised dissertation draft, I reflected on the entire process of addressing comments and feedback that motivated me to conduct an autoethnographic study of this experience—receiving feedback on the full draft, addressing the comments, the procedures I followed, the research activities I engaged in and responding to them. I intended to reflect on how this experience transformed me academically, theoretically and ethically. I became deeply interested in how I gradually evolved into a new person—a transformative scholar—through this journey of working with supervisory feedback. Therefore, I attempted to capture these phenomena in this study.

Autoethnography as the Method

I employed autoethnography as the research method to understand and reflect on my experiences of addressing supervisory feedback and revising the initial draft of my PhD dissertation. Autoethnography, as a qualitative research method, combines ethnographic and autobiographical elements to interpret personal experiences within broader cultural contexts (Chang, 2008). Ellis (2004) and Ellis and Bochner (2000) describe it as an autobiographical genre of writing and research that connects the personal to the cultural through multiple layers of consciousness. Despite variations in defining autoethnography on the basis of emphasis, scholars generally agree that autoethnography explores how researchers' lived experiences intersect with the cultural and institutional worlds in which they live and act. As Keles (2022) explains, it situates the “self” (auto) within society (ethno), allowing researchers to write (graphy) their own stories to illuminate meaning and connection. Autoethnography shapes dichotomies such as emotion and reason, self and society, and theory and practice (Gannon, 2006), offering creativity, flexibility, and multiple possibilities for meaning-making (Marx et al., 2017). Chang et al. (2013) differentiate between “interpretive narration,” which focuses on emotional and experiential depth, and “narrative interpretation,” which emphasizes analytical engagement with theory. In this study, I adopted a first-person stance to articulate my story in my own voice. Following Adams et al. (2015), I view this stance as a challenge to the impersonal norms of academic writing and as a means of embracing the decolonizing potential of autoethnography (Bhattacharya, 2018), which amplifies marginalized voices and disrupts silences (Boylorn & Orbe, 2014; Fall, 2019; Holman Jones et al., 2016).

Therefore, this study adopted analytic autoethnography to explore my lived experiences as a PhD student, particularly my engagement with supervisory feedback during the final year of my doctoral journey. Autoethnography allows the researcher's embodied experiences to become both the source and site of inquiry (Ellis et al., 2011), offering insider perspectives and revealing the meanings of lived experiences (Maslen, 2022). In the study, autoethnography serves as both a method and a voice to critically examine my lived experiences of engaging with supervisory feedback on my dissertation. This methodological choice enables me to explore moments of uncertainty, academic growth, and transformation that emerged throughout the feedback process. By situating my personal reflections within broader academic and cultural contexts, I examine how responding to supervisory feedback became a site of academic, methodological and ethical development. In doing so, I position my experience not merely as a personal account but as an analytical lens through which the dynamics of supervision, scholarly becoming, and doctoral identity can be more deeply understood.

Data Collection and Analysis

Data were drawn from multiple sources that captured my process of responding to supervisory feedback. First, my supervisor's written comments on each dissertation chapter, provided in the track changed word document and summarized in emails, served as the main source of data. Second, my memory-based notes provided complementary data, enabling me to reconstruct significant experiences and emotional responses through critical reflection. Third, successive dissertation drafts and revision files functioned as textual data. Together, these feedback texts, reflective records, and developing drafts formed a comprehensive dataset.

Data analysis was recursive and interpretive, guided by the interrelated processes of interpretation and narration (Chang et al., 2013). Initially, I chronologically organized feedback interactions from Chapter One through Chapter Nine to trace how my responses evolved over time. This was followed by thematic analysis to identify recurring patterns following Braun and Clarke's (2006) six-phase model adapted within an analytic autoethnographic frame. I employed analytic reflexivity (Anderson, 2006) to link my experiences with broader theoretical perspectives, including Ivanič's (1998) writer identity model and Wenger's (1998) learning as becoming (scholarly becoming), to interpret how engagement with feedback fostered academic growth. Finally, findings were presented as layered narratives that connected personal transformation with the cultural dimensions of doctoral supervision (Ellis & Bochner, 2000). This dual process-chronological and thematic interpretation-enabled a deeper understanding of how iterative engagement with feedback cultivated both academic development and scholarly becoming.

Results and Discussion

Receiving comprehensive comments and feedback on almost all chapters of my dissertation, my supervisor instructed me to address the comments chronologically - starting from Chapter One and submitting each revised chapter one by one. Initially, I assumed I could address all the feedback within a week. However, as I began working on them, a series of academic practices and research processes gradually unfolded. It eventually took me several months to revise the entire draft and shape it into the expected scholarly form.

In this section, I present the findings and analysis chronologically, tracing my key responses and revisions chapter by chapter. The discussion sheds light on how engaging with supervisory feedback facilitated my learning of the research process, my transformation, and my scholarly becoming as an academic writer and doctoral researcher. Each theme corresponds to a chapter of my dissertation and is organized according to the focus of my supervisor's feedback.

Restructuring the Research Problem

I understand problematising a research topic is a crucial step in any qualitative study. When I first received my supervisor's feedback on Chapter One, I was advised to condense and restructure the problem statement more effectively. He commented as follows:

Your problem statement section is too long. You can write three to four paragraphs in this section; a) give the context that students have to write in university (academic writing requirement of master's level students); b) show the gap in research in this area; and c) mention how you address this gap from your research.

As I had originally written the problem statement in four lengthy pages, his suggestion made me clear about how to structure it. First, I reviewed the curriculum and writing requirements of master's-level students in Nepali universities to contextualize what they are expected to write during their master's study. These insights guided me to situate my own research problem within academic conventions and supervisory practices. Second, I revisited, reread and reviewed prior studies on academic writing experiences and writer-identity construction to identify existing gaps. I found that this recursive process brought greater clarity and conciseness to problematising the topic. In this connection, Neupane Bastola (2022) points out that mismatched perceptions between supervisors and students often result in weak articulation of research problems. This realization encouraged me to explore my own difficulty in framing a researchable problem.

Third, I clarified how my study intended to address these identified gaps. In this process, I came to understand what Zhang and Hyland (2022) described as the "mediated positioning" of student writers who negotiate both the authority and content of feedback while constructing disciplinary competence (p. 171). Restructuring the problem statement became a reflexive exercise in critical reading and conceptual rethinking. It helped me to recognize what truly constituted the problem of my study and to go through the process of an effective engagement with supervisory feedback enhancing analytical awareness and enabling to articulate my research focus with greater clarity.

Thematic Categorization and Critical Empirical Review

In Chapter two, another important feedback was to reorganize the literature review into clearly defined thematic categories so that readers could easily identify what had been reviewed. My supervisor suggested that "Perhaps you can categorise this section (empirical review) into a few themes such as 'Resources,' 'Feedback Mechanism,' etc. This way, readers will see what you have actually reviewed in this section." Following his guidance, I reread the literature thoroughly and organized it into two broad themes and subthemes, including *writing challenges*, *feedback practices*, *academic socialization*, and *identity construction*. I understood that how thematic categorisation into subthemes helps readability on the part of readers. On the other hand, I realised

that, as Neupane Bastola and Hu (2021) observed, effective thesis supervision involves identifying alignment and dissonance between supervisors' and students' expectations.

Another important comment from my supervisor was focused on my reviewing strategy. I had mainly summarized existing literature rather than critiquing it. My supervisor commented: "Some discussions such as, Vygotsky and Wenger are repeated many times without new elements added. Further, the discussion of literature pointing out contradictions and limitations is inadequate." This feedback prompted me to re-read and condense earlier sections, analyze studies more critically, and examine methodological and theoretical orientations. I realised the process of addressing feedback as a site of researcher's reflexivity, where students move beyond mere summarising toward analytical engagement and self-positioning.

Drawing on Wenger's (1998) concept of participation and reification, I began to see literature reviewing itself as an act of participation in a community of scholarly practice—an entry into dialogue with prior researchers. By refining the review to highlight gaps and contradictions, I practiced what Neupane Bastola and Hu (2024) call developing critical academic literacy through engagement with supervision. Eventually, I learned that reviewing literature is not simply about compiling studies but about positioning myself within ongoing academic conversations. In this sense, my position shifted from passive receiver to active participant in disciplinary discourse—a crucial moment of development as a developing scholar (Zhang & Hyland, 2022).

Transparency and Rigor in Narrative Inquiry

Feedback on my methodology chapter (Chapter 3) emphasized transparency and rigor in describing the research process. My supervisor commented that "Mention how many times you interviewed each participant? What did you change or add in each round of interview? What was the focus of those series? How did you know there was enough data?" These questions guided me to reconsider whether my data were sufficient. To respond, I listened to all the interview recordings again, reread the transcripts, and reexamined the thesis chapters containing participants' narratives. I realized that two participants' accounts were incomplete, particularly regarding their writing challenges. Therefore, I arranged a subsequent round of interviews and sent follow-up emails to clarify the confusing and missing aspects. Finally, I elaborated on my interview process, specifying that each participant was interviewed multiple times. I added a brief explanation of how I determined data sufficiency and saturation.

This iterative process resembled what Neupane Bastola and Hu (2025) term narrative negotiation, where researcher and participant co-construct meaning through reflection and dialogue. Documenting each stage of revision helped me practice analytic transparency and recursive engagement with data (Braun & Clarke, 2006). Moreover, my methodological revision illustrated the temporal and evolving nature of feedback in supervision. Each iterative process deepened my reflexivity and strengthened my understanding of methodological justification. By the end of this phase, I learned to articulate my research decisions explicitly and realized that engaging with feedback fosters methodological learning in narrative inquiry research design.

Refining Narratives and Creating Transition between Chapters

Refining participants' narratives in Chapter four required me to provide a brief profile of each research participant to contextualize their stories. My supervisor advised: "Provide a brief profile of each participant before you get into their experience. This will set the scene for the chapter and help readers see who the participants are before they read their writing experiences." This comment was eye-opening because it revealed how short participants' profiles enhance readers' understanding. By listening to the audio recordings, reviewing field notes, and rereading personal information of my participants, I developed concise biographical sketches capturing each participant's academic background, writing experience, and the context. Ensuring consistency among participants' stories, I aligned their narratives with five key thematic areas. This process reflected the *reflexive return to the data* (Banerjee, 2022) in autoethnography, as I learned to treat narrative representation as both analytic and relational.

Creating transitions between chapters also proved crucial for maintaining structural coherence of thesis writing. My supervisor commented:

Your brief observations on the overall summary of the participants' stories would give a better transition for the next chapter (Analysis and Discussion). You can indicate what you found in these stories that you would like to describe and discuss in the next chapter.

Revisiting each narrative of my participants, I synthesized participants' shared experiences and added an analytical paragraph that bridged their stories with the next discussion based chapter. This step made me realize how coherence and contextual grounding strengthen writing credibility, as Caldwell et al., (2025) argued that structured reflection enhances doctoral wellbeing and academic clarity.

Framing Data-Driven Subthemes and Strengthening Discussion

Feedback on the discussion chapters (Chapters five and six) focused on creating subthemes grounded in the data themselves. My supervisor advised: "The themes are well generated, but the sub-themes could be created from the data themselves. Participants' words would give authenticity to the topic and present their voices more vividly." To respond this comment, I first revisited the data, highlighted participants' original expressions and constructed subthemes directly from their language used during interview. This process of responding to the supervisory feedback reinforced the ethos of narrative inquiry, emphasizing lived experience and the balance between participant voice and researcher's interpretation. Therefore, I experienced the process of responding feedback as a meaningful engagement fostering collaboration rather than compliance (Chugh et al., 2022).

Avoiding redundancy of data presented in several chapters was another crucial part of my supervisory feedback. I carefully examined overlaps between narratives and discussion chapters and reduced repetitions of the data. The process echoed with Braun and Clarke (2006) describe as the *iterative rhythm of qualitative analysis* (p. 86). Later, my supervisor suggested: "Connect the data discussion with the theories and literature you reviewed. And citation is very limited in analysis and discussion chapters." Revisiting and reconnecting with the literature and integrating theoretical insights more rigorously, enhanced my discursive identity as an academic writer. It reminded me that writing itself is an act of identity construction through positioning oneself among

discourses (Ivanič, 1998). Addressing this feedback particularly helped me recognize the transformation on my theoretical awareness and evolving scholarly voice in the dissertation.

Theoretical Insights on the Study

Writer identity construction among master's students was one of the central focuses of my research, informed by Ivanič's (1998) writer identity framework. In chapter 7, a textual analysis section of my dissertation, my supervisor commented: "Discuss critically how identity construction progresses during the writing journey of your participants, and comment on how the Ivanič model (1998) interacts with your analysis." As I had discussed each participant's identity-forming trajectory in four layers drawn from Ivanič's model, I realized I had not sufficiently demonstrated how identity evolved through the writing processes. Revisiting my analysis, I developed a separate section showing how Ivanič's model's four dimensions—autobiographical, discursual, authorial, and sociocultural—operated in participants' data, the narratives on writing experiences. Through synthesizing the analysis and reflection, I learned that this particular feedback extended to deepen theoretical and analytical understanding. Burgess and Ivanič (2010) noted that academic writers are "written by" institutional discourses even if they assert their identities. This insight helped me view participants' identity trajectories as an act of negotiation within academic structures.

Refining Findings and Policy Linkages

The final but significant feedback from my supervisor on the last chapter focused on clarifying the findings and linking them to policy implications. He first commented: "Provide thematic headings for the findings. You can generate the themes from your discussion chapter." To refine and make the findings section more succinct, I created two broad subheadings that reflected the main findings of my study based on the previous discussion. I realized that developing clear subthemes help readers easily identify and grasp the key findings of the study.

Second, since I had earlier provided only policy implications without reviewing related institutional policies, the suggestion was both helpful and eye-opening. My supervisor advised: "Have you also reviewed and analysed the policies of the universities on academic writing? You need to connect those policies with participants' experiences." This suggestion made me go through university guidelines and curricula on academic writing. I further integrated them into the discussion of the study showing how institutional guidelines enabled or constrained students' experiences. This stage brought to end to the long process of revision, leading me to build rapport with the university authorities for existing policies and their implementation. I even interacted with the department heads on the formulation of writing guidelines and their implementation. The revision helps me get insights over the formulation of university policies and implementing academic programs. Reviewing policies through this lens helped me connect individual narratives with broader systemic realities—a realization that significantly contributed to my scholarly becoming.

Conclusion

Reflecting on the process of addressing supervisory feedback, I experienced it more than a requirement to complete, rather it was a deeply transformative experience that redefined me as a researcher and writer. Through every round of revision, I learned that feedback is not simply a pedagogical and instructional tool but a dialogic space where identity, power, and learning intersect (Adams, 2018; Bearman et al., 2024) shaping my confidence and academic voice. Initially, I perceived feedback as a regular part of doctoral education to improve the dissertation in expected form. Over time, however, I began to view it as a collaborative and reflective conversation with my supervisor, authors of previous literature, research participants, and even with university authorities. The process of revision challenged me to think critically, refine my arguments, and clarify my theoretical, methodological and analytical positions. This realization enabled me to engage with feedback as a process of “becoming a certain kind of person” (Wenger, 1998; p. 215). On the other hand, supervisory feedback becomes part of the discursive negotiation through which I learned to align my autobiographical and discursive selves as an academic writer. Ivanič (1998) aptly notes, “Every act of writing involves a negotiation between the self that the writer wants to project and the socially available positions within discourse” (p. 47). This implies that doctoral feedback mediates the movement from novice to expert, during which I bring forth my autobiographical self and sociocultural self; representing my lived experience of receiving feedback and revising the dissertation, and reflecting how institutional feedback practices and the doctoral culture in Nepal shape my academic writer identity and scholarly becoming. Furthermore, the act of rewriting became a form of identity work (Burgess & Ivanič, 2010), where my evolving authorial voice reflected a balance between personal authority and disciplinary convention. In this way, my dissertation became a scholarly work reflecting my transformation and recording my effort from dependence toward autonomy as a doctoral researcher.

Through this experience, I have come to conclude that effective supervision is relational and co-constructed rather than hierarchical. My supervisor’s feedback, affirming or challenging, encouraged me to participate in a community of practice where knowledge is collectively negotiated and shared. Feedback thus operates as a bridge between the personal and the institutional, linking my individual struggles and insights to the broader academic culture of doctoral education in Nepal and beyond. Most importantly, this autoethnographic journey reaffirmed my belief that doctoral research is a process of becoming. Autoethnography enabled me to narrate this becoming with honesty and analytical depth (Ellis & Bochner, 2000; Chang, 2008). Therefore, through this journey of engaging with supervisory feedback, I experienced a sustained cycle of rereading, revisiting, reflecting, rewriting, and realizing. This journey embodied that identity being both a trajectory and a negotiation of self— is a continual process through which we form, transform, and re-form ourselves in relation to our communities (Wenger, 1998). This process of scholarly becoming has been partial, situated, and open-ended, shaped by my increasing participation within an academic community (pp. 149–151), and it marked my transition from a novice researcher to an emerging academic.

AI Use Disclosure: During the preparation of this manuscript, I used ChatGPT (OpenAI) for improving language and readability under my direct supervision. I take full responsibility for the final content of this article.

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Students' Equitable Participation in Education: Rethinking Academic Guardianship in Nepalese Public Schools

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DOI: <https://doi.org/10.3126/jotmc.v9i9.90454>

Abstract

This case study explores the ways to create supportive environment for the students of Nepalese public schools to ensure their equitable participation in school education. Through purposeful sampling, I interacted with 25 students, two principals, and a teacher using open ended long questions and phone call conversations. Additionally, I collected data from 240 students via open ended short questions. Creating themes and meaning units, I analyzed why the guardians are unable to involve in school activities and I drew a conclusion with the help of teachers and students' experiences. The results show that only 30 % percent guardians are capable to support their children in learning. Furthermore, the subordinate guardians, schools, teachers, peers, and local agencies can work as the alternative guardians to manage learning environment of students by providing them proper guidance and support in their learning needs. This study is significant for guardians, schools, and teachers to play the role of guardians and assist learners to manage their learning. Moreover, it provides feedback to the policy makers to design the policy going beyond the traditional concept of guardianship to ensure the equitable participation of diverse learners.

Keywords: alternative guardianship, learner agency, schools and teachers as guardians

Introduction

The constitution of Nepal (2072 B. S.) has provisioned social justice based education accepting education as the fundamental human right. Similarly, the right to education (31) aims for free and compulsory education up to basic level and free education up to secondary level. To implement this provision, the education policy (2076 B. S.), compulsory and free education act (2075 B. S.), sustainable development goal (2030 A. D.), and School Education Sector Plan-SESP (2079-2088 B. S.) have designed policies, guidelines, and programs to ensure equitable access of all school level children and provide them quality education according to their pace, level, and learning style. The progress in access of education of school students is good; however, the dropout, class completion, and sustainable rate are not satisfactory due to which the all children lead to less participation in school education (SESP, 2079-2088). Parental involvement related

studies have argued that the school level students are unable to take part in regular learning activities in school due to social, economic, and cultural aspects (Katel & Katel, 2024; Kunwar, 2024; Shahi, 2021; Shrestha, 2024). On the one hand, the existing literature shows that the learning regularity of children is badly affected by the less participation of guardians in schooling activities and on the other hand, Thomas et al. (2019), Moneva et al. (2020, and Eutsler (2019) highlighted the importance of parental involvement for better learning, effective communication skills, and quality use of technology to engage children in sustainable learning. Thus, there is essentiality of new approach to engage diverse learners in school education.

Regarding the context of Nepalese public schools, those children whose guardians support them in learning with required resources perform better in academic and personal life. Conversely, those whose guardians are unable to support and guide their children and the children without guardians are unable to participate in learning process and are prone to drug addiction, child marriage, and disruptive behaviors in the society (UNICEF, 2019; UNESCO, 2017; World Bank, 2020). Therefore, blaming guardians is not the solution of equitable quality education instead the stakeholders of education and policy designers are expected to think out of the box regarding the academic guardianship of those children who need parental support. As a teacher, I find my students interested in learning; nevertheless, they are unable to engage in learning process due to different personal, family, and socio-cultural aspects. As Pandey (2025) mentions teachers as silent guardians of students to enhance self-confidence, critical awareness, and learning environment, I also guide my students to overcome their personal and social-cultural problems and then some of them improve their academic and behavioral performance and some of them need further supports. So, I realized that if the schools think alternative ways of guardianship to ensure equitable participation of diverse learners, they engage in learning actively and the sustainable development goal of education is achieved. This situation provoked me to explore the understanding of teachers, principals, and students regarding equitable participation of students and involvement of guardians in schooling of children to develop a new approach.

As an alternative approach to guardianship, Fernandez-Martin et al. (2022) focused on the peer tutoring which can contribute to enhancing self-regulated learning. Additionally, Pandey (2025) mentioned teachers as silent guardians of students to enhance self-confidence, critical awareness, and learning environment. Likewise, MacLeod (2017) referred to teachers, local professionals and agencies as the alternative guardians for intellectually disabled individuals to address their diverse needs. Moreover, Crook & Kenny (2012) exemplified government agencies including ministers and prime minister as the guardians of refugee children in Malaysia. The available studies discuss the impact of guardians for the development of their children and alternative guardianship for special children. However, in the Nepalese context, there are limited studies on alternative guardianship to address the problems of diverse children and children without guardianship or good guardianship.

Therefore, this study is required to fill the research gap of alternative ways to guardianship in the context of Nepalese public schools to ensure equitable participation of each secondary level student in school education. The main purpose of this study is to explore alternative ways to provide support system for all students in public schools with a focus on finding out the exact

situation of guardians, reasons behind less participation of guardians and alternative ways to provide academic guardianship to school level children through the following research questions:

- a. Why do guardians of public schools hardly involve in school activities?
- b. How do students and teachers view on alternative guardianship?
- c. What are the alternative ways to provide guardianship for equitable participation of students in school education?

Literature Review

Conceptualizing Academic and Alternative Guardianship

Guardians are those persons who are in the school record as the guardians (Education Act, 2028). Similarly, grandparents, parents, sisters, brothers, and any person who manage for the study and nurturing of students are regarded as guardians but for the purpose of school management committee representatives, only parents and grandparents are valued as the guardians (Education Regulation, 2059). Likewise, MacLeod (2017) mentioned teachers, local professionals, and local agencies as the guardians. Crook & Kenny (2012) referred government bodies as the guardians, and Pandey (2025) explained teachers as the silent guardians. Now, the concluding point is that academic guardians are those supporters and environment creators who work for holistic development of any child taking their responsibility and accountability to create study environment and nurture them. Furthermore, in broad sense, any person who supports students in learning process and holistic development are considered as guardians.

The role of guardians is unexplainable as they play unlimited roles for the growth of their children. However, the guardians, according to education act and regulation, are for managing study environment and nourishment of the students. Additionally, guardians are for addressing all types of needs of learners (MacLeod, 2017), helping them to make right choice or decision (Kohn et al., 2013), encouraging for effective communication and expressions (Moneva et. al., 2020), security and creating opportunities (Crook & Kenny, 2012), and for developing critical awareness, self-confidence, and moral values (Pandey, 2025). Thus, guardians are prominent and significant support systems for learners' holistic development.

Alternative guardianship (AG), in legal and disability studies, is understood as a framework that provides decision-making support while preserving an individual's autonomy and guiding individuals to maintain their legal rights and receive assistance from trusted supporters such as family, peers, or professionals in making informed choices (Kohn et al., 2013). Likewise, AG is a formal, temporary legal status that authorizes a non-parent to act as a child's primary caregiver and decision maker which can be directed by court declaration with the transfer of parental rights from biological to appointed guardians (Weiss & Bowers, 2018). The appointed guardians work for education and welfare of children providing educational consent and participating in school related activities as the guardian of the child (U. S. Department of Education, 2023).

Sarkar (2016) highlights alternative decision-making arrangements ranging from shared decision-making to supported decision-making as more empowering than full guardianship, reflecting a global shift toward rights-based models. Together, these perspectives indicate that while laws provide a foundation, successful guardianship alternatives require trained personnel,

monitoring systems, and cultural acceptance to ensure children's well-being and protection (Davidson et al., 2023; Murtaza, 2023; Sarkar, 2016; UNICEF, 2023). Thus, if parents are unable to take care of their children or if the guardians are not available to support their children, the alternative guardianship is required (MacLeod, 2017; Crook & Kenny, 2012). Based on these concepts, alternative guardianship in educational context can be taken as the management or provision of responsible persons for the guardian less children to do all required activities for their nourishment and education either constructed via legal rights or by social systems.

Parental Involvement in Nepalese Public Schools

Parental involvement in well performing public school of Chitwan District is increasing to enhance students' academic achievement and overall learning environment by controlling, guiding, managing, and supporting school systems (Paudel, 2022). Participation of guardians through School Management Committee (SMC), Parent-Teacher Association (PTA), and informal parent-teacher interactions contributes to improved classroom performance, better attendance, and enriched home learning environments (Khadka, 2024; Paudel, 2022). Likewise, the studies conducted in Lalitpur and Makawanpur districts indicate that practices such as assisting children with homework, engaging in academic discussions at home, and providing emotional support significantly influence students' cognitive and affective growth (Bhattarai & Thapa, 2023). This argument indicates that the role of parents is significant for students' all-round development.

In contrast, poverty, low parental literacy, and long distances to schools reduce the capacity of many parents to actively engage in their children's education (Shrestha, 2024; Katel & Katel, 2024). Furthermore, limited communication channels between schools and families, alongside traditional social norms that restrict parents' decision-making roles and weaken sustained participation of guardians (Gautam, 2023). The problem is particularly evident at the secondary level, where parental engagement tends to decline as students advance academically (Poudel, 2024). Due to lack of awareness, the guardians involve in gambling, drinking alcohol, nonsense gossips on the one hand and they focus on household chores, daily activities, and agriculture on the other hand rather than giving priority to their children's study environment. They cannot play the role of motivator, counselor, and supporter for their children; consequently, their children become low-performing students and drop out the school (Shahi, 2021).

Challenges of Guardian Involvement in Public Schools

Economic hardship is a major factor (Shrestha, 2024) and Low literacy levels among parents also hinder meaningful engagement (Kunwar, 2024; Shahi, 2021). Similarly, cultural norms and gender roles further restrict involvement, particularly for women, who may feel discouraged from participating in school committees or decision-making processes (Gautam, 2023). Guardians are busy in managing to afford for daily expenditure laboring, working abroad and cannot give time to their children (Shahi, 2021). Schools often lack systematic channels for engaging parents and guardians (Bhandari, 2023). For parents of children with disabilities, additional obstacles include inaccessible school facilities, limited awareness of inclusive education policies, and insufficient guidance from school staff (Basnyat, 2023). These challenges highlight the need for comprehensive strategies to strengthen parental involvement, including structured communication mechanisms,

parental education programs, and policies that actively empower all guardians to participate in their children's education.

Promoting Guardian Participation in School Activities

Active engagement of guardians through School Management Committee (SMC) and Parent Teacher Association (PTA) in school development enhances both student performance and institutional advancement (Bhattarai & Thapa, 2023; Katel & Katel). Strengthening parent-teacher relationships and creating supportive home learning environments further contribute to students' cognitive and emotional development (Subedi, & Dahal, 2024; Shahi, 2021). To encourage an effective participation, schools in Nepal are increasingly implementing structured communication channels, such as regular parent-teacher meetings, use of digital platforms, and community outreach programs that educate parents about their role in children's education (Basnyat, 2023; Katel & Katel, 2024). Additionally, fostering inclusive school climates that respect and value all guardians, regardless of socio-economic status or literacy level, has been shown to increase engagement and sustain long-term parental involvement (Kunwar, 2024). These evidences indicate that the target of education policy and national curriculum framework is achieved by encouraging guardian involvement in school activities through social audit and regular meetings with the guardians.

Enhancing guardian participation in Nepalese public schools requires a multifaceted approach that addresses social, cultural, and institutional barriers (Katel & Katel, 2024; Shahi, 2021). Parents' active involvement in monitoring homework, attending workshops, and contributing to school decision-making processes influence student motivation and academic achievement (Shrestha, 2024). Schools that provide orientation programs, parenting education sessions, and awareness campaigns about the importance of parental engagement have attained higher participation rates, particularly among marginalized and disadvantaged communities (Gautam, 2023). Furthermore, community networks and local leaders to facilitate communication between schools and families can bridge gaps caused by low literacy or geographical distance (Bhandari, 2023). By creating inclusive, transparent, and supportive mechanisms, conducting awareness programs, getting help of SMC and PTA, rewarding active guardians, creating community parenting groups, doing regular effective communications, doing satisfactory assessment, maintaining transparency in school operations, doing door to door engagement of parents, and conducting counseling service for parents, Nepalese public schools can empower guardians to take an active role in shaping the educational experiences and outcomes of their children (Katel & Katel, 2024; Shahi, 2021).

Methods and Procedures

As the main purpose of case study is to make a comprehensive understanding about certain social or institutional phenomenon analyzing participants' perception, experiences, and detail of the case (Creswell, 2013), I employed case study research design. Via single site qualitative case study, I explored a case of a school related to guardianship of students collecting data purposefully from 240 students of grade nine and ten with the help of open ended short questions to identify the capability and incapability of guardians to guide their children, Similarly, I collected responses via

open ended long questions from 25 students to understand their perceptions on alternative guardianship and status of their guardians for helping them in schooling and whole personal growth. Moreover, I talked to two principals and a teacher in phone calls to identify how the schools and teachers can play the role of guardians to enhance learning environment of students. Good qualitative case study presents an in-depth understanding of the case and analysis of multiple units within the case to understand a specific issue, problem, or concern in detail (Creswell, 2013). Thus, I analyzed the data by making themes generated from the research questions and participants' experiences to make a comprehensive understanding on alternative guardianship. To maintain the ethical issues and quality standard of the data, I triangulate data by comparing perceptions of students and teachers presented in short and long open ended questions. At the same time, I explained my purpose deliberately by making informed consent, agreeing for pseudonyms, and promising for anonymity and confidentiality of participants' responses (Creswell, 2018).

Results

Status of Public School Students' Guardianship

The status of guardianship in public schools is miserable as they are trapped by their traditional and ignorant mentality towards public schools and their educational, economic, and social conditioning also disturbing them to be capable guardians. While taking responses through an oral question from 240 students; whose guardians are able to attend the school if school calls them for teacher-parent meeting and then 40 students out of 240 informed that their guardians would come to school. By looking that hazardous condition, I collected their responses in written form and found that only the guardians of 65 students are ready and able to give time to the school for the required discussions in the school and rest of all are unable to visit the school as most of them are farmer, daily weigh workers, workers in India, and some students stay with subordinate guardians like grandparents, uncles, sisters, brothers, and alone. Students mentioned that their parents are unable to give sufficient time at home due to over business for daily livelihood management.

I found that 80 out of 240 parents gave five to ten minutes to talk about their children's study, 52 parents provided thirty to fifty minutes, and 108 out of 240 students' parents rarely provides time to their children at home. Students reported that some of the guardians make their children busy in their household chores saying there will not be any loss if their children do not go to school for few days and some parents involve their children in labor claiming that earning few amount of money is better than going to school. This evidence shows that most of the guardians are unable not only to provide time to their children at home but also to school. The guardians who give five to fifty minutes times to their children are expected to visit school and contribute to school development and for 108 students, there is requirement of alternative guardianship or school-guardian partnership program along with parent education.

Regarding the current status of guardians, Prasad, a school principal, explained his experience that around ten percent students' guardians can participate in school activities actively and other guardians are not able to attend directly in the school. Similarly, Tika, another principal, is distressed towards the role of guardians but she is hopeful to increase participation of guardians through phone contact and social media. Moreover, Damodar, a teacher, claimed that forcing all

the guardians to attend the school is not fair. However, the schools and teachers can cooperate with guardians by using technology, taking help of local teachers, and contacting them by any other means. All of the participants agreed to use alternative ways to involve guardians to create better environment for students either with main guardians or with alternative guardians as the main priority of the guardians is working for daily livelihood due to economic, social, and awareness aspects.

Reasons behind Guardians' Exceptional Visit in School Activities

The national and widespread problem of public schools often heard is ignorance and less participation of guardians in school activities. To check this statement, I conducted this study and found the reasons why there is unsatisfactory involvement of guardians in school activities and proper guidance for their children. On the basis of students' responses, the first reason is that the guardians do not see any meaning of going to school as the schools are not doing better for educational environment, secondly, they have to complete the significant duties for nurturing their children and going to school to understand the status of their children is second priority. Meanwhile, some of the guardians cannot visit the school directly due to inconvenient time. One of the students explained that her father is a teacher who works in another school and due to same time of school; he cannot come to the meeting of her daughter's school. Furthermore, another reason is that the guardians of many students work in India and they stay with subordinate guardians whose priority is not to be engaged in school activities.

Prasad agreed that the guardians cannot come to school due to their economic, social, cultural, and political problems. He further added that when there is trustworthy relation with teachers, guardians visit school hopefully otherwise they ignore school due to low academic achievement of their children. He mentioned a case of a student that after the student got support from him as a subject teacher, the student talked to his parents and his mother met him at school and requested to make further improvement in her son. Likewise, Tika presented a case similar to Prasad that after her good rapport with the students with better teaching in the class, the guardians automatically visited her and expressed their concern that they are ready to support it means the role of teachers as a guardians attract the guardians of students to school activities. Similarly, Damodar presented the ill behaviors of school which discourage guardians to involve in school activities. He exclaimed with sorrow that some of the guardians visit schools with hope and curiosity but returns home being furious and discouraged with school environment. He further highlighted a case of a guardian who transferred his children one school to another after finding some unmanaged and teacher less classes at the school frequently.

Roles of Schools as a Guardian of Students

Students accepted the school as the guardian. However, they suspected that the schools are not really paying attention as the role of guardian. They mentioned that the school can be their guardian by providing good learning environment in the school and guiding students for the right decision. Similarly, they added that the students face the problems of pure drinking water, hygienic breakfast, clean toilets, and opportunities of extracurricular activities for holistic development which should be managed well by the school to play the role of guardians. Moreover, they

demanded for the equal and equitable behavior from school for all the students to maintain their motivation and continuous learning. Prasad is positive towards SMC and PTA's role as the guardians but he could not get full support from them as the guardians of students. He added that the political reasons, lack of awareness as the guardians, and having no such a vision towards school as guardians, SMC and PTA could not involve in the guardianship of students. Tika welcomed the concept "school as the guardians" and illustrated the role of school for it. She added, "School cannot reduce the poverty of students' guardians and cannot control the social disruptions but schools definitely can guide students to live economic life and teach students to live in society successfully." Damodar explained, "In our time, the school had the rights and responsibilities to regulate students. Similarly, guardians also used to respect and trust the schools and teachers." He described the role of school as the guardians that the schools can take help of the teachers available in the communities and the local agencies can help schools to engage guardians in school activities.

Teachers' Roles as a Guardian of Students in School

All of the students accepted teachers as the guardians. However, they stressed on the improvement of behaviors of some teachers and requested to be learning friendly. The common expectations of all students from teachers as guardians include equal behavior, no comparison among students, treating as their own children, understanding their guardians' problems, giving extra time for learning, and making meaningful learning rather than finishing course. Based on the students' responses, it can be concluded that few teachers are not playing the role of guardians while teaching students as the students feel discriminated and unsafe in the class. Students suggest focusing on learning rather than just finishing course and treat students as their children.

From the side of teachers, Prasad also discussed teachers (e.g., class teacher and subject teacher) as the central person to play the role of guardian for the students. He further explained that when class teachers keep records of all students by understanding their main traits and conditions and if subject teachers teach students with proper guidance and supportive behaviors, teachers can prepare students for learning and the schools and guardians also become more responsible towards students. He further added, "Class teacher are not just the person for taking attendance, they can be good guardians for the students." Similarly, Tika mentioned that school can make friendly and safe environment through class teachers and subject teachers coordinating with concerned authorities to solve the problems of students. Damodar praised the concept "teacher as a guardian" and explained his experiences that the teachers as a guardian in the class takes care of all students, make the class safe and engaged with meaningful learning activities, gives first priority to the students' progress, and does not think to leave the class in the name of doing other activities in the school.

Roles of Students as a Self-guardian to Manage Learning

Half of the students accepted that they can be guardians of themselves and take in-charge of their learning and behavior modification. One of the students told his story that he goes to labor in constructions cite and earns five hundred per day. When the school closes during summer vacation and festival vacation like Dashain, he earns ten to twenty thousands and maintains his study expenses throughout the whole academic year and he manages his every activity of learning as he has the total responsibility of his family so he accepted himself as a self-guardian. Likewise,

another boy of grade nine also mentioned that he is taking all responsibilities of his family as his father is in India and his mother is disabled. The major responsibilities that all of the students accepted to do are managing study environment for themselves, helping guardians to earn money, making right decision carefully, following schools rules, helping parents in household chores, laboring in construction site during long vacations, giving and taking help to/from friends. This situation indicates that the students who study in grade nine are compelled to take responsibility of not only study but also management of household chores. Therefore, some of the students are ready to help each other in learning process to ensure equitable participation of their friends.

Prasad explained that the students can play the role of self-guardianship when they are fully aware about their responsibility and supported by the teachers even though they live with subordinate guardians. He further added a case of a boy who did good self-guardianship. The boy left the school in class nine due to family problem but returned home from India after two years and admitted in school again and then he did well for not only himself but also played the better role as the guardians in the class. Tika asserts, "Teachers can teach with full effort and honesty ensuring learning of each student as the guardians, they should not afford students' expenditure which students can do themselves after the intellectual support from teachers." Damodar mentioned that most of the students of grade nine to twelve can manage their learning better when they get proper and timely guidance and support from teachers and schools. He further added, "If the school designs the program for learning and earning together, the students can learn and earn as a result the guardians also contribute for school development positively." The concluding remarks of teachers' perceptions on self-guardianship is that the students cannot do better only after developing critical awareness on them, supporting them in learning, and guiding them in problems they are facing in society and in the school.

Other Alternative Guardians for Student

Besides parents, schools, teachers, and peers, there can be other persons, agencies, and professionals who can contribute to creating the supportive environment for those students who are guardian less and seek good guardianship? Damodar asserted with confidence that the local government including ward office and non-government organizations allocate budget for parent education, provide dress, and stationaries to the needy students. Similarly, they can design safety and awareness program in the community level from which the children and guardians can be supported. Prasad sir explained the example of taking guardianship by the elected citizen representatives but it should be continuous not just during admission campaign and election time. He further added, "If all the stakeholders are focused on making mannered and competent manpower, there will not be any child who is called disruptive and low achiever so the local government can play active role for it." Tika agreed with the prior participants and added that SMC and PTA members can conduct campaign coordinating with grant providers and manage the fund for disadvantaged children to provide them required support. She explained, "I have seen some of the teachers, SMC/PTA members, and citizen representatives distribute stationaries and other supports to the needy students from which I am inspired to run a campaign in my school too." Thus, the other guardians are also significant stakeholders as main and alternative guardians for contributing to manage study environment for all students.

Roles of School-Guardian Partnership for Learning Environment

Although the solo contribution of parents, teachers, schools, and alternative guardians is significant for students learning, the collaborative efforts through schools-guardian partnership program adds more comprehensive learning environment for all type of students. Supporting this argument, Prasad sir highlighted the value of collaborative tasks of schools with guardians. He explained, “I along with my staffs went to the house visit of a student who was good but was deteriorating his study due to tension of long route from home to school. He did better after we managed his problem collaboratively.” Similarly, Tika described this program’s essentiality explaining it as an upper step after the support of guardians and teachers individually. Damodar agreed with previous participants and further illustrated the necessity of this program to creating fertile learning environment via collaboration of guardians and teachers to support the learners identifying their actual learning style and habit of learning. All of the participants stressed on the using platforms of social media and technology to share the learning status of students in both school and home. The students also accepted the contact between guardians and teachers through social media as it saves time and convenient for all to talk in any situation. In conclusion, the school-guardian partnership program goes beyond the support of guardians at home and support of teachers at school, putting guardians and teachers together for ensuring equitable participation and better learning.

Discussion

The findings are similar to existing literature in terms of alternative guardians and different in terms of supporting students in learning process. Despite significant role of parents in students’ academic achievement and personal growth, the public schools in Nepal are going through the problem of less participation of guardians in students’ learning and school development. Therefore, this study endeavored to identify the exact status of guardians and explored alternative guardianship for equitable participation of students who are guardian less and under the marginalized guardianship for which I found my participants positive towards the schools, teachers, peers, and self-guardianship as the alternative guardians. Furthermore, I pointed out local government including ward office, campaign groups, non-government organizations, and donation providers as other alternative guardians for the students to manage study environment. Moreover, as the advanced management of study environment for students, I found school-guardian partnership program which can help teachers and guardians to work collaboratively either teachers visiting students’ homes or guardians visiting schools for the betterment of children’s learning. The rationale of this study is due to the low/no awareness of guardians and their conditioning only for nurturing their children with basic needs no more attention on better learning. In the context of Nepalese public schools, my main argument is that the guardians who are contributing for their children and school, they are to be promoted and sustained whereas the children who are not under good guardianship, the schools should design alternative programs to ensure equitable participation of all students in learning.

Shahi (2021) also found the same status of guardians as I mentioned earlier and he pointed out the unsatisfactory participation of guardians in public schools as they prioritize their children’s stomach rather than mind, they are busy in gambling, drinking alcohol, working abroad, and

working long hours for daily livelihood. Parents also torture their children due to their low achievement in school and threaten to leave school and work with them to earn money. Similarly, Fernandez-Martin, et al. (2022) highlighted the good effect of peer tutoring for self-directed learning which is supportive to self-guardianship and Mouni (2024) supported self-guardianship exploring how learner autonomy can be boosted up by providing psychological, strategic, and problem solving support to the students. Eutsler (2019) discussed the apps and platforms to make good partnership between teachers and parents to enhance reading skill of children which matches with guardian-school partnership. Thomas et al. (2019) presented why the guardians rarely visit public schools claiming that the parental involvement in school is affected by the academic achievement of their children; the better academic achievement the more participation of guardians and the lower achievement the lesser participation of guardians.

Maharjan (2016) also supported guardian-school partnership program emphasizing on the collaborative support of families, teachers, and communities for the children to enhance their learning rather than playing separate role (e.g., only parents and teachers). The study of Poudel et al. (2024) also stressed on the collaborative contributions of schools, teachers, and parents to create academic excellence of students. In contrast, Wagle (2012) presented the reasons of dropout that when the children become guardian less, they are forced to child labor, early child marriage, and addictions due to which they dropout from school and Moneva et al. (2020) added the significance of parents' communication with their children which is contributing to academic achievement in school. These two studies go beyond discussing guardian participation in school. Katel & Katel (2024) mentioned the strategies to promote guardians' involvement in school development which provides guidelines for how schools can play the role of guardians for students.

For the foundation of this study, the concept of teacher as a guardian illustrated by Pandey helped me to clarify teacher as a guardian as he describes teachers' roles as nurturer, guide, and ethical mentor who can promote students' emotional well-being, critical thinking, and holistic development. He accepted that teachers can guide for not only learning but also for self-trust and moral behaviors. He further explained how the teachers can contribute to the holistic development of learners. Teachers can identify the level of distress and performance of students and can help accordingly. The author supported the ideology of Angelou that people forget our words and actions but they never forget how we made them feel about anything. Teachers' timely emotional support prevents students from long term psychological problems. They can engage students in judgment free communications to encourage students to express their concerns and to be connected with any useful resources. Through open dialogue, peer support, and teamwork, learners improve emotional resilience and academic performance. Teachers encourage for developing critical thinking, exploring new ideas, and challenging the pre-established systems. Teachers are skillful to identify and develop unique abilities of students and provide tailored support to nurture their inner talent. They can create the classroom as the center for discovery and innovations. A simple kind word and empathetic gesture of teachers can be transformative moment for students.

Conclusion

As the purpose of this study was to identify the exact situation of guardian support and alternative ways to guardianship of children, I found that the schools, teachers, peers, self-guardianship, local agencies, and government bodies can work as the good alternative guardians for those students who are roaming without guardianship and seeking for the support of guardians. Furthermore, the schools should go beyond the trap of traditional concept of guardianship and seek for the alternative ways of guardianships suitable to the students of 21st century by using technology and the theory of learner agency, autonomy, and investment. The existing literature explains the necessity of alternative guardians for disabled and refugee children conversely this study emphasizes the management of alternative guardianship for those students who are guardian less and whose guardians are unable to guide their children, respecting and accepting the value of core or traditional concept of guardians.

This study is not the alternative or opposition to the role of main guardians (e.g., parents and grandparents) but a supportive ways to ensure the guardianship for all children. All of the stakeholders blame each other for the failure of students in SEE but no one talks about the alternative ways to promote guardian participation in the growth of school and students. The implication of this study will be as the insights to provide guardianship to all learners of public schools in Nepal and the schools and teachers should change their role from teachers to guardians as they are central stakeholders of creating learning environment for the students. In the digital age, there are multiple ways to be connected guardians so there is no great meaning of saying the result of public school is poor due to less participation of guardians in school. The further research can be done on this issue in other schools and districts as it was limited to a school of Kailali district and the research can be conducted on effectiveness of teachers' role as the guardians and its practices in well performing schools.

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Resistance of Patriarchal Hegemony in Susan Glaspell's *Trifles*

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Abstract

This paper investigates the theme of female subjugation in Susan Glaspell's *Trifles*. The micro-level observations made by women are considered as mere trifles by dismissing them from the legal investigation. Yet, the women eventually succeed in becoming the real heroes through their silent resistance by protecting Minnie. Their common shared experience of suffering enables them to build the strong emotional bond and thus empowering them to uncover the truth which they prefer to conceal from the men only to serve justice. The women's curious eyes catch the evidence by the moment they enter the house while the superficial men fail to perceive the reality hidden in these apparently irrelevant details. The paper argues that Glaspell critiques the male-centred legal system and reclaims the domestic sphere as a vital site of knowledge, resistance, and ethical judgement to validate how women's marginalization becomes the actual source of authority and ethical judgement. To authenticate its central argument, this paper draws on the feminist theory of Bell Hooks — that condemns patriarchy and encourages women's canonical role in literature and society. Bell Hooks' books *The Will to Change: Men, Masculinity, and Love*, and *Feminist Theory: from margin to centre* function as the primary theoretical aspect.

Keywords: patriarchy, gendered investigation, suppression, resistance, justice

Introduction

This article deeply explores Susan Glaspell's *Trifles*, in which Mrs. Hale and Mrs. Peters are inconspicuously rejected by the men for focusing on what they believe inessential—such as an unfinished quilt and Minnie's preserved jars. Conversely, due to their attention to these so called trifles, the women succeed to uncover the hidden truth which ultimately protects Minnie. The three men ridicule the messy kitchen and chaotic household with their reproachful conclusion regarding Minnie as a poor housewife. Hitherto their eyes cannot examine the core reasons behind such

bizarre and disturbing household atmosphere. They investigate superficially blinding themselves to decode the keen emotional truth, and their incapability to understand the faint clues makes them failure in detecting the real motive behind the murder. As Bell Hooks (1984) says, “Within the present family structure, individuals learn to accept sexist oppression as “natural” and are primed to support other forms of oppression including heterosexist domination” (p. 38). Their detachment reflects their poor emotional intelligence making them unable to be the fastidious investigators of the murder. Their stereotypical inhibiting mind is the true cause behind their superficial judgement. Susan Glaspell never declared herself as a feminist, but her *Trifles* stood as one of the pioneering catalysts of the feminist movement of 1960s in America. Hence, Glaspell criticizes the patriarchal hegemony in belittling the female characters and dismissing the domestic environment as irrelevant “trifles.” Thus, this paper draws the Bell Hooks’ feminist insights from her books, *The Will to Change* and *Feminist theory: from Margin to Center*, to argue that Mrs. Hale and Mrs. Peters—despite being in periphery—emerge as the true investigators. Their emotional intelligence and scrupulous investigation expose the failure of males, who entitle themselves as authoritative, and elucidate how systems embedded in sexism and emotional repression cannot deliver true justice. In order to address this claim, this study aims to address the following research questions:

1. Why do the male characters diminish the women’s interest in domestic trivial details and their emotional attachment to Minnie?
2. How do the women eventually succeed in finding the Minnie’s motif behind the murder?
3. How do the women become the real heroine in saving Minnie by investigating the evidence of trifles?

Literature Review

While previous scholars have analyzed various aspects of *Trifles* through various perspectives, this article addresses a different and unexplored issue. While discussing the literature review of the play, Dipesh Neupane (2022) states that “The men have not only oppressed the women, they also blame the women for enjoying the only things their oppression allows them to have” (p. 29). His article focuses on the sheer domination of women and the resulting consequences they face in the patriarchal society.

Guswanto and Husna (2019), in their research article, examine that “in relation to the male-dominated society, Mr. John Wright is one example of the authoritative persons in that time. As a man, he had the authority to decide everything in his family. He had no consideration about his wife. He never talked to his wife in deciding everything in his family. He did not care about what happened in his wife’s life” (p. 29). Guswanto and Husna focus on the psychological aspect of gender relations, emphasizing how women are expected to think and act completely according to male authority. Their study manifests how male dominance not only controls external situations but also extremely affects the psychological and emotional well-being of women.

In the same manner, Charles Buckley (2021) attended the one-act performance of the play on November 5, 2021 which was directed by Rachel Wolf. In his review article, he describes the play as a compelling literary piece that examines all forms of evidence—even those that may initially seem insignificant while also explaining how prejudice can hinder the real investigation and that ultimately leads to false conclusions. For him, it is a hidden gem which is beautified by well-

crafted characters, perfect setting, and technical richness that collectively represent the women as the real heroines of daily life.

Similarly, reviewer Ken Jaworowski (2010) interprets that *Trifles* is the play of courageous women who are the true solvers of the murder, while their male counterparts appear blind and unaware. Rather than recognizing the women's intuition, the men disparage them as insignificant and haughtily valorise themselves as the authentic sole lawful investigators. The researcher, Hodge (1975) points out that, "The domination usually present within the family-of children by adults, and of female by male-are forms of group oppression which are easily translated into the "rightful" group oppression of other people defined by "race" (racism), by nationality (colonialism), by "religion," or by "other means" (p. 233). In *Trifles*, this oppression is evidently depicted by the scene where male's activities are set in public places, legal, economic, cultural, and other "public areas" with power and prestige, while female's activities are set in the "private areas" next to families, stoves, and children (Duan, 2008, p. 55). Thus, most of the time, the kitchen not only represents the triviality of the family itself but also represents the submissive position in the family (Wang, 2006, p. 164). This scene illuminates how the so-called patriarchal supremacy exists. In this regard, Mc Peak (2024) states that, "*Trifles* can be additionally interpreted as a safer, less direct attack to the standing social order because audiences are able to engage empathetically with the plight of the abused woman, and are not asked to engage critically with the logos of the piece" (p. 7). The women audience can relate to Minnie's suffering more due to the empathetic mode of reception yet men may not grasp that depth of her psychological trauma and despite the play's ironical exposure of patriarchal attitude.

Even though several scholars have studied *Trifles* through feminist, psychological and many other perspectives—often giving the stress regarding the marginalization of women, symbolic domestic sphere, and the critique of patriarchal supremacy—there is still a significant gap in the literature in the scenario of women's role as active investigators and protectors of Minnie Wright. In this article, the researcher tries to explore how the women- initially judged by the men as insignificant—come out as silent rebels who finally solve the murder case by outsmarting their male counterparts. The men were extremely supercilious that they consistently underestimate the women's intelligence and thus fail to indict Minnie Wright. Absurdly, they remain oblivious that the true motive behind the murder has already been discovered—not by their shallow investigation, but by the women's meticulous observation and empathy. Consequently, the men are unwittingly portrayed as the real fools in the play.

Moreover, Bell Hooks' feminist theory—particularly her notion on emotional repression, the limits of patriarchal masculinity, and the relationship between justice and empathy—have been rarely applied to *Trifles* by predecessors. This research addresses that gap with the argument that women, though dismissed as "trifles," can subvert patriarchal expectations through emotional intelligence and unity. Bell Hooks' feminist perspective truly guides this paper to reinterpret Mrs. Hale and Mrs. Peters not as passive observers, but as the true moral investigators who not only uncover the truth but also silently protect Minnie Wright, while the men's superficial methods only fail them to grasp the emotional and ethical veracity of the crime.

Methodology

This research article is based on close textual analysis. It explores on Susan Glaspell's play *Trifles* drawing on the theoretical insights from Bell Hooks seminal works: *The Will to Change: Men, Masculinity, and Love*, and *Feminist Theory: From Margin to Center*. These books provide theoretical foundation for this study.

Discussion and Result

The Superficial Men

The men's shallow interpretation deter them from judging the genuine cause behind the crime, as they are more preoccupied in criticizing Minnie's housekeeping than really indulging in the murder investigation. They notice the jars on the shelf, which seem aged and on the verge of bursting, and disparage Minnie for her alleged lack of hygiene. When Mrs. Peters remarks that Minnie was anxious about whether her jars "would break" (Glaspell, 1916, p. 10) while in jail, the men ridicule her concern. The sheriff sarcastically derides Minnie's worry over the preserves despite being "held for murder and worrying about preserves" (Glaspell, 1916, p. 10). In truth, the jars symbolize the women's protective instinct toward Minnie. When the country attorney speculates about her preoccupation with such seemingly minor matters, Mr. Hale bluntly retorts that "women are used to worrying over trifles" (Glaspell, 1916, p. 10). The men's dismissive perception of women's insights impedes any serious investigation into the subtle domestic details. This is because, as Hooks (2004) asserts, "Despite changes in the nature of gender roles, ours is still a patriarchal culture where sexism rules the changes day" (p. 102). Therefore, the country attorney has that audacity to reproach Minnie for the unwashed dishes, soiled towels, and a waterlogged sink, branding her a negligent housekeeper and promptly forbids any further inquiry in the kitchen, deeming it insignificant. Glaspell is not opposite to women; rather, her attempt is to justify how females are truly placed and treated as minors.

The men search the kitchen, bedroom, and barn but find nothing of interest. The county attorney's negligence is notable—he refuses to pay attention to what Mrs. Peters is carrying for Minnie, assuming they are harmless items. He thinks of Mrs. Peters as just a sheriff's wife, closely tied to the law but not likely to notice anything important. The country attorney's patronizing and mocking comments about the women's discussion of whether Minnie intended to 'quilt or knot' the blanket reveals the men's immaturity and their superficial attitude toward matters they consider unimportant. Here, Hooks (2004) is right when she states that "a man who is unabashedly and unequivocally committed to patriarchal masculinity will both fear and hate all that the culture deems feminine and womanly" (p.101). Men are raised with a kind of training that teaches them to see women as feeble. Therefore, Mr. Hale's sarcastic assertion that women are preoccupied with "trifles" wounds Mrs. Hale deeply, yet Mrs. Peters initially aligns with the men, believing they are engaged in more important matters because they cannot move "over the image of themselves as provider" (Hooks, 2004, p. 103). This internalized belief is a key reason behind their discrimination against women and "all these myths establish the idea of women's inferiority" (Beauvoir, 2009, p. 265). The men consider the quilt as nothing more than a piece of fabric but for women it is a narration of a silent testimony that discloses the emotional and psychological history behind the murder.

The Shrewd Mrs. Hale

Mrs. Hale is confident and courageous women, and her complete physical presence symbolizes her core strength and audacity. She plays a crucial role in taking the audacious decision to conceal the reality regarding the broken birdcage and the canary's death, hence diverting the men's suspiciousness away from Minnie. Mrs. Hale instantly comes to the conclusion that John Wright killed the canary only by the sight of the cage's violently damaged door — Minnie's sole companion in an isolated and silent home. Childless and confined in "a quiet house" (Glaspell, 1916, p. 19), Minnie lived under the control of a "hard man" (Glaspell, 1916, p. 19) without companionship or human connection. According to Bell Hooks (1984), "Between women and men, sexism is most often expressed in the form of male domination which leads to discrimination, exploitation, or oppression" (p. 47). The woman is suffering more mentally than physically due to the man's abuse as "male violence against women in personal relationship is one of the most blatant expressions of the use of abusive force to maintain domination and control" (Hooks, 1984, p. 120). Mrs. Hale demonstrates both empathy and insight as she pieces together the emotional abuse Minnie endured. She ultimately concludes that Minnie killed her husband not out of malice, but as a desperate response to years of oppression, and therefore should not be judged as guilty in the traditional sense.

Mrs. Hale never felt at ease in John Wright's home, located 'down in a hollow' (Glaspell, 1916, p. 19) - a place marked by isolation and emptiness, evoking a gothic atmosphere of desolation. This physical seclusion portrays the mental darkness and emotional void Minnie silently suffered. Mrs. Peters, however, initially defends John Wright as it would be unfair to judge him quickly in short limited understanding of Minnie's social relations. She points out that John is generally regarded as a good man by townspeople. However, Mrs. Hale sharply contests this perception and counters that spending time with John was similar to enduring 'a raw wind that gets to the bone' (Glaspell, 1916, p. 19). Her perception emphasizes the emotional coldness and exploitive environment of the Wright household. There is very little research that documents the extent to which depression about the nature of work leads men to act violently in their domestic lives (Hooks, 2004, p. 91), and it is often a form of blackmail when men claim their anger and frustration rise because their women compel them to act that way. It is because "to know love, men must be able to let go the will to dominate" (Hooks, 2004, p. xvii). Although Mrs. Peters is unfamiliar with both John and Minnie, she is quick to pass judgment on Minnie and readily sides with John. Mrs. Hale experiences guilt for having neglected to visit Minnie Wright for nearly a year, a neglect she attributes in part to the cold and uninviting nature of John Wright. She reflects on this with a sense of remorse and self-blame, even acknowledging her own neglect by admitting that failing to visit Minnie "once in a while was a crime" (Glaspell, 1916, p. 23), a statement that reveals both her guilt and her growing awareness of the emotional isolation Minnie suffered.

Mrs. Hale cautiously observes the uneven stitching in the unfinished quilt, noticing that "all the rest of it has been so nice and even" (Glaspell, 1916, p. 16), except for one section which has noticeable erratic sewing. She catches this inconsistency that prompts her to question what might have caused Minnie to sew in such a nervous and unusual manner. Her curiosity initiates a deeper psychological investigation into Minnie's mental state. She remembers Minnie as being "real sweet and pretty" (Glaspell, 1916, p. 20) who was like a bird—gentle and full of life. Mrs. Hale falls into

reflective silence while describing how Minnie changed after her marriage. It reveals the emotional and psychological damage Minnie endured which became the possible motive for the murder.

Mrs. Hale consistently defends Minnie throughout the play asserting that Minnie could not have committed murder without any forceful and justified cause. Sexist ideology teaches women that to be female is to be a victim (Hooks, 1984, p. 45). Mrs. Hale makes an epic revelation that all women suffer similar silent inhuman treatment. She affirms that women should support one another because they all “go through the same things” (Glaspell, 1916, p. 23). This shared experience is the main reason behind the emergence of women as the genuine investigators in the play. Mrs. Hale’s deep concern for Minnie, especially in covering the truth about the jars, reflects the emotional unanimity women possess. The county attorney is contemptuous to women when he says “at last we found out that she was not going to quilt it” (Glaspell, 1916, p. 25), accidentally revealing a deeper meaning. In fact, Minnie was not going to quilt; she was going to knot. She truly wanted to knot her marriage, knot her husband, and knot her oppression. Mrs. Hale’s clarification of Minnie’s intention to “knot it” (Glaspell, 1916, p. 25) mirrors her own oppressed desire to free herself from subjugation and suggesting all women to break the chain of patriarchal hegemony.

Mrs. Hale takes issue with every disparaging remark made by the men. She is the one who draws a symbolic connection between Minnie’s emotional despair and the erratically stitched quilt, revealing her ability to interpret Minnie’s psychological state. Her perceptiveness is truly commendable. Although she is deeply affected by the men’s derogatory attitude toward Minnie, her quiet composure and insight make her the true heroine of the play. She does not directly confront the men—partly because she, too, is socially powerless—but she succeeds in outwitting them. It is because “only experiences encountered by male characters are called “universal” or basic to “the human condition.” The “female experience is peripheral to the central concern of literature—which is man’s struggle with nature, God, fate, himself, and, not frequently, woman. Woman is always “the other” (Register, 1989, p. 10). The men do “other” the women in *Trifles*. It is not the first time that women are marginalized because they are condemned since ages they are not left pious even in religious books. For instance, Gilbert and Gubar critique Milton’s *Paradise Lost* for belittling Eve because still the humanity considers Eve’s tempt a sin but does not judge Satan’s maliciousness behind her “fall.” Gilbert and Gubar (1984) argue that, “Despite Eve’s apparent passivity and domesticity, Milton himself seems deliberately to have sketched so many parallels between her and Satan that it is hard at times for the unwary reader to distinguish the sinfulness of one from that of the other” (p. 196). Therefore, it is easier for the patriarchy to consider women nothing and the literature rather never gives prestigious place for females ever. Despite this, Mrs. Hale defends Minnie against the attorney’s criticism of the unwashed towel, pointing out that Minnie was responsible for managing the household, the farm, and her demanding husband. Under such overwhelming exhaustion, it is unrealistic to expect everything to remain perfectly kept. Presenting them as weaker one is not the goal of Glaspell; rather she is laughing at patriarchy for their shadowed image constructed just by being violent over women because they know women are fastidious and rigorous.

Similarly, Mrs. Hale’s resentment toward the men’s criticism of Minnie’s dirty towels reveals her role as a quiet yet resolute defender of women—almost a silent freedom fighter. Glaspell portrays how women are marginalized everywhere and men are supposed to be in cannon.

Therefore, Mrs. Hale's bold remark, "Men's hands are not always as clean as they might be" (Glaspell, 1916, p. 11), carries a sharp and coldly critical undertone, exposing the hypocrisy and narcissism of the men. It is more difficult for men to do the work of emotional development because this work requires individuals to be emotionally aware — to feel (Hooks, 2004, p. 70). Although the household appeared orderly on the surface, Minnie was emotionally wounded each day, metaphorically "butchered" by a life of isolation and emotional neglect. Mr. Wright's harsh and piercing words were enough to destroy Minnie's mentality. Mrs. Hale senses the cause of Minnie's detachment to her husband's death and recognizes it not as ruthlessness, but as the result of years of silent miseries.

Thus, Glaspell challenges the patriarchy by emphasizing how it gives privilege to men to be recognized by their own names while women are identified through their husbands' surnames. All over the play, female characters remain unnamed, stressing their loss of personal identity. Yet Minnie's first name is only revealed by Mrs. Hale on the second half of the play when she recalls about Minnie's cheerful and sovereign life, before marriage, whom once known as Minnie Foster—an ecstatic and spirited choir singer.

Mrs. Peter: Angel Turned Defender

Mrs. Peters starts sympathizing with Minnie by comparing to her own past reminiscing a childhood trauma when a boy killed her kitten. She also intensely resonates with Minnie's suffering—on the bereavement of her two years old infant. This kind of psychological and emotional recognition empower both women to steadily come across the probable reason behind Minnie's act of murdering John. Moreover, Mrs. Peters for a moment leaves this understanding only due to her fear of patriarchal authority. She also advises Mrs. Hale not to draw conclusions hastily as they cannot be assured "who killed" (Glaspell, 1916, p. 22) John. She underscores that law is responsible to judge and punish crimes, and affirms that "men are there to do so," defending her support to the existing legal system. Mrs. Peters is excessively worried with how the men might perceive them. Her apprehension is about how the men might ridicule harsh truth—that Minnie killed John for such small canary. Hooks (2004) says "women can be as wedded to patriarchal thinking and action as men" (p. 23). Similarly, Mrs. Peters is basically married to law of her husband just as attorney says. Mrs. Hale reveals seeing a gun in John Wright's house which Mrs. Peter cannot fully grasp. This remark symbolizes John's authoritarian control over Minnie and the domineering atmosphere in which she breathes. Due to the lack of in-depth comprehension Mrs. Peter cannot feel it rather she is obsessed with the weird circumstance of John's death—his wrung neck—and further indicates that Minnie may have murder her husband with precise plan.

Glaspell describes Mrs. Peters as "a slight wiry woman, a thin nervous face" (Glaspell, 1916, p. 5), indicating her frail physical and mental state, which reflects her acquiescent position in the society. Mrs. Peters is reluctant to touch quilt as attorney strictly ordered them not to disturb anything, as any item could function as evidence. In contrast, Mrs. Hale is disregarding this warning—her shrewdness and audacity manifest colossal degree of rebelliousness and courage. Mrs. Peters laughingly reminds on Minnie's appeal for her apron in prison—an aspect that signifies Minnie's deep affection to the daily tedious household chores. This implies Minnie's shabby life where she has little real agency that disconnected her even from the "Ladies Aid" (Glaspell, 1916,

p. 13). As Hooks (1984) argues “women also believed that a person in authority has the right to use force to maintain authority” (p. 119). Hence, Mrs. Peters’ submissive nature leads her to accept this viewpoint, trusting that the men will uncover the truth—one that the women are expected to acknowledge without question. Representing woman as weak character is the feature of patriarchal literature. Judith Fetterley aligns with this when she studies *The Great Gatsby* which is a “love story centred in hostility to women and the concomitant strategy of the scapegoat” (1978, p. 72). She has studied several American fictions in her book, *The Resisting Reader*, and discovered how woman characters are portrayed in periphery with condemnation.

Consequently, Glaspell has tightly caught this hypocritical nature of patriarchy and presents the women’s solidarity that stems from their own shared experiences of oppression. The harsh reality is that they, too, endure mistreatment at the hands of their husbands. As a result, Mrs. Peters lacks the confidence to defend Minnie in the presence—or even the absence—of men. She embodies the role of the “angel in the house” (Woolf, 1924, p. 285), as her thoughts are shaped by patriarchal expectations and she struggles to voice any dissent. Therefore, Elaine Showalter argues that women must not be the silent readers of the men’s texts rather they must be the writer of their own literature (Blamires, 1991, p. 376). Virginia Woolf’s *A Room of One’s Own* encourages women to establish themselves as writers and intellectuals, a message that complements Susan Glaspell’s portrayal of silent rebellion in *Trifles*. Woolf (1929) reflects on how societal restrictions silenced women’s creativity, stating, “That one would find any woman in that state of mind in the sixteenth century was obviously impossible” (p. 28) since even a sister of Shakespeare would never have received the same privileges or opportunities as he did. Similarly, in *Trifles*, Mrs. Peters initially aligns with the men, believing their concerns are more important and that domestic matters are trivial. However, as she uncovers the emotional and psychological toll of Mrs. Wright’s isolation she begins to question that mindset. It is because “whenever a woman is ready to speak, a process of liberation begins, so it has powerful political meaning . . . when we tell others the story of our lives, our self-consciousness becomes clear” (Hooks, 1989, p. 13). By the end, Mrs. Peters, along with Mrs. Hale, defies male authority by choosing empathy over legal duty—symbolically breaking the chain of female silence and subordination. She does not have head-on-face with the men directly but her silent revolt indicates the initiation of a personal revolution toward liberation.

Thus, women do have strong intuition to perceive psychological gradation that men fail to understand. Mrs. Peters compassionately associates to Minnie through her own suffering of losing a kitten and a child—representing women’s intense emotional intellect. However, the men’s unawareness superficial attitudes are responsible for their futile and shallow investigation—lacking insight to trivial quests.

The Red Box: A Treasure for Truth

Minnie had experienced the acute pain of childlessness for a long period, and thus she bought the canary for the companionship. Mrs. Hale is immensely assured that John Wright could not tolerate the happiness of Minnie—her enjoyment in spending time with her bird and its cheerful singing. Therefore, he made it “still.” His anger silenced the bird. The delicate red box which contains the lifeless body of a canary wrapped in silk, instantly alarms Mrs. Hale to connect the evidences—the cage, the broken door, the red box, and the dead bird. Noticing the canary’s neck

was wrung, she deduces that John likely caused its death. Wrapping the dead canary's body in silk signifies Minnie's unconditional love for the bird, and that she intended to "bury it in that pretty box" (Glaspell, 1916, p. 22). Mrs. Hale's courageous decision to conceal the box beneath the quilt scraps before the men return is truly admirable.

The audience feels Minnie through these two women despite her absence who was pretty "caged bird" much like her canary. While inspecting the birdcage, they discover that one of its hinges has been forcibly pulled apart. Although, Mrs. Hale wishes to leave, they are obliged to remain longer because the "men" are taking their time with the investigation. At the end, the women communicate through subtle, unspoken understanding because "the basis for bonding was shared victimization, hence the emphasis on common oppression" (Hooks, 1984, p. 45). Mrs. Peters is unable to hide the red box in her bag, and Mrs. Hale promptly "snatches the box and puts it in the pocket of her big coat" (Glaspell, 1916, p. 25) symbolizing their silent complicity because "sexist discrimination, exploitation, and oppression have created the war between the sexes" (Hooks, 1984, p. 34). This act of quietly concealing the red box embodies the women's collective resistance against the patriarchal justice system that disregards their perspective, ultimately succeeding in saving their gender. This truly shows that the "men who win on patriarchal terms end up losing in terms of their substantive quality of life" (Hooks, 2004, p. 72).

Result

In *Trifles*, the authoritative men try to impose their control on women that significantly conceals inherent trauma endured by them but they respond with silent suffering. This patriarchy not only robs women's freedom but also immures them to traditional roles as caretakers—expecting them to be the surrogate mothers to their husbands to the unpaid invisible slaves to perform relentless labor, management of household chores, land, and farm only to be invisible within their own homes. Moreover, men dominate language and narrative disregarding women's voices. Not only this, they reject women's concerns as trivial. Yet, it is the women who, at the end, come out as the true investigators, revealing the hidden motives behind the crime by their attentive scrupulous interpretation of the "trifles" which men overlook. They succeed to reveal that Minnie's profound emotional and social oppression was the real motive to kill her husband.

The women are not officially the part of the investigation but their quiet and subtle inquiry eventually proves far more insightful and impactful than the shallow search of supercilious men. They are sheer heedful to seemingly trivial details that reveal the emotional truths and concealed tensions that the men fail to see. The keen shrewdness of Mrs. Hale, contrasted with the cowed timidity of Mrs. Peters—finally exposes the primary reason behind the murder. The flippant and contemptuous men underestimate domestic matters that simply contrast with the careful and detailed observations of women. The men mock and dismiss the "trifles," whereas the women comprehend their importance with the a deeper awareness shaped by their lived experiences.

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English Teachers' Narratives of Teaching English Across the COVID-19 Pandemic in Bara District

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DOI: <https://doi.org/10.3126/jotmc.v9i9.90456>

Abstract

This paper explores the use of digital technology influenced students' teaching before, during and after COVID-19 and adds the teachers' experiences and college practices on teaching the English language, highlighting gains and losses. It aims to investigate the narratives of college English teachers in Bara district about their experiences teaching the English language before, during and after the COVID-19 pandemic. The study uses in-depth interviews and reflective accounts from English teachers' experiences and also using narrative inquiry methods under the qualitative research design to apply adult learning theory (Malcolm Knowles in 1968). Data are collected with the help of interviews with four English teachers. One significant finding is that all interviewees agreed there was a perceived learning loss among bachelor's students after COVID-19. Interviewees noted, it is quite difficult to divert students' attention from gadgets back to learning. The findings of this study offer significant implications for key stakeholders such as teachers, educators, and curriculum developers by offering them evidence-based practices through which to more effectively inform instruction. Not only do these implications shape current educational practices, but they also form the basis of follow-up research aimed at further improving student learning outcomes.

Keywords: College Students, Online class, Assessment system, Impact, COVID-19

Introduction

Selecting "Challenges Across the COVID-19 Pandemic in Bara District: Narratives of College Teachers" as a research topic is important to me because it is closely related to my experience. As an assistant lecturer at Bara College, starting from my first day, in my first class, teaching Compulsory English to BBS 1st-year students, I introduced the chapter "Rice" by Jhumpa Lahiri (Lahiri, 1999). I asked students to read and note down challenging words which they did but more than I had anticipated. I clarified words both in English and Nepali in an attempt to make them clearer. On the second day, I helped them in reading aloud, and I noted that some students especially girls were hesitant. I provided reading assistance and clarifications. On the third day, I

requested that some to summarize the next chapter in English or Nepali but discovered that some students lacked a complete understanding of the text.

On the fourth day of college, I had students paraphrase a lesson in their own words. As I was checking their work, I noticed they were struggling with comprehension, vocabulary, and grammar (Pokhrel & Chhetri, 2021). As soon as I could establish trust with them, they told me they would prefer Nepali translations because they find English difficult. I changed gears to teach English materials in Nepali, and within two weeks, they communicated that the COVID pandemic had made them short of appropriate guidance and a good environment (Shah, 2022). Knowing this truth about their loss of learning motivated me to study the learning crisis.

In this study, I explained the term learning crisis or learning loss, the impact of COVID in education (college, online class, assessment system) changes in teaching after the COVID period. Teaching-learning process highlights the educational challenges faced by students. The issue underscores learning gaps, hesitancy in participation and reliance on vernacular languages for comprehension. These issues resonate with broader discussions on the learning crisis and its impact of the pandemic on education systems as noted by Shah (2022). Shah (2022) argues that solving the learning crisis or loss depends on teachers ensuring students achieve important learning objectives for cultural species survival. It practices teaching and direct instruction where teachers act as strategic. Applying behavior analysis to all college components (students, parents, teachers and the supervisors) can support an effective pedagogy.

The COVID-19 pandemic profoundly impacted the education sector, catalyzing a dramatic shift in learning modalities and exposing opportunities and challenges. Tarkar (2020) emphasizes that the COVID pandemic has made difficult globally, originating in China and spreading worldwide. It has caused a health crisis and economic slowdown. Countries including India, Nepal and others made rules to control the virus. It implemented daily life and closed Schools, colleges and universities. The transition to online education systems has introduced significant challenges for students, teachers, and parents (Chaudhary et al., 2022). Simultaneously, policymakers were struggling to adopt educational policies to address these changes. This study focuses on the impact of COVID on the education system, given the challenges and changes in teaching trends.

Educational systems have the role of providing students with learning opportunities and overall development, but they are often faced with challenges that have a strong bearing on student performance. Factors such as access to technology, the quality of interaction between students and instructors, and the ability to manage psychological stress all contribute to the effectiveness of education, awareness campaigns, efforts to raise awareness about mental health and coping mechanisms could have been launched to support students in managing stress and anxiety (Gupta, & Poudel, 2025). When these elements are compromised, concerns arise regarding the long-term effects on students' academic performance, progress, and development.

Furthermore, the COVID-19 pandemic has affected education in the entire world. It revealed the students' learning conditions and outcomes, and the project-based assessments or online exams strategy has been widely adopted in various educational systems globally (OECD, 2020). These are essential for developing strategies to enhance educational resilience and support student learning in the future (Jones & Lee, 2020; Smith, 2021). At that time, schools and universities faced different types of challenges during COVID-19 in terms of technology, inadequate knowledge of

technology, reduced interaction with peers and instructors, and heightened psychological stress. This disruption has led to concerns about the long-term effects on students' academic performance, engagement, and their academic development (Ghimire, 2022). Vaccination Campaigns, educational institutions may have participated in vaccination drives, prioritizing teachers and eligible students to safeguard against COVID-19, which has been a common strategy worldwide (CDC, 2021).

Learning loss has worsened due to global disruptions. This shows the need for engaging teaching. In many schools, students passively receive information, leading to shallow learning. My education involved a lot of spoon-feeding. Passive learning makes retention hard (Biggs, 1999). Active participation, problem-solving, and dialogue make learning and remembering simpler. Discussion classes and projects suited me better. More interactive teaching needs to be introduced to address the learning loss of the students in the Bara district. Dropping spoon-feeding can increase learning and simplify the process for students to recall longer (Jones&Lee,2021). Encouraging independent thinking and active engagement aids better understanding and also allows students to take ownership of the learning process. To explore the stories of English language lecturers in the context of the COVID-19 pandemic, this study is guided by the research question;

How do Bara District college teachers narrate their experiences of teaching English before, during, and after the COVID-19 pandemic?

Adult Learning Theories as Theoretical Basis

Adult learning theory is also known as andragogy. It is the concept that has been around for years. It was developed by Malcolm Knowles in 1968. It is the study of how adults learn and how it differs from children (Knowles, 1970). It aims to show how adult learning is distinct and identify the learning style that suits them best. The COVID-19 pandemic underscored the significance of fundamental skills like reading and computer literacy along with the requirement for self-directed learning. Adult education sectors rapidly transitioned to online instruction despite obstacles such as a lack of access to technology. Andragogy, the adult learning theory, is particularly applicable since it identifies adults' requirement for self-direction, experiential learning, and applicability (Knowles, 1980). This study employs andragogical theory to explain how college English teachers in Bara District managed to teach before, during, and after the pandemic. On the basis of their narratives, the study reveals how teachers enabled adult learners to overcome challenges and adapt to new learning environments, making recommendations on how to improve adult education during crises.

Method of Inquiry

I apply narrative inquiry as a research method under a qualitative research design to ensure a systematic approach and achieve the study's objectives. Narrative inquiry explores individuals' personal stories to understand how they make their experiences, emphasising context and temporality (Clandinin, 2013). It provides insights into participants' identities and values shaped by their life-related narratives (Clandinin & Connelly, 2000). I selected participants purposively from the Bachelor level's four Bachelor level English language teachers, focusing on teachers who faced

the challenges due to COVID-19 while teaching their students pre, during and after COVID-19, to reveal the learning loss/learning crisis related to the Bara district's students. To ensure that the participants could provide rich, detailed accounts of their experiences of teaching the English language.

I collected data from these participants, taking consent from their campus chief and from them as well, to conduct interviews. I interviewed and had informal conversations in one empty classroom location at their convenience. I recorded the participants' responses using my mobile phone during the interviews. I interviewed each participant, each lasting approximately 15 to 20 minutes. This process was designed to ensure comprehensive data collection and to capture any nuances in their responses. I also observed the participants' language use during interviews. Then after, the recorded data were transcribed and translated into English. Data analysis involved coding the interview transcripts and identifying recurring themes and patterns.

During narrative analysis, I applied Barkhuizen's (2011) narrative knowledge model which story generation processes, transcription, translation data coding and thematic representation are emphasized. Analysis started with interview data transcription to reach accuracy and representativeness of participants' original accounts. Translations were made in order to maintain the authenticity of storis. I applied Saldana's (2016) coding protocols that proceeded through cycles. Finally, I interpreted and discussed our findings within the theoretical framework of Knowles (1980) Adult Learning Theory.

Findings and Discussion

Findings showed key themes that aligned with previous research and theoretical frameworks offering insights into participants' experiences and perspectives. Three main themes emerged from analysing participants' responses. They are listed with their descriptions.

Teaching English Before COVID-19

"Before COVID-19" refers the period before to the beginning of the COVID-19 pandemic that began spreading globally toward the end of 2019 and the beginning of 2020. It was the period when daily living, work, school, socialisation, and healthcare were routinely performed without the strict limitations, public health practices, and accommodations necessitated by the pandemic. In education, the case being teaching, most of the learning takes place face-to-face, with a conventional classroom arrangement being the case. Less application of virtual or remote teaching facilitations was seen, and learning interactions were more concrete and shared without social distancing and lockdowns placing their limitations. Large-scale adoption of online learning, telework and strict public health measures such as lockdowns and social distancing only became common in response to the crisis that began in late 2019 and early 2020 (UNESCO, 2021; WHO, 2020). Aman stated:

Before COVID-19, I was an assistant lecturer for 10 years working with undergraduate students. Predicaments were coordinating big classes and students' multilingual English proficiencies. Having been an accomplished English language teacher for over a decade of teaching. I realized that, mainly in classroom teaching, traditional leveraging of face-to-face interactions helps students. I would do role-playing exercises and group discussions to

enhance students' proficiency in speaking. It was not easy to work with large classes because one could not give one-on-one attention to each student.

Big class sizes posed challenges to providing individualized care and accommodating to accommodate different English levels. Traditional face-to-face techniques as role play and group discussion benefited speaking improvement but were bound to limit equitable participation in large mixed-ability classes. (Singh & Thurman, 2023). To support his points, Binita stressed:

I had technology integrated into my classes from a very early time and I utilized digital tools for assignments and evaluation. I was already used to utilizing digital tools for assignments and evaluations before the pandemic. So, it wasn't hard to transition; I typically utilized Google Classroom to share reading materials and receive assignments. Therefore, students were already familiar with it.

Evidence suggests that the use of tools like Google Classroom enhances student participation and performance and previous uses of the platform before the pandemic. Moreover, evidence shows that prompt feedback using digital resources boosts student performance (Hattie, 2009), facilitated by tools for real-time submission of work and feedback. Starting exposure to such tools builds teacher and student confidence in the effective application of technology, resulting in more adaptable and individualised learning experiences (Bakia et al., 2012). A proactive approach demonstrates the same, showing way digital tools can enhance both teaching methodologies and student performance. Concurring with both views, Bipin explored:

I had exposure to rural colleges, and I often faced problems with limited resources. When teaching in rural college, I mostly faced problems with fewer resources, but I made do by using creative methods like drama and narrative. I used local folk tales to teach English applying it to students through familiar stories while teaching English language.

Rural schools have few resources which also pose an obstacle to the process of learning and teaching but incorporating these limitations through the application of creative pedagogies such as drama and narrative can also contribute significantly to enhancing students' learning and engagement (Mehta & Sharma, 2023). Application of local folk tales in English lessons not only bridges the gap of cultural context between students' surroundings and the target language but also enhances the sense of an inclusive learning culture. This method concurs with Kumar and Patil (2022) which is centred on how culturally responsive teaching for example use of familiar stories increases language acquisition and comprehension especially in resource-poor settings. Engagement through narrative and drama has been found to increase motivation and engagement since it transforms passive learning into an active and interactive experience (Singh, 2023). Through the use of these approaches, instructors can break the limitations of a few resources, making the classes more engaging and efficient in rural universities. Aarti captured the situation before COVID-19:

There were no obstacles in teaching students, the teaching and learning process was going smoothly. I was in my comfort zone, feeling proud of myself because I was able to handle any problem related to English language teaching, so that students told me Beauty with brain ma'am in my college; however, I didn't have any knowledge regarding technologies. It was not needed for me, neither in my studying period nor in my teaching period before COVID-19.

I was shocked, I should learn technological things and feel depressed myself with my burdensome activities. By realizing this condition, Aman added:

Previously, I would read poetry aloud in class and discuss interpretations. During the pandemic, I had to transition to sharing poems via PDFS and discussing them through voice messages on WhatsApp. However, the pandemic shifted my perception; I realized the importance of digital skills.

Initially, I was impressed and successful in my teaching career, confidently providing English language education and gaining respect from students who even called me "beauty with a brain ma'am." My strength and comfort zone were in traditional methods as technology was not required while studying or during the early days of my teaching life (Smith, 2022). Recent studies resonate with this shared experience among teachers across the globe, highlighting the shared "technostress" and challenge of adapting to web environments without pretraining (Gupta & Poudel, 2024). Despite these challenges, the crisis has underscored the need for digital literacy and professional development, pushing teachers like me out of our comfort zone and into a lifelong learning process now embracing blended and online pedagogical strategies (OECD, 2020). This change has expanded instructional repertoire as well as knowledge regarding making learning environments inclusive and interactive. As digital technologies have become synonymous with education, continuing professional development is imperative to ensure teaching professionals are adequately prepared to utilize these tools to enhance student learning outcomes.

Teaching English During COVID-19

During the COVID-19 pandemic, the education sector experienced unprecedented disruption as schools and universities around the globe suddenly shifted on transitioned to online schooling. The pandemic compelled teachers and learners to transition at short notice to digital platforms such as Zoom and Google Classroom, with limited previous experience in online instruction (Gupta & Awasthi, 2025). This sudden change was traumatic to the majority of teachers, invoking "technostress" as they were not properly trained or prepared to utilize digital materials (Smith, 2022). Students also faced several issues, e.g., including connectivity with the internet, fewer interactions and poor support. Despite these challenges, the crisis highlighted demand for digital literacy and accelerated change into hybrid learning models, revolutionizing the education sector and calling for pedagogical reevaluation to better prepare students for a more connected, technology-driven world (OECD, 2020). Aman underscored:

The pandemic forced to divert of attention towards more functional skills that focus on digital literacy. I was initially confused and overwhelmed. The shift from in-person classroom to online teaching was sudden and awkward. It took a month to get used to it. Learning new technology was the most difficult part; I was not used to technology tools. Primarily I used Zoom and WhatsApp for communication. It took some time to get used to these tools. Also, frequent internet loss disrupted classes, and it affected continuous teaching and learning activities.

The COVID-19 pandemic directly disrupted traditional education, forcing educators to quickly adapt to online teaching platforms. As mentioned, the transition to digital tools like Zoom and WhatsApp was initially overwhelming due to limited technological skills. It suggests that while

teachers struggled with technological unfamiliarity and internet instability, they also demonstrated resilience, gradually enhancing their digital literacy (Gupta & Awasthi, 2025). Over time, the shift to distance learning promoted more sustainable and versatile teaching practices, albeit early challenges were extensive. Agree with Aman's statements Binita told:

I understood the utility of asynchronous learning when students had an appreciation for lecture recordings that they were able to see for their convenience. I looked at it, a chance to try new methodologies, although I was apprehensive initially. I enrolled in a course on best practices in online teaching within days and familiarized myself with new tools e.g., Kahoot for quizzes. I began applying Zoom breakout rooms for group conversations, which have taken me a week to adapt.

Realization of worth in asynchronous learning is supported by recent research that emphasizes its essential enhancement of various student learning styles. Evidence suggests that asynchronous learning is flexible that enabling students to review content at their convenience. It provides understanding and retention. Use of interactive tools e.g., Zoom breakout rooms has also been shown to facilitate participation for collaboration, key components of successful online teaching (Gupta & Poudel 2025). Teachers who implement such tools can create more dynamic and adaptable classrooms. With its contrast of both statements but partially supporting, Bipin understood:

I was frustrated and powerless, knowing that many of my students were not able receive online lessons. The pandemic revealed the digital divide, with a rise in the need for better infrastructure. I called the parents to find out if they possessed any means for their children to receive lessons, but most did not. It was a slow process that lasted approximately two months to find a working solution.

The COVID-19 crisis created immense hardship in education, such that numerous students did not have access to computing devices or even stable connections, which constrained them from using digital learning platforms (Gurung, & Shrestha, 2023). As a teacher, I faced the same difficulty firsthand and saw that a majority of the parents were unable to fund online studies for their kids. Current studies indicate that teacher effort, like your attempts to contact parents, was crucial, but often met with limited success due to widespread technological and resource limitations (Gurung, & Shrestha, 2023). The trial-and-error method of developing an effective strategy took time often months reflecting general findings that effective adaptation required protracted periods of effort and interaction among teachers, parents, and policymakers (Thorndike, 1911; Patel & Sharma, 2023). The episode emphasizes the need for enhanced infrastructure and digital proficiency to allow balanced access to schooling in the event of upcoming calamities (Smith et al., 2023). Similarly, Aarti included some assertions:

I mostly faced trauma of COVID-19, which kept me unable to teach my students as most of the time I was suffering from the COVID-19 virus. However, I taught my students through an online platform, which, unlike me, my husband stood by my side most of the time to get over it. After that, I have been trained with it and it is easy for me to deal with. I employed basic tools like WhatsApp to transmit assignments and audio lessons.

Teachers experienced unprecedented challenges in the COVID-19 pandemic, with most having undergone traumas due to issues and the sudden change to online teaching. Evidence shows

that the sudden shift and adaptation to remote learning was especially problematic for teachers who were not fluent in digital tools, causing colossal stress and impairing their well-being (Viner et al., 2022). Where technology access is low, teachers are likely to utilize basic platforms like WhatsApp in sharing tasks and imparting lessons, replicating studies in developing countries (Dhawan, 2020). Having support from family members assisted in overcoming such challenges, as per Pandey (2021), who pointed out the importance of family support in bridging the gap in terms of digital connectivity. For most educators, including those infected multiple times by the virus, adapting to online teaching was a process of learning, showing the resilience required in this era (OECD, 2020).

The COVID-19 pandemic accelerated directly to the use of technology in learning forcing schools to adopt online platforms for remote learning. Applications such as Zoom and Google Meet became indispensable, while more basic apps e.g., WhatsApp bridged the digital divide in regions with poor internet connectivity (Dhawan, 2020). While most teachers found this shift challenging at first, technology allowed for ongoing teaching and learning, showcasing both its promise and disparities in digital access (OECD, 2020). Aman commented on the familiarity of technology:

The most difficult was mastering the new technology since I had never employed it previously for classes. I mastered the use of Zoom during a workshop, but had problems with screen sharing at first. I even accidentally ended classes when I was trying to mute students. I shared reading materials and assignment instructions through WhatsApp groups and conducted live classes on Zoom twice a week.

Moreover, Binita, conceded that technological breakdowns accompany Aman's thoughts: *Padlet facilitated the students to post their ideas and responses on a single board, promoting cooperative learning. Connectivity issues were not frequent, but there were certain students whose issues occurred with shaky internet connectivity. Hence, I recorded classes and shared them via Google Drive so that live class absent students would be able to access them.*

Both these teachers experienced technical issues alone. Nearly all the teachers across the world went through this phase. Aman's and Binita's reactions to their experiences with technology during and after the COVID-19 pandemic were indicative of deeper issues in current studies. Aman had difficulties adapting to the new technology, like Zoom, where at first, he was having trouble with features like sharing screens and hanging up calls unexpectedly, which was in line with Dhawan's (2020) study of teachers' failure to access initial training. Similarly, Binita's use of Padlet to support collaborative learning is indicative of efforts to cooperate with students in the face of connectivity issues, as implied by the OECD (2020). Both teachers had connectivity issues, a common lament reported in studies of online learning in the developing world (Viner et al., 2022). Binita's coping with it involved recording lessons and sharing them via Google Drive, which researchers have recommended to serve students with uncertain internet connectivity (Pandey, 2021). Their narratives describe the coping capacity of teachers in online learning and instituting a mix of synchronous and asynchronous learning to sustain students' engagement.

Teaching English Transition in COVID-19

Educating students following COVID-19 has called upon teachers to adapt a new education terrain, where hybrid learning models and digital tools form part of the new classroom norm. The

pandemic brought to the forefront the role of technology in education, with colleges responding by continuing to utilize online platforms such as Google Classroom and Zoom in addition to the conventional in-class teaching (OECD, 2020). However, the return to school underscored learning gaps and inequalities, as well as inequalities in access, that required specific interventions to reverse students' academic and emotional deficits (Viner et al., 2022). Other students came back to school with varying levels of knowledge, depending on differences in home learning conditions during the pandemic. Teachers have also been forced to use differentiated instruction and social-emotional learning techniques to support students in recovering lost skills but regaining confidence within an adaptive, nurturing climate (Pandey, 2021). Post-COVID classroom environment supports the ongoing necessity of adaptability, resilience and proper integration of technology to meet a range of student needs. Aman presented his observation after COVID-19:

I noticed that students who had never even touched a laptop or tablet before. Now pros at navigating platforms like Zoom and Google Classroom. This extra digital literacy has also made it easier for us teachers to incorporate technology into our instruction. We can now use online tools like quizzes interactive lessons and videos to make learning more interactive.

The starting of digital literacy by students particularly on platforms like Zoom and Google Classroom, has changed the face of learning. With students who had no prior experience with digital technology adjusting quickly they became efficient in digital realms and process enhanced their engagement and grades (Crowdmark, 2023; Khan, & Farooq, 2021). In addition to interactive elements such e.g., quizzes, videos and group work has been made learning interactive and inclusive and accommodating to diverse learning styles (Crowdmark, 2023). Online platform shift also accommodates some of the major 21st-century skills, e.g., including critical thinking, digital literacy and flexibility that are essential to students' long-term success (Khan, & Farooq, 2021). Advances refer to the beneficial impacts of technology on contemporary classrooms improving in terms of the learning process and the general performance of students. Binita: "I agree with Aman."

Students' familiarity with technology has influenced how we learn. I have noticed that students are comfortable now with the interactive tools of Padlet and Kahoot that I use to enhance interactions in classes. They are accustomed to discussing and collaborating on the internet, which has transformed the class environment more interactive one than ever before. It is less challenging for us to integrate technology into everyday classes due to their eagerness to participate in virtual activities.

The use of technology by students has essentially enhanced classroom interactivity. Current research validates this trend noting that technological usage among students facilitates greater engagement and collaboration (Crowdmark, 2023). Interactive platforms not only encourage students to offer ideas but also enable peer collaboration to maximise the learning experience (Khan, & Farooq, 2021). Moreover, using e.g., platform advances the growing emphasis on digital literacy, as it is required to prepare students for life in the academic and professional environment (Crowdmark, 2023; Khan, & Farooq, 2021). As students embrace digital learning spaces, they are more actively engaged with content, enhancing their learning and classroom climate. Bipin extended:

If I talk about myself, then the hybrid shift in the learning model has been one of the most obvious changes. With students being more familiar with gadgets now, I've been able to integrate on-campus instruction and online learning more smoothly. This versatility is excellent because it enables me to provide students with the ability to access lessons from home, which suits individuals who struggle to come in because of challenges. Technology has become an essential part of our learning process.

The hybrid learning model has been an upcoming trend in education, combining face-to-face and online learning modes that cater to the diverse needs of students. The increasing ease of students of technology has enabled instructors to adopt online tools supporting flexibility and accessibility, as observed in literature (Garrison & Kanuka, 2022). The model supports students who are unable to physically attend classes, offering them the choice to attend virtually (Bonk, 2021). Additionally, hybrid learning supports individualised learning, where technology allows students to learn at their own pace and enhance their engagement, eventually leading to enhanced academic performance (Freeman et al., 2022). Nonetheless, Aarti took the above statements as satirical and presented her opinions in a centrist manner:

Now, students are familiar with gadgets, knowledgeable about using them. While they are misusing this technology due to misuse they are deviating from their duties and obligations. I have noticed, students can't live without it, become dumb and decrease their learning abilities day by day. Most of the time, my efforts to divert their attention from the gadgets but it's not simple for other teachers and me as well to divert and make their focus on their studies.

The increased use of digital devices among students has created opportunities, in addition to challenges, in learning. As much as technology can enhance learning through simple access to information, it has also become a principal source of distraction. Based on research, excessive use of devices, particularly for social media and entertainment, negatively affects the academic performance of students by reducing the time they dedicate to studying (Lepp et al., 2015). In addition, multitasking by devices may disrupt cognitive function, making it harder for students to focus and remember (Rosen et al., 2013). This trend of overuse, along with the inability to control technology that has resulted in decreased critical thinking along problem-solving skills among students (Kuss & Griffiths, 2017). Educators' challenge is not only using technology to teach efficiently but also helping students to ignore distractions and maintain focus on studies.

Conclusion

COVID-19 has greatly impacted student teaching, changing the education field. Before COVID-19, face-to-face teaching provided interaction between students and teachers giving a more structured and dynamic atmosphere to the learning experience. But during the pandemic, this shift to online and remote learning was abrupt, forcing both teachers and learners to adapt rapidly to new technologies. During this change, some significant issues, e.g., digital divide and unequal access to technology surfaced as barriers to students' successful learning. Teachers learned digital pedagogical skills by the seat of their pants during the pandemic, often with minimal training, so it was a very steep learning curve. Although most schools are now back to normal face-to-face teaching, COVID-19 has had ongoing effects on educational practice. The extensive use of digital technologies has bred hybrid models of learning, where the online and offline features are mixed in

order to become more flexible and accessible. The shift, though, has posed difficulties for students, primarily in managing screen time and maintaining focus. The pandemic has irreparably affected the students' attention span through over-technology use. Therefore, in the future, educators will have to continue embracing technology advancements alongside teaching assistance to students to be successful academically as well as emotionally in both virtual classrooms as well as physical classrooms.

Acknowledgement

I wish to acknowledge the University Grants Commission (UGC) Nepal, for the research grant that enabled me to undertake the study. Similarly, Dr. Tikaram Poudel deserves my heartfelt gratitude since his guidance, feedback, and assistance in the completion of the research were invaluable.

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Adoption of Mechanization by Paddy Growers In Rjkp Project Command Area, Kailali

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Abstract

This study aims to assess the mechanization status and constraints faced by the rice growing farmers and its impact in paddy production in Kailali district. The study was conducted in command area of RJKIP which covers Tikapur municipality, Lamki-Chuha municipality and Janaki rural municipality which were purposively selected. Sampling of 92 rice growers was done using simple random sampling method and primary data was collected via household survey. Multiple linear regression model was used to analyze the factors affecting adoption of mechanization among rice growers. The findings showed education level, larger land holdings, income of farmers had significantly increased the adoption of mechanization where, age, family size and labour cost had negative effect on adoption. Major problems in adoption of mechanized agriculture system were higher cost of machine followed by lack of technical knowledge, small land holdings, lack of subsidy etc. Farm mechanization can be enhanced by providing subsidy on machineries, technical assistance on using different tools and farming practices followed by land management scheme

Keywords: adoption, command area, mechanization, subsidy, regression

Introduction

Paddy is the major cereal crop in the context of production and area allocation in Nepal. It can be grown in different agro-climatic conditions from Terai to high Hills of the country. Rice is the most preferred staple food crop of Nepal and fulfils more than 50% of the calorie requirement of the Nepalese people. Rice occupies about 1447789 hectares of land which yields 5486472 tonne having average productivity 3.79 tonne per hectare. Among the seven province, Madhesh province has highest production i.e. 1388841 tonne while Karnali Province produces the least at 129473 tonne per hectare. Sudurpaschim Province recorded 589221 tonnes from 162520 hectares. The reports indicate Kailali district contributes 322646 tonnes from 71380 hectares (Department of

Agriculture [DoA], 2024). Rice contributes more than 20% of the agricultural GDP and the 50.27% of the total food grain production of country (Statistical Information Book, 2024). The crop is grown in height range from 60 m (Kanchanakalan, Jhapa) to high altitude as 3050 masl (Jumla Valley) of Nepal, which was the highest elevation for growing rice in the world.

In the last 15 years the agriculture sector of Nepal experienced several changes. The proportion of household operating agricultural holding as well as the average size of operated has decreased. About 60% of active population is dependent on agriculture (MoALD, 2024). Share of commodities to agriculture GDP from cereal and other crops account for 49.41% and separately constituted from vegetables and nursery 9.71%, fruits and spices 7.04%, domestic animal and poultry 23.25%, other animal farming 2.43% and forestry 8.07% (ABPSD, 2007). Nepal is a tiny, landlocked nation that lies between China and India. The majority of Nepal's population depends on agriculture for their livelihood, and it is the primary source of GDP, income, and job opportunities in the country. Approximately 34.7% of the country's GDP comes from agriculture, which also employs 73.9% of its people full- and part-time (NLFS, 2008). Population of Nepal is increasing over a period of time but the production of crops decreased over a period of time. The hill and mountain regions are highly food deficit and therefore have become vulnerable to food security. Nepal has been relying on unofficial imports from India to meet its food deficit so this indicates increase in paddy production for food security (DoA, 2020).

Kailali district covering an area of 3235 km² among this 40.3% (1303.7 km²) hills and 59.7% (1931.3 km²) terai. Total annual rainfall of this area was 1840mm. Maximum and minimum temperature of this area was 43°C and 5°C respectively (DADO, 2017). In addition to lowering drudgery, the adoption of agricultural tools, machinery, and other implements provides technology to support agriculture through the efficient use of inputs (Verma & Tripathi, 2015). Meeting the rising need for food to feed the nation's growing population is the largest problem facing the agriculture sector (Singh, 2015). Mechanization, along with other new technology, has induced an upward shift in production by increasing output and decreasing costs. Globally the paddy production is low, reason behind this is due to various factors such as inadequate irrigation facility, low soil fertility and nutrient, salt stress, ineffective weed control, lack of resistant and improve varieties, lack of mechanization and inappropriate production technology (Fahad *et al.*, 2019; Paudel *et al.*, 2021). In addition to facilitating the efficient use of different inputs like seeds, fertilizer, plant protection agents, and water for irrigation, agricultural mechanization also reduces poverty by making farming a desirable business. To boost productivity and ultimately raise the amount of produce, even small-scale farmers use specific, upgraded agricultural equipment on a custom-hire basis. It is preferred to employ such enhanced farm tools and equipment in order to lower production costs as well (Verma & Tripathi, 2015).

Agricultural mechanization plays an increasingly important role in agricultural production. It reduces around 27% of production cost and increased profit per hectare by 36% (Uprety, 2010). Agricultural activities in Nepal are mostly carried out by traditional method but with swift automation and high-quality seed and input materials are not even employed by farmers in adequate quantity (Thapa *et al.*, 2019). Farmers are affected by agricultural mechanization in a number of ways, including new seed, fertilizer technology, contemporary farming implements, cultural farming practices, and adjustments to operating schedules. But generally speaking,

technological advancements also raise capital productivity and change the technological rates at which capital can be substituted for labor, lowering the quantity of capital required to replace a unit of labor at specific output levels. In order to achieve certain output levels, fewer workers relative to land are required thanks to other improvements (Verma & Tripathi, 2015).

Due to a number of factors, including resource poverty, farmers are not adopting rice technology at high rates, so enhancing efficiency is crucial to raising output (Hormozi, Asoodar & Abdeshahi, 2012). Ghana's 13.6 million hectares of arable land, 8 million hectares, or 59%, are now suitable for mechanization (AESD, 2012). Just 20% (1.6 million hectares) of these fields were mechanized nationwide as of 2007. In Nepal's lowlands, tractor adoption has increased equitably (Takeshima et al., 2020). Ghana has recently seen an increase in demand for agricultural mechanization (Diao, Cossar & Kolavalli, 2014). Availability to extension agents, who were positively correlated with adoption and availability to farm equipment, were the main factors influencing the adoption of farm mechanization. Access to experienced labor, replacement parts, farm machine maintenance, and timely machine availability are among the issues encountered. Therefore, in order to raise farmers' understanding of the advantages of automation, more effort should be put into expanding their access to extension agents. Additionally, farmers that have access to credit are more likely to embrace mechanization (Ayandiji & Olofinsao, 2012). In Kailai districts, mechanization is limited only in large farmers or commercial farmers. Small and medium farmers are greatly affected by lack of mechanization due to unaware about agricultural mechanization. No adequate research activities have been conducted grading awareness and importance of adoption of mechanization in rice growers. Thus, the main objective of the study is to assess the farmers perception, constrain faced by farmers while adopting farm machineries.

Farmers have limited resources for production and farming was subsistence. Most of them were under-privileged and disadvantaged in terms of their socio-economic status due to poor level of production and productivity. Kailali district, though being terai district of Far Western Province faces deprivation of several infrastructures of development, education level, Poverty, socialization etc. In Nepalese agriculture, animal power is the primary source of energy. 36.3 and 40.5 percent of the nation's total farm power is derived from human and animal power, respectively. Just 23% of the nation's mechanical power is available. The majority of Nepal's mechanical power is located in the Terai, where it accounts for 92.28% of the country's total available mechanical power (FBC, 2006). Because hilly regions lack physical infrastructure (such as roads and electricity) and cultivate on small terraces, hill agriculture mostly relies on human and animal power. The main instruments and tools utilized in agricultural operations include sickles, local hoes, and indigenous wooden ploughs. Just 2.7% of estates in the hills have their own iron animal-drawn plough for agriculture. Farmers have begun employing power tillers for tillage operations in the valleys close to the road heads, and this practice is growing as rural roads are extended. In the majority of terai and hill settlements, sheller, polisher, and mechanical grinding mills are used. However, native tools like mortar and pestle, quern, and traditional water mills are still used for milling in the mountains (Shrestha, 2013). As we know that as population goes on increasing, land holding diminishes and production of crops goes declines, so we must increase either cropping land or productivity. And it is impossible to increase land holding but we can increase productivity by

implying various improved technologies. Among them mechanization is one of the options for increasing productivity.

Methodology

Site selection

Kailali district has the latitude between 28022'-29005'North and longitude between 80030'-81018' East with the altitude of 109m to 1957m from MSL. The total area cultivated under Rice in Nepal was 14,73,474 ha and the production was 56,21,710 MT in the fiscal year 2077/78 with the productivity as 5.62 MT/ha (MoALD,2024). The study was conducted basically focusing on paddy cultivation in command area of Rani Jamara Kulariya Irrigation Project (RJKIP) which occupies Tikapur municipality, Lamki Chuha municipality and Janaki rural municipality of Kailali district, Nepal.

Data collection methods

Tikapur municipality, Lamki Chuha municipality and Janaki rural municipality were purposively selected. Sample size of 90 rice growers was determined using Raosoft tool at 90 percent level of confidence. Primary data were collected by household survey and field observation from different ward of above three municipalities using simple random sampling. Both primary and secondary sources of information were used. The necessary data and information were gathered using semi-structured questionnaires. To triangulate the information provided by respondents, a key informant survey (KII) was also conducted. A variety of publications from government and non-governmental organizations, including the Ministry of Agriculture Development (MoALD), Agriculture Knowledge Center (AKC), Central Bureau of Statistics (CBS), District Profile, National Population and Housing Census (NPHC), and others, were reviewed.

Data analysis techniques

With the help of Excel tools, descriptive analysis was done using mean, frequency, percentage, etc. However, inferential statistics was applied through multiple regression analysis to determine the factors affecting the adoption of farm mechanization. Similarly, the relationship between the dependent variable i.e. adoption index (adoption of agricultural mechanization) and selected socio-economic characteristic as independent variables was determined by multiple regression analysis.

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + e$$

Where,

Y= adoption of agricultural mechanization as dependent variable

X₁= age of farmer (years)

X₂= education (schooling years)

X₃= family size (number)

X₄= land holdings (ha)

X₅= income (in rupees)

X₆= labour (in rupees)

X₇= inputs (in rupees)

Adoption categories

The extent of adoption of mechanization was analyzed by adoption intensity index. The adoption score was assessed by the sum of scores for the adoption of various machineries in four different farm operations used in paddy production. The level of adoption was indicated by adopters and non-adopters by using value one and zero respectively.

Adoption index was calculated by using following formula (Dangol, 2004)

$$AI = \frac{TAF}{MSO} \times 100\%$$

Where, AI = adoption index

TAF = total adoption score gained by individual farmers

MSO = maximum score one can obtain

The respondents were categories as low, medium and high adopter on the basis of extent of adoption of machineries.

1. Low adopters (up to 33 percent)
2. Medium adopters (34-66 percent)
3. High adopters (67-100 percent)

A total five operations were taken to calculate the adoption index. The selection of these operations was identified as major operations performed using mechanization in the study area.

Table 1

Farm machinery/ implements used in paddy production

S.No.	Operations	Machineries/implements used
1.	Tillage	MB plough, Cultivator, Mini tiller, Power tiller Harrow, Rotavator, Leveler
2.	Sowing/ planting	Hand operated rice seeder, Paddy transplanter
3.	Intercultural operations	Weeder, Hoe, solar operated irrigation pump, Fuel operated pump
4.	Plant protection measure	Knapsack sprayer, power sprayer
5.	Harvesting	Reaper, Mini paddy cutter Combine harvester, Thresher

Results and Discussion

Socio- demographic status of the study area.

Age of the Respondents

Out of 90 respondents, the minimum age of the respondent was found to be 18 years while the maximum was 70 years. The average age of the respondents was found to be 43 years with the standard deviation of 12.589.

Table 2

Age of the respondents

	Minimum	Maximum	Mean	Std. Deviation
Age of the respondents(years)	18	70	42.51	12.589

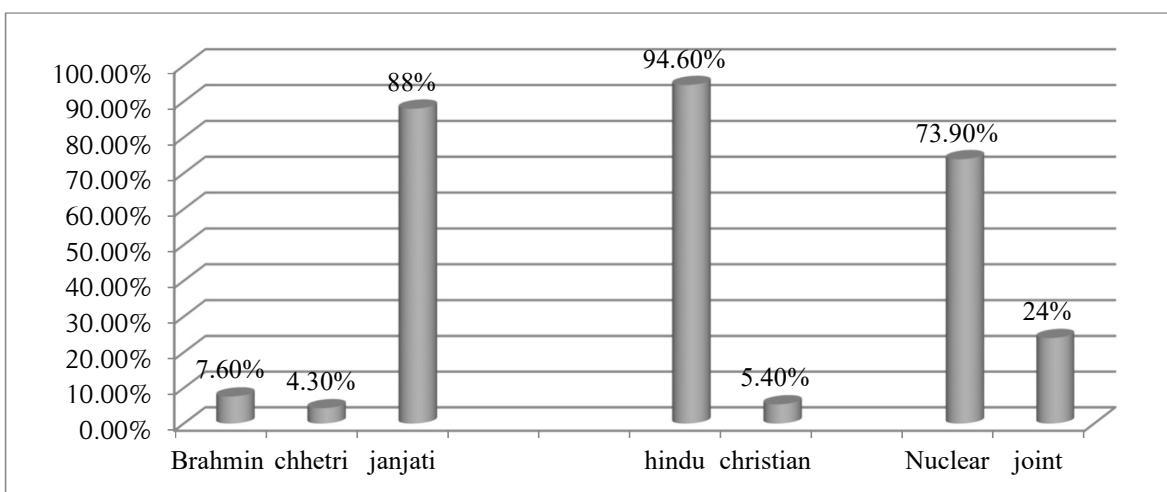
Gender of respondents

Among 90 respondents, only 27.9 (31%) were found to be female while remaining 62.1(69%) were male respondent. Female respondents were less as they are not the household head and they are involved to support agricultural activities with the male.

Caste, religion and family type of the respondent

Figure 1

Caste, religion and family type of the respondent

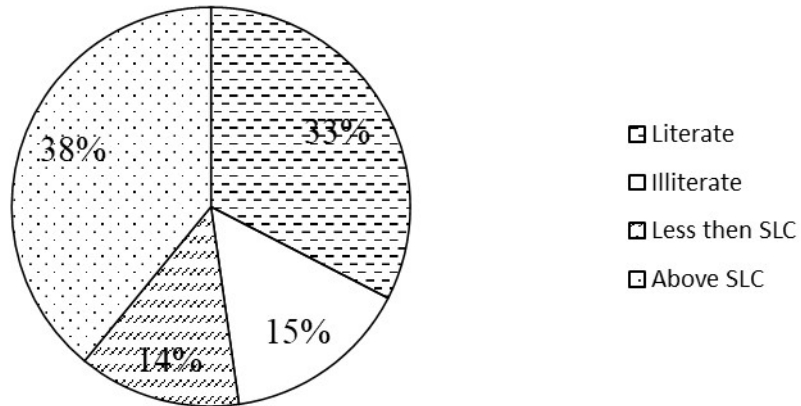


Among 90 respondents, only 9 (10%) were Brahmin, 14.85 (16.5)% were Chhetri and majority i.e. 59.85 (66.5%) were Janajati in the study site. Minority were Muslim, only 5.85 (6.5%) in the study area. In the study area, 72 (80%) were nuclear family and 18(20%) were joint family.

Education status of the respondents

The educational status of the respondents in the family was enumerated and categorized in four categories i.e. illiterate, literate, below SLC and Above SLC. The frequency distribution of the respondents by educational status was analyzed and presented in the Figure 2.

Figure 2
Educational status of the respondents

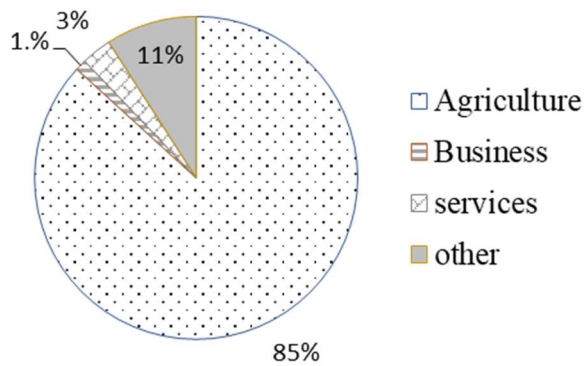


Among 90 respondents, only 13.5 (15%) were Illiterate, 12.6 (14%) were less than SLC, 29.7 (33%) were literate and rest of them were above SLC i.e. 34.2 (38%).

Main Occupation of the respondent

The occupation was categorized into Agriculture, Business, Service and other (wages) and shown in the figure.

Figure 3
Main occupation of the respondents



Land holding of respondent

The land holding of the respondents in the study area is given in the Table 3. The frequency of the land holding was analyzed and the mean, sum values and Std. Deviation were calculated. The total land was 98.37 hectare and the mean of total land was 1.069 hectare with the standard deviation of 0.91. Among that total land the total cultivable land was 98.20 hectare with the average of 1.067 hectare. Out of which 74.87 hectare was used for rice cultivation and the average of rice cultivation was 0.81 hectare. From the above table the total production was 258.95ton and average of 2.81 ton was found. Also, for the above table the total productivity was also calculated which was 3.46 ton per hectare.

Table 3

Land holdings of the respondents

Particulars	Sum	Mean	Std. Deviation
Total land (ha)	98.37	1.069	0.91
Total cultivable land (ha)	98.20	1.067	0.97
Paddy cultivated land (ha)	74.87	0.81	0.76
Total production (tonne)	258.95	2.81	2.83

Adoption index of the respondents

Together with an overall adoption level, the table 4 displays the mechanization adoption index for the five main farm activities such as tillage, sowing/planting, intercultural operations, plant protection, and harvesting. The results show that different agricultural operations vary significantly in their levels of mechanization. With 92.2% of respondents falling into the high adoption category (67–100%) and just 7.8% indicating a medium level, tillage operations exhibit the highest level of automation adoption. This implies that tillage is the most automated phase of crop production, most likely as a result of power tillers and tractors being readily available. These findings are consistent with those of Singh et al. (2015) and Kumar et al. (2020), who found that because land preparation is labor-intensive and mechanical tillage instruments are very inexpensive, it is frequently the first agricultural task in South Asia to be mechanized.

On the other hand, mechanization in sowing and planting activities is primarily low (95.6%), with only 4.4% demonstrating medium usage. Small and dispersed landholdings, the continued use of traditional seed broadcasting techniques, and restricted access to seed drills or planters may all be contributing factors to this low level of mechanization. This observation supports the findings of Thapa and Pokharel (2019), who pointed out that smallholder farmers in Nepal.100% of respondents are classified as low adopters for intercultural activities (such weeding and soil management), showing a total reliance on manual labor. In plant protection operations, when mechanization has not been used, similar patterns are seen. These findings are consistent with those of Upadhyay et al. (2021), who found that there is little mechanization in the intermediate and crop-care stages due to the lack of such tools or their incompatibility with tiny plots and a variety of crop systems. Similarly, the usage of harvesters and threshers is modest in mountainous and smallholder-dominated regions, harvesting is still entirely unmechanized (100% low adoption)

(FAO, 2022). Due to expensive expenses and the fact that huge harvesters are not suitable for uneven terrain, farmers frequently rely on sickles and family labor. The general adoption trend for mechanization, just 5.6% of respondents had low adoption, while 94.4% have medium adoption (34–66%). This implies that the total mechanization index is moderate, with some stages like tillage being highly mechanized while others lag behind.

Table 4

Adoption index of mechanization during different operation

Operation	Category for level of doption	Frequency	Percentage
Tillage	Low (up to 33%)	0	0.0
	Medium (34-66%)	7	7.8
	High (67-100%)	83	92.2
Sowing/ planting	Low (up to 33 %)	86	95.6
	Medium (34-66%)	4	4.4
	High (67-100%)	0	0.0
Intercultural operation	Low (up to 33 %)	90	100.0
	Medium (34-66%)	0	0.0
	High (67-100%)	0	0.0
Plant protection	Low (up to 33 %)	0	0.0
	Medium (34-66%)	0	0.0
	High (67-100%)	90	100.0
Harvesting	Low (up to 33 %)	90	100.0
	Medium (34-66%)	0	0.0
	High (67-100%)	0	0.0
Overall	Low (up to 33 %)	5	5.6
	Medium (34-66%)	85	94.4
	High (67-100%)	0	0.0

Source: Field survey, 2024

Factors affecting adoption of mechanization among the respondents

A relatively strong model fitness was obtained, which showed that the chosen socioeconomic variables together account for almost 63% of the variation in the adoption index ($R^2 = 0.63$). Farm size is one of the variables that has a positive and significant effect ($\beta = 0.792$, $t = 2.60$), indicating that farmers with bigger landholdings are more inclined to adopt improved agricultural methods because they have better access to resources and perceive less risk (Feder, Just, & Zilberman, 1985). According to Mwangi and Kariuki (2015), other factors like inputs and education level have positive but negligible effects, suggesting that farmers with more access to inputs and education are more likely to adopt new technologies. On the other hand, there are negative correlations between age, family size, and labor, suggesting that older farmers, larger families, and households with more workers are less likely to embrace innovations, perhaps as a result of their adherence to established methods and lack of receptivity to change (Kassie et al., 2015; Amsalu & De Graaff, 2007). Income indicates that without further institutional support, economic ability alone does not ensure adoption, despite having a positive but negligible coefficient (Doss, 2006). According to

diffusion theory, which emphasizes that socioeconomic and resource-related factors significantly influence adoption behavior, the findings generally show that landholding size continues to be the primary determinant of technology adoption, with education and input accessibility playing facilitating roles (Rogers, 2003).

Table 5

Multiple regression analysis of adoption index with selected independent variables

Independent variable	Coefficient	t- value
Constant	3.210	8.015
Age of farmer	-0.006***	-0.89
Education status	0.028**	0.65
Family size	-0.005***	-0.30
Land holdings	0.792**	2.60
Income	0.001***	0.08
Labour cost	-0.276	-0.25
Inputs	0.058	0.75
R² = 0.63		

Note: ** means significant at 0.01 and *** means significant at 0.05 level

Problem regarding adoption of mechanization by rice growers

Farmers confronted several problems while adopting mechanization in paddy production. Those problems were ranked on priority basis. The weightage was given with calculating index value. Thus, highest index value gives rank 1st and then in subsequent order. Among the problems faced by farmers, higher cost of machinery was the major constrain faced by the majority of farmers (index value 0.79), as the farmer were low economic status. Similarly, lack of technical knowledge to operate farm machineries (0.75), followed by small size of land holdings which increases cost rather than profit (0.56). Similarly, lack of government subsidy (0.55) and limited use of machineries (0.43) were subsequently affected on the adoption level of farmers.

Table 6

Ranking of problem that arise while adoption of mechanization

Problem	Index value	Rank
Limited use of machineries	0.43	V
Lack of technical knowledge	0.75	II
Lack of subsidy	0.55	IV
Higher cost of machinery	0.79	I
Small farm holdings	0.56	III

Conclusion

Overall, the study demonstrates that agricultural mechanization has significant potential to enhance farm income through productivity gains and cost reduction; however, its adoption remains moderate and uneven across farm operations, being largely concentrated in tillage activities. The influence of education, landholding size, and farm income on adoption highlights the importance of human capital, financial capacity, and scale in facilitating mechanization, while the negative effects of age, family size, and labor cost suggest persistent structural and demographic barriers. The presence of severe constraints particularly high machinery costs, limited technical knowledge, small and fragmented holdings, inadequate subsidy support, and restricted access to machinery indicates that adoption is constrained more by institutional and economic limitations than by farmer willingness. These findings imply that policies promoting mechanization should move beyond general advocacy and focus on improving access through targeted subsidies, credit facilities, extension services, and shared-use models such as custom hiring centers, especially for smallholders. Addressing these constraints is essential for accelerating mechanization adoption and realizing its potential contribution to farm income growth and sustainable agricultural development.

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Pesticide Purchase Behavior and Its Determinants Among Vegetable Farmers in Ghorahi, Dang

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DOI: <https://doi.org/10.3126/jotmc.v9i9.90460>

Abstract

Pesticides are essential for safeguarding crops both in the field and during storage purpose in Nepal. This study investigated vegetable growers' purchasing habits and the factors that influence their purchasing behavior among vegetable farmers in Ghorahi, Dang. A semi-structured interview schedule was used to interview 92 farmers who were chosen by simple random sampling. The results indicated majority of the vegetable growers i.e. 90.2% purchased pesticide from Agro-vet stores or pesticide retailers. Among the pesticides, the most often used pesticide was insecticide, which was followed by herbicides, fungicides, rodenticides, and nematicides. The most significant issue of farmers regarding pesticide purchase was lack of knowledge of farmers in choosing the right pesticides for their target pests, followed by the high cost of insecticides and the absence of sustainable substitutes like bio-pesticides. Retailer recommendations, prior experience, cost, simplicity of use, and brand trust were important factors affecting purchase decisions. Improving farmers' purchasing decisions requires targeted training and awareness initiatives, cooperation between farmers, retailers, cooperatives, and governmental organizations, as well as suitable guidance.

Keywords: Agro-vet, Bio- pesticide, Brand trust, Retailer recommendation, Target pests

Introduction

Agriculture remains to be an important component of Nepal's economy and it contributes 23.9% to the nation's GDP (MoALD, 2022). However, the agriculture sector is still dominated by subsistence farming, which has a negative effect on agricultural output and productivity (MoF, 2022). Out of total land area, 3,091 ha are under cultivation while, 1,060 ha are cultivable but currently uncultivated and 60.4% of the population are involved in agriculture (MoALD, 2022). Even though significant portion of the population are engaged in agriculture, Nepal imports a significant number of agricultural products and inputs from other nations for daily use such as food grains, potatoes, edible oils, spices, fruits and vegetables, and pesticides (Regmi & Naharki, 2020;

Ghimire & GC, 2018). Pesticides are crucial in vegetable farming as they help in controlling weeds, fungus, insect pests, and other harmful organisms and thereby increasing the yield (Vasoya et al., 2023). The different types of pesticides include herbicides, insecticides, fungicides, rodenticides, and nematicides. Among these, insecticides are mostly used in agriculture purposes (Humagain et al., 2024). Several studies conducted in Nepal clearly demonstrate that pests are accountable for over 50%, or perhaps even more, of crop damage (Joshi et al., 2022). Although, the need for agricultural products has increased due to population growth, but food security is seriously threatened by losses imposed due to pest infestations (Baral & Gyawali, 2025). Moreover, their indiscriminate use has led to environmental contamination and serious health risks (Paudel et al., 2020). Approximately 500,000 to 1 million individuals are poisoned by pesticides annually, and between 5,000 to 20,000 people are probably dying because of the poisoning (Khanal et al., 2025). Agricultural chemicals are used by farmers in underdeveloped nations with minimal protection and few opportunities to improve their safety (Karki et al., 2025).

Application of pesticides in vegetable cultivation in Nepal is extremely high and in increasing trend (Kalauni and Joshi, 2019). The usage of pesticides has been increasing at an annual rate of 10% to 20% due to the introduction of high-yielding crop types and the growing emphasis on vegetable farming (Vaidya et al., 2017). Concerns about the overuse of pesticides in vegetable cultivation and their possible health hazards and threat to the environment are becoming more prevalent in Nepal (Atreya et al., 2011; Sai et al., 2019). Low educational attainment, lack of information about safe handling procedures, and a lack of awareness of pesticide consequences are the factors contributing to this situation (Benaboud et al., 2021). Government policies are crucial in controlling the use of pesticides but Nepal's regulatory structure is still inadequate in terms of execution and inspection (Sharma et al., 2021).

The activities that farmers conduct while purchasing agrochemicals are referred to as purchasing behavior. It is assessed by investigating where farmers get the information needed to buy agrochemicals, fertilizers, pesticides, and other chemicals, and what factors influenced their decision to buy agrochemicals (Sharma et al., 2020). Farmers must have proper knowledge of the product and its usages, like right pesticide, right time of usage and the right method of spraying etc. to achieve high yields without crop losses. Therefore, farmers' buying decision of pesticides is very important for better crop production (Sreekanth, 2018). Marketers need to understand who actually makes the purchasing decisions and what factors affect their decision. They should also continuously monitor the kinds of purchases made and the processes that customers take in a social unit's decision-making process (Thangasamy and Patrikar, 2014). Product knowledge is significant influencer; customers frequently require vital product-related information before making a purchase (Kaldeen, 2019). Generally, local dealers, peer group, extension officials, sales personnel of different pesticide firms, scientists, mass media etc, are the source of information for the usage of pesticides and their application (Muduli et al., 2024).

Numerous studies have investigated pesticide use in Nepal; however, limited focus on understanding the pesticide purchase behavior of farmers is observed, which directly affects how pesticides are purchased and used (Giri et al., 2014). Purchasing decisions are influenced by factors such as farmer's education, perception of risk, market access, advice from agro-vets or dealers and brand reputation (Sharma et al., 2020; Ntow, 2006; Ali et al., 2018; Police et al., 2024). Ghorahi,

Dang was chosen for this study because it is one of the main vegetable-producing hubs of inner terai regions, where substantial vegetable farming frequently results in the massive use of pesticides. Vegetable growers in this region have a wide range of socioeconomic characteristics including income, farm size, and educational attainment, as well as strong interactions with organizations including extension agencies, cooperatives, and agro-vets. These situations assure significant compatibility with the study's main concern by offering an appropriate environment for examining the behavioral, socioeconomic, and institutional factors impacting pesticide purchase decisions. Findings will help to generate evidence for designing effective policies and interventions that promote safe and sustainable pesticide use.

Materials and Methods

Description of study area

Dang is one of the districts of Lumbini province, located in the inner terai region of Nepal. It lies on a latitude of 28.0° N and a longitude of 82.15° E. It covers an area of 2,955 km² and has a population of 6,74,993 (Central Bureau of Statistics [CBS], 2021). It consists of two sub-metropolitan cities and eight municipalities.

Sample size and sampling techniques

The study targeted vegetable-growing farmers within Ghorahi Sub-Metropolitan City, Dang, which comprises 19 wards. Wards 2, 3, and 18 were purposively selected based on their significant vegetable production areas and the substantial number of vegetable farmers. These wards collectively have an estimated 1,740 vegetable farmers according to data provided by the Agriculture Knowledge Center (AKC), Ghorahi. Using Rao soft at a 95% confidence level with a 10% margin of error, the sample size was calculated to be 92 by using simple random sampling method. A 10% margin of error was found adequate due to the exploratory nature of the study, a limited sampling frame, and practical limitations including time, resources, and respondent accessibility.

Data collection methods

The primary data for this study were collected directly from farmers through a semi-structured interview schedule. Pre-testing was done to evaluate the validity and efficacy of the interview schedule prior to the primary data collection. Secondary information was collected by reviewing different publications, reports, and related research papers from the government, non-government organizations, including MoALD, and AKC, Ghorahi.

Data analysis techniques

The collected data were entered, coded, and analyzed using Microsoft Excel and the Statistical Package for Social Science (SPSS) version 27. Descriptive statistical tools such as frequency, percentage, mean, and scaling technique were employed. Similarly, forced ranking analysis was done to investigate the types of pesticides used and purchasing-related problems. Respondents were asked to rank their preferences and constraints on a five-point scale, and an importance index (I_{imp}) was calculated using the formula, as applied by (Subedi et al., 2019).

$$I_{imp} = \sum S_i * F_i / N$$

I_{imp} = Index value of importance

\sum = Summation

S_i = Scale value of i th intensity

F_i = Frequency of i th response

N = Total number of respondents

Results and Discussion

Socio-demographic characteristics of respondents

Majority of the respondents (60.9%) were male and 39.1% were female and average age of respondents was found to be 45.32 years. While average family size of the households was found to be 5.23, which was higher than the national average family size of 3.53 (CBS, 2021). Majority of the respondents were found to be Janajati (41.3%), followed by Brahmin (28.3%), Chhetri (25%), and Dalit (5.4%). Hinduism (79.3%) and Christianity (20.7%) were the major religions followed by the respondents of the study area. Regarding the educational status of the respondents, about 14.13% of the respondents were illiterate, and 29.34% were literate. The majority of them (36.95%) had attained education up to primary level, and only a smaller proportion (10.86%) had attained secondary level education, and 8.72% have attained higher level education. 82.6% of respondents were engaged in agriculture, followed by service (9.8%), foreign employment (4.3%), and business (3.3%). 51.1% of respondents had more than 10 years of experience of pesticide application. 32.6% of respondents have 5-10 years of experience of pesticide application. Only a few proportion (16.3%) of respondents had less than 5 years of experience of pesticide application as shown in Table 1.

Table 1

Socio-demographic and farming characteristics of surveyed vegetable farmers

Variable	Frequency	Percentage
Gender		
Male	56	60.9
Female	36	39.1
Ethnicity		
Brahmin	26	28.3
Chhetri	23	25
Dalit	5	5.4
Janajati	38	41.3
Religion		
Hindu	73	79.3
Christian	19	20.7
Educational Status		
Illiterate	13	14.13
Literate	27	29.34

Primary Level	34	36.95
Secondary Level	10	10.86
Higher Level	8	8.72
Occupational Status		
Agriculture	76	82.6
Foreign Employment	4	4.3
Service	9	9.8
Business	3	3.3
Pesticide Application Experience		
<5 Years	15	16.3
5-10 Years	30	32.6
>10 Years	47	51.1

Figure1

Major vegetables highly exposed to pesticides

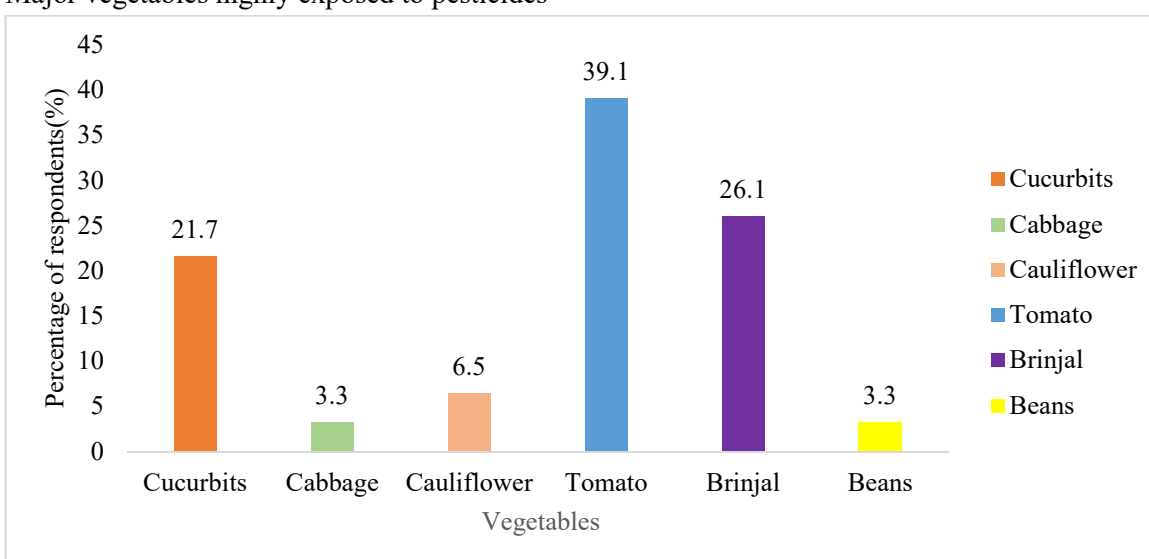


Figure 1 indicates that 39.1% of respondents experienced tomato as the most pesticide-exposed vegetable. This finding aligns with Bhandari et al. (2020), who reported higher residues of pesticides in tomatoes than other vegetable crops. Similarly, 26.1 % of respondents identified brinjal, 21.7% cucurbits, and 6.5 % cauliflower as highly exposed vegetables to pesticides. A small proportion of respondents (3.3%) reported low pesticide exposure in beans and cabbage.

Figure 2

Pest occurrence frequency in the study area

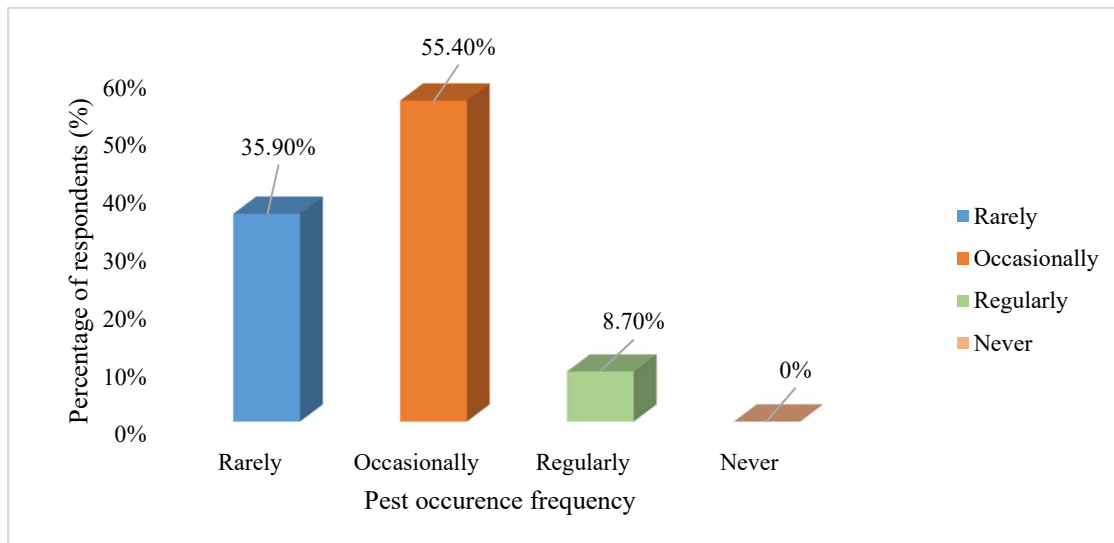


Figure 2, illustrates that the majority of respondents (55.4%) encountered the problem of pest occurrence occasionally. Likewise, 35.9% of respondents experienced pest problems rarely, and only a few of them (8.7%) faced the problem regularly. These findings are consistent with previous studies done by Parajuli et al. (2023) and Thapa et al. (2020) which documented that pest occurrence is a serious challenge for vegetable farmers in Nepal.

Types of pesticides purchased by the farmers

Insecticide was the most used pesticide with an index value of 0.90, as insect was the major cause of crop damage in the study area. Fungicides were the second most used, with an index value of 0.85, followed by rodenticide (0.50) and nematicide (0.48). Similarly, herbicide was the least used with an index value of 0.36. This finding is in line with the findings of Bhandari et al. (2020), who stated that insecticides predominated as pesticides because farmers believed insect pests posed the greatest harms to vegetable crops in study area.

Table 2

Type of pesticides purchased

Descriptive	Index Value	Rank
Insecticides	0.90	I
Fungicides	0.85	II
Rodenticides	0.50	III
Nematicides	0.48	IV
Herbicides	0.36	V

Source of pesticide purchase

Farmers' main source of pesticide purchase was Agro-vet stores or pesticide sellers (90.2%). These stores offered a variety of goods as well as suggestion and guidance on safety, brand, and efficacy. Gyawali et al. (2021) supported the finding, pointing out that because of their accessibility and wide range of services, Agro-vet stores and pesticide dealers are farmers' main sources of knowledge on pesticides. None of the respondents purchased pesticides solely from the agriculture co-operative, mainly due to limited availability and limited product choices during the application period. Only a smaller proportion (9.8%) of respondents obtained pesticides from both sources.

Table 3
Source of pesticide purchase

Source of buying pesticides	Frequency	Percent
Agro-vet/pesticide retailer	83	90.2
Agriculture co-operative	0	0
Both	9	9.8
Total	92	100.0

Timing of pesticide purchase

Among the respondents surveyed, 52.2 % purchased pesticides before the incidence of insect attack. Farmers bear additional costs when they apply pesticides before pests appear which reduces their profit (Hoy et al., 2015). Similarly, 26.1 % of respondents applied pesticides at the time of the incidence of insect attack. While the remaining 21.7 % of respondents applied after experiencing some crop loss. Many farmers tend to apply pesticides on a calendar basis or as a precautionary measure rather than relying on actual pest monitoring (Koirala et al., 2019).

Table 4
Timing of pesticide purchase

Timing of pesticide purchase	Frequency	Percent
Before the incidence of insect attack	48	52.2
Time of incidence of insect attack	24	26.1
After a certain loss	20	21.7
Total	92	100.0

Source of information for pesticide use

Farmers often rely on various sources of information to guide their pest use decisions. Majority of the respondents (34.8%) obtained information from pesticide retailers. This showed there was a great influence of agro-vet and pesticides retailers on pest control decisions in the study area, which is similar to the study of (Rijal et al., 2018). 20.7% of farmers reported relying on their own experience when making decisions about pesticide use which is in line with the findings of Desye et al. (2024), who found that farmers in developing countries frequently depend on their experience in determining pesticide application practices. Similarly, 18.5% information was

obtained from the progressive farmers, while 17.4% obtained advice from the agriculture cooperatives. The remaining 8.7 % of respondents accessed information from the agriculture office.

Table 5

Source of information for pesticide use

Source of information	Frequency	Percent
Self-decision	19	20.7
Progressive Farmer	17	18.5
Agriculture co-operative	16	17.4
Pesticide Retailer	32	34.8
Agriculture Office	8	8.7
Total	92	100.0

Farmers’ Awareness and Practices During Pesticide Purchase

43.48% respondents always checked the manufacturer's date and expiry date before purchasing pesticides, while 95.65% respondents always checked whether the bottle was properly sealed or not. Only 21.74% of the respondents always examined the pesticide label. Limited attention to label information is consistent with findings of Jallow et al. (2017) who reported farmers often neglect or fail to understand labels due to language barriers, technical complexity, and lack of training. Furthermore, 32.61% respondents always checked the specified waiting period, and 10.87% respondents always checked the pesticides toxicity level. The majority of respondents (89.13%) never checked the toxicity information, despite the associated health and environmental risks which is similar to the findings of Jyoti et al. (2023).

Table 6

Farmers’ Awareness and Practices in Pesticide Purchase

Description	Always	Sometimes	Never
Check the manufacture date and expiry date	40 (43.48%)	10 (10.87%)	42 (45.65%)
Check whether the bottle is sealed	88 (95.65%)	0 (0%)	4 (4.35%)
Check the labels of the pesticide	20 (21.74%)	10 (10.87%)	62 (67.39%)
Check the indication about the waiting period	30 (32.61%)	17 (19.57%)	45 (48.91%)
Check the toxicity level of the pesticide	10 (10.87%)	0 (0%)	82 (89.13%)

Determinants of Farmers’ Pesticide Purchase Decisions

Table 7 presents the factors influencing pesticide purchasing decisions of farmers. Recommendations from pesticide retailer (28.3%) was the major factor affecting pesticide purchase decision of farmers. This finding aligns with Maharjan et al. (2020) and Schreinemachers et al. (2017) who stated that farmers rely heavily on agro-vets or local retailers for advice, and such recommendations strongly influence pesticide choice. Similarly, second major determinants of pesticide purchase decision was found to be the previous experience of farmers (25%) which is in

line with the finding of Damalas and Koutroubas (2017) and Atreya et al. (2022) who revealed farmers' preference for products that they have previously used successfully, which reduces perceived risk and increases confidence in efficacy. The cost of pesticides was another important determinant (15.2%), as high prices can limit farmers' ability to purchase preferred products, often leading them to select cheaper or lower-quality alternatives (Wilson & Tisdell, 2001; Atreya et al., 2022). Other factors identified were ease of application (14.1%), trust in the manufacturer's brand (13%), and concern for environmental safety and health (4.3%). Although these factors were not as frequently highlighted, prior research suggests that ease of use, brand familiarity, and safety awareness may still influence farmers' decision-making (Damalas & Koutroubas, 2017; Pretty & Bharucha, 2015; FAO, 2020).

Table 7

Determinants of Farmers' Pesticide Purchase Decisions

Determinants of Farmers' Pesticide Purchase Decisions	Frequency	Percent
Cost of pesticide	14	15.2
Ease of application	13	14.1
Safety (Health and Environment)	4	4.3
Past Experience	23	25.0
Pesticide retailer's recommendation	26	28.3
Trust in manufacturer's brand	12	13
Total	92	100.0

Problem faced during pesticide purchase

The main issues farmers encounter while purchasing pesticides are highlighted in Table 8. With an index value of 0.65, the main problem was inadequate understanding about the selection of suitable pesticides for target pests followed by higher cost of pesticides (0.60). This result is consistent with Atreya et al. (2022), who revealed that low literacy, poor extension services, and insufficient training hinder farmers' capacity to recognize pests and choose appropriate pesticides, which results in incorrect application. Wilson and Tisdell's (2001) further supported the finding and claimed increased input costs had a major impact on the procurement of pesticides. Lack of sustainable alternatives such as bio-pesticides (0.58) was another important challenge. Despite their ecological benefits, bio-pesticides remain underutilized due to higher perceived costs, uncertain efficacy, and limited market availability (Pretty & Bharucha, 2015). Likewise, recommendations from pesticide retailers based on profit motives (0.57) was another problem affecting pesticide purchase, which is similar to the findings that Agro-vets and dealers often provide biased information for farmers, thereby encouraging overuse or inappropriate pesticide choice (Maharjan et al., 2020). At last, limited availability of effective pesticides (0.55) was the least important problem which is supported by the finding of FAO (2020).

Table 8

Problem related to pesticide purchase

Problem related to pesticide buying	Index Value	Rank
Limited availability of effective pesticides	0.55	V
Profit based recommendation of pesticide retailer	0.57	IV
Lack of sustainable alternatives (Bio-pesticide)	0.58	III
Higher cost of pesticide	0.60	II
Limited knowledge on the choice of pesticides	0.65	I

Conclusion

Vegetable farming in Ghorahi Sub-Metropolitan, Dang, relies heavily on chemical pesticides, among which insecticides are the most commonly used. Farmers mostly depend on Agro-vet or retailers for pesticide purchases, and their decisions are influenced by retailer recommendations, prior experience, cost, and ease of application. There is a significant gap in farmers' awareness regarding pesticide labels, toxicity levels, safety measures, and recommended waiting periods. The main obstacles were the high cost of inputs and the lack of knowledge in choosing suitable insecticides. It is crucial to increase farmers' ability through awareness campaigns, training, and access to trustworthy advice and guidance. Furthermore, to guarantee safe use, lower health and environmental risks, and support the long-term sustainability of vegetable growing, better control of pesticide sales and encouraging the use of sustainable substitutes like bio-pesticides are essential.

Conflict of interest

The authors claimed that they have no conflicts of interest with relation to this paper's publication.

Acknowledgment

The authors would like to extend their sincere gratitude to all of the farmers who kindly offered their time and opinions and took part in this study. The authors also thank Far Western University, School of Agriculture for its financial support and encouragement throughout the research process.

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Maternal Mental Health and Sociodemographic Determinants of Child Nutrition Under Five Years

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DOI: <https://doi.org/10.3126/jotmc.v9i9.90461>

Abstract

The study was conducted in Lamkichuha Municipality, Kailali District, Nepal. The main objective of this study was to examine the relationship between maternal mental health and sociodemographic determinants of child nutrition under five in the study area. This study used a cross-sectional design to collect data from 203 mothers and their children under five years. The collected data were analyzed in descriptive and inferential phases. The children surveyed had a high rate of malnutrition, with over 50 percent of children were stunted, 7 percent were underweighted, and 5 percent were wasted, respectively. Nearly 40 percent of the mothers were noted to have common mental disorders, and in the inferential analysis, there were stunting associations with ethnicity and other socioeconomic factors. Low birth weight was the main factor that led to wasting. Thus, the findings highlight the important socio-economic and psycho-social factors, with maternal mental health as the most influential one in the nutrition of children. Along with child nutrition programs, the study also suggests the use of strategies that target the root causes of social determinants to be able to effectively reduce undernutrition in rural and semi-urban areas. One such intervention could be the implementation of routine maternal mental health screening.

Keywords: Child nutrition, Maternal mental health, Mental disorders, Stunting, Undernutrition, Wasting.

Introduction

The World Health Organization (WHO) defines maternal mental health as "a state of well-being where a mother realizes her own capabilities, is able to handle the normal stresses of life, can work productively and effectively, and is also able to make a valuable contribution to her community" (Atif, N., et.al. 2015). Maternal mental health and children's nutrition are critical public health concerns that can greatly impact family and community well-being. Maternal mental well-being describes the mental and emotional state of a mother during pregnancy as well as after

childbirth. A mothers' good mental health can support appropriate child care and nurturing practices, while a poor mental health may lead to inappropriate childrearing practices that negatively influence a child's growth and development (Khan, A.M.,2014).

Globally maternal mental health problems are considered as a major public health challenge. Worldwide about 10 percent of pregnant women and 13 percent of postpartum women experience a mental disorder, primarily depression. In developing countries, this is even higher, i.e. 15.6 percent during pregnancy and 19.8 percent after child birth. In severe cases, mothers' suffering might be so severe that they may even commit suicide. (WHO, 2023). In this way, poor maternal mental health has been strongly linked with negative child nutritional outcomes. It can limit a mother's ability to provide optimal care, including breastfeeding, meal preparation, and attention to a child's nutritional needs (Rahman et al., 2018).

Malnutrition remains one of the most serious issues of global health. It is mostly responsible for half of the deaths of children under five years (UNICEF, 2023). The situation in Nepal is very alarming. Overall, 25 percent of children under five are stunted and 8 percent of children are wasted (NDHS, 2022). The Lancet series on maternal and child undernutrition claims that depressed mothers are a primary cause of stunted growth in children. Therefore, the paper suggested integrating mental health with maternal and child health programmes (Lancet, 2013). Conversely, mental well-being of mothers has been associated with good maternal health outcomes and positive parenting practices that enhance children's socio-emotional development as well as their success in school and other fields (WHO, 2014).

Though, there has been increased attention to maternal and child health and its importance as a global public health issue, there still remains a gap with the Millennium Development Goals (MDGs) in relation to maternal and child health and mortality with many low- and middle-income countries (WHO, 2008). The gap in maternal mental health is a significant factor that contributes to these gaps. The majority of global maternal and child health programs focus on the physical health of the mother and child. They rarely give priority to mental health basically in low and middle-income countries. In order to fill the gaps, maternal mental health needs to be included in the mental and child health programs in such countries. There is a need to address the maternal health in a more complete and comprehensive way including the mental and emotional health of the mother in the perinatal period, as the mother is the key to child development and health interactions with the family and the community (Atif, N., et.al. 2015).

In this regard, Lamkichuha Municipality is also poverty-driven area with low levels of education and limited access to health care facilities. While there are government and non government managed projects aimed specifically at reducing levels of malnutrition in children along with improvement of health of mothers, there are focal overlaps. These cross-cutting issues include the relations of mental health at child nutrition. This highlights the need for intersectoral approach at the nexus of the of the mental and physical health of mothers and children.

As the relationship between maternal mental health and child nutrition is so complex, only a comprehensive-integrated care plan can be effective in addressing the issue. Simultaneous intervention in both problems can give policymakers and health care practitioners a clear picture of the necessary measures to be taken in order to bring about the desired outcomes. This research thus goes beyond to examine the association between maternal mental health and sociodemographic

determinants of child nutrition under five in Lamkichuha Municipality, Kailali, which then becomes a source of evidence for public health interventions in similar rural contexts.

Objectives of the Study

The general objective of this study is to examine the relationship between maternal mental health and sociodemographic determinants of child nutrition under five in Lamkichuha Municipality. The specific objectives are as follows:

- i. To identify the maternal mental health of the mothers.
- ii. To determine the health and nutritional status of children aged 6 to 59 months.
- iii. To analyze the association between maternal mental health and child nutrition status in the study area.

Hypothesis of the Study

- i. Null Hypothesis (H₀): There is no significant association between maternal mental health and child nutritional status.
- ii. Alternative Hypothesis (H₁): There is a significant association between maternal mental health and child nutritional status.

Limitations

This study was limited to Lamkichuha Municipality, relied only on quantitative data, and included maternal mental health questions that may be affected by recall bias. Time, budget, and resource constraints also restricted the study's scope and depth.

Methods and Procedure

Research Design

In this study, a cross-sectional design was employed, where both the exposure (maternal mental health) and the outcome (child nutritional status) were measured at the same point in time.

Study Area

The study was conducted in Lamkichuha Municipality, Kailali District, Nepal. No previous research has been conducted in this area to explore the association between maternal mental health and health outcomes among children under five years of age.

Study Population

The study population included children aged 6 to 59 months and their mothers residing in Lamkichuha Municipality, Kailali District.

Sampling and Sample Size

The sample size was determined using the equation $n = (z^2pq)/d^2$, which was developed by the statistician William G. Cochran. It was published in his book *Sampling Techniques* in 1963 (Singh & Masuku, 2014). It has taken a 15.2% prevalence of maternal depression as a basis, as cited in a

research article (Janaki Medical College and Teaching Hospital in Dhanusha), and also a 95% confidence interval and a 5% margin of error. The sample size was calculated to be 198, and with an additional 10% to account for non-response, the final sample size increased to 217. Out of these, 203 participants completed the interviews. The PHC/ORC registers of all 10 wards were used and the lottery method was applied to select mothers with children under five, ensuring that every area of the municipality was equally represented.

Data Collection Tools and Techniques

A structured questionnaire, the Self-Reporting Questionnaire-20 (SRQ-20) and the Warwick Edinburgh Mental Well-being Scale: WEMWBS (Tennant, R., and et.al., 2007), was used to assess maternal mental health. The SRQ-20 was used to identify symptoms of depression, anxiety and psychosomatic complaints whereas the WEMWBS was used to assess positive mental well-being in both hedonic and eudemonic domains.

The nutritional status of children was determined based on standard anthropometric indicators: stunting (height-for-age), wasting (weight-for-height), underweight (weight-for-age), and overweight (weight-for-height), in accordance with WHO reference standards.

Data Collection Methods and Data Analysis

Data were gathered through household interviews and anthropometric measurements of the children. The length/height, weight, and mid-upper arm circumference (MUAC) of children were taken following the WHO guidelines. Maternal mental health was assessed using the WHO recommended Self-Reporting Questionnaire (SRQ-20).

The collected data were analysed using SPSS, applying both descriptive and inferential statistics. Descriptive analysis summarized key information about the participants demographic and socioeconomic factors, maternal and child health characteristics, and children's nutritional status (stunting, wasting, and underweight). These analyses provided a clear overview of the study population and set the foundation for examining associations between maternal mental health and child nutrition outcomes.

Ethical Considerations

Ethical approval was obtained from the concerned local authorities in the study area. Participants provided written informed consent and were informed that their participation in the study was entirely voluntary. They were free to withdraw at any time. The researcher also explained the participants' responsibilities during the data collection process.

Results

Prevalence of Common Mental Disorder

The mental health of the mother is an important factor in the development and nutrition of the child. Mother with common mental disorders (CMDs) like anxiety and depression are unable to provide sufficient nutrition, responsive care, and love to her children. Measuring the prevalence of CMD is a way of estimating its influence on child health and thus positioning the demand for combined mental health and nutrition interventions.

Figure 1
Prevalence of Common Mental Disorder

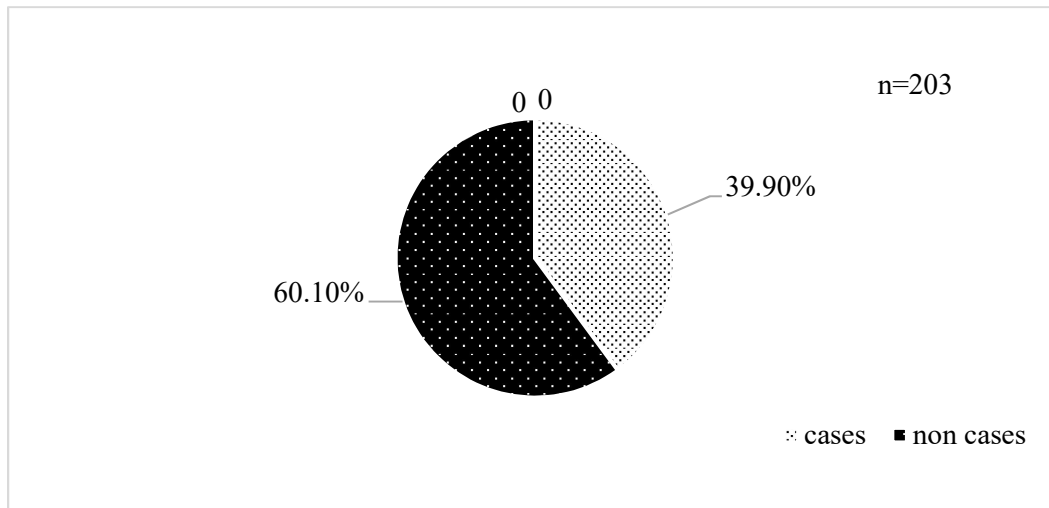


Figure 1 illustrates the distribution of mental health conditions among the participants in the study. Approximately 40 percent of the respondents experienced some form of mental disorder, while 60 percent did not exhibit any mental disorder and were classified as non-cases.

Prevalence of Undernutrition and Maternal Mental Health

Under nutrition manifested as stunting, wasting, and underweight is a critical indicator of child health and development. Stunting reflects chronic malnutrition, wasting indicates acute malnutrition, and underweight represents overall nutritional deficiency. Assessing the prevalence of these conditions helps evaluate the severity of malnutrition in the population and identify priority areas for targeted intervention.

Figure 2
Prevalence of Undernutrition

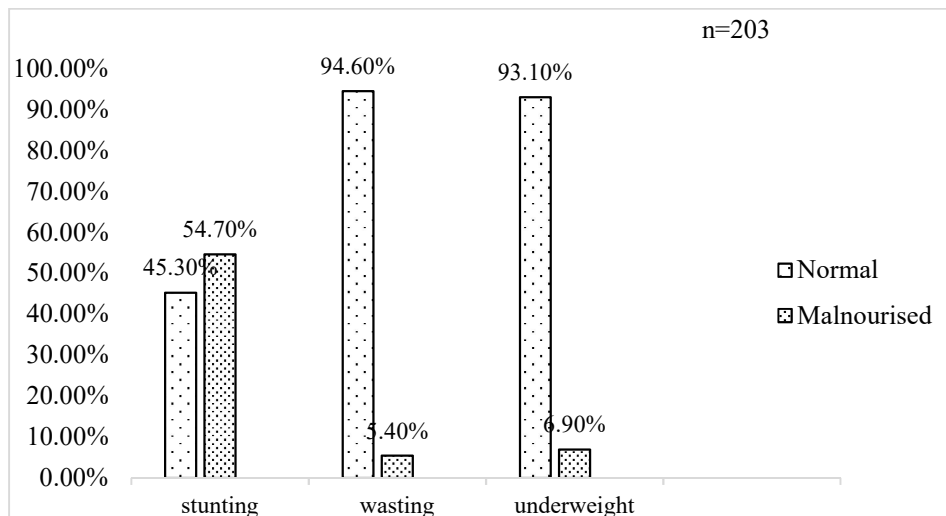


Figure 2 shows the extent of under nutrition within the study population. Over 50 percent of the affected children showed stunting and hence suffered the burden of chronic malnutrition. On the other hand, underweight prevalence was 7 percent, while the prevalence of wasting was 5 percent. On the other hand, the Prevalence of Common Mental Disorder Maternal mental health is very important in child care and nutrition. Maternal mental disorders like anxiety and depression may result in the inability to properly nourish children and provide responsive care and even emotionally support them. The main focus of assessing the prevalence of Common Mental Disorder (CMD) is to determine its possible impact on child health. This prevalence further highlights the integration of mental health and nutrition as a necessity.

Analysis of Association

This section analyzes the association between maternal mental health of a mother and the health condition of children aged 6 to 59 months and below using some techniques of inferential statistics. For the association between the two categorical variables, the p-value of < 0.05 was considered a statistically significant association using the Chi-square method. Along with the mental health condition, the analysis also considered the social variables and health variables such as ethnicity and type of education of the parents, type of occupation, level of income of the household, and geographical location which relates to the economic health of the child of stunted growth, underweight, and wasting. This is to help find the major causes of under-nutrition and the potential impact of maternal psychosocial health in the study population.

Association of Sociodemographic Factors and Child Nutritional Status

Sociodemographic variables that affect stunting include ethnicity, education, occupation, and location of residence. These factors may affect the growth pattern of the child. Understanding the association of these factors with stunting helps in the identification of structural and socioeconomic factors of chronic malnutrition. Wasting, which is one of the signs of acute malnutrition, can probably be controlled by factors at a family level such as income, education of parents, and their occupation. Investigating these associations provides a way to figure out if children's short-term nutritional deficits are the result of socioeconomic conditions. This knowledge can help in formulating strategies to bridge the gap of child growth and address both chronic and acute malnutrition.

Table 1

Association of Sociodemographic Factors with Child Stunting and Wasting

Variables	Stunting			Wasting		
	Normal n (%)	Stunted n (%)	P Value	Normal n (%)	Wasted n (%)	P-Value
Age of the mother			0.432			0.121
19-29	66 (43.7)	85 (56.3)		145 (96)	6 (4)	
30-39	26 (50)	26 (50)		47 (90.4)	5 (9.6)	
Ethnicity			0.004			0.139

Dalit	28 (30.4)	14 (12.6)		41 (21.4)	1 (9.1)	
Jana Jati	32 (34.8)	57 (51.4)		81 (42.2)	8 (72.7)	
Brahmin/Chhetri	32 (34.8)	40 (36)		70 (36.5)	2 (18.2)	
Family Type			0.786			0.089
Nuclear	49 (46.2)	57 (53.8)		103(97.2)	3 (2.8)	
Joint/extended	43 (44.3)	54 (55.7)		89 (91.8)	8 (8.2)	
Mother Education			0.716			0.150
Primary	30 (41.7)	42 (58.3)		66 (91.7)	6 (8.3)	
Secondary	40 (46.5)	46 (53.5)		81 (94.2)	5 (5.8)	
Higher Secondary/Above	22 (48.9)	23 (51.1)		45 (100)	0 (0)	
Husband Education			0.414			0.067
Primary	16 (37.2)	27 (62.8)		38 (88.4)	5 (11.6)	
Secondary	41 (45.6)	49 (54.4)		85 (94.4)	5 (5.6)	
Higher Secondary/Above	35 (50)	35 (50)		69 (98.6)	1 (1.4)	
Mother Occupation			0.691			0.216
Job	18 (51.4)	17 (48.6)		34 (97.1)	1 (2.9)	
Agriculture	60 (43.5)	78 (56.5)		128(92.8)	10 (7.2)	
Business	14(46.7)	16 (53.3)		30 (100)	0 (0)	
Husband Occupation			0.002			0.081
Job	31 (62)	19 (38)		48 (96)	2 (4)	
Agriculture	12 (44.4)	15 (55.6)		27 (100)	0 (0)	
Business	19 (59.4)	13 (40.6)		32 (100)	0 (0)	
Foreign Employment	30 (31.9)	64 (68.1)		85 (90.4)	9 (9.6)	
Residence			0.014			0.242
Rural	52 (27)	81 (73)		68 (35.5)	2 (18.2)	
Urban	40 (43.5)	30 (27)		124(64.6)	9 (81.8)	
Income			0.096			0.708
<50k	3 (32.1)	10 (76.9)		180(94.7)	10 (5.3)	
>50k	89 (46.8)	101(53.2)		12 (92.3)	1 (7.7)	

Source: Karki & Bhandari, 2025

Note. $p < 0.05$ indicates statistical significance. Percentages may not total exactly 100 due to rounding.

Table 1 examines the association between sociodemographic factors and child nutritional status, including stunting and wasting. A statistically significant association was found for stunting with ethnicity, husband's occupation, and residence (p -value < 0.05). Ethnicity showed a strong association with stunting ($p = 0.004$). Children from Janajati groups had the highest prevalence of stunting (51.4%), followed by Brahmin/Chhetri (36%), while Dalit children had the lowest prevalence (12.6%). Husband's occupation was significantly associated with stunting ($p = 0.002$). Children whose fathers were in foreign employment had the highest stunting rate (68.1%). Residence also showed a significant relationship ($p = 0.014$). The stunting prevalence was remarkably high among rural children (73%) in comparison with urban children (27%). All other covariate characteristics (mother's age, education, occupation, family type and monthly income)

did not demonstrate significant associations with stunting ($p > 0.05$). These results show that both ethnicity, father's occupation, and place of living are the principal factors for stunting in the studied population.

In contrast, wasting was not significantly associated with sociodemographic characteristics (p -value < 0.05). The study did not find any statistically significant associations ($p > 0.05$) between wasting and any sociodemographic variables that were investigated. Results point to the necessity of conducting more studies with larger samples to have a clearer understanding of the causes of wasting.

Child and Maternal Factors Associated with Stunting and Wasting

Child health such as low birth weight, history of illness, and maternal mental health influence stunting. Exploring such associations contributes to understanding whether health and caregiving issues are present that may be impeding growth, suggesting more focused intervention efforts. The situation of acute malnutrition is often traced to direct health factors of a child such as infections, birth weight, and feeding practices. Finding these associations is a way to understand what is causing the decline of a child's biological or environmental factors and thus to guide nutrition interventions, both preventive and curative.

Table 2
Child and Maternal Factors Associated with Stunting and Wasting

Variables	Stunting			Wasting		
	Normal n (%)	Stunted n (%)	P Value	Normal n (%)	Wasted n (%)	P-Value
Sleep disturbance			0.803			0.307
No	71 (45.8)	84 (54.2)		148 (85.5)	7 (8.4)	
Yes	21 (43.8)	27 (56.3)		44 (91.7)	4 (8.3)	
Headache			0.095			0.206
No	83 (47.7)	91 (52.3)		166 (95.4)	8 (4.6)	
Yes	9 (31)	20 (69)		26 (89.7)	3 (10.3)	
Gastrointestinal Problem			0.333			0.054
No	80 (46.8)	91 (53.2)		133 (95.7)	6 (4.3)	
Yes	12 (37.5)	20 (62.5)		59 (92.2)	5 (7.8)	
Respiratory Infection			0.068			0.307
No	69 (49.6)	70 (50.4)		133 (95.7)	6 (4.3)	
Yes	23 (35.9)	41 (64.1)		59 (92.2)	5 (7.8)	
Birth Weight			0.110			0.016
<2500gm	8 (30.8)	18 (69.2)		22 (84.6)	4 (15.4)	
>2500gm	84 (47.5)	93 (52.5)		170 (96)	7 (4)	
CMD						0.699
SRQ \leq 7 (Good)	62 (50.8)	60 (49.2)	0.053	116 (95.1)	6 (4.9)	
SRQ \geq 8 (Poor)	30 (37)	51 (63)		76 (93.8)	5 (6.2)	

Source: Karki & Bhandari, 2025

Note. CMD = Common Mental Disorder; SRQ = Self-Reporting Questionnaire. $p < 0.05$ indicates statistical significance. Percentages may not total exactly 100 due to rounding.

Table 2 illustrates the relationship of different health features of children to the prevalence of stunting (height-for-age). In general, no statistically significant relationships ($p > 0.05$) were identified between stunting and the considered child health factors. Nevertheless, a few variables showed the trend of getting close to the statistical significance. The association of the stunted rates was stronger with the headache group (69%) compared to the no-headache group (52.3%) children, as reflected by the p -value of 0.095. The pattern of the association was also clear for respiratory infections, with 64.1 percent of infected children being stunted compared to 50.4 percent among non-infected ones ($p = 0.068$). The comparison of low birth weight (<2500g) children to normal birth weight children revealed that the former had a more considerable percentage of stunting (69.2%) than the latter (52.5%), however, there was no statistical significance ($p = 0.110$) found. One of the major factors that showed a near borderline association with maternal mental health measured by SRQ was common mental disorder (CMD) ($p = 0.053$). The proportion of stunted children whose mothers had poor mental health ($SRQ \geq 8$) was 63%, while the stunting rate of children whose mothers had good mental health was only 49.2%. However, the odds for these variables have not attained significant levels statistically, the interactions that have been noticed signal probable links between the occurrence of diseases in children, getting born with a low weight, the mental health of the mother, and the condition of being stunted. Such data indicate that substantially more cases might be necessary to make these connections clear.

Very low birth weight (<2500g) is the only factor that is significantly correlated with wasting ($p=0.016$). Infants born with a low-birth-weight experience almost four times the prevalence of wasting (15.4%) in comparison to a normal birth weight (4%). These results position birth weight as the main factor leading to acute malnutrition in this population. At the same time, it also suggests that common childhood diseases may become a source of malnutrition but cannot independently determine the risk of wasting. The findings highlight the necessity of solving the problem of low birth weight through interventions in the prenatal period if acute malnutrition is to be prevented.

Association Between Sociodemographic Factors and Weight for Age (Underweight)

Underweight is an indicator of overall malnutrition. It is likely to be influenced by household factors such as the mother's occupation, family income, and place of living. Knowledge of these connections aids in focusing the socioeconomic environments that lead to the occurrence of nutritional deficiencies in children.

Table 3

Association Between Sociodemographic Factors and Underweight

Variables	Normal n (%)	Underweight n (%)	P-Value
Age of the mother			
19-29	141 (93.4)	10 (6.6)	0.793
30-39	48 (92.3)	4 (7.7)	
Ethnicity			0.052
Dalit	42 (22.2)	0 (0.00)	
Jana Jati	79 (41.8)	10 (71.4)	
Baramin/Chhetri	68 (36)	4 (28.6)	
Family Type			0.467
Nuclear	100 (94.3)	6 (5.7)	
Joint/Extended	89 (91.8)	8 (8.2)	
Mother Education			0.297
Primary	65 (90.3)	7 (9.7)	
Secondary	80 (93)	6 (7)	
Higher Secondary/Above	44 (97.8)	1 (2.2)	
Husband Education			0.256
Primary	39 (90.7)	4 (9.3)	
Secondary	82 (91.9)	8 (8.9)	
Higher Secondary/Above	68 (97.1)	2 (2.9)	
Mother Occupation			0.029
Job	35 (100)	0 (0)	
Agriculture	124 (89.9)	14 (10.1)	
Business	30 (100)	0 (0)	
Husband Occupation			0.166
Job	48 (96)	2 (4)	
Agriculture	25 (92.6)	2 (7.4)	
Business	32 (100)	0 (0)	
Foreign Employment	84 (89.4)	10 (10.6)	
Residence			0.026
Rural	69 (35.5)	1 (7.1)	
Urban	120 (63.5)	13 (92.9)	
Income			0.310
<50k	13 (100)	0 (0.0)	
>50k	176 (92.6)	14 (7.4)	

Source: Karki & Bhandari, 2025

Note. $p < 0.05$ indicates statistical significance.

Table 3 details the relationship of the children's sociodemographic factors to their underweight status. Two variables were found to have their statistically significant associations with children being underweight ($p < 0.05$), i.e., maternal occupation and residence. Among these, maternal occupation had a very significant association with underweight ($p = 0.029$). Kids of moms that were in farming showed the most significant percentage of underweight status (10.1%), while

children of formal-job or business mothers showed zero cases of underweight. In addition, residence was a factor that had significant changes in children with underweight ($p = 0.026$). Although there were a lot of respondents from rural areas, most of the children with underweight were living in urban areas, contributing to 92.9% of the cases. Besides, ethnicity had a near association that was close to statistically significant, ($p = 0.052$), where the Jana Jati children constituted 71.4 percent of the underweight cases, while no underweight children were reported among Dalit groups. In fact, the better the educational level of parents, the lower was the prevalence of underweight, which was a protective trend though not statistically significant. These results indicate that maternal agricultural work and urban living may be the two major factors leading to children underweight in this community.

Child and Maternal Factors Associated with Weight for Age (Underweight)

Diseases of the child such as infections, low birth weight, and poor mental health of the mother may affect a child's underweight condition. Finding out the relationships between these factors will help to understand which of the two - health problems or care-giving challenges are the main causes of insufficient weight gain.

Table 4
Association Between Child and Maternal Factors and Underweight

Variables	Underweight		P-value
	Normal n (%)	Underweight n (%)	
Sleep Disturbance	Normal	Underweight	p value
No	147 (94.8)	8 (5.2)	0.080
Yes	42 (87.5)	6 (12.5)	
Headache			0.018
No	165 (94.8)	9 (5.2)	
Yes	24 (82.8)	5 (17.2)	
Gastrointestinal Problem			0.034
No	162 (94.7)	9 (5.3)	
Yes	27(84.4)	5 (15.6)	
Respiratory Infection			0.006
No	134 (96.4)	5 (3.6)	
Yes	55 (85.9)	9 (14.1)	
Birth Weight			0.000
<2500gm	20 (76.9)	6 (23.1)	
>2500gm	169(95.5)	8 (4.5)	
SRQ \geq 8 (Poor)	70 (86.4)	11 (13.6)	

Source: Karki & Bhandari, 2025

Note. CMD = Common Mental Disorder; SRQ = Self-Reporting Questionnaire. $p < 0.05$ indicates statistical significance. Percentages may not total exactly 100 due to rounding.

Table 4 illustrates a number of significant ($p < 0.05$) correlations between child health factors and the underweight condition. The most potent indicator was low birth weight (<2500g), whereby

infants who were affected had a 23.1 percent underweight prevalence compared to 4.5 percent in normal birth weight infants ($p < 0.001$). Maternal common mental disorders (CMD) have also significantly increased the risk (13.6% underweight vs 2.5% in non-CMD mothers, $p = 0.02$). Besides that, children with current health problems have also been found to be at high risk. For example, respiratory infections (14.1% vs 3.6%, $p = 0.006$), gastrointestinal problems (15.6% vs 5.3%, $p = 0.034$), and headaches (17.2% vs 5.2%, $p = 0.018$). The presence of a child under six months in the family almost made the underweight risk three times higher (28.6% vs 7.4%, $p = 0.035$). Those results emphasize that biological factors (birth weight), current illnesses and maternal mental health are the main determinants of the underweight condition, therefore the suggestion of interventions should be to solve the medical as well as psychosocial aspects of malnourished children.

Bivariate Analysis

Bivariate analysis looks at the strength of the relationships between main variables and nutritional outcomes. It is instrumental in figuring out the factors such as sociodemographic, child-related, or health-related, that are most strongly linked to stunting, wasting, or underweight. The present analysis serves as an initial source of insights to be explored further in multivariate modeling and targeted intervention planning.

Table 5
Bivariate Analysis of Associated Factor and Nutritional Status of Children

Variables	Stunting		Underweight		Wasting	
	COR (95%)	P-Value	COR (95%)	P-Value	COR (95%)	P-Value
Ethnicity						
Dalit	1.191 (0.583-2.434)	0.631	2.152 (0.646-7.173)	0.212	3.457 (0.710-16.819)	0.124
Jana Jati	0.501 (0.198-1.270)	0.145	0.000 (0.00-0.00)	0.998	0.854 (0.075-9.708)	0.899
Brahmin/Chhetri	ref		Ref		ref	
Husband Occupation						
Job	0.409 (0.175-0.953)	0.038	0.350 (0.074-1.664)	0.187	0.394 (0.082-1.896)	0.717
Agriculture	0.656 (0.262-1.641)	0.367	0.672 (0.138-3.271)	0.622	0.000 (0.0-0.0)	0.998
Business	0.452 (0.177-1.1641)	0.096	0.00 (0.000-0.00)	0.998	0.000 (0.0-0.0)	0.998
Foreign Employment	ref		Ref		ref	
Residence						
Rural	1.074 (0.512-2.251)	0.851	7.352 (0.897-60.252)	0.063	2.468 (0.518-11.749)	0.257
Urban	ref		Ref		ref	
Total Children						
Less than two	ref		Ref		ref	
More than two	1.350 (0.569-3.202)	0.496	0.984 (0.262-3.695)	0.982	0.798 (0.165-3.814)	0.773
Total Infant <6 Month						
No	ref		Ref		ref	

One	9.837 (2.197-44.045)	0.003	3.579 (1.023-12.526)	0.046	1.810 (0.366-8.943)	0.467
Total School Going Children						
Less than two	ref		Ref		ref	
More than two	2.933 (0.667-12.909)	0.155	0.962 (0.117-7.896)	0.971	1.271 (0.152-10.660)	0.825
Headache						
Yes	0.493 (0.213-1.144)	0.100	0.466 (0.111-1.956)	0.297	0.418 (0.104-1.677)	0.218
No	ref		Ref		ref	
Respiratory Infection						
Yes	0.569 (0.309-1.047)	0.70	0.303 (0.082-1.123)	0.074	0.532 (0.156-1.814)	0.313
No	ref		Ref		ref	
Birth Weight						
<2500gm	2.032 (0.840-4.917)	0.116	6.337 (1.996-20.126)	0.002	4.416 (1.196-16.304)	0.026
>2500gm	ref		Ref		ref	
CMD						
Good	ref		Ref		ref	
Poor	1.757 (0.990-3.118)	0.054	6.233 (1.681-23.109)	0.006	1.272 (0.375-4.315)	0.7

Source: Karki & Bhandari, 2025

Note. COR = Crude Odds Ratio; CI = Confidence Interval; CMD = Common Mental Disorder. Ref = Reference category. $p < 0.05$ indicates statistical significance.

Job holder's children were more likely to have less stunting than foreign employment COR (0.409,95% CI (0.175-0.953). Having infant (<6month) likely to stunting than no infant (COR=9.837, 95% CI (2.197-44.045). Similarly having infant (<6month) likely were around 4 times more underweight than no infant (COR=3.579,95% CI (1.023-12.526). The children below less than 2500gm were 6 times likely to have underweight than more than 2500gm birth weight. Similarly, those mothers who had the cases of common mental disorder were 6 times more likely to have underweight their children than non-cases of common mental disorder; COR=6.233,95% CI (1.681-23.109). Lastly, the children below less than 2500gm were 4 times more likely to have wasting than 2500gm birth weight (COR=4.416, 95% CI (1.196-16.304).

Discussion

The present study identified a high prevalence of common mental disorders among mothers, with almost 40 percent reporting mental health issues. This result is similar with the previous study conducted in in Ethiopia (39.4%) but lower than the rate reported in Bangladesh (49%) (Tesfaye et al., 2010). This is similar to what is found in lower- and middle-income regions of the world, and particularly the maternal common mental disorders associated with socio economic stressors, caregiving responsibilities, and having little or no access to mental health support (Surkan et al., 2011; WHO, 2014). Maternal CMD has been associated with an increased risk of child stunting and underweight in several studies conducted in countries like Bangladesh and Vietnam (Nguyen, et. al. 2014). This study found that undernutrition among children was chronic, as evidenced by

stunting. It is the most common form of undernutrition from which more than half of the children suffered. This pattern aligns with the 2024 Joint Child Malnutrition Estimates by UNICEF, WHO, and the World Bank. It is reported that approximately 150.2 million children under the age of five around 23.2% were stunted globally, reflecting the ongoing challenge of chronic undernutrition across regions (UNICEF, WHO, & World Bank, 2025).

The stunting prevalence among children regarding relative ethnicity, the father's occupation, and living in rural areas, all point to obvious inequalities in the population. It has been documented in other studies from around the world which show that chronic undernutrition is a clear byproduct of socioeconomic disadvantage (Black et al., 2013). Maternal CMD most likely accounted in children of mothers with poor mental health. Children of mothers diagnosed with CMD, however, showed a greater prevalence of stunting, despite CMD not being statistically significant in CMD-related stunting, which follows previous findings where the caregiver's depression negatively impacts the child's growth due to the caregiver's psychosocial inadequacy in child feeding and caregiving processes (Rahman et al., 2004; Surkan et al., 2011). It was also considerably lower and both under wasting and low birth weight of the child were the only significant association, reinforcing the previous evidence that acute malnutrition is most correlated with maternal prenatal and perinatal characteristics, not with socioeconomic conditions of the community where the child was born. Prior studies focused on the fact that maternal nutrition and antenatal care is fundamental to low birth weight and subsequent wasting (Victora, et al., 2010).

In 2024, 42.8 million children under five were globally wasted (6.6%), which also depicts the ongoing child malnutrition problem in the world (UNICEF, WHO & World Bank, 2025). In this study, maternal occupation, place of residence, childhood sickness, low birth weight, and maternal CMD showed significant underweight. The findings of this study showed a strong association between maternal CMD and children underweight, have supported previous studies showing poor mental health of mothers that increases risk in children in undernutrition through poor feeding, less health seeking efforts, and not being emotionally present (Patel, et al., 2004; Atif, et al., 2015).

Overall, the findings support existing global evidence that child undernutrition is the result of a complex interaction between biological, sociodemographic, and psychosocial factors. In line with WHO and UNICEF recommendations, the study highlights the necessity of integrated maternal mental health and nutrition interventions to improve child growth and development outcomes.

Conclusion

This research indicates an essential link concerning the mental health status of mothers in relation to the health and nutrition of children under five years in Lamkichuha Municipality, Kailali. Mental health issues pertaining to mothers are highly prevalent with over 40 percent of the sampled mothers having common mental disorders (CMD). The nutrition situation of children in the study area was found to be very poor in that over 50 percent of children were stunted, 7 percent were underweighted, and 5 percent were wasted. This showed both chronic and acute malnutrition. The research results show that CMD of mothers are strongly correlated with underweight children; while stunting and wasting were a result of a mixture of issues. These issues include low birth weight, having an infant less than 6 months, occupation of the parents, and the health status of the child in question, who suffered from diarrhea and respiratory infections. The strong link that low

birth weight has with wasting and underweight, reflects the need to promote care intervention prior to birth. Stunting and underweight were also associated with some of the socio demographic factors like ethnicity, parental occupation, and place of residence which demonstrates that there are underlying structural and socio-economic factors that impact the child's nutrition. Overall, the research indicates a need for integrated intervention programs that take into account the mental health of mothers and nutrition of the children in a holistic way. Psychosocial health of mothers, malnutrition and socioeconomic factors are integrated.

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Acculturation and Occupational Shift among the Badi Community of Surkhet

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DOI: <https://doi.org/10.3126/jotmc.v9i9.90470>

Abstract

This paper assesses the influence of acculturation practices on the occupational shift of Badi community in Surkhet having the major objective of exploring better social adjustment. The study employs exploratory sequential design based on mixed method (QUAN-QUAL). In essence to explore the livelihoods of Badi, they were found engaged in entertainment occupations singing and dancing, relying on upper caste patronage and living in their homes. Their socio-economic conditions were measurable marked by dependency and discrimination. However, after democracy in 1991, the Badi people are found be acculturate in terms of occupation freedom, pursue education, and occupations diversification. Despite facing challenges during the Maoist conflict (1995-2005), this period became pivotal in fostering their desire for independence; they realized “*Aba Magi Khane Hoina Gari Khane Ho*” (work independently for survival not to be dependent) and opportunities and rights have to grab against not to accept. Thus, the research explores that acculturation practices have contributed to their occupational shift towards agriculture and other. However, the Badi community still found facing socio-economic and cultural challenges; lagging behind other castes in terms of livelihood improvement in Surkhet.

Keywords: Acculturation practices, occupational change, livelihood transformation, Surkhet, Dalit studies

Introduction

The Badi community in Nepal, a unique group within the Dalit caste that it has own traditions, language, and social structure. The word ‘Badi’ is derived from the Sanskrit word *Vadyabadak*, means “one who playsmusical instruments, reflecting their historical role as nomadic entertainers in the Indian states of Bihar and Uttar Pradesh (Bhandari, 2012).

The Badi people arrived in Nepal from India in the 14th century and initially lived in the western regions. Their livelihoods were similar to their Indian counterparts, as they sang songs, performed dances, and narrated stories from the Hindu epics of *Mahabharat and Ramayan* at festivals, weddings, and private gatherings. Their livelihood was sustained through patronage from affluent high caste landlords and rulers (Bhandari, 2012; Sharma, 2018).

Currently, there are approximately 40,000 Badi individuals in Nepal, mainly settled in Karnali and Far-Western provinces. Despite being part of the *Dalit* caste, the Badi community occupies the lowest position within the *Dalit* hierarchy, earning them the label of "untouchables of the untouchables" (Nepal, 2015).

Nepal is a diversified country in terms of socio-economic and cultural aspects. It is the home for multi-cultural, multi ethnic, multi-racial and multi-linguistic society where the caste system forms the foundation of the social structure that each caste has distinct socio-economic, cultural, and traditional skills, which play a key role in understanding their development status. Rural areas in Nepal are more challenging to live in compared to urban areas, with people in rural community often living in traditional ways and lacking basic facilities of transportation, combination, healthcare, and irrigation. Among the marginalized *Dalits*, Badi community people are considered as the most marginalized who are living below the poverty line (Nepal, 2015).

Acculturation the process of socialization that involves adopting aspects of another culture while maintaining elements of one's own, is a key factor in modernization. Modernization often begins with the process of acculturation in developing communities, leading to significant changes in the lives of the people. For the Badi people, acculturation has been crucial in shifting their traditional occupations and life styles, enabling them to adjust socio-economically by adapting to changing circumstances (Sharma, 2016).

In the mid-20th century, the *Badi Andolan* (Badi Movement) of 2007 resulted in several agreements with the interim government, which included pledges to stop using discriminatory language, provide citizenship to all Badi people, offer scholarships to Badi youth, and create community job initiatives. Additionally, two Badi representatives, including one female, were included in a government task force tasked with researching the concerns of the Badi community (Nepal, 2015). According to the 2011 Census, there were 38,603 Badi individuals in Nepal, making up 0.15% of the total population and 11770 according to CBS 2021. The majority of the Badi population resides in the provinces of Sudurpaschim, Karnali, and Lumbini. Over the past few decades, this nomadic group has settled permanently in these regions (Central Bureau of Statistics, 2011; 2021).

Socially, economically, and politically, the Badi community has been one of the most disadvantaged communities in history (NDC, 2060). They still endure prejudice, even within their own Dalit community, when it comes to basic amenities. Since the Badi community has gradually moved away from their original occupation as performers and their nomadic manner of life, their current circumstances have greatly improved in comparison to their past. They have, however, also made their permanent homes there, as is the situation in Karnali province, where access to essential services is already limited caused of different factors (UNDP, 2023). Skill generally refers to the ability, capacity, or efficiency to perform tasks within an individual's production system or machinery. It is the effort to carry out work and can be found in various forms such as machinery, equipment, documentation, or processes. Skill is often conceptualized with respect to its origin, purpose, and characteristics to avoid ambiguity (Sharma, 2015).

Occupations in Nepal were determined on the caste system by the birth of people not by their interest and capacity, which was designed to maintain social structure (Bista, 1990). Similarly, the Badi people as part of Sudra caste, were considered the lowest untouchable and impure. The

Kshetri used to serve as warriors and administrators received *Rakam* (money or land), *Vaishyas* used to engage in trade received money, and *Sudras* including the Badi, used to engage in skill based serving occupation relying on the patronage from upper caste people. Particularly in the case of Badi community people, they were entertainers who used to perform songs and dances (Bista, 1991; Caplan, 1970; Sharma, 2015).

Occupational structure and their socio-economic livelihood among and within *Dalits* were found to be discriminative as well because the *Kami* are black smiths and gold smiths. Despite the similarity in skill based traditional occupation, the *Kami* hold a higher position in the caste hierarchy compared to other untouchable castes (Subedi, 2021). The relationships between inter-caste *Dalits* were rigid, polluting, and prohibitive; and in the context of the Badi people, they were considered the lowest untouchable caste faced more social domination and discrimination during social adjustment and changing their livelihoods (Hofer, 1976; Rai, 2021).

Therefore, this study issue of the Badi in Panchapuri municipality is guided by empiricist thought of marginalization applying on Dalit issue (Guru, 2002). This approach explores the realities of caste-based exclusion, discrimination, and violence through the lens of right-based concept how the weaker section being shift in other main stream socio-cultural and occupational aspect (Thorat & Newman, 2010).

Objective of the Study

This research aims to investigate the level of acculturation and shift in occupational change and, specific objective is to explore the level of acculturation practices among the Badi as they transition from patronage to new social adaptation.

Methods and Procedures

This study employs a mixed-methods approach (QUAN-QUAL) using an exploratory sequential design that primarily focused on quantitative data supplemented by qualitative analysis. Initially, I gathered quantitative data through interviews, using a census method from total 15 households heads: eight from ward number six, three from ward number eight, and four from ward number four, all belonging to the Badi community in Panchapuri Municipality of Surkhet district during August 2024. In the second phase, I collected qualitative information through participant interviews with four key representatives (Jhilke Badi and Keshar Badi in 21st and Lure Badi and Jiban Badi in 22 October) from the Badi community, aligning with my research objectives, conducted on October 21 and 22, 2024, to complement the quantitative findings and analysis.

There were 92 total Badi populations in Panchapury (Municipality Profile, 2017). Additionally, I have examined relevant literature, including books, articles, and newspapers to gather necessary secondary data. Consequently, I have utilized a descriptive research to evaluate the data guided by pragmatist approach.

Findings

Situation of Traditional Entertaining Skill based occupation of Badi in Surkhet District

The Dalit Badi people, in general, are very hard working people, having specialization in one art and craft or other related on making their musical instruments tam-tam (Madal), *Tabala*, and *Sulpa* (mud made smoking instrument) (Action Aid Nepal, 2001). The Badi people living in Surkhet district have also the similar history in their specialization on traditional professional occupation constructed by social structural for social adjustment. In the response to know the changing occupational trend, Lure argues as

“I remember, my grand gather had engaged and used to do this entertaining singing and dancing traditional occupation in the past before 40 years however, this traditional profession has been changed and be shifted into agriculture and others because some of the members of our community are being teachers and some other are in India and Korea” (L. Badi, 22/10/2024[KI]).

In the essence of this changing spirit another key participant Keshar argues as

“I left my traditional entertaining occupation for being independent and having eager of adapting respectful occupation in the changing situation because I think, that patronage system based entertaining profession was the ruin for our community development that it had made us dependent to higher class people for survival and led us into poverty” (K. Badi, 21/10/2024[KI]).

In Nepal, 25.16 percent people of the total population are surviving under the economic poverty line (CBS, 2021). In the case of Badi people in Surkhet, mostly all the Badi people have first priority to join on service sector, business and agriculture. Thus, the Badi people agreed that they are highly interested giving priority to involve in other occupational sectors as making their major occupation although it was not their ancestral occupation because better livelihood requirements food, clothing, and shelter are also being the matter of challenge for them in Surkhet. Only few populations have satisfactory income however, this section of population is not found engaged on traditional skill related occupation. Therefore, the state shift in occupation from patronage to new social adjustment more in agricultural occupation can be the causes of acculturation practices.

Situation of Entertaining traditional Skill based occupation

Traditional occupation is the specialization art or handed technology which is easily transferable to other generation. In the past before 1990s the Badi people have also found been engaging on entertaining singing and dance based indigenous profession as their main occupation which had sustainably supported in the economic status and livelihood of the Badi in the study area. They would sing the different songs, dance to entertain the rulers and elite feudal section of the people for accepting patronage and make various products of mud, metal and leather based entertaining instruments for their survival (Thapa &Khanal, 2019).

Whole the participant household heads argued that the Badi community people have the more or less traditional skill to make different entertaining instruments or products in the community. Still now, the 6 respondents 40 percent of the total have good knowledge and skill on this but they

are partially continuing this traditional entertaining skill of singing song, performing dance, and making the needy instruments for this as their alternative source of income or occupation as well. They also agreed that their whole past generation before 1990s were involved in that traditional entertaining occupation but now, nobody want to engage in this occupation caused by changing attitudes of new generation of Badi and the products cannot compete in the open market (Interaction Experience with the Fifteen Household Heads, 20-24/06/2024).

For wise understanding, some major items of traditional entertaining songs and dances and their relative traditional skill based products of Badi community are presented here by analyzing the data in this table.

Table 1
Traditional Products and Types of Song and Dance of Badi

S. N.	Name of the traditional products	S. N.	Name of the Traditional Song and Dance
1	Madal (Nepali Folk Musical Instrument)	1	Jhyaure folk song and Dance
2	Tabala	2	Nepali Filmy song and Dance
3	Sulpa (traditional smoking item made by clay)	3	Hindi Filmy Song and Dance
4	Chilam/Hukka (Large size smoking item)	4	Cultural: Feast and Festival Based Dance
5	Traditional Fishing Net	5	Not Having their Indigenous Song and Dance However, Professional for Giving Entertainment

Source: Participant Interview, 2024

The products made from partial involvement of Badi people living in Panchapuri municipality of Surkhetare based on traditional knowledge that the products have found to be played more important role in utilization and easy fulfillment of human needs in the society.

Badi people argued that now the situation of handmade Madal, Tabala, Chilam (Hukka), and fishing net made by them are gradually replaced by the machinery based industrial products. Similarly, the traditional singing and dancing entertaining profession is also in phase of extent because of the development of modern entertaining instruments radio, television, film/movie, and excessive use of digital devices instead of traditional entertaining songs and dance performed by the Badi in Nepal. The Badi people stated that their products made by using indigenous knowledge are more useful, easy available, use simple handed technology and locally available, use of local resources, and qualitative too than for securing the sustainable livelihood than modern machinery product.

Table 2

List of the Equipment for Entertaining-Based Traditional Products of Badi

S.N.	Name of using equipments /materials
1	- <i>Leather of Goat for two sides hitting materials on Madal (Modne Ra Talla Hallne)</i> - <i>Leather of ox or monkey for Making rope (Tana Hallne)</i>
2	<i>Kari (soft Iron stone)</i>
3	<i>Kit (Mixture of pods of rice, ash of Dry Babiyo grass or tyre)</i>
4	Log (wood) of Khamari, Mallyato, Khirro, Piyari, Bhalayo, Bauni Sallo
5	Leather rope (vain of dead ox or monkey)
6	<i>Jara (iron equipment for making cylindrical hole in the wooden log)</i>
7	Mungra (hitting wooden equipment for making plain of sides of Madal and Tabala)
8	Hammer, harrow, and ankle

Source: Participant Interview, 2024

These are the major equipments and materials used for working on traditional occupation of Badi people of Surkhet District. The Badi people argue that this traditional entertaining occupation had appropriate in the past for social structural adjustment and for the livelihood survival in the society however, it's situation through the lance of economic sustainability it is found inappropriate for them because of some constraints in the modern economy:

- They faced key challenge of shortage of raw materials due to changing situation of national political systems and policies related to forest and wild lives which needed them like mainly the leather of dead animals and wood.
- Traditional entertaining occupation couldn't compete with other means of entertainment in the modern market.
- Their products had not good finishing in the comparison of modern industrial machinery products and entertaining performance also could not compete to modern means of entertainment.
- They had lack of training and support to upgrade their skill change it in to the entrepreneurship concept in modern market.
- The Badi people were economically poor to set the live sing and dance platform and introduce machinery in their product in modern way.
- Patronage could not be the sufficient source of income to sustain their families in changed socio-economic, cultural and political situation after 1990s.

Thus, in this changing process, Jhilke gives his reaction as

“our community is still facing problem of untouchability and caste based discrimination although it is abolished according to law. However, most of us we feel hesitation in the society to involve in that occupation due to hierarchical social structure that other caste people think us as inferior, un respected, and dominated. Therefore, I think it is the compulsion for us to acculturate for our independence and respectful existence” (Interview with J. Badi, 21/10/2024 [KI]).

Changing Attitude on Traditional Occupation of Badi

Keshar a youth from the Badi suggests, the people of present generation in our community do not want to adapt traditional entertaining occupation as main occupation because they feel domination and insulted involving in this occupation. Now the Badi people are aware on their rights and privilege thus the occupational status of Badi people have been found to involve on different sectors therefore, their position of traditional entertaining occupation is gradually decreasing. Similarly, the views of all the Badi people of this community found not to suggest their children to involve in this traditional entertaining occupation as well. Thus, the changing attitude of being eager to adopt new occupation was the key turning point for acculturation practices in their livelihood guided by empiricist view of grabbing new opportunities.

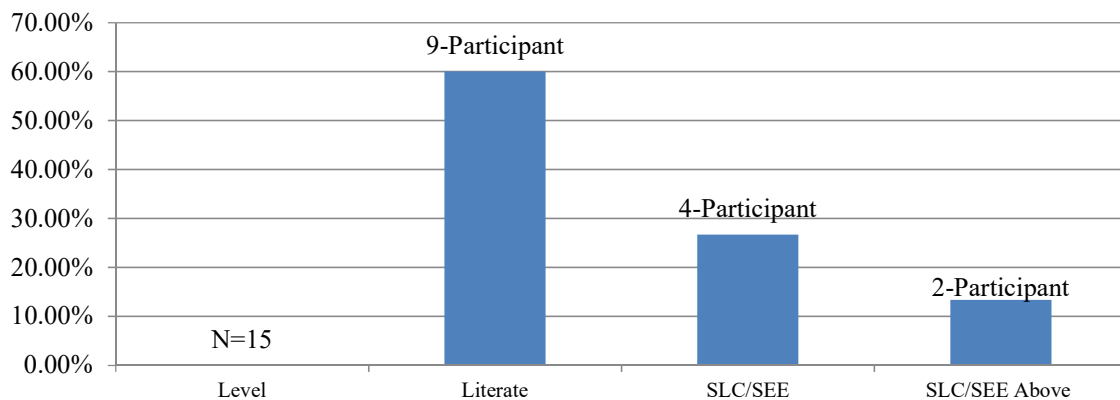
Acculturation practices of the Badi community on occupational change includes the components of family structure, marriage system, education, occupation, ownership of land, Land use pattern, income level, use of domestic energy consumption level, socio-cultural norms and values, feast and festivals, customs and lifestyle of community are important to know in the shifting occupational livelihood of Badi people in the study area.

Education Factor for Shift in the Occupation and Livelihood of the Badi

Education is one of the major means of acculturation process in the community because it gives the knowledge of learning of others socio-economic and cultural aspects. Without education it is difficult to improve the life and get involve in decision making position. Therefore, it can be an important mean for acculturation practices in the livelihood of the Badi. The given figure 1, shows the level of education of the respondent's households given below.

Figure 1

Educational Status



Source: Participant Interview, 2024

Data shows that majority 9 participants (60 percent) of Badi people were literate where as 4 participants (26.67 percent) were found having SLC Passed and 2 participants (13.33 percent) of respondents have above the level of SLC. The data about education of 40 years ago of the Badi were not available in the area however; they agreed most of them were illiterate. The satisfactory

data of educational status among the Badi community shows the better result of understanding guided by empiricist view for their right among the communities in the modern world to gain the better opportunities through competition. Nowadays, many Badi of study area have been aware on their changing needs, opportunities and techniques to grab. One of the participants from Badi community (J. Badi) a teacher of Sree Samuha primary school Panchapuri 6, Surkhet, in the community suggested as

“I have passed Bachelor in Nepal subject thus, I am able to afford the basic requirements of my family, I can understand my rights and duty than other members in the community which is the part of gaining knowledge that helps to acculturate us to be aware than our previous generation” (J. Badi, 22/10/2024[KII]).

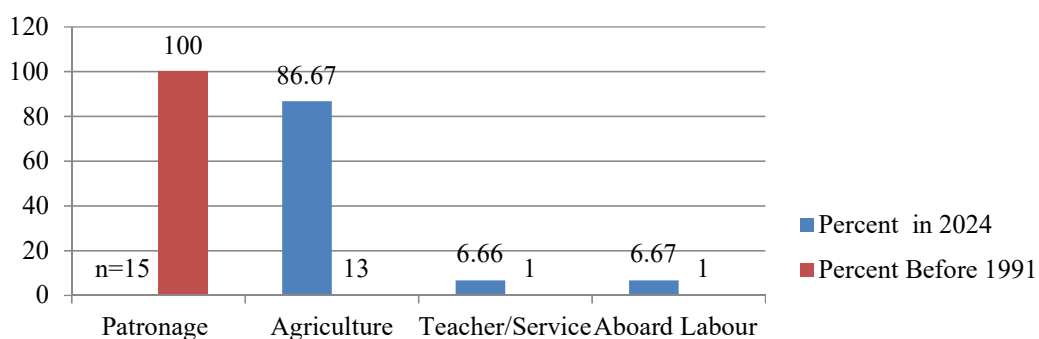
Change in Occupation of the Badi through Process of Acculturation

Change in the occupation is the result of acculturation. Acculturation practices in the occupational aspect of the Badi have been found greatly influenced in the study area.

“In my opinion after establishment of democracy in 1990s, we Badi community people became aware and independent for adopting our interest of occupation. Democracy resulted us about awareness of freedom on education and occupational choices; thus awareness made us and our children able to think and know the level of discrimination, insult, domination and exploitation from upper caste people in the name of patronage thus our generation changed our occupation”(Jh. Badi, 21/10/2024).

Figure 2

Occupational Shift of the Badi Over the Last 40 Years as Their Main Occupation



Source: Participant Interview, 2024

The study in the figure 2, shows sent percent people of Badi were adapted patronage system from the elite central and local level ruling class (King, Ministers, administrative head, Jimuwal, Mukhiya, Pradhan, Thalu, Pancha-Bhaladmi and other upper caste Ista-Mahajan; and as in some case of BaligharePratha) before 1991 in Nepal but contradictory in the case of change in their

occupation it is shifted and changed dramatically that they mostly dependent on agriculture occupation and others. Now the ratio of involvement in agriculture has been increased at 86.67 percent and some of them also have involved in other occupations eg. teacher and aboard working labour that 6.66 percent engaged on service sector as a primary teacher, and 6.67 percent found to be gone for foreign employment as for doing labour but nobody respondent are found adopted their traditional entertaining occupation as their main occupation at the time of study. In this view, Lure has given supportive argument as

“I think in the Maoist conflict period in Nepal 1995-2005, we all faced many problem on patronage and complexity in our livelihood survival in one hand and in the other hand the period of Maoist insurgency created the feeling empiricist view in to our mind that we started to think *Aba Magikhane Hoina Gari Khane Ho* (work independently for survival not to be dependent) and opportunities and rights have to be grabbed against not to be accepted. Therefore it was the most key influencing factor for shifting our occupation from entertainment performer occupation to agriculture occupation and other” (L.Badi 22/10/2024[KII]).

State of Ownership on Land and change in Traditional Occupation

The Badi of Panchapuri municipality of Surkhet has specially the families dependent on agriculture production. Thus, land ownership is taken as an indicator of occupational and economic change through acculturation practices. At present they have been highly affected by other higher caste community people, their occupation, economy and livelihood. The situation is happening because of changing political system after establishing democracy after 1990s and after period of Maoist insurgency from 1995 to 2005 was the landmark turning period to be aware the Badi people for shifting them in the agricultural occupation.

Table 3

Change in Ownership of Land

Area	Present Time (in 2024)		Before 1991	
	Respondents	Percent	Respondents	Percent
Below 2 Ropani Land	1	6.67	0	0
3-4 Ropani Land	6	40	0	0
5-8 Ropani Land	8	53,33	0	0
Landless	0	0	15	100
Total	15	100	15	100

Source: Participant Interview, 2024

The study indicates the result of the land ownership situation of Badi people living where they argued their ancestors had no ownership of land for cultivation before 1991 or forty years ago. They did not have permanent settlement and had not their own house; they used to live in the Goth of Thula-bada (ground floor of the elite and feudal house) and survive on patronage offered by them. The situation has found to be changed after establishing democracy in 1991 and started to live and occupy on public land managed by the upper caste villagers for the Badi. The majority of the

Badi have 5-8 Ropani land holding size but it is still not registered in their name. Thus, the land holding size of the Badi can be very small below as real cultivators engaging on agricultural occupation for their sustainable livelihood.

Change in Income Level through the Process of Acculturation

Income level of the Badi in the study area found changed over 40 years because the majority of respondents are engaging on agriculture as their main occupation where, their past generation had adopted entertaining profession based on patronage. The income gained from patronage was not fix, the income range used to depend on the ability of giving entertaining satisfaction to the elites ruling class upper caste people king, minister, administrative officials, Pancha-Bhaladdmi and others in different functions feast and festivals. The Badi people used to divide the villages and households of upper caste people for the purpose of collecting patronage following as Balighare Pratha (rights of collection different food grains in different seasons). Now, this patronage traditional occupational system is found to be completely changed and it is shifted in to agriculture and other occupation. The Badi people are independent to choose their own occupation by themselves for maintaining respectful social adjustment in the society however, socio-economically they cannot be able to adjust their livelihood because of the problem of small land holding size for production and occupied land by them is still remained Ailani (officially unregistered). This Ailani land of the Badi has been a problematic issue in the case of collateralevaluation and taking loan from different financial institutions for doing other economic activities.

Table 4
Change in Income level

Annual	Present in 2024		Before 1991	
Income level in RS.	Respondents	Percent	Respondents	Percent
Not Fix and unknown	0	0	15	100
Up to 50,000	2	13.33	0	0
51,000-100,000	11	73.33	0	0
Above100,000	2	13.33	0	0
Total	15	100	15	100

Source: Participant Interview, 2024

The above table Shows the data of income level of the people of Badi that sent percent 15 households had the annual income was not fix that they are unknown about their income, only they are agree they used to perform song and dance for their survival based on patronage before 40 years but now their occupational situation and income has been changed and found to be shifted in other sectors where the 13.33 percent households have Rs 50,000 annual incomes. Similarly, 73.33 percent households have been Rs.50,000 to 100000, and only 13.33 percent have been found above the Rs. 100000. Therefore, the data of income source of the Badi has found being gradually changed in Surkhet.

Change in the energy consumption trend through the Process of Acculturation

Acculturation practice in the livelihood of the Badi has found bringing lots of changes in the energy consumption trend in Surkhet. Cooking, lighting and heating are fundamental activities for livelihood survival; the energy consumption level also found been changed. The given table shows the changes in the change in use of domestic energy consumption level during the last 40years.

Table 5
Changes in the Domestic Energy Consumption Level of Badi

Types of Energy and Consumption Purpose	Present in 2024		Before 1991 (40 Years)	
	Respondents	Percent	Respondents	Percent
Cooking Purpose				
Firewood	8	53.33	15	100
LPG gas	7	46.67	0	-
Total	15	100	15	100
Purpose for Lighting	Respondents	Percent	Respondents	Percent
Using Pine Firewood for Lighting	0	0	14	93.33
<i>Tuki</i> (Lighting pot using kerosene)	0	0	1	6.67
Solar Panel	2	13.33	0	0
Electricity	13	86.67	0	0
Total	15	100	15	100

Source: Participant Interview, 2024

The above table 5, Shows almost sent percent Badi respondents were dependent upon firewood for cooking and however, in lighting purposes one respondent 6.67 percent viewed they used to use *Tuki* before the last 40 years, but now the trend has been changed because 46.67 percent are dependent on LPG gas instead of firewood for cooking, and 86.67 percent has used the electricity for their purpose of lighting. It shows the impact of acculturation practice in the use of domestic energy change trend during 40 years.

Development Infrastructure Changes

Development infrastructure is one of the most important elements of change in the livelihood strategies of people. While comparing the present with past study area Panchapuri municipality has undergone drastic change in terms of development infrastructure, Twenty years ago there was no sufficient facility of health, electricity, telephone, motorway, graveled road, education etc. related to modernization process of the Badi. But now with modern technological change all kinds of facilities like graveled wide road, nine secondary schools and a campus, one health center, electricity, telephone, mobile and modem irrigation canal have been available there. So, all these development infrastructures have contributed to change in the livelihood strategies for Badi Thapa & Subedi, 2017; Adhikari, 2020).

Thus, the change in the types of family, the structure of houses, marriage practices, feasts and festivals, languages, dress and ornaments, dances and songs of a community represent the level of

acculturation practices in the context of developing communities.

House Structure (Types)

The study consists of similar type of house structure supported and made by *Bipanna Barga Lai Aawas* (Habitat for Marginalized Community).

Table 6
Change in House Structure of Badi

Type of House Structure	Number of Household Heads in 2024	Percent in2024	Number of Household heads Before 1991	Percent Before 1991
Not Having House	0	0	15	100
Having House (Mini Ghar)	15	100	0	0
Total	15	100	15	100

Source: Participant Interview, 2024

The Badi people are found to be completely changed in their settlement pattern and structure of houses from traditional homeless condition to new permanent because all the Badi have their own homes to live. In the past before 1991, they used to live in the Goth of other upper caste people but now. They have permanent settlement found to start living in their own homes. Thus, having permanent settlement in their own homes is a key indicator for changing livelihood of the Badi due to the influence of acculturation practices among them in Surkhet.

Types of Family

In the past Badi people had found to live in a joint and extended family. But nowadays, they prefer to live in nuclear families. On the basis of the study, the family type has been changed from joint to nuclear.

Table 7
Family Type of Badi

Family Type	In 2024	Percent	Before 1991	Percent
Nuclear	15	100	0	100
Joint and Extended	0	0	15	0
Total	15	100	15	100

Source: Participant Interview, 2024

The study shows the impact of acculturation in the structure of the Badi family during the period of forty years in the study area because it is found that their family structure has been changed in the area. Sent percent people of the Badi have been found being agree that they lived in joint family structure before 1991, but now contraductly, all of the 100 percent they live in the nuclear family structure in the study area.

Change in Socio-Cultural Aspect: Marriage Practice, Feast and Festivals, Language, Dress, through Acculturation Practices

The Badi have their own language Badi *Kham Bhasa* 'Khamasi' however, they use to speak Nepali well to communicate other people in the society and also found similarity in dress and tradition with Khas Aarya community (Shrestha, 2015). Thus, they had the traditional own Dancing and singing profession however, it has been changed disappearing during the period of forty years (Pandey, 2018). In this sense of understanding the issue Jiban spoke as

“In our community, the common age for marriage to girl ranges from 16-19 years and for boys ranges from 18-22 years. I think, this changing situation in marriage practice can be the result of increasing awareness and socializing practices among us particularly in new generation. Similarly in the context of the celebration feasts and festivals, we have similarity to other non-Badi people” (J. Badi, 22/10/2024).

From this view of Jiban the socio-cultural aspects and marriage practice of the Badi is also found gradually shifting from community restricted arranged marriage to love marriage. Thus, the Badi in the study area have the well unity and they have gradually changed their life style; mixed up with other communities and trying to shift from traditional occupational livelihood to agriculture and other sector occupations (Thapa, 2020).

Discussion

The key findings shows that there is a decline in skill-based jobs related to traditional entertaining occupation among the Badi in Surkhet, accompanied by substantial occupation change through the process of acculturation. In the past, the Badi community earned their livelihood through singing, dancing, and crafting traditional musical and cultural instruments through a patronage system. They had enough food/meals for survival, which assured continuity in dependency and caste-based hierarchy (Action Aid Nepal, 2001; Thapa & Khanal, 2019). After the 1990s, political transformations, increased awareness among the community about their rights, and lack of access to equal opportunities through the patronage system motivated the community to leave this occupation. They shifted exclusively to agriculture, services, and foreign employment. Other similar research shows that modernization and advancements in modern technologies related to entertaining have also marginalizes skills and make them economically ineffective (Pandey, 2018). Education has been quite effective in this regard as it has improved community awareness and empowered the community to make occupations as per choice, challenging traditional caste-based occupations and the need for dignity and independence (Shrestha, 2015).

Along with occupational transformation, the data also shows that there are other livelihood and socio-cultural changes that indicate substantial processes of acculturation. The change in landlessness to partial land access, homelessness to long-term housing, and joint family to nuclear family shows structural changes in livelihood practices. Although land-related economic vulnerabilities is still exist having not registered officially (Thapa and Subedi, 2017; Adhikari, 2020). The change in the pattern of earnings, energy use, marriage, and life habits further reflects their integration into the mainstream socio-economic order. However, caste-based discrimination affects occupation, as Badi people deliberately try to not be engaged in entertainment occupations to save themselves from humiliation and disrespected derogatory stigma of their traditional

occupation. Findings indicate that although acculturation has enhanced social status and independence, land support and capacity-building and favorable economic incorporation are the need of the hour for secure livelihood security of the Badi people.

Conclusion

Acculturation practice in shifting traditional occupational livelihood of the Badi is the “first micro-level acculturation study of Badi in Surkhet”. Acculturation brought lots of changes to the Badi in socialization and modernization during over the period of forty years in Surkhet. The satisfactory level of data on educational status among the Participants shows the better result of socialization for new and sustainable socio-economic adjustment in the society. Acculturation practices in the occupational aspect of the Badi people has been found greatly influenced that it is completely shifted their previous traditional entertaining profession mostly into agriculture as their main occupation. All the informants argued, they have found completely leave to sing and dance however, six participants 40 percent of the Badi people are found to be involved partially in making entertaining professional products using traditional skill for generating their alternative source of income in the family. Mostly they make Madal to sell on the basis of community demand. Income level, settlement, family structure, level of energy consumption trend, structure of house, language, culture, customs, feast and festivals, marriage system, and other livelihood components. Therefore, the Badi in Surkhet have been found acculturate and modernized. However, different institutional supports are found insufficient because the supports mostly emphasizing on securing their basic needs and rights not in promoting and modernize the traditional skill of the Badi community in Nepal. Thus, this research will be beneficial to understand the influence of acculturation practices on the occupational shift of Badi community in Surkhet for further researchers and in the aspects of related policy formulation.

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**Determinants of Timely Postnatal Care Utilization in Bagmati Province,
Nepal: Evidence from NDHS 2022**

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DOI: <https://doi.org/10.3126/jotmc.v9i9.90462>

Abstract

Postnatal care (PNC) provided soon after childbirth is vital for preventing illness and death among mothers and newborns. However, the use of PNC services in Nepal remains inadequate and unevenly distributed across different socio-demographic groups. This study sought to assess the extent of timely PNC utilization and to identify its key socio-demographic determinants among women in Bagmati Province, Nepal. The study analyzed secondary data from the 2022 Nepal Demographic and Health Survey (NDHS), including 468 women who had experienced a recent live birth. Patterns of PNC use were examined using descriptive statistics, while multivariate logistic regression analysis was applied to explore associations between timely PNC uptake and factors such as maternal age, birth order, educational attainment, household wealth, caste/ethnicity, religion, and place of residence.

The findings reveal that maternal age, economic status, and birth order play a significant role in determining timely PNC utilization. Women aged 30 years and older were considerably more likely to receive postnatal care compared with younger women, whereas women with three or more children showed lower levels of PNC use. Household wealth emerged as the most influential factor, with women from the richest households demonstrating markedly higher utilization than those from poorer backgrounds. Substantial inequalities were also evident across caste and ethnic groups, particularly among Terai caste/ethnic women, who had the lowest likelihood of accessing PNC services.

Overall, the study highlights that economic disadvantage, caste and ethnic marginalization, and higher parity remain critical obstacles to equitable postnatal care utilization in Nepal. Addressing these challenges requires targeted policy actions, culturally responsive interventions, financial assistance for disadvantaged households, and stronger involvement of rural institutions and community leaders to ensure timely and equitable access to PNC services.

Keywords: Bagmati Province, Healthcare Disparities, NDHS 2022, Postnatal Care Utilization, Socio-Demographic Determinants, Timely Postnatal Care, Wealth Inequality

Introduction

Postnatal care (PNC) is an essential element of maternal and neonatal care and services, which is crucial that reduces complications and mortality and enhancing health outcomes. In Nepal, a region that features the Kathmandu Valley (Bagmati Province), the drivers of PNC use are determined by an interaction of both socio-demographic, economic, and cultural factors. The topic of this discussion is these determinants along with the differences and trends peculiar to the province.

The determinant plays an important role in the use of PNC in Bagmati Province old age. There is a higher probability of women aged 20-29 years seeking PNC services as compared to under-age (<20) or over-age (>30) mothers. It can be explained by greater health awareness and literacy rates in this age bracket (Pandey et al., 2022). Restrictions include stigma and a lack of control of the decision-making process in teenage mothers and the shift of prioritizing care in older mothers because of their past experiences in childbirth (Ghimire et al., 2024).

Bagmati Province has a strong relation to education and PNC use. There are more chances that women can enjoy healthcare services in cases when their level of education (secondary and higher) gives them much knowledge concerning maternal health and allows them to navigate healthcare systems (Acharya et al., 2023). But there is also high disparity, especially in the rural parts of the province where access to education is scarce. Improved female education which is special programs may help a lot in improving PNC utilization rates.

Economic status is a key predictor of postnatal care (PNC) utilisation in Bagmati Province, where wealth-based disparities are evident. Households in higher wealth quintiles in Bagmati Province have substantially higher PNC coverage, largely because they can better afford medical expenses, transport costs, and the indirect costs of seeking facility-based care and also have better physical access to health facilities (Koirala et al., 2023). By contrast, women in the poorest quintile in Bagmati Province remain disproportionately disadvantaged, often relying on under-resourced public health facilities or traditional postnatal practices due to financial constraints. These persistent socioeconomic inequalities in PNC utilization underscore the urgent need for targeted, pro-poor policy interventions in Bagmati Province, including subsidized maternity and postnatal services, transport incentives, and strengthened public healthcare financing to ensure equitable access to postnatal care across all economic groups.

The province of Bagmati with its diverse population registers massive disparity in access to healthcare based on caste and ethnicity. Janjatis and Dalits experience prejudice in the system and have a low rate of receiving high-quality healthcare compared to Brahmins and Chhetri's (Ghimire et al., 2023). The existence of cultural stigmas and socio-economic differences increases marginalization to these groups creating a need to implement inclusive policies and community-based interventions that are developed to eliminate these gaps.

A stark urban-rural gap exists in Bagmati Province. The urban women, especially in Kathmandu Valley enjoy a better healthcare system in terms of developed infrastructure, increased

literacy levels as well as health awareness. In contrast, rural females are challenged by the distance to the facilities and healthcare condition of roads and the necessity of sufficient healthcare staff (Sharma et al., 2022). Such a gap highlights the significance of bringing healthcare and health services to the countryside by way of mobile clinics and telemedicine.

Religion is also another implication of PNC utilization in Bagmati Province. Cultural practices before and after child delivery are influenced by Hinduism since it is the predominant religion. Nevertheless, Muslim and Buddhist communities have a tendency to adhere to traditional ways of doing things implying the fact it may be unfavorable toward formal healthcare use (Tamrakar et al., 2023). These barriers can be overcome by involvement of religious leaders and other community influencers in health promotion campaigns.

The birth order significantly contributes to PNC utilization in Bagmati Province. PNC services will be more prevalent in first-time mothers than in women with bigger birth orders due to the particular attention and care that the former receives (Regmi et al., 2022). The need to manage the limited resources available and the duty to care for the number of infants in the big family usually prompts disparity in attention to maternal health during the next pregnancy.

The employment status also determined PNC use in Bagmati Province, with women in formal employment having higher chances of receiving healthcare services because of the financial stability and the existence of maternity benefits provided by the employer (Basnet et al., 2022). Unlike in formal labor, women in informal labor have a harder time balancing between work and healthcare, and supportive labor policies should be enacted.

Cultural beliefs and practices still affect health-seeking behavior of Bagmati Province. Other rituals like diet, use of traditional healers, and postpartum confinement tend to interfere with access to formal PNC services by women (Adhikari et al., 2023). The implementation model of culturally sensitive health education programs is necessary to eliminate false notions and raise awareness of the advantages of postnatal care with professionals.

The predictors of the PNC utilization in Bagmati Province are an indication of the interrelationship between socio-economic, demographic, and cultural factors. Education and wealth become important determinants, whereas caste, ethnicity, and household location show that inequality remains constant. The challenges dictate a multifaceted approach to being achieved by combining education, economic support, the development of healthcare infrastructure, and culturally conscious interventions. Focusing on equity and inclusiveness of maternal health policies, Bagmati Province will be able to increase PNC utilization rates and strengthen maternal and neonatal health outcomes.

Research Methodology

Forty-eight hours critical care in form of postnatal care (PNC) is essential in eliminating maternal and neonatal deaths. Nevertheless, the availability and use of PNC services tend to differ in relation to socio-demographic and economic factors. The study uses data collected on 468 respondents to provide evidence-based policy recommendations on determinants of PNC utilization within two days and gives suggestions on how to improve the service delivery environment in a resource-limited system. A sample of 468 respondents was used in the collection of data based on key variables of age, birth order, education, religion, caste/ethnicity, place of residency and wealth

quintile. Calculation of percentage values was computed by utilizing the descriptive statistics and associations between variables and PNC utilization carried out using cross-tabulations. Patterns were identified on the basis of which the insights were made. First 48 hours maternal and neonatal health outcomes are strongly dependent on postnatal care (PNC), but disparity over its use is still high. The paper is based on logistic regression analysis of factors that determine timely PNC using 468 participants. The most important are age, birth order, caste / ethnicity, education level, residence and quintiles of wealth. The data has 468 respondents which are grouped by means of variables like age, order of birth, religion, caste/ethnicity, education, residence, and wealth quintile. The odds ratios (OR), standard errors (SE), t-values, p-values as well as 95 percent confidence intervals (CI) were calculated using multivariate logistic regression. Statistical significance was determined at ***($p < 0.01$), **($p < 0.05$), and *($p < 0.1$) levels.

Results

Existence of the human being is influenced by a complex latticework of socio-demographic factors. The most powerful factors that determine how individuals and groups relate with the world include age, birth order, level of education, religion, caste/ethnicity, place of residence, and wealth quintile among others. Individual attributes and dynamics about each variable play distinctive roles in the shaping of patterns and inequalities, as well as opportunities in society. This adventure peeps into such variables in order to illuminate how they influence human lives.

Age is a timely measure that characterizes the phases of life. It affects roles, duties, and expectations of the people in society, especially in infancy to old age. Childhood is a period of learning and growth, whereas adolescence is usually a period of self-exploration and preparation for adulthood. When one is an adult, he or she takes over economic, familial, and social responsibilities. Old age, on the other hand is accompanied by wisdom and experience; however, it may also be accompanied by physical and economic dependency. Policies that are associated with age, such as access to a universal education to children or age-based retirement policies show the desire to have a society that provides services according to the age group needs. Significant life events, such as starting school, marriage or retirement are commonly defined by certain age; however, local customs can affect the timing of these. Eventually, the collective development of societies is based on the notion of age as it functions as a universal blueprint.

Birth order within a family Formation, that is the order that children are born, has long been a subject of discussion when it comes to the individual personality traits and how well one is to live out life. First-borns are also considered to be natural leaders, where they enjoy more parental investment as well as expectations. Middle children can acquire negotiating skills which are ideal in striking a balance between relationships between older and younger siblings. The last one, usually the child in which the whole family takes him as its baby, can be spoiled and have less want to be responsible. Studies indicate that the birth order may have an influence on academic and career performance but this may be mediated by such issues as family size, socio-economic levels and cultural expectations. Although not deterministic, birth order provides an extra dimension to genetics and the study of family life and individual development.

Education will form one of the pillars of the development of the individual and of society. It gives individuals special skills, knowledge and critical thinking capabilities to enable personal

development as well as economic productivity. Education about the level of basic literacy to the acquisition of advanced degrees represents an investment by a given society in its human capital. Better education is associated with the greater potential of employment, higher income, and the spur of a better life. The education opportunity is however, not uniform. Influence of wealth differences due to poverty, gender inequality, and location of people are some factors that have great influence on accessing good education. As an example, the rural regions could have no infrastructure, and the marginalized groups are affected by the systemic limitations. The way forward would be to close these disparities by introducing specific policies and investments on how education can be the avenue to equity.

The importance of religion in human life is so personal and collective in terms of creating beliefs, values and traditions. It gives it not only moral direction, but also a sense of community and purpose. Religious institutions also assume great roles in education, medical care and social welfare. Religion may also be regarded as a divisive factor where at times the minorities may be discriminated against or marginalized. Relation between religion and society is complex. Whereas in some religious cultures charity and social unity are promoted, others can strengthen hierarchies. In ever more heterogeneous communities, interfaith dialogue and religious pluralism need to be encouraged so as to facilitate social peace and integration.

Caste and ethnicity are rooted into both cultural and historical contexts, affecting the way an individual informs his identity, his access to resources, and his relations with others. In some parts of the globe such as South Asia the roles, occupations and hierarchies have been determined by caste systems. The castes that have been marginalized are usually systematically targeted with fewer opportunities to move up socially and economically. In the same manner, ethnicity is a sense of belonging, which also manifests through common language, culture, and heritage, yet gives a feeling of belonging and exclusion in multi-ethnic societies. The role of affirmative action, anti-discrimination legislations, and broad-based policies cannot be underestimated in combating caste- and ethnicity-related iniquities, the path to increased social justice.

The location of residence (urban, rural, and suburban areas) defines their access to resources, opportunities and their quality of life. The city is a centre of economic activities, which provides improved accessibility to health, education, and jobs. They are, however, normally fraught with problems such as overcrowding, pollution and socio-economic differences. Although rural regions create a sense of strong community and a traditional lifestyle, they are often underdeveloped in terms of resources, including quality education or medical institutions. Regional inequality is also significant hence the need to focus on regional developments in developing opportunities to connect the rural-urban divide.

Wealth quintile is a tool of partitioning populations, in terms of income or assets, depicting stern economic disparities. People in the upper quintile have such advantages as access to enhanced healthcare, good education, and high-quality housing, which tend to be perpetuated in the generation cycles. On the other hand, the individuals in the lowest quintile have a lot of problems such as lack of access to essential services, bad living, and exposure to financial shocks. Inequality in wealth also causes social disturbances and slows trade. These gaps need to be addressed through incentives such as progressive taxation, social nets, and public service investments. The evenness in the spread of the wealth is the first step towards a more inclusive society.

Table 1
Distribution of PNC Care

Variable	No		Yes		Total	
	Number	Percent	Number	Percent	Number	Percent
Age						
<20	12	9.3	8	2.3	20	4.2
20-24	39	30.0	84	25.0	123	26.4
25-29	51	39.7	99	29.4	151	32.2
30-49	27	21.0	147	43.4	174	37.2
Birth order						
First	46	35.3	168	49.6	213	45.6
Second	49	37.9	133	39.4	182	39.0
Third or higher	35	26.8	37	11.0	72	15.4
Level of education						
No Education	23	17.7	27	8.0	50	10.7
Basic Education	98	75.5	169	49.8	266	56.9
Higher Education	9	6.8	143	42.2	152	32.4
Religion						
Hindu	85	66.0	266	78.5	351	75.0
Other religion	44	34.0	73	21.5	117	25.0
Caste/Ethnicity						
Dalit	13	9.8	26	7.7	39	8.3
Janjati	77	59.6	184	54.4	261	55.9
Other Terai	7	5.2	4	1.2	11	2.3
Brahmin/Chhetri	33	25.4	124	36.7	157	33.6
Place of Residence						
Urban	70	54.2	275	81.4	346	73.9
Rural	59	45.9	63	18.6	122	26.1
Wealth quintile						
Poorest	41	32.0	24	7.1	65	14.0
Poorer	28	21.8	40	11.8	68	14.6
Middle	30	23.4	52	15.3	82	17.5
Richer	18	14.1	64	19.0	83	17.6
Richest	11	8.8	158	46.8	170	36.3
Total	130	100.0	338	100.0	468	100.0

Source: Nepal Demographic and Health Survey, 2022

Age: Respondents of 30-49 years old had the highest utilization of PNC (43.4%), whereas the smallest number of utilization of PNC was among the respondents less than 20 years old

(2.3%).The group of younger respondents was significantly underrepresented in the timely uptake of PNC, which points to possible unmet demand factors caused by a lack of awareness or access.

There was a larger use of PNC services by the mothers without a previous child (49.6%) and fewer by mothers with three or more children (11.0%). The trends are representative of limitations in resources and lower demand of larger families in seeking care.

The chances that higher educated respondents received timely PNC were 42.2 percent, representing basic education (49.8 percent), and no education (8.0 percent). Education is one of the major components of healthcare awareness and access. Close correlation between education and PNC usage supports the necessity of educational programs to promote the awareness of maternal healthcare.

Religion: They found 78.5 percent of Hindu respondents and 21.5 percent of other religions using PNC as compared to their utilization. Healthcare-seeking behavior may be affected by cultural and religious aspects.

Janjati respondents showed the greatest PNC usage (54.4%) whereas Other Terai indicated the lowest utilization (1.2%). Caste/ethnicity-based systemic disparities are still there.

Urban dwellers had a high probability of using PNC services (81.4%) than the rural communities (18.6%). The demographic set-up between urban and rural emphasizes the infrastructural and resource gap. Rural settings need to improve on their healthcare facilities, outreach drives and transportation systems to increase access to PNC.

Wealth Quintile: Responders in the wealthiest quintile were the highest utilizer of the PNC (46.8%), whereas those in the poorest quintile were the least user (7.1%). Financial disparities are also the main obstacle to health access. The gradient of wealth in PNC use shows the necessity of subsidies and free health services to maternal healthcare facilities to the economically deprived population.

Table 2

Factors association of post-natal Care

Variable	Odds Ratio	Std. Err.	T	P> t	95% Conf. Interval	Sig
Age						
20-24	2.683696	2.218437	1.19	0.236	0.516703-13.9388	
25-29	2.008646	1.489091	0.94	0.35	0.4583924-8.801755	
30-49	6.084897	4.565684	2.41	0.019	1.363975-27.14564	**
Birth order						
Second	0.6030657	0.2009214	-1.52	0.133	0.310451-1.171484	
Third or higher	0.2868791	0.1322262	-2.71	0.008	0.1144872-0.718854	***
Religion						
Other religion	0.8376136	0.282065	-0.53	0.6	0.4281264-1.63876	
Caste/Ethnicity						
Janjati	0.9451692	0.4621753	-0.12	0.909	0.3566713-2.504673	
Other Terai	0.0732462	0.0631203	-3.03	0.003	0.0131491-0.4080142	***

Brahmin/Chhetri	0.697263	0.4358638	-0.58	0.566	0.2006027-2.423574	
Educational attainment						
Basic Education	0.7532392	0.4037724	-0.53	0.599	0.2587961-2.192341	
Higher Education	3.077729	2.182176	1.59	0.117	0.749098-12.6451	
Residence						
Rural	0.7565172	0.3038584	-0.69	0.489	0.3397565-1.684495	
Wealth quintile						
Poorer	2.431712	1.417036	1.52	0.132	0.7612544-7.767734	
Middle	2.670173	1.217731	2.15	0.035	1.075987-6.626312	**
Richer	6.330332	3.841076	3.04	0.003	1.889014-21.21376	***
Richest	9.098719	4.766316	4.22	0	3.203079-25.84597	***
_cons	0.5546392	0.5135141	-0.64	0.526	0.0876276-3.51059	

Multivariable logistic regression using socio-demographic characteristics as independent variables to determine the effect they have on utilization of [insert outcome variable, e.g., the use of postnatal care (PNC)] can be found in Table X. It was found that there were a few statistically sound associations.

Mother age was strongly positively correlated with the result in aged 30-49 years (OR = 6.08, $p = 0.019$), which means that this group used the service more than six times more often than other reference group 15-19 years. This observation underlines the higher health seeking behaviour or perceived need by the older mothers. But the age groups 20 to 24 and the age groups 25 to 29 did not indicate any statistically significant differences.

The outcome had a negative relation with birth position. Thirdly or greater birth order women were also far less likely to use the service when compared to first time mothers (OR = 0.29, $p = 0.008$), which indicates possible complacency or obstacles built in with multiparous women. The second group of the birth order also demonstrated a smaller possibility but not statistically important.

The uptake of service was greatly affected by caste and ethnicity. The Other Terai caste group of women had the lowest likelihood of using the service (OR = 0.07, $p = 0.003$) in comparison with the reference group (Dalit) due to the continued caste-based disparities in utilization of maternal healthcare.

The educational attainment demonstrated a positive albeit insignificant correlation. Higher educated women were more likely (OR = 3.08, $p = 0.117$) to use the service than those educated and thus, although it was not statistically significant in this survey group, education had an enabling effect.

The strong determinant was the position of wealth status. The likelihoods of using the service rose progressively as wealth quintile rose. The richest women had nine times more chance of using the service as compared to the other groups (richer, middle, poorer) of women (OR = 9.10, $p < 0.001$), and the richer, and the middle women had six, and two times more chance respectively (OR

= 6.33, $p = 0.003$, OR = 2.67, $p = 0.035$). A gradient, in this case, emphasizes the importance of economic status with regard to access to healthcare.

The aspects of residence and religion proved not to influence the outcome of this model. Likewise, the constant term also did not appear to be statistically significant meaning that the odds of the outcome at the baseline lacking all predictor effects could not be distinguished to be other than an act of chance.

These findings support the fact that the definition of the multifaceted socio-economic and demographic factors affecting the behavior of maternal health is a complex process. Special policy focus should be on resolving the disparities experienced by low-income, low-educated, and disadvantaged ethnicities so they can have equal access to the necessary maternal health services.

Discussion

Postnatal care (PNC) within 48 hours of childbirth is a critical component of the maternal and newborn health continuum, significantly reducing preventable morbidity and mortality. This study examined socio-economic and demographic determinants of early PNC utilization in Bagmati Province, revealing persistent inequalities shaped by age, birth order, education, caste/ethnicity, residence, and wealth status. These findings both align with and diverge from existing national and international evidence, highlighting province-specific dynamics that merit targeted policy responses.

Maternal age emerged as a significant predictor of PNC utilization in Bagmati Province, with women aged 30–49 years demonstrating substantially higher odds of accessing PNC services within two days of delivery. This finding is consistent with national evidence from the Nepal Demographic and Health Survey (NDHS) 2022, which reports higher postnatal service use among older mothers compared to adolescents (Ministry of Health and Population [MoHP], 2023). Similar patterns have been documented in studies from Ethiopia and India, where older women tend to possess greater health literacy, decision-making autonomy, and prior exposure to maternal health services (Tirunch et al., 2022; Singh et al., 2021).

In contrast, adolescent mothers in Bagmati Province were markedly underrepresented in timely PNC uptake, reflecting broader structural challenges such as early marriage, limited autonomy, stigma, and inadequate access to youth-friendly services. This mirrors findings from Khadka et al. (2023), who observed delayed postnatal service utilization among teenage mothers in central Nepal. Compared to urban Kathmandu Valley studies, where adolescent PNC coverage is relatively higher due to better service availability, rural and peri-urban pockets of Bagmati appear particularly disadvantaged. These findings underscore the need for age-specific and adolescent-responsive postnatal interventions.

Birth order significantly influenced PNC utilization, with first-time mothers exhibiting the highest uptake. This aligns with evidence from Nepal and other South Asian countries showing that primiparous women receive greater familial attention, counseling from health workers, and facility-based follow-up (Acharya et al., 2023; Singh et al., 2020). Conversely, women with three or more children in Bagmati Province were significantly less likely to seek PNC, reflecting competing childcare responsibilities, financial strain, and perceived reduced need for care.

This pattern is consistent with NDHS 2022 findings and studies from Bangladesh and Pakistan, which report declining maternal health service utilization with increasing parity (National Institute of Population Research and Training [NIPORT], 2022; Agha & Carton, 2019). The Bagmati-specific evidence highlights the importance of family-centred postnatal counseling, particularly targeting high-parity women who may underestimate postpartum risks.

Educational attainment showed a positive association with PNC utilization, particularly among women with secondary or higher education. This finding corroborates extensive literature demonstrating that education enhances women's health literacy, negotiation power within households, and ability to navigate healthcare systems (Shrestha et al., 2023; Victora et al., 2012). Although higher education did not reach statistical significance in the adjusted model, the observed trend aligns with national-level analyses showing that educated women in Bagmati Province consistently outperform their less-educated counterparts in maternal service utilization (MoHP, 2023).

In contrast, women with no formal education who constituted a non-negligible proportion of the sample remained significantly disadvantaged. Similar disparities have been reported among marginalized communities in Madhesh and Lumbini provinces, suggesting that educational inequities remain a structural barrier nationwide (Poudel et al., 2023). These findings reinforce the role of female education as a long-term investment in improving maternal health outcomes.

Caste and ethnicity were strongly associated with PNC utilization in Bagmati Province. Women from marginalized Terai caste groups demonstrated significantly lower odds of accessing timely PNC, consistent with prior research highlighting entrenched social exclusion and discrimination in Nepal's health system (Bista et al., 2023; Bennett et al., 2013). In contrast, relatively higher PNC uptake among Janjati women may reflect improved outreach through community-based programs and urban proximity within Bagmati Province.

Comparable patterns have been observed in India, where socially disadvantaged caste groups experience delayed or inadequate postnatal care despite geographic proximity to services (Joe et al., 2019). These findings emphasize that physical availability of services alone is insufficient without addressing social inclusion, trust, and culturally appropriate service delivery.

The urban–rural divide in PNC utilization was pronounced in Bagmati Province, with urban women exhibiting substantially higher coverage. This finding mirrors national data showing that urban PNC utilization in Nepal exceeds rural coverage by more than 20 percentage points (MoHP, 2023). Similar disparities have been documented in other low- and middle-income countries, where rural women face compounded barriers including distance, transportation costs, and shortages of skilled health personnel (WHO, 2022).

Despite Bagmati Province's relatively advanced infrastructure compared to other provinces, rural municipalities remain underserved. This suggests that provincial development alone does not guarantee equitable access and highlights the need for decentralized and mobile postnatal care strategies.

Religion did not emerge as a statistically significant determinant of PNC utilization; however, cultural norms associated with religious practices may indirectly influence care-seeking behaviors. Studies from Nepal and India indicate that postpartum confinement practices and reliance on traditional healers can delay formal postnatal care, particularly among Hindu communities (Sharma

et al., 2023; Baru et al., 2018). Engaging religious and community leaders in health promotion initiatives has shown promise in overcoming such barriers and may be particularly effective in culturally diverse provinces like Bagmati.

Wealth status was the strongest predictor of PNC utilization in Bagmati Province, with women from the richest households exhibiting markedly higher odds of receiving timely care. This finding is consistent with NDHS 2022 and global evidence demonstrating that economic capacity influences healthcare access through affordability of transportation, private services, and opportunity costs (Acharya et al., 2023; Boerma et al., 2018).

The disproportionately low PNC uptake among the poorest quintile underscores persistent financial barriers despite Nepal's free maternal health policies. Similar gaps have been documented in Bangladesh and Ethiopia, where indirect costs remain a major deterrent (Agha & Carton, 2019; Tiruneh et al., 2022). These findings support the expansion of targeted subsidies, transportation incentives, and social protection schemes to enhance equity in postnatal care utilization.

Conclusion and Recommendations

It is understood that the use of postnatal care (PNC) during the initial two days in Bagmati Province, Nepal, is subject to a complex collection of socio-demographic, economic and cultural factors. Though the awareness regarding the significance of timely PNC increases, unlevelled usage can be observed throughout subpopulations. Age played a very significant role and a woman between 30 and 49 years was more likely to receive PNC services indicating that women become more willing to consult healthcare when they are experienced and enlightened. Service uptake was negatively associated with birth order, with expectant mothers of higher-order kids exhibiting a significantly weaker use of services more than mothers of lower-order children- presumably because larger families spread out resources and because they are simply tired of care. Although educational level correlated with the higher use of PNC, its impact was not significant in a multivariate mode and it is possible that educational barriers can still result in the inability to use the service despite the educational level. It is important to note that wealth status is strongly and significantly correlated to PNC utilization; women in the richest households have nine times more chances of receiving timely care, as opposed to the poorest quintile. These highlights pre-existing economic imbalances in access to maternal health services. The dimensions of inequality are caste and ethnicity. Specifically, the Other Terai women were extremely unlikely to receive PNC services compared to majority women indicating that even with the inclusion of policy rhetoric, the Other Terai women were still maligned. Even more surprisingly, a meaningful rural-urban disparity was not found in the ad-adjusted model, which possibly reflected positive trends in service outreach service, however, descriptive figures indicated huge absolute differences between rural and urban populations and would be a topic worth exploring in greater depth.

Together, the results report the complexity of PNC use and bring out system inequities that have to be addressed using context-specific and individualized interventions.

The recommendations to be made by the study to enhance the use of postnatal care (PNC) in Bagmati Province include enabling low-income families with financial assistance, providing proper health education, particularly in rural communities, and providing culturally sensitive interventions of disadvantaged populations. It reminds that more efforts should be made to differentiate any

plans of both multiparous and first-time mothers, to transfer effective models of urban health to the rural population, to involve religious and cultural leaders in spreading the word about care, and to investigate such understudied aspects of care as job insecurity and social norms.

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**Exploring Insights and Perspectives of Stakeholders toward the Midday Meal Program
at Community Schools of Nepal**

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Abstract

The midday meal program, one of the assertive programs, which is initiated by the government to ensure free and compulsory school education in Nepal. The retention rate of children from marginalized, disadvantaged communities has been increased with the effective implementation of midday meal program. This paper aims to explore the insight and perspective of stakeholders on the practice of midday meal program for ensuring free and compulsory education. Qualitative research design, along with interpretative phenomenology, was employed for this study. Two community schools located in Koshi Province were purposively selected and 12 participants including head teachers, teachers, and parents were taken for in-depth interview. The participants were interviewed via semi-structured guidelines in their convenient location, and their responses were transcribed verbatim. Thematic analysis techniques were employed for data analysis. The report revealed that the practice of mid day meal is essential for implementing free and compulsory education. Monitoring and supervision of program is also the mechanism for effectiveness. The mid day meal program drew the attention of stakeholders and enabled learners to participate in the classroom discourse for effective learning outcomes. Findings contribute to the advancement of holistic policy ranging from pre school intervention to post school to ensure fundamental the rights of children. Free and Compulsory Education Policy and its effective implementation bring students toward sustainable growth and positive change in learning.

Keywords: Free and Compulsory Education, Midday Meal, Monitoring and Inspection, Student Enrollment Rate, Local Government

Introduction

In some extent, I had the opportunity to visit different community schools located in a hilly district of Koshi province for a performance audit as authorized by the Education Review Office, Ministry of Science and Technology, Nepal. At that time, I observed the several practices adopted by school for promoting students' attendance and retention for achieving better academic outcomes. In over viewing academic and non-academic activities, I observed the status of day meal program as initiated by government and found to be low nutritional status. The sanitation was unsatisfactory. In this context, I was really shocked and questioned about how the day meal program supports the retention of children at school and reduces drop out as well. The existing practice adopted by community school made me in sighted to study about what opportunity and challenges are approaching to ensure quality education. Indeed, the children of today are the greatest asset that can lead to the illumination of the future of the nation. Adequate nutrients play crucial role in the knowledge gaining process. Sound mind always appears in the sound body which is the consequent of nutrients. Compulsory Education is the act of making school-age children attend school and providing education, while providing lunch to students during school hours is a mid-day meal. The Constitution of Nepal has clearly mentioned that Free and Compulsory Education needs to be provided to each child up to the Basic level, and there should be free education up to the secondary level. Reviewing the global context and as that of Nepal, it is found that midday meal programs have a positive impact. For ensuring Compulsory Education is recognized as a human right by the United Nations Human Rights Council. After being included in the Universal Declaration of Human Rights (1948), it has had an impact on the world, and it is gradually increasing day by day. There have been some leftist movements in education in Nepal since the Rana period. It is also found that radical changes have been taking place in education only after 2007 BS. After the declaration of free primary education in Nepal 2031 B.S., Nepal's education, which gained further momentum, had to face a lot of disruptions and confusion during the 1991 movement and the second people's movement in 2006 AD. With the promulgation of the Constitution of Nepal in 2015, the Education Act has been amended several times and is being implemented to bring further reforms and modernisation in education, while a new Education Act is in the process of being promulgated. In the meantime, the Compulsory and Free Education Act, 2018, has been promulgated and implemented, while the Midday Meal Standards and Program Facilitation Manual for Community Schools, 2019AD, is also being implemented. Midday meal is provided in various forms in Nepal, and currently it is being provided in all community schools up to grade five.

The School Lunch Program in Nepal was initiated in 1967 to improve the health and nutritional status of girls by improving school enrollment and learning standards. Initially, it was implemented in selected schools in 37 food-insecure districts to improve the health, nutrition, and educational status of poor, marginalised and underprivileged girls. Currently, it is being continuously revised. Since 1996, the Ministry of Education has implemented the midday meal program in primary schools in 16 districts of the far and mid-west, and has helped increase children's school attendance and continuity. It has now been implemented in all primary schools in all districts.

According to the research report of Oblong Edem Effing, Nigerian Free and Compulsory Education, it has increased enrollment rates, increased school completion rates and played a significant role in National Development. Section 25 of the Compulsory and Free Education Act 2015 makes provisions for midday meals. In that section, the Government of Nepal may provide midday meals or midday meal expenses as prescribed at the local level. The Sustainable Development Goals (SDGs) have expressed a national commitment to reduce poverty, eradicate hunger, and ensure quality basic education for all. The economically disadvantaged, the underprivileged, and the communities lagging in the Human Development Index (HDI) have benefitted from the Compulsory and Free Education Act 2018, which has made provision for providing free education to children, including midday meals (Lundborg et al., 2022). Government of Nepal has increased mid day meal budget every fiscal year both in the form of cash grants assistance for food supply. It is imperative to make more effective and systematic mid day meal program for schoolchildren in integrated form (Mansukhlal, 2012). Midday meal program has increased student achievement, attendance rate, participation and socialisation of students in the education sector of Gujarat State (Patel & Pancholi, 2019). A healthy body and a hunger-free environment are the basic conditions for children's learning. Recognising this fact, mid-day meal programs are being implemented in most countries to increase children's educational access, participation and learning level and to keep them healthy (Patel & Pancholi, 2019). According to the Economic Survey 2017, the midday meal program had implemented for all students from pre-primary to grade 5 in all districts of Nepal. In regard of government education, it is justifiable that midday meal program plays vital role for reducing children's hunger and improving their health status, thereby increasing educational access, participation, continuity and retention at school level (Adamson et al., 2013). In this context, this study seeks to explore the practice of free and compulsory education, which is complemented by the midday meal program. In this context, this study aims to explore the perception of stakeholders towards existing practice of the midday meal program and its key relation with Free and Compulsory Education at basic schools of Nepal.

Literature Review

I reviewed some of the research articles and made me insightful about the research gap, methodology and conceptual clarity about the day meal program. It also provided perception about the key relationship with the practice of free and compulsory education.

In the research article entitled the implementation and effects of free and compulsory education in Nigeria, to analyze data from the Federal Ministry of Education covering the periods of 1997-2008 and 2009-2018, alongside data from the National Statistics Division and UBE Digest? The study addresses three key questions regarding the program's impact on the development of Akwa Ibom State, school dropout rates, and school completion rates and testing the Null Hypothesis that there is no significant effect. Utilizing a t-test, the author concludes that Free and Compulsory Education is crucial for national development and has positively affected school completion rates, although its impact on dropout rates is significant primarily at the junior secondary level, rather than at the primary level. The author advocates for sustainable implementation of the program to enhance its benefits.

Sujan K. Patel and Deepak Pancholi (2020) investigate how India's literacy rates are affected by free and mandatory schooling as well as midday meal availability. In 1951, the literacy rate was just 18.32%, and schooling and lunch provisions were not given enough attention. In 1937, Mahatma Gandhi highlighted the value of a university education, signaling a change in the direction of better education. The Compulsory Education Act of 1870 and Gopal Krishna Gokhale's 1906 Bill for free compulsory education, which was turned down in 1910, served as the legal underpinnings.

Compulsory Education Act, which Vithalbhai introduced in 1917, was gradually put into effect, and by 2011, India's literacy rate had risen from 18.32% to 74.04%. The Constitution's Part 3 guarantees that children are not charged fees for basic education, despite obstacles like a lack of resources and insufficient law enforcement. Bibi (2018) addresses these advancements using two main research questions.

Article 25(A) of the 18th Amendment, which requires free and compulsory education, is one of the provisions of the Pakistani Constitution that the author examines in this article. The author emphasizes that since the provincial government took over implementation in April 2010, the program has not been successfully realized at the grassroots level through a survey of twenty randomly chosen Punjabi citizens. Inadequate physical facilities, a lack of regulation and guidance, a lack of qualified teachers, and parental financial burdens for necessities like textbooks and transportation are all factors that contribute to this ineffectiveness and undermine the constitutional guarantee of free education.

According to the research report of Sujan Kumar Kanubhai Patel, Deepak Pancholi, in 2018, there is positive impact of the midday meal program launched by the government in the Indian state of Gujarat for the sustainable development of students. The report further revealed that the program has improved student achievement, attendance, participation, and socialisation in the education sector of Gujarat.

Tan (2010) discusses the establishment of compulsory education in Singapore's Constitution in 2000, lasting approximately 6 years. The article examines the influence of education on Singapore's social and economic growth, referencing a UNESCO report from 1998 that noted 16 out of 186 countries, including Singapore, had implemented compulsory education. Human rights organizations advocate for compulsory education, emphasizing the universal right to education, with UNESCO encouraging mandatory elementary education.

In Singapore, the implementation of compulsory education starting in 2000 significantly increased school enrollment and improved pass rates, aligning with national economic and social objectives. The system's success is attributed to its dual goals of promoting economic progress and social tolerance, which, combined with government responsibilities and parental involvement, has heightened awareness and engagement in education.

In an explanatory article on education in Singapore, the author utilizes data from government agencies and historical context. However, the article lacks perspectives from parents, students, and school administration, which could have enhanced its credibility.

Methodology

This study employed a constructivist paradigm, which sought the information from insight and perception of the social setting (Creswell & Zhang, 2009). The qualitative research design with a phenomenological approach was the methodological orientation for underpinning the study (Groenewald, 2004). To accomplish this study, several national and international documents were studied by using Google search engine and websites that published online.

Two basic schools from the Koshi Province were purposively selected. 12 participants including head teachers, parents and school management committee member were taken from the research site by the purposive techniques. After a couple of days of continuous communication, the participants were interviewed at the time provided by them in the convenient location. The interviews were confined in the periphery of midday meal and compulsory education. The interview was conducted for about 30-35 minutes. The interview responses were transcribed as the data in copy. The transcription was made in Nepali and then translated into English. After translating the details obtained in the copy, the data were read carefully and collected codes from each sentence. The codes were collected from each sentences in the transcription and written them on page. After reading the codes written in this way several times, they were categorised and created groups from them. The global themes were extracted from organized theme and the main themes were discussed by linking with theories adopted and literature. The main themes were described as main findings of the study. In this way, the results of the study were analyzed and the conclusions were drawn.

Findings and Discussion

After conducting a study, the practices and challenges of free and compulsory education was explored from the existing situation and the conclusion have been made from the lived experience of stakeholder in the community schools. The essence of the study is to analyse the data obtained by the researcher and prepare a report that everyone can understand. The result obtained from the interpretation of the data were discussed along with policy and legislative provision under the following headings.

Ease in Implementing Compulsory Education

Midday meals program is an excellent concept in the implementation of compulsory education. Mid-day meals have been found to have made a major contribution to making students regular in school. After the launch of mid day meal program, the parents who are busy with agricultural work are free from the burden of Tiffin and seemed parents sending students to school regularly without any hesitation (Kantawala, 2015). Most of parents expressed that they do not have to spend money on lunch, they have also felt that the financial burden has decreased where as they can spend Tiffin money for students' uniforms, notebooks, and pens. During the interview, the principal of a school said, " whenever there is a festival for Dalits, they stay at home, and when something happens, they stay there and eat. However, the number of Dalits is high over here, which made it a little difficult. Now, when lunch comes, they are relaxed. Learning has become easier.

Midday meal has been found to have a positive impact on the implementation of compulsory education. Absenteeism rates have decreased. Student regularity has increased. Retention rates have increased (Gyawali, 2024). Due to student attendance, there has been a positive impact on teaching and learning activities. There has been a difference in academic activities before and after providing the midday meal (Kaushal, 2009). Students who used to come irregularly have now become regular. Regularity has also been found to help teachers teach and students understand and learn.

The Compulsory and Free Education Act, 2018 AD, provides for the Mid-Day Meal Act. In order to implement the Act, the government has been allocating funds under the Mid-Day Meal heading through the annual budget. So, it seems that implementation of the program has been facilitated through the allocated funds. The automatic Implementation of the Barua Act is also being practised.

It seems that the midday meal concept is being implemented in Nepal with the overall intention of the school's reformation. Midday meal leads to sustainable growth of students, an increase in attendance, and happiness among parents. Since it also facilitates learning, its impact is positive and needs to be continued.

Food Quantity and Quality

It refers to the quantity of food provided to the children for midday meal and healthy food. Low quality and less amount of food cannot cover the calorie intake for the metabolism of human body. In this context head teacher of one school says,

Each child eats 100 grams of lunch. Even then, local children can more than 200 grams. They are fed even less today; they complain that they are not satisfied. Thus, when the amount under the lunch heading is not enough for lunch, schools have tried to maintain the quality of lunch by raising funds from internal sources. But they feel financial burden because the financial situation of all schools are not equal.

In the above concern the midday meal amount is sent to the local level. In the budget of the fiscal year 2018, it has been announced that students received a lunch amount of Rs. 15 per day for attendance and the solution has been implemented. Every child has the right to eat quality lunch (Pant, 2025). The government has issued a midday meal policy and guidelines, published a lunch schedule and sent it to the relevant schools, stating that quality lunch should be served at the rate of Rs. 100 per student. It has been found that there is a complete mismatch between the amount provided by the government, the policies and guidelines issued, and the local environment (Chakraborty & Jayaraman, 2019). The government has been providing lunch expenses for only 180 days per year, saying that schools should be open for at least 180 days, but most schools in Nepal have been open for 210 days. There is no decision on who will bear the expenses for the remaining 20 days. This has created inefficiency in lunch management. It is an unfortunate situation in itself that the amount distributed as lunch expenses cannot be used to provide lunch. There is a growing concern that the quality of lunch will also affect the health of students due to the government's unscientific thinking. It seems that the government should be aware of this issue promptly.

Mid-day meals have helped parents dependent on agriculture to reduce the hassle of collecting and preparing lunch money and sending it every day. The practice of busy parents not sending their children to school due to the hassle of lunch has ended. Schools serving lunch according to their own lunch schedule also had a positive impact on the health of students (Jayalakshmi & Jissa, 2017). It has helped in the displacement of preschoolers. Since all schools do not have the capacity to meet the lunch deficit from internal resources, there is a need to make some money for the lunch expenses provided by the government. The chairman of a school's says, "*The current amount is very low , it is not enough , it requires to increase the amount in the budget by at least 50-70%.So, I think I can find the idea of lunch , but it seems to be expensive*". In this regard, the task of finding quality in food seems very challenges in between the excellent idea of midday meal and the government's budget. The government is trying to mitigate such type of challenges to make the program effective (Acham et al., 2012). The government needs to allocate sufficient budget for midday meal to ensure the adequate nutrient required for psychological well being and mental health.

Local Dishes and Socializing at Lunch

Local food refers to food available at the local level and the lunch dishes prepared from it. The availability and use of local food helps in protecting the local environment and also in the health of students. In this context, teacher says,

Due to market influence, local foods like dhindo are seldom consumed, even in traditional settings. There is a shift towards common dishes, like pulao, which undermines the diversity of local cuisine. To combat this trend, efforts from government, local authorities, and schools are necessary to enhance appreciation for local foods and address the inferiority complex towards traditional dishes.

In the above concern, by the effects of urban culture, it is also found that students and parents have neglected local snacks, but local snacks have been used. Schools that have not been able to implement the government lunch schedule due to financial constraint (Acham et al., 2012). They have been using local snacks such as corn, Suzy, Vegetables bitten rice has been used. The low use of pesticides in local dishes has also helped the health of students. Another participant said, According to Suryakumar Khanu's article on the implementation of the Mid-Day Meal Program in Gujarat, which was written by Bhai Patel and Deepak Pancholi, students' achievement, attendance, participation, and sociability have all improved because of midday meals that feature regional cuisine. In Nepal, where there are many different ethnic, religious, and linguistic backgrounds, this effect is also seen; students' relationships are strengthened and sociability is encouraged through shared meals.

Monitoring and Supervision

Monitoring and supervision play crucial role in the success of any program. While assessing the progress made in making the program successful, it is also necessary to be concerned about the future direction. The concept of midday meal, the budget required for it, the initiative of the local level, the proactivity of the school and the interest and activity of parents and students affect the overall midday meal schedule (Ramachandran, 2019). In this context

Section 25 of the Compulsory and Free Education Act 2018AD requires management attention regarding midday meals. The concept of midday meals, the budget required for it, the initiative of the local level, the proactivity of the school and the interest and activity of parents and students affect the overall midday meal schedule. However, in many schools, there have been acts of neglecting to prepare lunch, denying that the amount received for lunch is not enough to prepare lunch, and distributing money

Concerning to above, the Compulsory and Free Education Act 2018AD provides provisions of midday meal program for ensuring equity in education. For this purpose, Government of Nepal is providing lunch expenses as prescribed through the local level. The government has also issued a midday meal guideline. This has been affecting the government's operation regarding midday meals. The midday meal policy mentions serving lunch up to the basic level, but the budget has provided funds to provide lunch only up to grade six. From which it is seen that there is a mismatch between the policy and the budget (Ghimire et al., 2024). If anything has affected the implementation of midday meals, it is necessary to monitor it. The government has a policy of serving lunch only to 100 children, but local children try to eat at least 200 and they are not satisfied with less than that, so it is necessary to monitor it in a timely manner (Gyawali, 2024). The policy needs to be revised to ensure fundamental rights of children to be educated. The government has appointed an additional one person to the Midday Meal Management Committee. In this regard, a community school head teacher says,

The local level is necessary to make active and manage it well in schools for the succession of program. The midday meal program will be meaningful with the active participation of all parties. Local schools have high expectations from the local level and some seem disappointed when they do not receive a response from there. The government's midday meal policy has been found to provide relief to the daily lives of students and parents. If special attention is paid to the management aspect, midday meal will have a very positive impact on compulsory education.

Concerning to the above, the local government need to play vital role for succession of midday meal program. Legally, the local community can observe the food status and quality of nutrient required for children (Ghimire et al., 2024). The retention and engagement of children for learning is impacted by midday in the rural areas (Ratala et al., 2023). By the imbalanced economic condition of people, some of the children are left behind the school. So the government mid day meal program is seemed to be milestone for increase educational access of children.

Similarly, the SMC chairperson says,

It is necessary to further educate the local level on the aspect of monitoring in order for it to play a more effective role. We have not felt that we have achieved the same amount as the Government of Nepal has invested in it. Because in order to achieve the results on the basis of the investment, if the concerned part of our local body takes the path of mandatory and strong monitoring and implements it strictly, it will definitely support the objectives of the Government of Nepal.

Providing midday meals is not just about making a policy and allocating a budget. As much enthusiasm as there is in its implementation. The more the relevant bodies are kept active and efficient, the more successful the program will be (Sharma, 2015). If the local level makes local

education effective, prioritizes the education sector and provides monitoring, inspection and suggestions, the local level will be more active (Pant & Scholar, 2020). School education will also improve. If midday meal program is effective and , managing , reward and punishment for effective implementation it will make a special contribution to the excellent implementation of compulsory education.

It is found that local governments are trying to develop as a mechanism that places special emphasis on midday meal management and the implementation of compulsory education. If the identity of local dishes can be ensured in midday meals through the successful mobilization of local governments, it will be easy to identify every class of society and bring them into the mainstream of education through the compulsory education program (Tripathi, 2024).

Awareness and Training for Guardians

The work of local governments should be efficient and effective. To some extent, local governments have been doing good work. However, it is necessary to make such work more effective and to make the local level more aware and to displace public grievances (Pokhrel et al., 2025). In this context, the chairman of a school says,

Initially, there was more activity in making parents and teachers aware by providing orientation training, but after the local level camp, it has become very serious. It would have been good if training and seminars were held for parents and teachers from time to time. It is necessary to be active in every body to keep them agile, and in some cases, the state would have helped to reach that goal by orienting the parents, state, and teachers. If that were done in the education sector, a good breakthrough could have been made.

In the above concern, the parents and guardians need to aware for the implementation of midday meal program. What quality of food are provided by the school should be supervised by the parents for the sanitary condition of food (D. D. Ghimire, 2024). The guardians have the power to play a special role in running and managing the school and to understand the feelings of local students and parent. The teacher of the same school says by linking compulsory education and the midday meal program as

We have to keep the same staff in the lunchroom for organizing the management. I think , now it is given to the local level and everything that used to be done from above . Some people were kept there , they were monitored. It seemed like that was not the case. But I felt like it was a minus , or something. I don't like to call it a plus.

While there should be optimism towards the local level, the head teachers and staffs revealed that the local level government did not appoint any one. However, it is rare that the local level has not been able to play a special role in resolving the demands, complaints, and problems of the schools in their ground level (Ghimire, 2024). Although the local level allocates the midday meal amount, there is no monitoring about the condition of midday practices provided by the school (Rai et al., 2024). This needs to be taken into account. If the local level were particularly aware of such matters, it would have helped to improve school education if there were fewer public complaints. In this context one participant said,

A minimum of 15% of the total national budget will be allocated to the education budget.

However, according to this plan, the government has not allocated any amount under the

education heading in the annual estimated budget. This has had a direct impact on the implementation of the midday meal program. At the primary level, the local government is currently providing Rs 15 per student per day from the grant sent by the association. Schools have been complaining further to the local level, citing that this amount is not enough to provide midday meal.

In the above concern, Section 25 of the Compulsory and Free Education Act, 2018 states that the Government of Nepal may provide midday meal or midday meal expenses as prescribed through the local level. According to that act, the federal government has been showing various vehicles and problems to the local level schools and the problem is that local schools are distributing money to students without providing them with lunch(Sarma et al., 1995). If midday meal could be arranged instead of midday meal expenses, it would help in fulfilling the purpose of midday meal(Dubey, 2010). The local level should give special emphasis on its monitoring , inspection , vigilance and problem solving.

The local level has proven to be a special tool for raising the standard of school education, effectively implementing the midday meal program, bringing all children under the purpose of compulsory education, increasing the school attendance rate of students, and improving the educational standard(Ahmadi & Laei, 2012). Since the overall quality of education depends on the effectiveness of the local level, it seems that the local level should be aware of it and work objectively.

Conclusion

Everyone has the right to education, which is necessary for both personal growth and the production of skilled human resources. The midday meal program is essential for increasing educational access, boosting children's nutrition and health and raising academic standards. Children from low-income communities are successfully included in this program along with free and compulsory education. By incorporating financial grants and food supplies, expanding these programs can enhance overall educational outcomes and school attendance while also making them more systematic. Enrollment has increased, absenteeism has decreased, student retention has improved, health and nutrition have improved, and learning outcomes have improved since the implementation of the midday meal program and mandatory education policy. Along with an improvement in pass rates, the literacy rate among participants has increased, helping to achieve national education goals and integrate previously underrepresented communities into mainstream education.

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**Assessing Stakeholder Perceptions on Local Governance: Evidence from
Tikapur Municipality**

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DOI: <https://doi.org/10.3126/jotmc.v9i9.90464>

Abstract

The current study assesses the stakeholders' perceptions on local governance based on the evidence of Tikapur Municipality (TM) with reference to key dimensions of governance. In this regard, the focus was on accountability, transparency, law and policy implementation, stakeholder participation, public hearings/social audits, and anti-corruption mechanisms. The study adopted cross-sectional research design as data were collected from respondents through a one-timed structured survey. The structured questionnaire was administered to survey the respondents to collect required data to fulfil the research objectives following purposive sampling strategy. The study population of the research were all the elected representatives of TM, bureaucrats, service receivers, and stakeholders of TM. Amongst them, 33 were selected as samples of the study based on purposive sampling. The findings reveal that the majority of respondents perceive TM as largely adhering to good governance principles, particularly in accountability, transparency, and stakeholder participation. The findings suggest that governance practices are generally positive, continuous institutional strengthening, participatory decision-making, and monitoring are essential to enhance the quality governance and increase satisfaction. Based on the insight from this study, the author would like to make recommendations such as improving feedback mechanisms, strengthening anti-corruption measures, ensuring consistent policy enforcement, and promoting citizen engagement in decision-making processes for improving governance.

Keywords: Local governance, accountability, transparency, Law and policy implementation, Stakeholder participation, Public hearings

Introduction

Local governance of Nepal has been constitutionally empowered since the promulgation of Constitution of Nepal (2015) in terms of local legislation, fiscal management, public service delivery. Moreover, the Local Government Operation Act (LGOA) (2017), has also been formulated and enacted by the Federal Government of Nepal as per the constitutional provision mentioned in Annex 8 of the constitution. The study of Yale Economic Growth Center (2024) asserted that this provision has fundamentally transformed and strengthened local governance practice, thereby enabling local governments to exercise autonomy in terms of prioritizing the choice of local people, resource allocation, and implementation of the fiscal management for ensuring fulfilment of aspiration of the citizen. Prior to the implementation of the Constitution of Nepal (2015), there was observed wide variation and anomalies in decentralization practice of local governance. But, such problems and issues were significantly reduced followed by the promulgation and implantation of the latest constitution of Nepal. Nevertheless, the implementation of autonomy provided by the legal system is at early stages, it takes a reasonable time frame to observe matured practice. In this regard, empirical studies indicate that local governments are found to be facing persistent challenges such as weak accountability, limited deliberation, and low citizen engagement. Therefore, the local government of Nepal has witnessed serious problems in accountability, transparency, stakeholders' participation, corruption control and local regulation (Shahi, 2025; Bhusal, 2024; Sharma, 2025). Moreover, comparative analysis of Bhusal (2024) and Sharma (2025) asserted that the government of Nepal has suffered from the burgeoning issues such as lack of integrity in accountability and responsiveness, white collar bureaucratic inertia, and widespread violation of fiscal discipline. The Provincial and Local Governance Support Programme (PLGSP) are implemented to improve governance of the government (PLGSP, 2022). Despite Tikapur Municipality (TM) formal commitment as a local government to ensure good governance, it is not free from burgeoning issues such as limited satisfactions from the side of common people with respect to key dimensions of governance. Moreover TM is regarded as the focal point of Far Western Province of Nepal, in terms of subnational governance programs aimed at improving institutional government performance, community participation, and fiscal management (Yale Economic Growth Center, 2024). Nevertheless, previous evidence from similar contexts reveals persistent significant gaps between statutory mandates of TM and their practical implementation (Shahi, 2025). Therefore, the researcher was motivated to conduct this study focusing on the perception analysis of both service providers and service receivers regarding governance practice and regulation in Tikapur Municipality. Hence, the primary objective of the study was to assess the perceptions of elected representatives, bureaucrats, service receivers, and civil society members, particularly in areas such as accountability, participatory decision-making, transparency, policy implementation, and corruption control mechanisms. The next aim of the research was to have better insights regarding the challenges faced by the TM in maintaining effective institutional governance.

Review of Related Literature

Theoretical Foundation

Theoretical perspectives on local governance postulate that effective local government and institution need to meet key requirements such as legal authority, strong deliberative culture, coordination amongst stakeholder, and strong citizen trust (Rhodes, 1996; Stoker, 1998; Moore, 1995). Moreover, Governance Theory provides foundation for better understanding of the intricate interactions and relations among state institutions, and common people, and civil society. In this context, UNDP (1997) and UNESCAP (2009) established globally accepted normative constructs in terms of participation, transparency, accountability, equity oriented, and responsiveness. The Nepal Subnational Governance Program (SNGP), (2022–2024) implemented from 2022 to 2024 with support from DFAT, generated a range of program reports and municipal survey findings during this period. These documents present empirical evidence on the performance of municipal governance, the quality of service delivery, and level of citizen feedback. Key indicators assessed in the survey include transparency, accountability, public participation and satisfaction with municipal service. The finding revealed significant disparities in governance performance among municipalities, with some demonstrating strong results on governance measures while others showed weaker performance. In the case of Tikapur, the benchmarking data are particularly useful for assessing its relative's strength and shortcoming compared to other municipalities nationwide. The program ultimately recommended enhanced capacity development initiatives and greater citizen involvement to improve overall governance practices. Essentially, Nepal also accepted above normative construct and formulated and enacted Good Governance (Management and Operation) Act (2008) meant for making reference line for assessing local government performance evaluation. In fact, the theoretical overview is an instrumental and helpful lens to proceed and navigate the systematic and rigorous study of any issue.

Rhodes, (1996) explains that governance theory developed to overcome the limits of conventional government, focusing on network, partnership, and working together in decision making. It sees governance as going beyond formal government institutions to include interaction among the state, civil society and private sector. Similarly, Kooiman (2003) mentions that effective local governance depends on how these networks function and how citizens perceive inclusion and responsiveness. This theory suggests that people view governance more positively when decision making it transparent, accountable and responsive

Fung & Wright, (2003) contend that participatory governance focuses on citizens actively taking part in decision making. This approach encourages creation of governance results through inclusive methods like public meeting, social audit, and planning with local people. People tend to view governance more positively when they can influence policies and ensure authorities are accountable. Similarly, Arnstein (1996) Ladder of citizen participation also shows varying levels of involvement from tokenistic participation to full citizen control after public satisfaction and assessment of governance achievements.

World Bank, (2004) describes the social accountability framework as linking citizens' perceptions with governance performance through instruments such as public hearing, community scorecards and citizen charters. Fox, (2015) governance quality is influenced by local governments' responsiveness, creating a positive cycle of improved practices and citizen

perceptions. Actually, this framework shows that accountability creates a positive cycle improving both governance and peoples' views.

North, (1990) explains that institutional theory views governance practices as the result of both formal and informal institution arrangements. Local governance is guided by laws, norms and values that shape the behaviour and interactions of actors. Scott, (2014) Citizens views of governance depend on how stable institutions are, where the rule of law is followed and if processes are fair. However, local institutions are consistent, competent, trustworthy, and public confidence increases. Weak institutions, however, lead to perceptions of corruption inefficiency and exclusion. Addink (2019) offers a conceptual review of the various definitions of good governance, grouping them into three main value domains: the rule of law, participation and accountability. This categorical framework is useful for designing empirical indicators in municipal surveys and perception based studies, including those conducted in context such as Tikapur. The concept of good governance, advanced by the United Nations and World Bank, outlines principles such as participation, accountability, transparency, effectiveness, and equity (UNESCAP, 2009). These principles serve as normative benchmarks for evaluating governance practices. Citizens' perceptions of governance quality are often tied to how well these principles are practiced in local contexts. When governance is inclusive, transparent, and responsive, it enhances public satisfaction and strengthens democratic legitimacy (Hyden, Court, & Mease, 2004).

This has focused on the six key dimensions of governance such as accountability, transparency, stakeholder participation, rule of law, with proper implementation, corruption controlling mechanisms, and public hearings and social audits. Therefore, this study is underpinned to the institutional governance theory.

Empirical Review

There are perceived issues and discrepancies relating key dimensions of local governance around the world. In this regard scholars and stakeholders have conducted empirical studies and they are surveyed by the researcher. Bhattarai and Pasa (2021) study revealed weak administrative functions caused lower satisfaction among service receivers, and indicated widespread challenges related to staffing and their capacity. PLGSP (2022) study asserted that the municipalities with better technical assistance support are found to be showing more transparent planning and stronger institutional capacity. But, variation in governance performance is observed due to resource disparity.

Paudel and Shrestha (2022) study underscored that when local government authorities uphold criteria based on the Good Governance (Management and Operation) Act (2008), citizens report higher satisfaction with governance. Conversely, they reported worse satisfaction, lower transparency; suffered from elite capture perceptions and extreme lack of fairness. It eventually weakens democratic legitimacy. A comparative empirical review published in Gurain (2024) reviewed governance practices in several Nepalese municipalities; including those in sudurpaschim province. The study identified key weaknesses such as low administrative capacity, weak monitoring system, and limited people's participation, while also noting increasing awareness of transparency and accountability. It recommended unified local governance standards and strong

institutionalized participation at the municipal level offering a useful benchmark for assessing municipalities like tikapur against the border national trends.

Adhikari (2023) study concluded that federalism offered opportunities for improved governance in Nepal. Nevertheless, the gaps persisted in human resources, fiscal decentralisation, and transparency. Bhusal (2023) study asserted that meaningful citizen involvement is essential for producing improved outcomes. Moreover, the study underscores that limited administrative capacity gives rise to tokenistic participation without meaningful and productive achievements. These insights are widespread in contemporary governance practice at local level. Shahi (2023) examined monitoring and deliberative practices and found uneven implementation of various governance practices and moderate civil satisfaction in the local government of Kailali district.

Hood (1991) censoriously observed the increase of New Public Management (NPM), finding the key component principles such as decision-making autonomy, implement capacity, and competitive mechanism and calculating their implications. Again he claimed that however NPM assured effectively and efficiently, this study also engendered democratic accountability and fairness. This structure is trusted for local level governance lessons for the reason that it supports analyzing conventional bureaucratic practices alongside modern management reform, mainly once measuring efficiency based improvements in local government. Similarly Wang (2023) said that this study delivers a current synthesis connecting governance philosophy through participatory governance and public administration. This research analyzes highpoints in what way link the related institution for effective and efficient collaboration, create the belief and collectively problem solution in public service delivery. In the context of local level governance, this viewpoint of study shows how coordination and cooperation between the different branches, civil society and the people can recover the facility achievement and effectiveness of governance. Initially, Wang investigated the governance principles with applied models of co-production and collective administration in the local area.

Ballintyne (2018) expands Moor's idea of public value into a wider public value management model, promoting a whole-of-governance strategy that brings together citizen participation, cooperation among agencies, and performance evaluation. This perspective redefines governance as a collaborative process of value creation through partnership between government bodies, civil society institutions, local people, community and society. The approach offers important insights for assessing local governance practices, where collective responsibility and active community involvement play a central role

According to Guffer (2021), the absence of accountability in public administrations leads to serious negative consequences, including ethical violations, corruption, loss of public trust and weakened institutional legitimacy. In the civil service, accountability refers to an official's obligation to justify their action and decisions, primarily through vertical accountability to their superiors. Without this mechanism, organizations become more valuable to internal and external threats that harm their performance, productivity and long –term stability. The study of Han (2024) focused on the quantitative study of accountability, citizen participation, and public trust in the local government of Nepal. The study concluded that effective accountability and citizen participation are pre-requisite for promoting public trust in local government. Conversely, poor feedback systems worsen citizen trust towards local government. These findings also provide

meaningful insights to assess perceptions of the stakeholders relating to transparency and accountability in the study area. Likewise, Adhikari (2024) opined that though legal frameworks are clear, there is significant variation in the implementation, depending on leadership style and institutional capacity. Similarly, Sapkota (2024) investigation revealed that women's political leadership in local governments with increased legal quotas enhanced increased representation, followed by the increased inclusiveness in decision making. Similarly, the findings of Yale Economic Growth Centre (2024a) and (2024b) revealed that transparent and participatory decision-making strongly correlated with the governance capacity and citizen satisfaction.

Rajbanshi (2024) study found moderate public perception of governance, showing special concern for the improvement in responsiveness and transparency. Similarly, Dahal (2021) study findings also highlighted constraints in human and financial capacity of local governments, despite having numerous regulations. Likewise, Shahi (2025) study found several areas of concern on deliberative and local governments having only symbolic participation, and limited inclusion and low level of capacity. Moreover, Dhakal (2025) found that the public perception was influenced by Citizen Charter, but bureaucratic attitudes are poor at addressing public grievances and less responsiveness.

Taylor (2022) citizens' views of public hearings and social audits are increasingly recognised as central to effective social accountability. Research shows that when people are genuinely invited to participate in hearings and audit activities, they feel more capable of holding Institutions responsible and develop greater confidence that decisions are to be carefully examined (How effectively are social accountability mechanisms being applied in mental health service within the newly federalized health system of Nepal?, 2025). In addition, social audits not only help reveal gaps between official reports and what actually happen in practices, but also enhance transparency, especially when they are conducted alongside public hearing in which information is openly presented and discussed (Social audit and public reporting, 2022) Consequently, public hearing and visible action on audit finding build trust significantly contributes to control corruption (Su et al., 2023).

Based on the summary of reviewed literature, the researcher has made some intuition and insights to the knowledge gap and evidence gap regarding issues relating to accountability and transparency of post-federal Nepal. Moreover, the empirical studies indicate that despite notable strides of post-federal local governance in terms of enhancing service delivery, accountability, and inclusion, still there persists challenges regarding institutional capacity, optimization of human and financial resources, and effective citizen participation. Additional studies such as Sharma (2025) emphasize challenges in fiscal capacity, Forest Action Nepal (2024) asserted limitation of coordination with community organizations (ForestAction Nepal, 2024), and knowledge gaps in deliberative governance practices (Shahi, 2025). Collectively, these empirical findings are instrumental to provide valuable guidelines to construct a study framework for rigorous examination of governance practices within Tikapur Municipality. Therefore, the findings underscore to make initiates to carry out further study to fulfil the objectives stated earlier.

Research Methodology

This study employs a descriptive method of data analysis to fulfil the objectives of research. This method of data analysis is appropriate for assessing the perceptions, and attitudes of stakeholders on the practices regarding local governance.

The researcher selected the study site purposely as it provides a relevant and appropriate context for examining the research objectives. Moreover, the presence of diverse stakeholders and ongoing governance practices offers rich empirical data. More importantly, the site was also accessible to the researcher, and necessary administrative approvals were obtainable, ensuring feasibility and ethical compliance. Therefore, the selected study site is suitable for generating valid and reliable findings. The study population are declared to be in four strata such as all elected representatives, municipality bureaucrats, service receiving people and civil society members within Tikapur Municipality. A total of 33 respondents were purposely selected, including elected representatives, bureaucrats, service recipients, and civil society members, to capture diverse and information-rich perspectives on governance practices relevant to the study. Purposive sampling is widely used in qualitative and governance research when the objective is to obtain in-depth, information-rich data from participants who possess direct experience and knowledge of the phenomenon under study (Patton, 2015).

The study used structured survey questionnaires consisting with close-ended and open-ended questions both to collect relevant primary data meant for fulfilment of aforementioned objectives of this study. Moreover, contextual information is also compiled from secondary sources such as peer-reviewed journal articles, relevant books, and policy reports. Similarly; data analysis is focused on key constructs such as accountability, transparency, rule of law. The consents of respondents and participants were taken for ensuring ethical consideration of the current research.

Table 1
Operational Definition of the Key Variables

Construct	Dimensions	Nature respondents	Data Source
Accountability	Answerability	ME, SP, SR, SC	Field Survey 2025
Transparency	Disclosure	ME, SP, SR, SC	Field Survey 2025
Policy Implementation	Compliance	ME, SP, SR, SC	Field Survey 2025
Participation	Inclusiveness	ME, SP, SR, SC	Field Survey 2025
Public Hearings	Oversight	ME, SP, SR, SC	Field Survey 2025
Anti-Corruption	Enforcement	ME, SP, SR, SC	Field Survey 2025

Note. Table 1 above shows about the operationalization of the study based on the construct, dimensions, respondents, and data source. The acronyms ME, SP, SR, SC stand for elected representative, bureaucrats, service receivers, and stakeholders.

Results and Discussion

The analysis of collected data and overall estimated quantitative results followed by their interpretations are presented in Table 1 to Table 6 subsequently.

Perception and Practices on Accountability

Table 2 below summarises the result analysis on perception and practices on accountability, where only three categories of responses are given by the respondents.

Table 2

Perception and Practices on Accountability of Officials

Respondents	Disagree (%)	Agree (%)	Strongly Agree (%)	Total (%)
Civil Society	2.3	22.7	25.0	50.0
Beneficiaries	6.8	15.9	25.0	47.7
Service Providers	2.3	22.7	25.0	50.0
Executives	11.4	13.6	25.0	50.0
Total	4.5	20.5	75.0	100.0

Note. Table 2 above demonstrates perception analysis result on practice and accountability.

Data Source: Field Survey, 2025

Table 2 results show that on aggregate a majority of the respondents 75 per cent strongly agreed that officials are accountable, followed by 20.5 per cent agreed and only 4.5 per cent disagreed. Evidently, perceptions are largely positive, although a small portion of executives and beneficiaries expressed scepticism. This may be indicating that accountability mechanisms may not be uniformly applied. In this regard, strengthening transparent reporting and inclusive feedback are essential to enhance institutional governance. The empirical studies of Rai (2024) found contradicting these results. The study underscored that the existence of legal provisions, accountability practices are often weakly enforced, creating gaps between policy and practice. Moreover, international evidence similarly shows that perceived accountability significantly affects service delivery and public trust (Manaf et al., 2023; Beshi & Kaur, 2020).

Transparent Decision-Making

Transparency also involves providing access to relevant information, documentation, and rationale behind key decisions, which allows stakeholders to better understand institutional actions and actively engage in governance processes. Table 3 below presents perception of respondents on the transparency in decision-making in the study area.

Table 3

Perception on Practices of Transparent Decision-Making Process

Respondents	Agree (%)	Strongly Agree (%)	Total (%)
Civil Society	11.4	13.6	25.0
Beneficiaries	9.1	15.9	25.0
Service Providers	6.8	18.2	25.0
Executives	6.8	18.2	25.0
Total	34.1	65.9	100.0

Note. Table 3 above demonstrates Perception and Practices on Transparent Decision-Making Process

Data Source: Field Survey, 2025

Table 3 above shows that all respondents expressed positive outlook on the transparent decision-making practices, with 65.9 per cent strongly agreeing, followed by 34 per cent agree. This indicates that there is a strong institutional culture of openness. Moreover, it also suggests that there is credible and participatory role of municipal authority in decision-making. These results align with findings by Dhungana (2019) and KC and Paudel (2025), who reported increasing transparency initiatives in Nepalese local governance, especially in planning and budget disclosure. However, studies by Shil and Chowdhury (2023) contrast this, showing limited transparency due to weak information dissemination and restricted citizen engagement in Bangladesh. The results reflect governance theory principles, emphasizing rule-based, accountable, and participatory decision-making, reinforcing that transparency is central to effective local governance.

Public Hearing and Social Audit

Table 4 below summarizes the perception of respondent on public hearings and social audits that are requisites of social accountability mechanisms.

Table 4
Perception on Public Hearing and Social Audit

Respondents	Neutral (%)	Agree (%)	Strongly Agree (%)	Total (%)
Civil Society	–	9.1	15.9	25.0
Beneficiaries	–	2.3	22.7	25.0
Service Providers	–	4.5	20.5	25.0
Executives	2.3	6.8	15.9	25.0
Total	2.3	22.7	75.0	100.0

Note. Table 4 above demonstrates Perception and Practices on Public Hearing and Social Audit

Data Source: Field Survey, 2025

Table 4 above result shows that a majority of respondents (75%) strongly agreed on the existing practice of public hearings and social audits. This reflects strong recognition of these participatory accountability mechanisms. There is observed a minor level of neutrality 2.3 per cent among executives. These findings are supported by Dhungana (2019) and KC and Paudel (2025), who reported improved citizen oversight mechanisms in Nepalese local governance. In contrast, Shil and Chowdhury (2023) found that limited citizen participation and poor follow-up actions constrain the effectiveness of social audits in Bangladesh. The results align with governance theory, emphasizing participatory, accountable, and transparent governance, suggesting that institutionalized citizen engagement through public hearings strengthens legitimacy and responsiveness in local decision-making.

Perception on Legislation of Local Governments

In the context of current study, perceptions on legislation refer to the rule and law making procedures of the local government of the study area. In this context, Table 5 below summarises the result of the study.

Table 5

Perception on Law, Policy, and Rule Making

Respondents	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Total (%)
Civil Society	2.3	–	2.3	20.5	25.0
Beneficiaries	–	2.3	11.4	11.4	25.0
Service Providers	–	–	11.4	13.6	25.0
Executives	–	–	13.6	11.4	25.0
Total	2.3	2.3	38.6	56.8	100.0

Note. Table 5 above demonstrates Perception and Practices on Perception on Law, Policy, and Rule Making

Data Source: Field Survey, 2025

Evidently, the majority of respondents 56.8 per cent strongly agreed against the statement, followed by 38.6 per cent agreed with existing practice of formulating and implementing policies, laws, and rules in the study area. However, about marginally low response 2.3 per cent are observed as disagreement. This is supported by Dhungana (2019) and KC and Paudel (2025), who observed that formal legal and policy frameworks are increasingly applied in Nepalese local governance. However, Shil and Chowdhury (2023) report that in some contexts, weak enforcement and limited citizen awareness undermine effective policy implementation. The findings align with governance theory, highlighting rule-based governance, institutional compliance, and citizen engagement, suggesting that transparent and participatory rule-making strengthens legitimacy and accountability at the local level.

Stakeholder Participation in Decision Making for inclusiveness and legitimacy

Citizen and stakeholders' engagement and participation are imperative to strengthen inclusiveness and legitimacy in local government. Table 6 below summarizes the perceived scenario of stakeholder participation in decision making for inclusiveness and legitimacy.

Table 6

Perception on Stakeholder Participation

Respondents	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Total (%)
Civil Society	–	–	13.6	11.4	25.0
Beneficiaries	–	2.3	15.9	6.8	25.0
Service Providers	2.3	–	11.4	11.4	25.0
Executives	–	–	9.1	15.9	25.0
Total	2.3	2.3	50.0	45.5	100.0

Note. Table 6 above demonstrates Perception and Practices on Perception on Stakeholder Participation.

Data Source: Field Survey, 2025.

Table 6 indicates strong positive perceptions of stakeholder stakeholder participation in decision making for inclusiveness and legitimacy 45 per cent, followed by agree 50.5 per cent. Moreover minimal disagreement on the statement suggests that participation exists but may not be fully consistent across all groups of the society. This finding is supported by Dhungana (2019) and KC and Paudel (2025), who observed that participatory mechanisms, such as ward committees and planning meetings, enhance citizen involvement in Nepalese local governance. Conversely, Shil and Chowdhury (2023) report that limited inclusion of marginalized groups and poor communication channels can weaken genuine participation. These results align with governance theory, emphasizing inclusive, participatory, and accountable governance, where stakeholder engagement strengthens legitimacy and decision-making effectiveness.

Perception against Anti-Corruption Mechanisms

Table 7 below summarizes the perception analysis result on the good government construct anti-corruption mechanisms.

Table 7

Perception on Corruption-Discouraging Mechanisms

Respondents	Disagree (%)	Neutral (%)	Agree (%)	Strongly Agree (%)	Total (%)
Civil Society	2.3	2.3	2.3	18.2	25.0
Beneficiaries	–	2.3	11.4	11.4	25.0
Service Providers	–	–	11.4	13.6	25.0
Executives	–	–	6.8	18.2	25.0
Total	2.3	4.5	31.8	61.4	100.0

Note. Table 7 above demonstrates Perception and Practices on Perception on Anti-Corruption Mechanisms.

Data Source: Field Survey, 2025

Table 7 shows that the majority of respondents (93.2% combined agree and strongly agree) perceive corruption-discouraging mechanisms as actively practiced in local governance, with civil society and executives reporting higher effectiveness. These findings are supported by Dhungana (2019) and KC and Paudel (2025), who documented the presence of anti-corruption policies and complaint-handling procedures in Nepalese local governments. In contrast, Shil and Chowdhury (2023) highlight that weak enforcement and limited citizen awareness often reduces the practical impact of such mechanisms. The results align with governance theory, emphasizing accountable, transparent, and rule-based governance, where anti-corruption measures strengthen legitimacy, trust, and institutional integrity.

The findings revealed that Tikapur Municipality demonstrates relatively positive governance practices in term of the good government dimensions accountability, transparency, rule of law, stakeholder participation, public hearings and social audits, and corruption control mechanisms. However, respondents demonstrate minor disagreement in some areas. This was observed particularly among elected representatives.

Conclusion and Policy Implication

The current study was focused the to primary objective to assess the perceptions of elected representative, bureaucrats, service receivers, and civil society members, particularly in areas such as accountability, participatory decision-making, transparency, policy implementation, and corruption control mechanisms. The study concludes that respondents demonstrates generally positive governance practices across accountability, transparency, stakeholder participation, law and policy implementation, public hearings, and anti-corruption efforts. The overall perception of governance is favourable, suggesting that institutional mechanisms are in place and recognized by stakeholders. However, there is observed minor gaps in consistent implementation, inclusiveness, and enforcement highlight areas for improvement. Therefore, strengthening institutional capacity, fostering citizen engagement, and monitoring governance practices are critical areas of reform to ensuring sustained and effective local governance.

Policy Implication

The researcher has drawn some policy implication as outcome of this study:

- Strengthen accountability and transparency through regular monitoring and reporting mechanisms to ensure uniform accountability across all levels.
- Enhance Stakeholder Participation through regular citizen engagement, with special focus on marginalized groups.
- Conduct periodic policy reviews to ensure timely and effective execution that is expected to improve legislative procedures.
- Strengthen corruption control mechanisms by developing and enforcing clear whistleblowing and reporting channels for corruption-related concerns.
- Promote public hearings and social audits to make sure that public hearings and social audits are regular, to link it with actionable outcomes.

Acknowledgement

The researcher would like to express heartily thanks to Faculty of Humanities and Social Sciences, Office of Dean, Far Western University, Bhimdattanagar, Kanchanpur for providing financial support to manage field work of data collection. Moreover, the researcher also is thankful to all the academic signatories for providing moral and technical support to complete the research.

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**Democratic and Republic Nepal: Increased Road Connectivity at the cost of
Decreased Self Reliance**

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DOI: <https://doi.org/10.3126/jotmc.v9i9.90465>

Abstract

Nepal's infrastructure landscape has undergone a significant transformation following the restoration of democracy in 1990 and the establishment of a republic in 2006, particularly through the expansion of road connectivity. This study aims to critically examine the paradox of expanded road networks by assessing their contribution to national economic growth alongside rising economic dependency. Qualitative analytical approach is taken based on secondary data, policy documents, trade statistics, and existing literature, the research assesses the socioeconomic, agricultural, and environmental concerns of increased road access. The findings relate that although enhanced connectivity has boosted transportation, market access, and trade opportunities, it has concurrently faded local production structures. Inherent agriculture, traditional handicrafts, and small-scale enterprises face extreme competition from cheaper imported goods, growing Nepal's dependence on foreign involvements such as seeds, fertilizers, machinery, and consumer products. Improved mobility has also augmented labour migration, underpinning a remittance-dependent economy. Additionally, heavy dependence on foreign aid and contractors in road development has controlled the growth of native technical capacity and long-term financial self-reliance, while inadvertent road expansion has increased environmental degradation and disaster vulnerability. The study concludes that infrastructure development without corresponding policies demoralises self-sustainability. The findings suggest the need for balanced infrastructure stratagems that assimilate road expansion with promotion of domestic industries, sustainable agriculture, environmental safeguarding, and local technological capacity enhancement to strengthen Nepal's long-term economic freedom.

Keywords: Road connectivity, self-reliance, economic dependency, labour migration, import dependency, foreign aid

Introduction

Infrastructure development is considered as a crucial aspect of national growth, and road connectivity network has been a main center of attention in Nepal since the introduction of democracy in 2046 BS/1990 AD and later with the institutionalization of the republic in 2063 BS/2006 AD. Roads have improved the access to center of communications, assisted economic exchanges, and enhanced mobility in general. Nevertheless, this extension has come at a noteworthy cost to Nepal's self-reliance. Amplified road network has led to a heave in imports, reliance on foreign investments, and dependency on external labor markets.

The road network of Nepal is categorized into the strategic road network (SRN), which comprises highways and feeder roads, and the local road network (LRN), comprising district roads and urban roads. Before 2046 BS (1990 AD), Nepal's total road network length was relatively limited due to the country's difficult terrain, lack of resources, and reliance on traditional transport methods. According to available historical records, total road network available was 8328 kilometer, of which 3083 km was black topped, 2181 km was graveled, and 3064 km was fair weathered roads in 1990/91 (Sapkota, 2011). The major highways were the Tribhuvan Highway (linking Kathmandu to Birgunj), Prithvi Highway (Kathmandu to Pokhara), and Mahendra Highway (East-West Highway), which were crucial for national connectivity constructed so far. Apart from these limited roads, most of the rural area remained inaccessible, and transportation was very difficult which was heavily reliant on foot trails, mules, and porters. It's true that the expansion of road networks accelerated significantly only after the restoration of democracy in 2046 BS.

Nepal's road network was about 64,500 km in 2076 BS. Among that, about 14,913 km belong to the SRN, the main network of national highways and feeder roads connecting district headquarters (Logistic Cluster, n. d.). These figures demonstrate the considerable expansion of Nepal's road infrastructure over the decades.

It has been observed a considerable enhancement in infrastructure mainly in road network after the political transformation of Nepal from constitutional monarchy to a democratic republic. The expansion of highways, urban, suburban as well as rural roads, and cross-border trade routes was due to increased political awareness and decentralization resulted enhanced accessibility and economic activities. This remarkable expansion has also led to a rising dependence on exterior resources, imported goods, and foreign assistance, raising concerns about the country's worsening self-reliance in parallel.

Elevated imports of consumer goods, agricultural products, and industrial materials is inversely proportional to adverse impact on local production and traditional industries because of the better road network. Figures shows that Nepal's road expansion contributed to a 12% decline in agricultural GDP share in between 2010 to 2020 (World Bank, 2022). Previously self-sustained many rural communities, now depend on imported food, fuel, and daily needs, weakening local economies and generating vulnerabilities. The environmental and socio-economic consequences of road expansion, such as deforestation, displacement, and rural-urban migration, have further deepened Nepal's dependence on peripheral support.

This study seeks to analyse the contradiction of Nepal's infrastructure-led development. How the increased road network has contributed economic growth simultaneously dipping national self-

reliance. It aims to discover the socio-economic impacts of increased road connectivity, the decline in native production and self-sufficiency, and suggest policy procedures to balance connectivity with sustainable self-reliance in democratic and republic Nepal particularly in agriculture, local industries, and domestic production as well as to assess the socio-economic and environmental consequences of increased road connectivity, including deforestation, rural-urban migration, and changing livelihood patterns.

Research Methodology

This study followed a mixed-method approach, qualitative and quantitative research methods integrated together to analyze the impact of increased road connectivity on self-reliance of Nepal. The research work has also followed a descriptive as well as analytical design with the aim of examining trends, impacts, and relationships among infrastructure development and economic dependency.

Information acquired from the government offices were evaluated. Reports of Nepal Rastra Bank, the World Bank, and the Asian Development Bank were also analyzed to evaluate trade dependencies. The literature related to Nepal's road network, economic policies, and self-reliance trends are also studied.

A broad perceptive of the relationship between Nepal's infrastructure expansion and its growing dependency provided. The research work was concentrated on key road networks and their socio-economic bearings. Difficulty in accessing accurate trade data, regional discrepancies in infrastructure development can be considered as the limitations.

Theoretical Framework

This research is grounded in numerous theoretical perspectives that help to explain the association between increased road connectivity and decreased self-reliance in Nepal's context. Theories described here provide a conceptual foundation for scrutinizing the influence of infrastructure development on economic reliance and sustenance.

Infant Industry Argument and Dependency Theory

Underdeveloped economies need temporary protection such as tariffs or subsidies to encourage and develop their domestic industries. Advanced economies can flood the market with superior, low-cost imports in the absence of such protection. Local producers of underdeveloped economies cannot compete with them. Improved road connectivity in Nepal's case acts like a channel that aids this flood of imports by dominating local markets (Krueger, 1974). Argument of the Dependency Theory is that developing nations remain economically dependent on developed countries through a structure of economic exploitation and heavy reliance on exterior resources. International agencies financed heavily to Nepal's road expansion increasing lasting financial dependence. The influx of imported goods due to enhanced road access has faded local industries, creating Nepal dependent on foreign economies. On top of that labour migration has intensified, underlining a remittance-based economy rather than nurturing self-reliant domestic industries (Frank, 1966).

Structural Change Theory

Structural change theory proposes that, when a shift is observed from agriculture-based economies to industrial and service-based economies then economic development happens (Chenery, 1975). It happened in Nepal with the expansion of roads that assisted this shift, but at the cost of weakened local agricultural production and traditional industries. The theory support how better connectivity inclined employment patterns, migration, and economic transformation.

Localization vs. Globalization Perspective

Globalization theory argues how developed infrastructure bring up international trade and economic incorporation. Whereas, localization theory advocates for consolidating local economies, self-sufficiency, and community-based production. Localities with good road access saw a 40% drop in subsistence farming and 300% rise in imported goods dependency in Nepal (Dahal, 2021). This study has examined how Nepal's infrastructure development has slanted the balance toward globalization while weakening self-reliance. Infrastructure empowers trade integration but on contrary it can undermine local systems (Rodrik, 2011).

This study has used these theories to investigate how road connectivity influences Nepal's economy and trade patterns. Critically evaluate whether infrastructure especially road expansion indorses genuine economic growth or upsurges dependency. Recognize policy commendations that bring into line the road development with bearable self-reliance.

By integrating these theoretical perspectives, the research has provided a well-rounded analysis of Nepal's road connectivity, economic dependency, and sustainable development in the democratic republic era.

Result and Discussion

Historical Background of Road Development in Nepal

Nepal's endeavors of road development have evolved through different political systems. Road construction was limited to urban areas and in between strategic locations during the Rana regime (1846 AD to 1951 AD) (Bastola, 2015). East to West, the Mahendra Highway; Kathmandu to Kodari, the Araniko Highway; Kathmandu to Hetauda, the Tribhuvan Highway; Kathmandu to Pokhara, the Prithvi Highway and Pokhara to Butwal, the Siddhartha Highway are the main road projects initiated during Panchayat regime ("Mahendra of Nepal", n.d.) until establishment of democracy in 2046 BS. After establishment of democratic system, successive governments invested in expanding highways, rural roads, and border trade routes. Nonetheless, these developments have often dependent on foreign aid, compelling Nepal progressively more dependent on exterior financial and technical support (Mishra, 2023).

Even after the establishment of the republic, Nepal has additionally strengthened its efforts to improve road connectivity, with huge projects linking remote areas to cities and communication centers as well as international borders (Observer Research Foundation, 2023). Whereas these expansions have improved accessibility, they have also augmented the country's experience to foreign influence in infrastructure investment and project implementation (Sharma, 2025).

Foreign Involvement in Road Expansion

Reliance on International Aid

On the request of Nepal government international agencies like World Bank, Asian Development Bank and foreign governments like the governments of China and India funded large-scale road projects in Nepal (Mishra, 2022). Nepal's financial dependency increased with increased foreign investments to expand road infrastructure. Potential benefits to the domestic economy reduced due to the exploiting preconditions laid by the donors in the projects that benefit foreign contractors and suppliers (Prasai, 2019).

Lack of Domestic Technological Development

Nepal's capacity to develop its own engineering and construction industries is limited because most road construction projects rely on foreign expertise and imported materials (Khanal, 2023). The foreign dependency has been increased and Nepal's ability to undertake major infrastructure projects without external assistance degraded over time (Nepal, 2024). The development of homegrown solutions to infrastructure challenges prevented due to insufficient focus on research and innovation in road-building techniques.

Economic Impacts of Road Expansion

Increased Import Dependency

Local product's demand lowered with improved road access because rural markets have been overloaded with foreign goods. Competition with imported foreign goods has negative impact on traditional industries such as handloom weaving, pottery, and small-scale manufacturing. Nepal's self-sufficiency in food production gradually decreased because imported food and agricultural products have replaced local agricultural production. There are several episode of blockade faced by Nepal from India in the memory lane. Blockade of 1989/90 and 2015 were the significant. India – Nepal trade and transit dispute led to the unilateral economic blockade to Nepal on 1989/90 which caused about NPR 10 billion (much higher in present inflation). Additionally the blockade's economic consequences were extensive, with Nepal's GDP growth rate dipping from 9.7% in 1988 to 1.5% in 1989. This decline was largely due to decreased availability of goods and higher tariffs, leading to serious deficiencies of essential commodities such as coal, fuel, oil, medicine, and spare parts ("India – Nepal Relations", n. d.). Following the mega earthquake of 2015 Nepal resisted the economic blockade after introducing new constitution. The 2015 India-Nepal blockade had significant economic repercussions for Nepal. According to a report by the Nepal Economic Forum and Alliance for Social Dialogue, Nepal's private sector suffered losses totaling approximately NPR 202.5 billion (around \$1.96 billion USD) (The Kathmandu Post, 2016). Only 4.5 month long blockade of 2015 – 16 caused loss of twenty times bigger than the loss faced in 1989 – 90 which was of 3.3 times longer (15 months) blockade. It proves how the dependency increased drastically in democratic and republic era than in active monarchy.

When there was no road connectivity in remote areas of Nepal before 1990, accommodations used to be made of organic materials found in the community by the local experts. Not a single construction material was used transported from other parts of Nepal. Zero possibility of use of imported construction material was observed (Kandel et al., 2025). If we consider present day

scenario there almost all construction materials are transported from other parts to make houses including substantial amount of money is expended on imported construction materials. Expert workers are also employed for construction from neighboring countries.

Agriculture is also progressively based on imported materials like seeds, fertilizers, insecticides and pesticides, tools and equipments used for plough fields, plantation as well harvesting after availability of road connectivity. Shortage of manpower for agriculture works is another prevalent problem connected to labor migration from Nepal to Middle East and South East Asian countries as well as other parts of the world. Before 1990, local seeds, compost fertilizer, minimal use of equipments in agriculture, use of animals for plough the fields, traditional methods were used to harvest the agriculture products were main activities performed where very nominal use of imported things were involved.

One of the most important effects of globalization is the availability of international products and services in local markets. Road network in Nepal provided easy access to international brands and services by displacing locally based traditional products. Globalization brings both opportunities and challenges, promoting economic growth and cultural diversity while also raising concerns about inequality, environmental damage, and cultural erosion (Harvard Business School Online, n.d.).

Challenges for Local Industries

Before 1990, cottage and handicraft industries like hand woven textiles, woodcarving, metal and jewelry, paper industries, pottery and ceramics were abundant in towns and villages of Nepal. Agro based industries like rice oil and flour mills, dairy products, jute mills, tea and coffee processing were also prevalent in different parts of the country. Same ways textile and garment industries like traditional weaving (Dhaka, cotton, wool), wool and leather industries, blacksmithing, Gold and Silver ornaments as well as local liquor production used to be the main sources of income for Nepali citizens (Country Studies/Library of Congress, n.d.). Instead of providing access to local products to the markets developed road connectivity made easy access to imported products to remote areas of Nepal resulting virtual disappearance of small scale traditional industries in Nepal after 1990 that is promulgation of democracy.

Low-priced imports from neighboring countries leading to a turn down in domestic production of many Nepali enterprises. Weak policies of government favoring imports over protectionist measures, further intensified foreign dependency. Discouraged Investment in domestic industries due to the easily available cheaper foreign products turned down in local production potential (Prasain, 2022).

Increased Labor Migration and Rise in Remittance Dependency

Labor migration begins in Nepal after Sugauli treaty of 1816 between Nepal and British India. Before 1990, labor migration from Nepal was largely focused on India, the British and Indian armies, Bhutan with only a small number migrating to the Middle East and Southeast Asia (Kunwar, 2021). The trend of large-scale labor migration to Gulf countries and other global destinations increased significantly after Nepal transitioned to democracy in 2046 BS. Yearly remittance of Nepal was about 50 – 100 million USD (1500 million – 3000 million NPR) during

these years (Shrestha, 2021). As per the census data of 2021, 2.19 million people living abroad (Central Bureau of Statistics, n.d.). Over 1.67 million Nepali people left the country for various purposes mainly for employment, education, and permanent residence in 2024 only. Amazingly, 66,835 individuals migrated for permanent settlement abroad in the same year (Republica, 2025). In the first 6 months of the fiscal year 2081/82, remittance received was 7063 million Nepali rupees in Nepal. Remittances increased by 22.2 percent in the first six months of last financial year than FY 2080/81 (Shah, 2025). These data shows that a huge portion of Nepali population is residing abroad. Since there is open border with India and unaccountable daily flow of Nepali toward India indicate that accurate data of Nepali residing abroad in current date is very difficult to decide. Approximately one third of Nepali populations migrate to other countries including India. Main reasons for labor migration are limited employment, low wages and income insecurity, poverty, political instability, easy access to global labor market, decline in traditional and local industries, evolved migration culture, globalization and natural calamities. It can be summarized as labor migration from Nepal is largely a response to structural economic limitations, compounded by global labor demand and domestic development constraints (Country Studies/Library of Congress, n.d.; World Bank, 2025).

Trade deficit was about 10 percent of the GDP in 1990 – 94 while it increased to 28.01 percent of the GDP in 2023. According to Nepal Rashtra (National) Bank (NRB) data, Public debt of Nepal in the 1980s was approximately NPR 21.02 billion, which was rapidly escalated to NPR 155.91 billion in the 1990s (Prasai, 2024) meanwhile public debt is surged to approximately NPR 2.536 trillion as of mid-January 2025 (Republica, 2025) leaving about NPR 87000 loan to every newborn Nepali citizen. These data shows with the remarkable increase in road connectivity and labor migration abroad with the negative impact on the trade deficit and foreign debt.

With many youth seeking jobs abroad instead of contributing to local economic activities, better road connectivity has facilitated migration. Reduced incentives for self-sufficiency in production and services dominated by remittances based economy (International Organization for Migration, 2018). As majority of educated professionals seek the opportunities overseas instead of developing local enterprises resulting increased mobility has also contributed to a "brain drain" (Mishra, 2016).

There is shortage of youths or productive manpower in villages. It is hard to find muscles power in villages even for funeral rituals like activities. Only children and old age population are living there leaving productive land barren and importing foods from neighboring countries ultimately increasing dependency on foreign countries.

Although the road connectivity has also provided nominal access to national and international markets for local products in Nepal but overwhelmed import of products of different countries displaced local products and industries which caused less job opportunity to youths leading to manpower exports to different parts of the world mainly in middle East and South East Asia (Prasain, 2021). Labor migration of Nepal has created shortage of manpower in the villages which discouraged agriculture and local industries including handicrafts as well as cottage industries which increased remittance dependency economical structure (Sharma, 2017).

Social and Environmental Consequences

Deforestation and Soil Erosion

Most of the roads constructed in rural areas of hills are the improvements of traditional trails to mule tracks then mule tracks to roads. Engineering point of view is hardly followed in such road constructions resulting impact on ecosystem as well as in environment. Deforestation, landslides, soil erosion and destabilized ecosystem are the negative impact of construction of unplanned roads in hilly regions in Nepal (The Kathmandu Post, 2022). Due to improper road planning and lack of environmental assessments, landslides have become more frequent, especially in monsoon seasons (Subedi, 2021).

Displacement of Rural Communities

Migration in rural communities is prevalent due to loss of their agricultural land and habitation. Many of the road projects run through old traditional settlements and villages disturbing their religious belief as well as only profession of agriculture. Indigenous communities displaced and loss of agricultural land is also a social impact of many road projects (LAHURNIP, n.d.). Expanded road network provided an easy access to tourists and imported goods to the remote villages. Influence of western culture increased which caused negative impact on existing language, tradition and culture. The expansion of roads has also contributed to cultural shifts and the erosion of traditional lifestyles in remote areas (Blair, 2025). Most of the traditional foot trails in remote areas are developed in roads by compromising engineering needs which encouraged unplanned projects and settlements. Environmental and social challenges prevalent due to unplanned urbanization along newly built roads (Prasain, 2022).

Dominance of foreign cultures

The expansion of road networks in Nepal has not only boosted connectivity and economic development but also accelerated cultural changes in remote areas. Increased exposure to global media, tourism and migration was noticed when these regions become more accessible by road connectivity. Such exposures often leads to a superior influx of foreign cultural values, products, and lifestyles, which can eventually overshadows traditional practices and local cultural identities (Blair, 2025). It is highly relevant to the country like Nepal where native industries yet to grow, not fully developed infrastructure and very weak economy.

Communities that were once isolated start to follow new consumer habits, communication styles, and social norms that replicate broader, global trends (Unplanned infrastructure development, 2022). For example, local markets may start introducing international brands, and younger generation might favour global music, fashion, or media over home-grown forms of expression. This process can contribute to cultural homogenization what some scholars describe as. The uniqueness of local customs and traditions is eroded in favour of a more dominant foreign culture.

Degraded cultural heritage

Expanded road network in Nepal not only brought development and connectivity; it also imposed challenges to preserve the country's traditional national identity (Prasain, 2022). The corrosion of cultural heritage is complexly associated to both societal transformations and environmental aspects, highlighting the necessity for development policies that effectively integrate sustainable growth with the protection and preservation of cultural assets. In simple words, while upgraded road infrastructure brings several benefits, it also presents noteworthy challenges in conserving cultural heritage and confirming that the pace of change arrange in a line with the community's capacity to adjust while keeping their traditional identity (LAHURNIP, n.d.).

Changed family structure/Weak family ties/rise in divorce/extramarital relations

The increased road connectivity following the promulgation of democracy in Nepal has significantly influenced internal migration patterns, particularly the migration of labourers from rural to urban areas or to other regions in search of better economic opportunities (Asian Development Bank, 2018). This migration has had notable ripple effects on family structures and social dynamics. Migration often results in prolonged separations between family members. When one or more members of a household leave for work, the traditional multi-generational family unit can fragment (Adhikari, 2014). Generation gap is deepening due to changed structure of the family. Number of nuclear family is increasing day by day whereas number of extended as well as joint families are reducing on other hand. Interaction of opportunities of grandparents to their grandchildren are also reducing resulting less attachment within family members especially with their third generation and less transformation of the information from their elder generation to new generation. This division might lead to reduced day-to-day communications and a fading of the traditional prolonged family support system that has long characterized Nepali society (Nepali Times, 2019). With bigger physical distance and exposure to urban lifestyles, traditional values and interpersonal bonds can go down. The continuous familial communications that once reinforced social cohesion are substituted by irregular contact, hypothetically leading to a sense of isolation and less familial oversight. Over the time, these conditions may contribute to a weakening of the collective familial identity.

Long-term separation strains and pressures of urban life can lead to marital frustration. When migration is the cause of family separation, there is often less supervision and fewer immediate social sanctions regarding marital loyalty (Adhikari, 2014). This condition can result in an augmented occurrence of divorce and extramarital relationships, as both spouses may seek company outside the traditional marital outline (International Organization for Migration, 2018). These variations are not simply individual or familial but have wider societal consequences. As traditional family framework grow, there is a steady shift in social norms and values. Close community, strong family bonds dictated behaviour and provided support is progressively replaced by more individualistic lifestyles. This shift challenges long lasting cultural practices and could lead to a reassessment of family meaning in a modern Nepali context (Adhikari, 2014).

It can be summarized as, economic opportunities and social transformations are opened up by the improved road connectivity and subsequent migration. Changes in family structure, weakening of traditional family bonds, and increased incidences of divorce and extramarital relationships are

the resultant reflection of rapid modernization and urbanization on traditional societies. Targeted social policies required to reinforce family cohesion and offer support systems for families experiencing the stresses of migration and modernization.

Changed demographic structure

Nepal experienced significant infrastructural improvements especially in road connectivity after the promulgation of democracy in 1990. This development facilitated easier travel but also primarily altered migration patterns within the country Nepal (Central Bureau of Statistics, 2011). Remote rural areas became accessible after improved road networks which encouraged labour migration to urban centres and more economically vibrant regions. People moved in search of better employment and education opportunities, rural populations began to decline ultimately (Asian Development Bank, 2018).

The migration stimulated by enhanced connectivity paid off to rapid urbanization. Cities and towns experienced population booms which lead to increased demand for housing, public services, and employment. This urban concentration has changed the traditional demographic landscape of many regions (Nepali Times, 2019). The demographic alteration has brought about noteworthy changes in community structures. Urban centres benefit from a younger, dynamic workforce while the exodus of rural populations often leave behind older people and diminished local economies. The migration has also led to a blended culture and the emergence of heterogeneous communities. Nevertheless, it has also implications on changed traditional social structures and eroded rural lifestyles.

Internal migration was catalysed by the expansion of road connectivity after 1990 which in turn contributed to noticeable demographic alteration in Nepal. This conversion has redefined the country's urban-rural balance and endures to inspire its socio-economic landscape (Asian Development Bank, 2018).

Changed Livelihood Pattern

Nepal's livelihood pattern is definitely changed by increased road connectivity. Developed road networks have boosted accessibility to markets, education, and healthcare resulting intensified internal migration, urbanization, and economic diversification (Asian Development Bank, 2018). Better road connectivity has provoked many rural residents to seek opportunities in the cities, contributing to the progression in a remittance-based economy and the lowering of traditional agriculture. Concurrently, exposure to external markets and modern technologies has encouraged the modernization of local industries, although it has also challenged old cultural practices and community cohesion (International Labour Organization, 2021). Enhanced road connectivity in Nepal has remarkably transformed livelihoods by augmenting access to markets, education, and healthcare, stimulating internal migration, urbanization, and a shift toward a remittance-based economy consequently reducing reliance on traditional agriculture. Side by side, exposure to external markets and modern technologies has restructured local industries but posed challenges to traditional cultural practices and community solidarity.

1990 was marked by a predominantly agrarian, limited diversification and community centric as well as self-sufficient economy rooted in traditional practices. Livelihood pattern is drastically

changed in 2025. Diversification and urbanization, rise of remittance based economy, modernization of agriculture and rural industries, increased exposure to global markets, and changing social dynamics are observed. Better road connectivity, intensified migration, and incorporation into global markets have guided the country towards a complexity of urban and rural livelihood where modern sectors and remittance influxes play a critical role together with traditional agriculture (International Labour Organization, 2021).

Conclusion and Recommendation

In democratic and republic Nepal, economic opportunities and improved mobility are brought by road expansion at the cost of substantial dependency on foreign resources and a deterioration in self-reliance. Determining stability between infrastructure development especially in roads and sustainable economic policies is a significant challenge for Nepal. Dependency on external funding, policy coordination and planning gaps, resource constraints, climate vulnerability, unequal economic benefits, cultural and social disruption and environmental degradation are the main challenges. By prioritizing local industries, investigating in domestic expertise, and adopting ecosystem friendly policies Nepal can reduce its dependence on external support and move toward a more self-sufficient future. Ensures road connectivity strengthens rather than weakens Nepal's long-term economic resilience. Following strategies are recommended for balancing self-reliance and development concurrently.

Strengthening Domestic Industries: Implementation of policies supporting local manufacturing and agricultural sectors to lessen prevalent import dependency in Nepal is utmost important (Food and Agriculture Organization, 2021). Promote self-reliance, provide subsidies and incentives for small and medium enterprises (SMEs) (Prasain, 2022). Concentrate on revival of traditional industries all the way through financial and technical backing (Sharma, 2020).

Developing Local Expertise in Infrastructure: To produce high level local technical manpower, invest in technical education and training programs (Asian Development Bank, 2021). To promote novelty in road constructions, support joint venture between universities and the private sector (World Bank, 2020).

Implementing Sustainable Road Development Practices: Make an obligatory international protocols of environmental regulations to curtail deforestation and soil erosion during road construction (United Nations Environment Program, 2021). Give attention on balancing development and environmental conservation; promote eco-friendly road-building techniques (Food and Agriculture Organization, 2020).

Diversifying Economic Growth Strategies: Create job opportunities within Nepal to reduce over-reliance on remittances (Nepal Planning Commission, 2022). Deliver alternative sources of revenue beyond migration to improve rural industries (Ministry of Industry, Commerce, and Supplies, Nepal, 2023).

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Indigenous Knowledge Systems and Medicinal Plant Practices among the Ampipal Community of Gorkha, Nepal

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Abstract

This paper focuses on the case study of the Ampipal community of Gorkha, Nepal and the community's indigenous knowledge systems (IKS) relating to the ethnomedicine of the community and the socio-cultural identity the community has of itself with the Ampipal socio-cultural identity as ethnomedicine. Primary health care herbal medicine practiced in the community has a unique socio-cultural order. The aims of the research are to understand the depth and breadth of the community's primary health care herbal medicine and local systems of healing and the social history of the community's knowledge systems and how they have transformed over time. The community's elders and traditional practitioners are the primary sources of knowledge the researcher has captured through semi-structured interviews and participatory observation. The research leads to the conclusion that the Ampipal herbal medicine community is in a unique state of crisis. There is a considerable body of knowledge and still the community, Ampipal, the community herbal medicine practitioners and the Ampipal herbal medicine community, is in a unique state of socio-cultural crisis because of the traditional concept and practice system of the Ampipal herbal medicine community being disrupted and permeated by the modern system of biomedicine. The research recommends that a system of education that focuses on the community be created, along with a system of documentation concerning the community and the practices of its community members.

Keywords: Ampipal Community, Ethnoecology, Ethnomedicine, Indigenous Knowledge Systems (IKS), Medicinal Plants/Herbs, Knowledge Transmission

Introduction

Indigenous life worlds can be described as using specific ecological observations to create mental models and intricate knowledge systems, and these systems are not mere static data sets while a knowledge system can be described as a system of intangibles, knowledge acts as a mental property that helps create perceptions and social relations within diverse and disparate societies. The world is diverse, and that diversity is a reflection of variation in systems of knowledge, culture, and practices that embody the social configuration of communities. The focus of this paper will be the indigenous knowledge system of herbal medicine in the Ampipal community located in Palungtar Municipality, Gorkha District, Nepal. Specifically, it is aimed at documenting the community's traditional practices and knowledge of medicinal herbs, and how perceptions of herbal medicine are changing. Nepal is home to many diverse ethnic and indigenous peoples, as well as a myriad of religious beliefs and groups. These societies are characterized by a particular social and cultural organization within disparate sociocultural settings, also characterized by diverse, knowledge systems and cultures created and sustained over time, based on considerable natural resources of their geographic/ ecological settings (Mapara, 2009). A system of knowledge embedded within the experience and interaction of the indigenous people with their environment, indigenous knowledge, is often referred to as the local knowledge system.

This knowledge includes the collective skills, technologies, and processes that enable communities to adjust and prosper (Denevan, 1995). The use of medicinal plants is particularly important in Nepal, where the health care system is still dependent on herbal medicine. Modern medicine is available, but the use of herbal medicine continues.

This underscores the importance of traditional methods. It is noted that the importance of medicinal plants is not confined to anthropology (Joshi and Edington 1990); they are of great importance in the health care systems of many of these communities. The World Health Organization (WHO) states that herbal medicine should be considered by health care providers, and it is part of the traditional medicine list. Also, indigenous knowledge systems provide the best framework for ecologically sustainable development and resource management (Gadgil, Folke, & Berkes, 1993). The documentation and systematic study of indigenous knowledge on herbal medicine is important, especially when modern phenomenon such as globalization and industrialization are threatening these knowledge systems. This study seeks to validate and improve currently available local knowledge and provide insights on local remedies that are potentially valuable to the entire world.

Literature Review

The term ethnoecology refers to the understanding of people and the systems of culture that surround them and the couplings of the people and the systems of culture to the ecology. It is the study of the interrelations of the people and the ecology. Ethnoecology is not about studying the culture and nature separation, however, it focuses to center on the study of the means by which people appropriate nature through a triadic system called the cosmos, corpus and praxis. These are belief systems, systems of knowledge and systems of practice. Brosius et al. (1986) defined ethnoecology as the study of people and their cultural systems in relation to the environment. There is a unique ecology and a system of perception towards the environment of a culture and society.

Ethnoecology studies the systems of classifications and the use of labels and terminologies, which are central attributes of a culture in order to understand the environment and the system of perception of a people. Ethnoecology, as an interdisciplinary domain, focuses on the understanding of people in groups in relation to nature through the systems of knowledge and belief and how people utilize, manage, and control the resources that are available in nature. This approach recognizes the belief-knowledge systems of the indigenous people as extremely useful and complex systems in the context of the conservation of biological diversity.

Thus, ethnoecology offers a holistic perspective on human appropriation of nature by emphasizing the cosmos (belief systems or worldviews), corpus (systems of knowledge and repertoires), and praxis (practice), (Toledo, 1992).

Ethnoecology is an academic field that studies how different social groupings conceptualize and interact with the environment and how this is mediated by a distinct cultural belief system and a language. Language is the most fundamental of all human cultural phenomena. It is the principal instrument through which people categorize and identify the components of the environment, and thereby, it engenders a distinct worldview that defines how a society organizes the exploitation of its biological resources. "Systematic Ethnoecology is as a legitimate study in its own right" and not "simply as a methodological adjunct to nobler tasks" (Frake 1962:53-54). Harris (1968:570-572) has generally critiqued ethnoscience for not demonstrating the relevance of the cognitive analysis it undertakes in the daily life of the people in focus, or for isolating cognitive analysis from practical issues, thereby making it seem trivial. That time has now passed.

Studies of the shared cognitive aspects of human ecological systems have an urgent need to incorporate the action that connects a people's beliefs to the environment in which they are attempting to sustain themselves. Ellen (1982) has observed that ethnoecology provides the means for identifying and analyzing the practical and cognitive dimensions of human activity in an integrated manner.

According to the World Health Organization (Krippner, 2002), ethnomedicine is still widely used in all regions of the developing world, and its use is also increasing in industrialized countries. Broadly, ethnomedicine is defined as the use of plants as medicines and is a type of ethnobotany, which in this case also encompasses the description, observation, and experimental (screening) investigation of indigenous remedies for possible biological or therapeutic value. It is an interdisciplinary field that includes the core sciences (physiology, chemistry, biochemistry, pharmacology, and botany) and also history, archaeology, and anthropology in the search for, and investigation of, naturally occurring substances that have the potential to be of therapeutic value. Ethnomedicine plays an important role in conservation (Hamilton 2003) because of the cultural value and economic support it provides to many people. Ethnomedicine is defined as the body of disease-related beliefs and practices that stem from indigenous cultural developments and that are not modern medicine (Foster 1986 cited by Metha & Lamba 1990).

Ethnomedicine, as a branch of anthropology, focuses on understanding how different cultures construct meanings of health and sickness, how individuals think and act in relation to healing and health. While examining health systems of different societies, Foster and Anderson (1978) considered ethnomedicine to encompass a society's totality of health, health related knowledge, values, beliefs, abilities, and activities, including all clinical and nonclinical health related

endeavors. Ethnomedicine, in a broad sense, gives a description of health related theories and knowledge, which individuals living in a particular society and culture, and by virtue of their socialization, acquire. It serves as the basis for the logic of medicine or cultural medical common sense, which individuals employ to identify and resolve their health issues. Like language, music, and politics, medicine as a culture is studied in particular localities.

Ethnomedicine developed from the study of theories and knowledge on health derived from cultural experience. Each society possesses diverse cultural medical systems or medical knowledge systems, which are termed ethnomedicines. Every ethnomedicine has its characteristic medical logic and common sense, which has, for an extended period, made significant contributions to the overall well-being of the population. Each ethnomedical system has its conception of the human body, the causation and prevention of diseases, diagnosis, and treatment, which are interrelated and integrated. Such systems and knowledge are also referred to ethnophysiology, ethnopsychiatry, ethnomedical practitioner-seeking behavior, ethnopharmacology, and others. In scholarly publications, the term ethnomedicine has, to an extent, been treated differently. In American literature, the term "medicine" in ethnomedicine refers to concepts and knowledge of healing and health care. In European and biological literature, the term "medicine" generally refers to substances or methods of healing and treatment. Illness, disease, prevention, diagnosis, and treatment are all subsumed under Hahn's (1999) definition of ethnomedicine.

Indigenous knowledge is defined by Mahia Maurial (1999) as "the peoples' cognitive and wise legacy as a result of their interaction with nature in a common territory" (PP. 62). Other definitions, such as the one provided by Joey De La Torre (2004), define Indigenous knowledge as the traditional wisdom of Indigenous nations, the worldviews, traditions and customs that guide them. This final definition demonstrates the importance of worldviews in relation to Indigenous knowledge. Emaegwali and Falolan (2003) suggest that Indigenous knowledge can be a proprietary system that, when compared to Western systems can be more adaptive and flexible; or, in some instances, not exist at all. Indigenous knowledge may be embedded in products and services in a way that is less apparent because of the holistic socio-cultural and even spiritual aspects of the traditional knowledge, as opposed to conventional science.

The Convention on Biological Diversity (Rio 1992) has assisted the incorporation of indigenous knowledge into the discourse on biodiversity conservation and sustainable development by influencing the mainstream practice of the signatories to "respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional life-styles relevant for the conservation and sustainable use of biological diversity". Known as the 'Storehouse of Variants of Plants,' Nepal has a wide range of climates and ecosystems. This includes a variety of medicinal herbs that have been used for centuries for healing purposes. Nepal's Himalaya includes a range of climatic and topographical diversity with an abundance of plant species, numerous of which are used for medicinal purposes. The Himalaya region is characterized by its geographical, physiological, topographical, climatic, and ecological diversity, all of which significantly contributes to the biodiversity of the region (Khoshoo and Sharma 1991). The main components of traditional herbal medicine, which is regarded as the primary lifeline, the first option, has fewer side effects, better tolerance to pain, is comparatively less expensive, is accepted in the culture, and has a long history of use when compared to western medicine, are

medicinal herbs (Kunwar et al., 2010). Traditional herbal medicine is rooted in local resources, spirituality, and livelihood practices. Because modern medicine is based on scientific pharmacology, when combined with herbal therapies, it can have miraculous healing effects. Alternative medicine comes from a different paradigm and can work wonderfully alongside.

Many forms of medicine and healing have been documented. The modern medicine industry has built its practice on the processes of herbal healing and the healing supplements that are made of medicinal herbs.

The Dietary Supplement Health and Education Act of 1994 positively influenced both the practice and marketing of herbal supplements.

Nepal, like many other individuals and also ethnomedicine practitioners (who have come to practice ethnomedicine due to a shift in their own belief system), practices herbal healing medicine. In the U. S., herbal medicine is a complete, multi-billion dollar industry. It is also available in retail pharmacies. Ethnic and traditional medicine has also marketed about 1500 products that are not considered safe and effective. These products and many like them are not regulated by the FDA, and is marketed based on pre market toxicity testing.

Herbal medicine is one of the oldest forms of health care practices, dating back to when 80 of the world population relied on it.

The anthropological perspective suggests that geographical isolation is not the only reason for the phenomenon. Rather, it also accounts for the more developed cultural systems of herbal medicine. Regardless of the advancement of modern (allopathic) medicine, traditional practices continue because of the total health care (or, more accurately, health coverage), especially the psychosocial aspect, which modern medicine neglects. Although modern medicine is thought to neglect the psychosocial aspect of care, it is worth mentioning that 80 % of the population relies on some form of herbal medicine (Farnsworth 1988) even though less than 10 % of the 250 000 species of flowering plants that have been documented around the world have been studied for their pharmacological properties (Stix 1993).

Research Problem

The socio-legal structures within a region's community affect the management of biological diversity and the community's impact on the region's ecosystems. With regard to these impacts, the management of resource systems by Indigenous peoples includes self-governed, community customary law controlled resource systems and traditional systems (Gurung, 1996). These resource management systems have a technical aspect, but, in the broadest sense, they are a unique integration of nature and culture, to include symbolic structures, value systems, and beliefs, which are fully part of the culture of the community. The unique community ecological practices of these peoples have led conservation and social scientists to use the terms indigenous, ethnic, or tribal to describe these groups. These systems of knowledge, however, have not been static and are not repositories of knowledge, but the result of numerous generations of observations, interactions, and relationships with the natural world for the purpose of learning and acquiring practical, empirical knowledge. The knowledge systems indigenous to their ancestral ground and the people who carry them are of great value for current natural resource management and the achieved and sustained global development goals.

The systems of knowledge held by indigenous people contribute to the fields of wildlife and natural resources conservation, sustainable development, and the management of natural resources. Indigenous knowledge teaches people how to live in harmony with their natural surrounding. Historically, indigenous people have retained unique knowledge about the ecosystems within which they have lived. Indigenous knowledge has served as the primary actor in mother-nature conservation and protection. Indigenous knowledge systems and practices are rapidly growing in significance and promise in the field of sustainable development, conservation of biodiversity, and responsible management of the natural resources.

Most of Nepal's population consists of rural residents. For these people, herbal medicine has served as their only means of treating and curing illnesses. The Amppipal people, who share the same geographical area of Nepal, also predominantly live in rural areas. The Amppipal people have one hospital, which is modern, and a variety of herbal medicines, which they use in conjunction with the hospital to treat illnesses. The health care system of Nepal is made up of herbal medicine and the traditional knowledge and practices that accompany it. More importantly, the Amppipal people possess a variety of Indigenous knowledge systems and practices, which include herbal medicine as a customary form of primary health care. The system of herbal medicine possessed by the Amppipal people is not merely a traditional health care system; it is also a system that embodies their culture and values, their system of knowledge, and the process of passing that knowledge to future generations. The Indigenous knowledge systems and practices of the Amppipal people are deserving of the attention of science for study and documentation. It is also important to analyze the continuity of the herbal medicine tradition, as well as the systems, practices, and conditions, in light of innovations and the availability of modern health facilities. This study explored components of the indigenous knowledge system concerning the application of herbal medicines.

Objectives

- a) To document the indigenous knowledge and customs of medicinal herb use in the Amppipal community.
- b) To analyze the community's contemporary perceptions and valuation of this herbal knowledge.
- c) To assess the intergenerational transmission and current viability of this knowledge system.

Theoretical Perspective

This research analyzes the indigenous knowledge and practices related to medicinal herbs through the lens of ethnomedicine and an ethnoecological framework. Ethnoecology, as a conduit of 'people-centered' study, and in particular, grey literature, looks at communities and their environments and includes ethnobiology and ethnobotany as subdisciplines (Davison, 2000). As an approach to cultural anthropology, it looks at cultural frameworks of peoples to understand the ecological knowledge of the peoples and the intertwined relationships of the people, animals, plants, and objects in the environment (Delgado, 2002). In a particular society, a culture shapes the construction of the environment and the elements it deems necessary for sustenance. The ecological elements, in turn, shape the rural areas, the underclass, the systems to address the

medical needs of a society, and the extent of conservation (Harris, 1968). In addition, the ethnoecological framework considers and appreciates the emic (insider) and etic (outsider) points of view in cultural systems and the framework as they relate to the environment (Geertz, 1977). The study of ethnomedicine, which in part examines the integration of the elements of a culture such as plants and the spirituality of people, is a significant part of the research study (Johnson, 1974). The combination of both approaches offers an in-depth study of the cultural practices of the Ampipal people and their rituals, as well as their practices concerning the environment. The Ampipal people possess a sophisticated and well formulated system of knowledge and management of their resources. The research study has articulated the framework that is central to understanding the practices of the Ampipal people. The complexity of their practices, culture, ecology, and health advances understand of indigenous technologies and their utilization.

Methodology

This study aims to understand the Indigenous Knowledge systems (IKSs) and healing practices of the Ampipal community using critical qualitative methodology. The study intends to interact with the community using an anthropological approach to capture and, in turn, legitimize the community's knowledge systems and local narratives about their environment and heritage. Thus, the study goes beyond mere descriptive accounts to empower the Ampipal community using their IKS and healing practices.

Fieldwork and Critical Engagement: The process of collecting primary data spanned one month and was conducted during one period of time in Ward 3 of the Palungtar Municipality. This is attributed to the 50 households that the research is anchored on demographically; nonetheless, depth of inquiry is guaranteed through purposive non probability sampling. This is particularly so due to the in depth focus on what are referred to as knowledge holders. Here, the primary knowledge holders are the Amchi/Dhamis or traditional medicine therapists, and the other elders who are forest users. We are after the type of qualitative data that a secondary broad survey would not be able to provide.

Methodological Triangulation: The study was driven by the necessity to arrive at the most suitable thick description of the context of the study through the use of the best applicable data collection technique. This was achieved through multi-methodological triangulation. Pilot Observation enabled the researcher to record and analyses the day to day experiences and the praxis that is embedded in the traditions of the activities.

In this study, semi-structured and in-depth interviews were employed with 15 primary respondents who took part in several sessions, which provided the research with the opportunity to analyze the development and transformation of understanding over a particular time. The third method of data collection for this study was Focus Group Discussion (FGD). This involved three different FGDs, each with 6-8 participants, in which the participants were divided concerning age and sex to consider different socio-cultural complexities. These discussions aimed to explore the collective views of the respondents concerning the use of traditional medicine and the socio-cultural obstacles and enabling factors in the transmission of knowledge.

Systematic and coded analysis is aimed at the Ampipal people describing to them their cultural narratives and voices to enable them to understand the biological context of the landscape they inhabit and to offer a ‘participatory’ narrative.

Result

The Ethnoecological Fabric of the Ampipal Community: Although the Ampipal community’s relationship with plants has to do with their functions and values, such an understanding does not do justice to the community’s socio-religious structure which also influences the people’s attitude to their environment. In an effort to present this as sociologically detailed as possible, the findings have been collated into two of the predominant socio-religious socio-ecological themes: Ritualistic Mediation, and Intergenerational Knowledge Transmission.

Table 1
Ethnobotanical Resources and their Ritualistic Functions in Ampipal

S. N.	Local Name	Scientific Name	Ritual Name	Purpose of Use
1	Tite Pati	ArtemisiaVulgaris	In different Pooza and Birth and Death ritual	Incense for purifying
2	Peepal	Ficus religiosa L.	Uses in different rituals (Marriage, Poozas)	Bothe are regard as holy tree and purifying
3	Bel	Aegle marmelos	Uses in different rituals (Marriage, Poozas)	Regard as holy tree and purifying
4	Aap	Mangifera indica L.	Uses in different rituals (Marriage, Poozas)	Regad as holy tree and purifying

Source: Field Data, 2025

Theme 2: Intergenerational Transmission and Contemporary Perceptions

There is an uninterrupted flow of intergenerational transfer of indigenous medicine knowledge from the elders to the younger members of the communities. However, the data shows a contradiction where there is a paradoxically equal respect for the 'limits of knowledge potential' and the Oral Tradition.

During the oral testimony of Ramji Prasad Devkota, the community holds a value on the constructed use of the herbal medicine; however, there seems to be an issue with how deeply one can direct attention toward the system. This peak of the paradox illustrates the community's problem of how to utilize their knowledge of herbal medicine. This paradox is the reason why the community views the plants as a 'cultural anchor' that connects human beings with their forefathers and also as a 'primary healthcare resource'.

Discussion

Findings from the Amppipal study enrich the global ethnoecological database concerning traditional medicine and Human-Environment interactions. The indigenous community's advanced understanding of indigenous regional vegetation and its application in the training of global pharmacology and veterinary medicine is highly commendable. Amppipal's practice of herbal medicine is one of the oldest and simplest traditions and also exemplifies a local type of medical pluralism. Such a practice, although traditional, lives side by side, and most of the time provides the community health and first tier health services. The study noted that practice of traditional health care systems was highly dependent on knowledge transfer across generations. In most of the societies, the knowledge of a disease and the applicable treatment modalities using herbal and other therapeutic methods was regarded a community asset, and resulting in a high level of cultural development and adaptive resilience.

Furthermore, the discovery and systemization of the herbal medicine of Amppipal results from an evolutionary process, as opposed to a mere unidirectional phenomenon, of the Amppipal herbal medicine's systemization and discovery. This focus of the Amppipal Community on the herbal medicine systemization and discovery reflects a broader phenomenon of community praxis as it relates to the disease control practice and the ecosystem relational balance maintaining practice. This body of knowledge forms a critical bridge to the community and the ecosystem, the place where the community healing practice as a technique of healing, becomes a cultural and traditional system. When we regard the community healing practices as a part of a feedback mechanism to the global knowledge system, we can grasp the sophisticated historical phenomenon of the indigenous population and the complex interrelation constructed toward health and survival within their homeland.

Finding: The Ontological Significance of Herbal Praxis

The Amppipal community, along with the utilization of herbal medicine, considers the practice of healing an important part of the community's philosophy. The Amppipal Community's indigenous people have an extensive knowledge of their immediate environment, and with the philosophy of holism, knowledge of the environment is viewed as a collective and tactical domain and integrated with the community's cultural practices. The community of Amppipal, as this research illustrates, has a sophisticated knowledge system of ethno ecosystems and ethnoecology, as it pertains to the enhancement of life in all of its diverse and multidimensional relationships with the bio-physical surrounding systems. In the process, the community of Amppipal is able to foster a sense of common identity, which in turn sustains the community. In the year 2003, the World Health Organization referred to systems of this nature. They are complex systems of multiple, differing health practices, pathways and beliefs that utilize the flora, fauna and minerals of a particular region for the maintenance of health. In Amppipal such a system is created around the healing power of plants. The community of Amppipal considers plants, along with other cultural practices, to have a vital role in sustaining, fusing and strengthening the community, as well as providing healing attributes.

Conclusion

The use of herbal medicine has been notable in the Amppipal community's health care system, embodying the community's ecological, cultural, and spiritual knowledge. Its historical value is now being contested owing to the community's lack of knowledge transfer and the youth's changing outlook on the practice. Elders' regret of being unable to pass on the knowledge of herbal medicine fully indicates how much knowledge is still untransmitted. The research illustrates that the herbal medicine system is not just a means of health care, but is also an integral part of the community's culture and religion, and serves to unite the community with the ecosystem and the super-natural. With the loss of knowledge of herbal medicine, the community also loses its cultural and health values. The community has begun to rely on modern medicine and the social changes that have taken place have overshadowed the use of traditional medicine and the herbal practices. This is due, in part, to the complex relationship that herbal medicine and the community's religious practices have. The community often views the herbal medicine practices and the community's spiritual beliefs through a cultural accent that emphasizes a value greater than the value of use.

The loss suffered by the people of Amppipal can only be partially averted if the community is able to capture the knowledge of the elder herbalists of Amppipal and combine it with the inquisitive knowledge of the young members of the community. A community-based educational strategy focused on the herbalist traditions and the use of the Amppipal people's herbalist traditions will solidify the herbalist traditions of the Amppipal people. More importantly, the community will benefit from the use of the Amppipal herbalist traditions, and the community will protect its cultural traditions. The use of the Amppipal herbalist traditions will also protect the culture, traditions, and heritage of the Amppipal people - the community will benefit from the use of the traditions and the culture will be preserved. The Amppipal people will benefit from the use of the Amppipal herbalist traditions and will preserve the culture, traditions, and heritage of the Amppipal people.

The community of Amppipal needs to record the knowledge of herbal medicine, and preserve the practices of herbal medicine based on the curiosity of the young members of the community and the inquisitive knowledge of the young members.

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Indigenous Knowledge Responsive Education Policies for Marginalized Dalit Communities

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DOI: <https://doi.org/10.3126/jotmc.v9i9.90467>

Abstract

Nepali society inhabited with distinct culture, identity, ideology, knowledge, skill and practice. Most of valuable cultural, technological and caste based knowledge and skill are related to Dalit communities that have been adapting and practicing from generation to generation, called indigenous and cultural knowledge. These knowledge are in disappearing stage because of the policy provision. The aims of this study to analyze the indigenous knowledge responsive policies for marginalized Dalit communities. I applied qualitative research design with systematic review of policy documents as thematic review process and reviewed data analyzed by the use of thematic analysis method as interpretive and analytical way. The study found that few issues are endorsed in the constitution, education policies and other supportive program to support the indigenous knowledge and skills of the marginalized communities however, these are not more specific and sufficient to preserve and promote the indigenous knowledge of Dalit. These are seemed being only for popularity, even to endorse the hidden interest of the development partners. Unfortunately, in the context of Nepal, every policy is limited in the formal documents for mass popularity and donorfare. This study will motivate the further researcher and academia to identify the indigenous knowledge, art and skills of Dalit communities and its importance of preserving. It will also for policy maker to integrating the local and cultural knowledge into present education policies and formal curricula.

Keywords: Indigenous knowledge, traditional knowledge, skill, policy, marginalized community

Introduction

Nepal is a diversified country containing with racial, religious, social, cultural, lingual, political and ethnic background as what Toni Hagen (1961:59) calls "the ethnic turn-table of Asia" (Parajuli, 2012; Nepali, 2007; Constitution of Nepal, 2015). They have distinct culture, identity, ideology, charter, knowledge, skill and practice. They have been adapting and practicing different occupation, indigenous or cultural knowledge and identity based on their caste, race, tradition for

their livelihood where Brahman are related to pray or teaching, Kshatriya to security, Vaishya to business and agriculture, and Shudra (now is called Dalit) to different serviceable work of higher caste (Luintel, 2018; Acharya, 1986, 2010; Kotani, 1999 & Khanna, 2009). Thus, it argues that the caste and occupation were interrelated for centuries. Historically, the caste promoted to division of work or occupation and occupation is represented to caste, and categorizing people into different groups based on occupation and birth. (Kafle, 2024). The caste system creates an occupational injustice (Shetty et al., 2022) and primarily leads to social stratification and certain occupation, tradition and identity (Sonowal, 2020). Therefore, occupations were very commonly related with casteism.

The indigenous and cultural knowledge is a social and cultural capital of such communities however, it had been more popularly developed within Dalit communities like Lohar makes iron instruments, Kami are blacksmith, Sunar are goldsmith, Sarki are cobbler, and Damai are in tailoring and musician (Nepali, 2018; Koirala, 1996), Kumal make soil pot, Badi make musical instruments, smoking pot, fishing net etc. (Charmakar, 2021). Although, every cultural group has own knowledge and skill that were practicing since over centuries that called indigenous, traditional and cultural knowledge which are directly associated with culture and traditions of the people and it is stored in peoples' memories and activities (Lama, 2021). It is also known as local, folk, systematic and scientific knowledge acquired by local people through the accumulation of experiences (Ocholla, 2007; Warren, 1987; Rajasekaran, 1993; Haverkort, 1991; Larka, 2021; Godfrey & Siraje, 2019). Indigenous knowledge is integral to cultural values, resources management practices of local people, the interaction of inhabitants with an organism of their environment, indigenous rituals, and spirituality for better survival (United Nation Education, Scientific Cooperative Organization {UNESCO}, n.d.). It is assumed that traditional knowledge and practices lie at the heart of a community's culture and identity.

Therefore, such IK and skill of Dalit communities need to protect through education policies and restructure of existing curriculum of the state because education is considered a critical foundation and important tools for socio-economic and cultural development, modernization of traditional technology, national identity and occupational gains (UNESCO, 2009, 2016). Education is also a paramount for respect of indigenous cultures, languages, traditions, and traditional knowledge (Lukong, 2016). But our formal curriculum enacted and rarely reflects ethnic knowledge and indigenous ways of knowing (Champange, 2009; Mamung, et al., 2022; Dahal et al., 2002). Indigenous knowledge is often neglected in the formal education system with obstacles to its introduction into the school environment (Silva et al., 2024). The challenge for universities is to orient their curriculum towards IK management (Magara, 2015). Thus, all traditional knowledge, skill and technology should be included in education policies for their preservation and promotion. Indigenous knowledge of every ethnic group has been denied and destroyed for centuries through the the western and modern education system (Stavenhagen, 2015). Consequently, formal education does not reflect distinctive cultures and knowledge systems of indigenous people (UNESCO, 2010). Skinner and Holland (2009) claims that "school did not only constitute a place for reading textbook and listening of teacher lecture, they constituted different sorts of relation and new identities" (p. 315). On the other hand, Malik (1979) stated that occupational prestige is highly correlated with income derived from occupation. The improved educational and occupational status

of schedule caste has not received adequate recognition in society. They feel that they were unable to earn social status because of their lower social origin and lower caste then they wanted to escape from their traditional caste based occupation. To raise their social status, they motivated to change their occupation and living standard. As a result, nowadays, their ethnic knowledge is continuously declining because of the high motivation of youths towards modern and scientific knowledge with an assumption of a utilitarian perspective (Niure, 2019).

From the above discussion, the IK and skill were more invaluable long life experiences of the human civilization, our identity, local engineering practice and cultural heritage as intergenerational transformation. Traditional knowledge offers valuable insights into community resilience, self-sufficiency, and holistic well-being (Seerangan & Ravi, 2023). Unfortunately, at present such indigenous knowledge and identity of every community has been disappearing gradually due to the dominant educational system, often prioritizes standardized curricula, western knowledge framework and culture, and lack of documentation (Seerangan & Ravi, 2023). The main problem in loss of our cultural knowledge by developing modern technology and western mindset where is given more focus on imported knowledge and culture or artificial technology rather than original. The other problem is of disappearing IK, accepting it as intellectual property and ownership of indigenous knowledge (Everitt 1994; Mead 1995; Abdullah & Stringer 1997). Moreover, the Dalit community is more affecting from this problem that was supporting their daily livelihood. Thus, to solve this problem, it is necessary to preserve and promote indigenous and cultural knowledge of marginalized Dalit communities by integrating into educational policies and contemporary curriculum for recognizing their value and promote intergenerational learning and to link with new technology and way of daily livelihood (Adhikary et al., 2024). On the other hand, there should be change on perception and understanding on traditional and/or cultural knowledge, skill and art. Therefore, this study will try to explore the education policies that integrating or not indigenous knowledge and skill of marginalized Dalit communities.

Conceptualizing the Indigenous, Cultural and Traditional Knowledge

There we found some similarities and differences between IK and TK however, from literature as much as common knowledge, skill, meaning, understanding and common characteristics among them. According to Maden & et al. (2009), IK and TK some sense similarity and distinctively different and on the other, IK is often referred as TK. Where, IK refers to the point of origin and incorporate with local while TK may not be of local origin or TK is usually collective knowledge. TK does not represent not only old knowledge; it may be recently established knowledge which is based on existing knowledge. However, there are some difference among these knowledge but these are same practices, experiences, art, knowledge and skills within local communities. Thus, knowledge indigenous and traditional accumulated by ethnic communities about their habitat for centuries.

Indigenous knowledge is stored in peoples' memories and activities that is known as local knowledge, cultural and folk knowledge acquired by local people (Ocholla, 2007; Warren, 1987; Rajasekaran, 1993; Lama, 2021; Larka, 2021). TK, IK, LK and CK generally refer to knowledge systems embedded in the cultural traditions of regional, indigenous, or local communities has been orally passed for generations from person to person (Warren, 1991; Godfrey & Siraje, 2019). It is

assumed that traditional knowledge lies at the heart of a community's culture and identity and in the same perspective, IK and CK are both cultural knowledge and developed over time based on experience, often tested over long period of use, adopted to local culture and environment (Larka, 2021). Consequently, such knowledge and practice are their indigenous knowledge that were transmitted for years. Based on above literature my understanding toward IK, TK and CK are not so distinct in nature still, thought that IK can accommodate and represents the all knowledge. Therefore, I used the term 'indigenous knowledge to explore the indigenous knowledge responsive education policy for marginalized Dalit community.

Conceptualizing the Marginalized Dalit Community

Generally, we supposed that the marginalized community is an oppressed, backward and deprived community from many more opportunities. Where, Dalit religiously, culturally, educationally, politically and economically oppressed, socially backward and most deprived and vulnerable social group as well as social justice in the society (Koirala, 1996; Kisan, 2009, p. 46; Tiwary, 2007; Bishwakarma, 2018; Chaurasiya et al., 2019). So, Dalit, politically coined word used to refer to a socially backward community and suffer from social hate since traditionally (Borale, 1980). For Dalit, specific terms use such as water polluting, untouchables, low caste, ignored, oppressed, exploited, poor, marginalized, disadvantaged, minorities, excluded (Bhattachan & Sunar, 2009). Thus, it is argued that Dalit lies in marginalized community. But, within marginalized community does not only lies Dalit community and also lies other communities (Madhesi, Janajati, Adivasi, Muslim and other ethnic minorities) which belong to marginalized characteristics. In this context, it is argued that Dalit also belong to backward and marginalized community so I used the word 'marginalized Dalit community' in my study.

Research Problem

Indigenous knowledge is taken as an intangible heritage of numerous societies around the globe (UNESCO, 2010). IK is a social capital, intellectual property and milestone for the survival of the community as well as marginalized poor community that reflects the community's deep connection to their heritage, environment, and sustainable practices (Seerangan & Ravi, 2023; Adhikary et al., 2024; Senanayake, 2006). Every community had been adapting various indigenous knowledge that some are explored and some are still waiting for exploring. But, now, these types of knowledge have been gradually disappearing because of the lower social prestige, low value in father's occupation, high motivation of youths towards modern and scientific knowledge and difficulty in competing with the open market (Parajuli, 2012; Turin, 2014) and ownership toward Ik as intellectual property (Everitt 1994; Mead 1995; Abdullah & Stringer 1997). On the other hand, the modern technology and westernization replaced indigenous knowledge and culture (Niure, 2019; Charmakar, 2024) of Dalit. Likewise, they could not update and protect their knowledge and culture in one hand and other hand the government policy could not promote and conserve their culture, identity and knowledge (Lukong, 2016). Thus, this is a main issue of exploring educational policy for identifying, protecting and conserving the Dalit's IK and practice that motivated me to study on this issue.

The other problem, because of the giving low value and caste based discrimination, they demotivated toward their local cultural occupation, then shifted their profession, changed their role and norms for their survival. It has been a problematic issue for new generation to understand, recognize and appreciate the IK by developing the colonized mindset. As we supposed education is a backbone for all round of personal development and progress of society (Kour et al., 2025), fundamental right and needs (Constitution of Nepal, 2015), important tools of socio-cultural development of such ethnic group (Devendra, 2001), and main driving force of empowerment and leading in policy formulation (UNESCO, 2009; 2016). National education system and policies should be more responsible to protect and promote the indigenous knowledge of such communities. However, the education policies and formal curricula (school level and higher level) rarely reflect the ethnic knowledge (Champange, 2009). Unfortunately, in the Nepalese context, is more focused in imported policies, curricula, knowledge, culture and technology rather than in formulating the policies to promote own culture, identity, knowledge, skill, art and civilization. As a result, this is other problem of my research to explore the policies are addressing or not of marginalized Dalit communities with formal education system and curricula.

In the Nepalese context, there is a problem in formulating the policies to promote own culture, knowledge, skill, art and civilization. The question can be raised that what policies are formation? IK responsive policies are integrating or not within formal education. Are they sufficient for promoting IK and skill? But when reviewed literature there is a big gap in previous study. My study mainly centralized to explore the policy provision about indigenous knowledge for marginalized Dalit community and not in implementation practice for now.

Research Objective

1. To explain the indigenous knowledge responsive education policies for marginalized Dalit community.

Research Question

1. What are the policies developed for addressing the indigenous knowledge and skill of marginalized Dalit community?

Method

This study was based on qualitative research design with systematic thematic review method of policy documents addressing indigenous knowledge and skill of marginalized Dalit communities. It was not covered the whole sector of the government policies of Nepal so it only delimited to indigenous knowledge responsive policies for marginalized Dalit communities. The documents reviewed as secondary data source inwhich national fifth year plans of Nepal, reports of education commission, national education policies, educational act, regulation, constitution of Nepal, School Sector Development Plan (SSDP), School Education Reform Project (SERP), School Education Sector Plan (SESP), Millennium Development Goal (MDGs), Sustainable Development Goals (SDGs), National Curriculum Framework and other related polices to indigenous knowledge and skill.

First of all, I collected above documents through google scholar, website, web link of the authorized organization and reviewed thoroughly as I needed. Essential data was received from thematic review and content analysis then data was transcribed, coding and theme making as thematic model as their nature (Braun & Clarke, 2006; Attride & Stirling, 2001). These themes interpreted and analyzed in qualitative and hermeneutic interpretation way (Creswell, 2012; Myers & Avison, 2002)). Furthermore, to maintain its validity and quality standard triangulated with other data sources like previous research papers and other related literatures, peer debriefing and expert review method was used. Likewise, during the document analysis, editing, coding and analysis was considering essential ethical issues by using the authorized sources and documents.

Result and Discussion

After reviewing the policies, artifacts launching by government and other authorities in different historical time-period that related to indigenous or cultural knowledge of marginalized Dalit communities is categorized in the distinct theme based on their nature. These themes are analyzed in detail as interpretive way.

Indigenous Knowledge Related Policies Before Democracy

Before establishment of democracy, there was lack of formal education system and policies to endorse the indigenous knowledge and cultural knowledge of such ethnicity. Existing government launched some policies to govern state and to address the essential need of the citizens. Thus, in that period, the formal education institutions were not developed formally however, as per the need of the state specific policies and programs had been launching. The concept of indigenous knowledge was developed from Vedic era as an ethno-science that was indigenized spiritually, traditionally and culturally. The main aim of Gurukul education is to develop an ideal, original and cultural knowledge. Gurukul education is a discipline. At present, the words, learning by doing and child-friendly education that was focused in action, use of local material and interest based skill and knowledge (Adhikari, 2023). Farmers used forest plants and herbs to treat their animals even themselves as natural medicine and they had developed own natural treatment system, hunting and agricultural system and instruments, ethno-botany and ecological knowledge, navigation, ethno-astronomy (Godfrey & Siraje, 2019). They had own traditional customs, ornaments, cooking, decoration, dresses making and housekeeping knowledge, life story, songs, language and communication system (Rai, 2021 & Oguamanam, 2019). Thus, the concept of indigenous knowledge was developed in Vedic period knowingly or unknowingly which has been practicing informally and orally at present postmodern era. Whatever, there was no caste hierarchy as a formal structure in the Vedic period.

The Lichhavi period was considered as a period of renaissance in Nepalese arts, crafts, architecture, education and culture as well as singing and dancing. It is called a golden age in the history of Nepal where medical science, religious scriptures were also highly developed during this period (Shrestha & Singh, 1972). The education system was based on Gurukul and monasteries system where priests and monks imparted skills and values in various disciplines usually to Brahmins or the sons of the ruling elite (Subramanian, 2010). The main objective of education was to produce ideal citizen and human resource (Dhamala, 2022). The education was an optional, non-

formal and given more focus on function of state, however it is supposed a milestone period of education and indigenous knowledge, skill and occupation.

Likewise, Malla period was also a golden time for art, architectural wonders and cultural heritage that were totally dominant in Hindu and Buddhist religious philosophies which are reflected by various kinds of painting images, temples, monasteries, old squares, and other monuments (Parajuli, 2019). In that time who were illiterate or half literate were to act as goldsmiths, carpenters, masons and other artisans. Besides it, "men of different castes gained mastery over, skill, and efficiency in their respective jobs, culminating in the production of masterpieces of different arts and architecture" (Shrestha & Singh, 1972, pp. 25-26). King Jayasthiti Malla legalized caste hierarchy based on occupation and believed in education as preparation for life ((Kafle, 2021; Boker, 1988; Lama et al., 2019; Upreti, 2010, Ghimire, n.d.; Sharma, 1990). Therefore, indigenous knowledge and skill was specified on the different caste groups. After then, the caste based occupation was legalized in Nepali context however every ethnic group of Nepal were practicing their cultural and local knowledge for centuries. Most of cultural knowledge, skill and practice are related to Dalit communities. But, there is main problem of their indigenous, local or cultural knowledge of protection and transformation as a written document.

During the unification process of Nepal by King Prithivi Narayan Shah gave little attention to education, art and architecture (Bhandari, 2021). The Ranas were against imparting education to the mass. After rise of Rana regime by Jung Bahadur Ran opened Durbar School, originally accessible for the Ranas and the elites. Later, Deb Shamsher and Chandra Shamsher open Bhasha Pathsala and Shrestaa Pathsala respectively, to produce clerks for official work (Bhandari, 2021). "Mohan Shamsher addressed the right of universal education, creation of adult education centers as called basic training centers to provide different life skills" (Sharma, 1990, p. 6). In sum, that period created a big gap for indigenous knowledge creating, sharing, continuing and promoting. In that period, not only marginalized Dalit community, all people out of Rana family deprived from formal education and other human right. Yet Dalit communities were hesitated due to their caste based occupation, job and behavior that fertilized to disappear their generational caste based knowledge and skill. After, Rana regime dethroned, the democratic government launched somewhat different plan, and programs that included indigenous knowledge oriented policies.

Indigenous Knowledge in Fifth Year Plan

After establishment of democracy, the government developed a policy of fifth year plan consisting the overall plan of the state. In that spirit, the first plan was prepared in 2013 that focused on economic development. The second, third and fourth plan had focused in economic development, productivity, social justice, employment, reduce social discrimination and social disparities (National Planning Commission of Nepal {NPC}, 1956-1961; 1962-1965; 1965-1970 & 1970-1975). Fifth plan (NPC, 1975-1980) for the first time, addressed the problem of poverty and provisioned to reduce poverty of marginalized communities by the income generational activities. Sixth and seventh plan focused on increase small industry and fulfill the basic need of low income rural people (NPC, 1980-1985 & 1985-1990). Eight plan for the first time, the policy adapted to develop science and technology, knowledge and technical skills by preserving and promoting the

glorious national culture, arts, music, national languages, integration of communities and groups that have lagged behind in society (NPC, 1992-1997). These policies seem back to response the special Dalit communities' knowledge and skill but in some context are able to address the voice of rural and backward communities.

Ninth and tenth plan focused economically and socially backward communities like laborers, Dalits, Adibasi, Janajatis and Madhesi to empower for the protecting and promoting such indigenous technologies. It provisioned to preserve and conserve language, literature, arts and culture of various castes and ethnic tribes (NPC, 1997-2002 & 2002-2007). On the other, eleventh and twelfth plan focused need based and entrepreneurship program for Dalit and other disadvantage groups (NPC, 2007-2010 & 2010-2013). Thirteenth plan has focused on preservation, promotion, modernization and industrialization of traditional skill and occupation (hand craft, small cottage, fishing, hunting etc.) of Dalit, janajati, Madhesi, Muslim, Badi and other marginalized communities (NPC, 2013-2016).

Accordingly, fourteenth plan was positive to conserve and promote of traditional culture, occupation, knowledge, skill and modernization of traditional occupation for marginalized (NPC, 2016-2019). The national goal of the fifteenth plan was “Prosperous Nepal, Happy Nepali” and focused on social justice, protection and promotion of socio-cultural diversities, entrepreneurship development, and preserving, modernizing and upgrading traditional and local knowledge, skills. Beside it student who are economically and socially backward and deprived from formal education and special program for marginalized and ethnic groups (Raute, Kusunda, Chepang, Rajbanshi, Chamar, Mushar, Badi, Raji, etc.) was other goal (NPC, 2019-2024). Likewise, sixteenth plan has focused on to modify the curriculum, conservation of traditional occupation, knowledge, skill, art of Dalit, learning and earning program (NPC, 2024-2029).

From the eye of the fifth year plan, we found indigenous knowledge responsive plans to protect and promote the indigenous knowledge of the backward communities. These plans somewhat are addressing the Dalit community. But, unfortunately, these plan and programs are only limited as a policy level. Few contents are incorporated within the plan but there seems a gap in programmatic step for promoting of indigenous knowledge of marginalized Dalit community. It is need to form permanent mechanism to explore what type of indigenous knowledge are in the Dalit communities, and how to conserve and protect? How to add modern technology? And how to link in the daily livelihood and what programs should be launched?

Indigenous Knowledge Responsive Education Commission Report

The first democratic government had formed a Nepal National Education Plan Commission (NNEPC) in the leadership of Saradar Rudra Raj Pande, to suggest government regarding education policies in the changing context. The commission accepted the diversity and decentralization character of the country for the first time. This policy recommended the free, vocational, practical and need based basic education. It disliked imported schemes and curriculum must be designed to address learning and earning program such as art, culture, music, dance, folklore, agriculture, carpentry, masonry, brick work, cloth making, dying, printing and other small-industry (NNEPC, 1954). All Round National Education Commission (1961) focused to technical and vocational education. The National Education System Plan (1971) had adopted

centralized system but focused on technical and vocational education, preserve, develop and propagate the national culture and arts of different ethnic groups. National Education Commission (1992) focused on different non-formal courses for those who are deprived of the class-room education, special education and training for the tribal and backward communities, geographically disadvantage groups, disabled children and orphans, and so as poly-technical and skill-based higher education and job-oriented adult literacy program. High Level National Education Commission (1998) focused on special and non-formal education, special treatment for socially, economically and geographically backward people.

Although, different education commission reports have advocated for technical and vocational education, adult literacy, short term skill development training and protecting art, culture, ethnic identity and local knowledge however, these courses and content are oriented by the western knowledge and philosophy not for promoting IK. Therefore, these report does not speak about how to identify, conserve and promote the IK and skill? How to link it with formal education system and school level curriculum? What types of specific plan and program should be developed to impart the program in practical field especially for marginalized community like Dalit?

IK in Educational Supportive Program

School Sector Development Plan (Ministry of Education, Science and Technology, 2016–2023) had endorsed to promote life skills, income generation program, value-based education, socio-cultural diversity, school-based technical and vocational program and lifelong learning programs. The Second Higher Education Project (University Grants Commission, 1997–2002) implemented focusing on curriculum reform. Higher Education Reform Project (UGC, 2015-2020) had initiated to support the government's national programs in higher education focusing on equity, inclusion, entrepreneurship and self-employment. School Sector Reform Plan (MoEST, 2009-2015) had focused on lifelong, vocational and technical education, entrepreneurship skill, cultural knowledge and sustainable way of life. School Education Sector Plan (MoEST, 2022-2032) program has endorsed on identification, preservation, promotion, modernization and transfer of indigenous and traditional knowledge and skills of the local community especially marginalized community. It has also focused to improve, modify, and revise school-level curriculum to make more relevant, qualitative, inclusive, up-to-date knowledge and skill to link formal education and lifelong learning.

Sustainable Development Goal has focused in employment, entrepreneurship, to ensure equal access to education, vocational training for the vulnerable, disables and indigenous peoples. It has focused in sustainable lifestyles, promoting cultural diversity, livelihood skills, indigenous knowledge, promoting secondary education with specialization in science, music, sports, Ayurveda, herbs and provide local skill training through community learning centers (Government of Nepal, 2016-2030). Likewise, Millennium Development Goals (United Nation, 2000-2015) has focused in global information networks to address the local and indigenous content on the internet for globally exposer, universal access and connected to local knowledge with global knowledge system (Holmner, 2011). It has also focused to preserve the IK for future generations, respect for cultural heritage and diversity, to solve local problems, support infrastructure, eradicate poverty

and hunger, maintain local biodiversity, environmental sustainability (Smith 2010), and shifting cultivation technique.

Above mentioned national programs have more focused in school level education by addressing technical and vocational education, life skill and other entrepreneurship courses in their curriculum. On the other hand, international supportive programs like MDGs and SDGs are more motivated to sustainable development by promoting indigenous knowledge related programs. Such program has a lacking of identify the caste specific indigenous knowledge and skill, specific institutions for promoting and conserving the IK, implementing plan, program and methodology in the field level.

IK in Constitution of Nepal

The first legal policy, civil code legalized caste hierarchy and caste based occupation in the history of Nepal (Kafle, 2021; Boker, 1988; Lama et al., 2019; Upreti, 2010 & Ghimire, n.d.). But, the constitution of the kingdom of Nepal (1959) and the constitution of Nepal (1990) eliminated all type of discrimination based on caste, race, religion. They were liberal to preserve and promote culture, art, local technology, cultural civilization and heritage of Dalits, indigenous ethnic groups, Madhesi, and other ethnicity and modernizing the traditional knowledge, skills and practices.

The Constitution of Nepal (2015) has focused on the right based education and protecting and promoting of the traditional knowledge, skill, practices and local technology of the Dalit, Adivasi Janajati and other backward and local communities and also focused to incorporate with new technology by providing necessary skill and resources. Furthermore, there is special provision for Dalits to pursue higher education in technical and professional subjects. On the other, it has secured the opportunity for conducting studies, research, archaeological excavations and dissemination, protecting and promoting traditional medicinal system such as the Ayurveda, natural medicines and homeopathy (pp., 11-23)

IK in Educational Act and other policies

Education act 1971 and regulation 2002 has endorsed to provide various life skill and income generation program to the adults through non-formal and literacy class and community learning centers. Likewise, free education to the Dalit, oppressed, indigenous and disadvantage groups. The national education policy 2019 (MOEST, 2019) has focused on the conservation and promotion of traditional knowledge, skill and also link with modern technology for national development. Likewise, it has also targeted to ensure the eastern philosophy, culture and tradition like natural Aurveda, medicine, art, music, dance, song and drawing in the present curriculum. To provide the subsidy and loan for the technical and vocational education to the backward community has recommended.

Technical and Vocational Education and Training Policy (2012) has focused for promoting the backward communities' previous knowledge and skill, financial support and also prepare curricula composing with occupational skill. Inclusive Education Policy (2017) has focused in need-based, life skill, employment and lifelong based education (Acharya & Sigdel, 2023). Non-formal education policy (2007) has ensured the occupational and vocational courses including skill training programs to be considered as non-credit courses in order to increase access to education

for socially, economically and educationally disadvantaged or marginalized community and has also focused in literacy skills and income generation program. National Curriculum Framework (NCF, 2019) has focused on value-driven education consisting life skills, employment and competency-based curriculum. Likewise, it incorporates local content, art, culture, indigenous subjects and technical streams in secondary education to address the diversified communities' demand and need. Likewise, National Education Policy (2019) has purposed to prepare competitive, productive and technical manpower by accommodated with the traditional and modern technology. This policy has focused to eastern knowledge, philosophy, civilization and culture by which it assumed that it helps to promote and conservation of traditional knowledge, skill and technology.

As the constitution and other educational policies, are addressing the traditional knowledge, skill, art and culture, the education act and regulation seem silent to address these knowledge and skill clearly. All reviewed policies are touched the indigenous knowledge and practice of the backward, marginalized and local communities as a policy framework but could not specify them that what and how policies may be applicable for how? And how can be implemented? How to localize these types of indigenous or cultural knowledge? How to adjust the indigenous and cultural knowledge of Dalit and other every ethnic groups in the curriculum? Therefore, the main weakness of every policy is, not to be addressing the program as implementing process. The other permanent problem in Nepalese context is that every policies are prepared for only popularity maintain or to endorse the hidden interest of the development partners and not to be target groups. The traditional and cultural knowledge often transmitted orally and through hands-on practice (Shee, n.d.) that reflects ethno scientific knowledge and skills of the local communities that playing a critical role in sustaining livelihoods. The problem is that on the one hand the indigenous knowledge oriented policies cannot formulate academically for promoting and implementing the marginalized Dalit communities and on the other hand, the traditional knowledge and skill cannot modify, transfer and compete with the new innovative technology. Their traditional occupation could not fulfill their daily needs and/or hand to mouth problem, as a result, they compelled to avoid. At present, traditional knowledge has been facing significant threats. Thus, it is necessary to address in the educational policies and curriculum to implement it successfully.

Conclusion

Traditional knowledge is the vast repository of skills, wisdom, and practices developed by marginalized Dalit communities since over generations that reflect their real culture, tradition, ethno knowledge, skill and innovation. Such practicing knowledge of the Dalit community is supposed as a community identity and sustaining livelihoods but the modern technology and modernization challenges their indigenous and cultural knowledge. Consequently, the preservation of traditional knowledge has become an urgent and vital endeavor, not only to safeguard cultural diversity but also to harness the invaluable insights and sustainability practices (Shee, n.d.). From the review of policies, I found indigenous knowledge and cultural related issues are addressed in the constitution of Nepal, fifth year plan, education commission report and other education related policies addressing backward, marginalized, oppressed, rural and poor communities. In few case I found that the indigenous and cultural knowledge of Dalit, Madheshi, Adibashi Janajati and

minority ethnic groups should be conserved and promoted by addressing in formal and informal education system. However, these are not more specific and sufficient to preserve and promote the indigenous knowledge of marginalized disadvantage groups like Dalit and these are seemed being only for popularity or even to endorse the hidden interest of the development partners. Unfortunately, in the context of Nepal, every policies are limited in the formal documents for mass popularity and donorfare. Thus, there is problem of specific program, curriculum and pedagogical practices in school and higher level education. The other problem is the implementation of local curriculum to conserve, protect and promote of every ethnic groups knowledge, skill, practices, culture, identity and daily way of life. Thus, the implementation practice seems very weak. There is necessary to promote the Dalit communities' traditional and cultural knowledge, skill, art and practices that had been a milestone for their livelihood.

Implication

This study will help to explore and analyze indigenous knowledge and skill responsive policies for addressing the Dalit communities. It will motivate the further researcher and academia to identify the indigenous knowledge, cultural knowledge, art and skills of Dalit communities and its importance of preserving. This will support to researcher itself, to dig out the indigenous knowledge and practice, and such knowledge is integrating or not in our education policies. It will also for policy maker to integrating the local and cultural knowledge into present education policy and formal curriculum. It will also help the fulfill the research gap. It will contribute to the broader discourse on decolonizing education system by challenging dominant education policies, curriculum and pedagogical practices and advocating for culturally responsive policies.

Acknowledgments

I extend my sincere gratitude to my respected professors for valuable feedbacks and suggestions and acknowledge the invaluable support and collaboration of our colleagues throughout this research endeavor. I would like heartily thank to the Tikapur Multiple Campus who provide me this opportunity.

Conflict of Interest

I hereby declare that there are no conflicts of interest associated with this study. The research was conducted independently, ensuring the objectivity and integrity of the findings. Data will be made available upon reasonable request.

Funding

No external funding was received for conducting or publishing this study

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