

Determinants of Youth Unemployment in Nepal

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Abstract

Both developed and developing countries are facing youth unemployed problems. The main objective of the study is to identify the determinants of youth unemployment in Nepal, using secondary data. For empirical analysis, the study uses multivariate Logit regression model to identify the determinants of youth unemployment. The logistic model shows that the sample variables like time spend in farm, ever-married, communication, completed school year, training have positive relationship with probability of being youth unemployed whereas urban, house ownership, male, household size, Koshi Pradesh, Bagmati Pradesh, Gandaki Pradesh, Lumbini Pradesh, Karnali Pradesh and Sudurpaschim Pradesh have negative relationship with probability of being youth unemployed. The sample variables like as time spend in farm, completed school year, Koshi Pradesh, Bagmati Pradesh, Gandaki Pradesh, Lumbini Pradesh, Karnali Pradesh and Sudurpaschim Pradesh are significant at 1 percent level and other explanatory variable like urban, ever-married, house ownership, communication, male, training, household size are not significant but they are important determinants of youth unemployment. This study suggests that more investment on education, improve agriculture sector, emphasis on regional balance and consider the determinant factors.

Key words: Youth, unemployment, Logit, human capital, Nepal

Introduction

Youths are the most important resources for the economic development of any country. By the proper utilization of energetic youth labour force, a country can have to boost its social and economic development. Youths are not only a productive agent of goods and services but they play the role in country's purchasing power, which may be the fuel for economic growth (Imran et al., 2015). The available youth labour force and their utilization are the pillars of the economic development. Despite these importance, youths have been faced the problem of

unemployment. The societies and state are unable to provide the necessary jobs for the youth people. Youth unemployment is a condition of which the economy being unable to provide employment for those aged (15-24) year who want to work, actively search work and currently available to work. It is the part of unemployed aged (15-24) year to the total labour force at the same age group.

Youth unemployment means underutilization of youth human capital. It inversely effects the development of a country. Omitogan and Longe (2017) explained the social and economic consequences of youth unemployment are increase in crime rate, loss of respect, decreases in purchasing power, psychological effects and corruption. Ewubare and Ushie (2018) emphasized on the socio-economic effect on (of) youth unemployment are fall in national output , Increase in rural-urban migration, wastage of human resources, high rate of dependencies ratio, poverty, depression, immoral acts and criminal behaviour.

Youth unemployment problems are facing both development and developing countries. In global perspective, around 497 million youth population are in the labour force. According to ILO (2020), 429 million youth labour force were employed, 68 million were looking for and available for work (unemployed) and 776 million were outside the labour force in 2019. The total youth unemployed rate was 13.6 percent of them, 14 percent was male youth unemployment rate and 13.0 percent was female youth employment rate. Total youth employment to population ratio was 35.6 percent of which male was 42.2 percent and female was 28.5 percent. The total youth labour force participation rate was 41.2 percent of which male was 49.1 percent and female was 32.8 percent.

In national perspective total youth population were 5654 thousand. According the Nepal Labour Force Survey (2017/18), total youth employed were 1273 thousand, Total youth unemployed were 346 thousand and nearly 4035 thousand were outside of labour force (outside the labour force). Youth labour force participation labour force participation rate was 28.6 percent of which male was 30.4^p and female was 20.3 percent. Youth unemployment rate was 21.4 percent of which 20 percent was male and 23.9 percent was female. The employment to population ratio was 18 percent of which male was 17.8 percent and female was 18.3 percent.

The government of Nepal has been implemented various plan, policies and programs for youth employment. The government introduced Labour act 1992, Labour policy 1999, National labour and employment policy 2005, new labour act 2017, National employment policy 2015. Similarly, the government has also implemented various youth oriented employment programs like youth self- employment programs, youth and small entrepreneur self-employment programs, skill development training programs and so on. However, policy implementation falls short. There has been little change in government commitment and action. The formal employment cannot be increased. Youth labour force participation rate was 38.9 percent of which, male 38.9 percent and females was 20.3 percent. About 33.5 percent of the employed

youths were in vulnerable employment. Youth unemployment remains 21.4 percent. In this perspective, the main objective of the study was to identify the determinants of youth unemployment in Nepal by applying econometrics tools. It provides an important knowledge which may be useful for the further researcher, students, Individuals, planners and policy makers.

The remaining parts of this paper organize as follows-Literature review, data and research methodology, Conclusion and limitations of the study.

Literature Review

Conceptual Review

Youth unemployment is an important policy issue for many countries at all stages of development. But, national variations in age definitions do occur. ILO (2013) defined a youth as a person of age 15 to 24 years. TLFS (2014) defined a youth as a person of age 15 to 35 years. BFLS (2018) defined age of youth as 15-24 and 15-29 years. The age of youth was also defined as 18-25 years by the department of youth, Bangladesh. ZLFS (2020) defined a youth is any person 15-35 years of age in the Zambian context. The Nepal Labour Force Survey followed the definition of ILO (2013). Youth unemployment is the percentage of the unemployed population in the age group 15-24 to the Labour Force in the same age group.

Theoretical Review

Classical Theory of Unemployment

The classical theory of unemployment was developed by classical economist like Adam Smith, J.S. Mill, David Ricardo and so on. According to this theory, unemployment is the result of rigidity wage rate and interference in the working of free market in the form of wage legislation and trade unionism. The classical economists believed that unemployment is a temporary phenomenon. When there is unemployment, wage rate decreases. The decreased wage rate makes employment more profitable. It leads to increasing demand for labour and unemployment disappear in the long run. In such a way, unemployment is the reward of wage rigidity.

Keynesian Theory of Unemployment

This theory of unemployment developed by J.M. Keynes. According to this theory, unemployment occurs due to the lack of aggregate demand or demand deficiencies in an economy. When demand for goods falls, production decreases but wage remains constant and unemployment appears in an economy. Unemployment is the function of low income. According to Keynes, effective demand is determined aggregate demand and supply function. The supply function depend on technology but remains constant in short run. Therefore unemployment depend on aggregate demand.

Maxian Theory of Unemployment

This theory of unemployment was developed by Karl Marx. This theory assumed that unemployment is a result of the capitalist system. In the capitalist society, the factors of production is owned by small group of people who called capitalist. Those who sell their labour to capitalists are called workers. Worker is the main source of production of goods and services. In the competitive market, capitalist tries to cheapen their products by substituting labour saving mechanism, which also increase the labour productivity. This process of substituting labour by machine creates an industrial reserve army (unemployed) and downward pressure on wages. In such a way, capitalist system is the cause of unemployment.

Human Capital Theory of Unemployment

The human capital theory was developed by Gary Becker. Becker argued that investment in human capital leads to economic productivity. Human capital refers to skills, knowledge, abilities and experiences received by an individual which are essential to economic production. Human capital can be created through formal education or informal experiences. The human capital theory makes distinction between different forms of human capital. It also suggests that to gain the knowledge about determinants of youth unemployment, the study should examined these factors which affect the development of human capital among youth. These factors may be individual characteristics, household characteristics and socio-economic factors.

Empirical Review

Todaro (1998) explained the four unique nature of employment problem in developing countries like educated unemployed, self-employed, women and employment and youth unemployment and child labour. The most specific dimension of the unemployment problem in developing countries is prevalence among people between the ages of 15 and 24 years. Youth unemployment affects both educated and uneducated, women as well as men.

Hubbard and O'Brien (2017) explained the measuring procedures of unemployment rate, Labour force participation rate, employment to population ratio, frictional unemployment, cyclical unemployment, and various determinants affecting the unemployment like government policies, unemployment insurance payment, minimum wage, Labour unions and efficiency of wages.

Duguma and Tolcha (2019) explored the determinants of youth unemployment in Guder town of Ethiopia. The main objective of the study is to identify the determinants of urban youth unemployment. The selected variables for the study were employment status, sex, marital status, Educational level, access to credit, access to market information, skill match and family prosperity level. The paper used primary cross sectional data. The logistic regression model was employed for empirical data analysis. The finding result showed that sex, educational level, marital status, skill match and access to credit are the significant determinants of youth unemployment.

Alwadi, Kreshan and Selim (2020) analysed the determinants of youth unemployment. The main objective of the study is to analyse the determinants of youth unemployment in Jordan, using secondary data. The data was collected from Jordan labour market panel survey, conducted by the department of statistics in 2016. For empirical analysis, the study used multinomial logistic regression model and the selected variables were sex, educational level, regions, marital status, father's education, etc. The findings result shows that youth unemployment is affected by gender, educational level, geographical location and marital status.

Egessa, Nnyanzi and Muwanga (2021) analysed the factors that leads to persistent youth unemployment in Uganda. The main objective of the study is to analyse the factors that leads to youth unemployment in Uganda, using secondary data. The secondary data was obtained from the Uganda National Household Survey 2016/17, collected by the Uganda National Bureau of statistics. The selected variables for the study were region, residence, marital status, age of youth, health status, sex and educational level. For the empirical analysis, the study used binary logistic regression model. The findings result showed that education, gender, residence and age are responsible for youth unemployment.

Deme, Feye and Dejene (2023) examined the determinants of youth unemployment. The main objective of the study was to examine the determinants of youth unemployment in Gedo town of Ethiopiaby using primary and secondary data. The study used logistic regression model for quantitative data analysis and narrative analysis for qualitative data analysis. The selected variables for the study were sex, age, marital status, migration, educational level, social network, family size, work place, access to job information, participate in training, practice of saving and interest to join job. The logistic model showed that sex and educational level have positive impact and other variables like migration, family size, workplace, training, information and saving habit have negative impact on youth unemployment and they are significant.

Research Gap

Nepal has a various types of socio-economic and demographic features. Very few researches have been done on the determinants of youth unemployment in Nepal. Therefore, may be useful for the policy maker to revise the existing policy related to youth unemployment. The previous studies have use various methods like binary logit regression model, probit regression model, ordinary least square method, multinomial logistic model to analyse the determinants of youth unemployment. So, there is a new scope for new research using appropriate methods adding more explanatory variables. The most of the previous studies were related at international level, at different time period, in different climate and different economic environment. But, this study only concern with Nepalese economy where youth unemployment is one of the key challenge faced by the economy.

Methodology

Research Design

This study is based on the descriptive, quantitative and quantitative research design, conducted with the secondary data collected from the central bureau of statistics. The data is extracted from NLFS 2017/18, the latest national representative labour force survey including youth unemployment in Nepal. The philosophical paradigm of this study is functionalist, the ontological position of the researcher is objectivism and the epistemological position is positivism. Similarly, the axiological position of the researcher is value free as possible.

Sources of Data

The main data source for the study is the Nepal Labour Force Survey 2017/18. The Labour Force Survey data has collected by the central bureau of statistics. This survey provides statistics on labour force employment, unemployment, underemployment, outside the labour force, youth unemployment and so on. This is the national representative survey data. Involved a sample of 18000 households from 900 PSU's distributed across all the 77 districts. This survey included 168 questions in fourteen sections.

Specification of Model

In this study, we employed the logistic regression model. Youth unemployed is binary nature. It takes value =1 if an individual is youth unemployed and value =0 if an individual is youth employed. The logit regression model is desired for binary or latent dependent variables. The logit model with multiple independent variables is

$$\frac{P_i}{1-P_i} = \beta_1 + \beta_2 X_{i1} + \beta_3 X_{i2} + \beta_4 X_{i3} + \dots + \beta_n X_{in} + \sum_i \dots \dots \dots (i)$$

Where,

$$\frac{P_i}{1-P_i} = \text{Status of youth unemployed in probability function}$$

P_i = Prob. of youth unemployed

$1-P_i$ = Prob. of youth employed

X_i = Explanatory/ Independent variables

β_i = Parameters

Now,

$$\frac{P_i}{1-P_i} = \beta_1 + \beta_2 \text{ time spend Infarmi} + \beta_3 \text{ urbani} + \beta_4 \text{ ever - marriedi} + \beta_5 \text{ house ownershipi} + \beta_6 \text{ communicationi} + \beta_7 \text{ malei} + \beta_8 \text{ completed school yeari} +$$

β_9 trainingi + β_{10} household sizei + β_{11} Koshi Pradeshi + β_{12} madesh Pradeshi + β_{13} bagmati Pradeshi + β_{14} gandaki Pradeshi + β_{15} lumbini Pradeshi + β_{16} karnali Pradeshi + β_{17} sudurpaschim Pradeshi + $\sum_i \dots (ii)$

Description of variable

Logistic regression model is used to examine the determinants of youth unemployed in the study area. The dependent variable for logistic model is the youth unemployment. The youth unemployed is a binary variable if it takes 1 youth unemployed and 0 youth employed. The demographic, household and socio-economic variables like spend time in firm, urban, ever-married, house ownership, communication, male, completed school year, training, household size, Koshi Pradesh, Bagmati Pradesh, Gandaki Pradesh, Lumbini Pradesh, Karnali Pradesh and Sudurpaschim Pradesh are explanatory variables.

Table 1: *Definitions of Explanatory Variables*

S.N.	Variable Name	Variable Type	Variable Description	Expected Signs
1	Dependent Variable Youth Unemployed	Binary	If 1 for unemployed and 0 employed	
2	Explanatory variables			
3	Time Spend in Farm	Continuous		+
4	Urban	Dummy	Urban = 1 0 = Rural	-/+
5	Ever-married	Dummy	Even-married = 1 0 = Never-married	-/+
6	House Ownership	Dummy	Yes = 1 0 = No	+/-
7	Communication	Dummy	Yes = 1 0 = No	-/+
8	Male	Dummy	Male = 1 0 = Female	-/+
9	Completed School Year	Continuous		
10	Training	Dummy	Received = 1 0 = Otherwise	-/+
11	Household Size	Continuous		
12	Koshi Pradesh	Dummy	Koshi = 1 0 = Otherwise	-
13	Madhesh Pradesh	Being reference category		
14	Bagmati Pradesh	Dummy	Bagmati = 1 0 = Otherwise	-
15	Gandaki Pradesh	Dummy	Gandaki = 1 0 = Otherwise	-

16	Lumbini Pradesh	Dummy	Lumbini = 18c 0 = Otherwise	-
17	Karnali Pradesh	Dummy	Karnali = 18c 0 = Otherwise	-
18	Sudurpaschim	Dummy	Sudurpaschim=18c0=Othe rwise	-

Source: Author's Hypothesis 2024

Test Statistics

The ordinary least square method is based on various assumptions for good estimators. When these assumptions are violated, it provides multicollinearity, heteroscedasticity and autocorrelation respectively. The variance inflation factor, Breush-pagan godfrey test and Jarque- Bera test are performed for the detection of multicollinearity, heteroscedasticity and normality respectively. Similarly, Goodness of fit and link test are performed for model specification.

Summary statistics of the variable

Table 2 Provides summary statistics of the variables used in the logistic regression model. The average sample youth unemployed is 20.5 percent. The average hours spend in agriculture farm by youth unemployed is 10.5. The average urban youth unemployed are 64.9 percent. Approximately 37.4 percent sample youth unemployed are married. Around 1.13 average youth unemployed have own their house and 94.7 percent youth unemployed have communication facilities. The average male in the sample is 59.9 percent. The average completed school year of the youth unemployed is 8.59 and only 15.5 percent youth unemployed have technical and vocational training. The average household size of the sample youth unemployed is 5. Similarly, the sample of youth unemployed is taken from Koshi Pradesh, Bagmati Pradesh, Gandaki Pradesh, Lumbini Pradesh, Karnali Pradesh and Sudurpaschim Pradesh are 18.3 percent, 20 percent, 10.5 percent, 17.6 percent, 8.5 percent and 10.9 percent respectively. Madesh Pradesh is the reference category.

Table 2: Summary Statistics of the Variables

Variables	Mean	Std. Deviation	Min.	Max.
Youth unemployed	20.5	.404	0	1
Time spend in farm	10.5	24.2	0	270
Urban	64.9	.477	0	1
Ever-married	37.4	.484	0	1
House ownership	1.13	.389	0	3
Communication	94.7	.224	0	1
Male	59.9	.490	0	1
Completed school year	8.59	3.60	0	15

Training	15.5	.362	0	1
Household size	5.37	2.68	1	27
Koshi Pradesh	18.3	.387	0	1
Madesh Pradesh	Being reference category	-	-	-
Bagmati Pradesh	20.0	.400	0	1
Gandaki Pradesh	10.5	.306	0	1
Lumbini Pradesh	17.6	.381	0	1
Karnali Pradesh	8.5	.279	0	1
Sudurpaschim	10.9	.312	0	1
No. of employed	2701			
No. of unemployed	697			
Total observation	3398			

(Source: Author's Calculation Using STATA)

Table 3 Show the result of logistic regression model. The logit co-efficient indicates the relationship between dependent variable and independent variables. According to table, the sample variables like time spend in farm, ever-married, communication, completed school year, training have positive relationship with youth unemployment whereas other sample variable like as urban, household ownership, male, household size, Koshi Pradesh, Gandaki Pradesh, Bagmati Pradesh, Lumbini Pradesh, Karnali Pradesh and Sudurpaschim Pradesh have negative relationship with youth unemployment. Similarly, time spend in farm, completed school year, Koshi Pradesh, Bagmati Pradesh, Gandaki Pradesh, Limbini Pradesh, Karnali Pradesh and Sudurpaschim Pradesh are significantly related (which) with youth unemployment but variables are insignificantly related with youth unemployment. The value of prob>chiz=0.0000(value) shows the model is significance.

Table 3: Logit Co-efficient of the Determinants of Youth Unemployment

Youth unemployed	Co-efficient	Standard deviation	Z	P>Z	(95% Confidence Interval)	
Time spend in farm	0.014	0.002	8.35	0.000	0.011	0.017
Urban	-0.110	0.095	-1.15	0.249	-0.297	0.077
Ever-married	0.041	0.094	0.44	0.659	-0.143	0.226
House ownership	-0.108	0.132	-0.82	0.413	-0.367	0.151
Communication	0.282	0.243	1.16	0.246	-0.194	0.758
Male	-0.010	0.091	-0.11	0.911	-0.189	0.168
Completed school year	0.115	0.014	7.95	0.000	0.087	0.144
Training	0.004	0.121	0.04	0.970	-0.233	0.242
Household size	-0.024	0.017	-1.4	0.163	-0.058	0.010
Koshi Pradesh	-1.120	0.153	-7.3	0.000	-1.420	-0.819

Madhesh Pradesh	-	-	-	-	-	-
Bagmati Pradesh	-1.445	0.164	-8.81	0.000	-1.766	-1.123
Gandaki Pradesh	-0.889	0.172	-5.17	0.000	-1.226	-0.552
Lumbini Pradesh	-1.099	0.153	-7.18	0.000	-1.398	-0.799
Karnali Pradesh	-1.366	0.199	-6.86	0.000	-1.757	-0.976
Sudurpaschim Pradesh	-1.193	0.174	-6.84	0.000	-1.534	-0.851
Cons	-1.521	0.328	-4.64	0.000	-2.163	-0.879
Log Likelihood	-1615.7846					
Prob>Chi2	0.0000					
Pseudo R2	0.0629					
No. of obs.	3398					

(Source: Author's Calculations Using STATA)

Odds ratio of the determinants of youth unemployment Table 4 provides the information of odds ratio co-efficient of the determinants of youth unemployment. The table shows that time spend in firm (Farm), ever-married, communication, completed school year, training have odds ratio greater than one. It shows that (that) the probability of that explanatory variables will have the greater chance of being unemployed in comparison to the reference category. Similarly, the explanatory variables like urban, house ownership, male, household size, Koshi Pradesh, Bagmati Pradesh, Gandaki Pradesh, Lumbini Pradesh, Karnali Pradesh and Sudurpaschim Pradesh have odds ratio less than one. It reflects that the probability of those explanatory variables will have the lesser chance of being youth unemployed.

Table 4: Odds Ratio of the Determinants of Youth Unemployed

Unemployed	Odd ratio	Standard deviation	Z	P> Z	(95% Confidence Interval)	
Time spend in farm	1.014	0.002	8.35	0.000	1.011	1.017
Urban	0.896	0.085	-1.15	0.249	0.743	1.080
Ever-married	1.042	0.098	0.44	0.659	0.867	1.253
House ownership	0.898	0.119	-0.82	0.413	0.693	1.163
Communication	1.326	0.322	1.16	0.246	0.823	2.134
Male	0.990	0.090	-0.11	0.911	0.828	1.183
Completed school year	1.122	0.016	7.95	0.000	1.091	1.154
Training	1.004	0.122	0.04	0.970	0.792	1.274
Household size	0.976	0.017	-1.4	0.163	0.944	1.010
Koshi Pradesh	0.326	0.050	-7.3	0.000	0.242	0.441
Madhesh Pradesh	-	-	-	-	-	-
Bagmati Pradesh	0.236	0.039	-8.81	0.000	0.171	0.325
Gandaki Pradesh	0.411	0.071	-5.17	0.000	0.294	0.576

Lumbini Pradesh	0.333	0.051	-7.18	0.000	0.247	0.450
Karnali Pradesh	0.255	0.051	-6.86	0.000	0.173	0.377
Sudurpaschim Pradesh	0.303	0.053	-6.84	0.000	0.216	0.427
Cons.	0.218	0.072	-4.64	0.000	0.115	0.415
Log Likelihood	-1615.7846					
Prob>Chi2	0.0000					
Pseudo R2	0.0629					
No. of observation	3398					

(Source: Author's Calculations Using STATA)

Marginal Effect of the Estimated Co-efficient

Table 5 shows the percentage change in dependent variable due to the one unit change in independent variables and significance level. In table, when one percent changes in time spent in farm, the probability of being youth unemployed increases by 0.002 percent as compared to the reference category. Similarly, When one percent or one unit change in urban, house ownership, male, household size, Koshi Pradesh, Bagmati Pradesh, Gandaki Pradesh, Lumbini Pradesh, Karnali Pradesh and Sudurpaschim Pradesh the probability of being youth unemployed decreases by 0.017, 0.017, 0.002, 0.004, 0.137, 0.168, 0.108, 0.134, 0.144 and 0.135 respectively. In such away, when one unit change in ever-married, communication, completed school year, training, the probability of being youth unemployed increases by 0.006, 0.040, 0.018, 0.001, respectively with respect to reference category. The explanatory variables like as time spend in farm, completed school year, Koshi Pradesh, Bagmati Pradesh, Gandaki Pradesh, Lumbini Pradesh, Karnali Pradesh and Sudurpaschim Pradesh are significant at 1% level but other explanatory variables are not significant.

Table 5: Marginal Effect of the Estimated Coefficient

Variables	dy/dx	Standard Error	Z	P> Z	(95% Confidence Interval)		X
Time spend in farm	0.002***	0.000	8.35	0.000	0.002	0.003	10.481
Urban *	-0.017	0.015	-1.14	0.254	-0.046	0.012	0.649
Ever-married*	0.006	0.015	0.44	0.660	-0.022	0.035	0.374
House ownership*	-0.017	0.020	-0.82	0.413	-0.056	0.023	1.128
Communication*	0.040	0.031	1.27	0.206	-0.022	0.101	0.947
Male*	-0.002	0.014	-0.11	0.911	-0.029	0.026	0.599
Completed school year	0.018***	0.002	8.12	0.000	0.013	0.022	8.588
Training*	0.001	0.019	0.04	0.971	-0.036	0.037	0.155
Household size	-0.004	0.003	-1.40	0.163	-0.009	0.001	5.367
Koshi Pradesh *	-0.137***	0.015	-9.36	0.000	-0.165	-0.108	0.183
Madesh Pradesh	Being	reference	Category	-	-	-	-

Bagmati Pradesh*	-0.168***	0.014	-11.83	0.000	-0.196	-0.141	0.200
Gandaki Pradesh*	-0.108***	0.016	-6.70	0.000	-0.140	-0.077	0.105
Lumbini Pradesh*	-0.134***	0.015	-9.22	0.000	-0.162	-0.105	0.176
Karnali Pradesh*	-0.144***	0.014	-10.61	0.000	-0.171	-0.118	0.085
Sudurpaschim*	-0.135***	0.014	-9.66	0.000	-0.162	-0.108	0.109

***, **, * denote that significance is established at 1% level, 5% level and 10% level respectively. (*) dy/dx is for discrete change of dummy variable from 0 to 1

(Source: Calculated from NLFS data (2017/18))

The goodness of fit test are performed to test the model specification.

Goodness of Fit Test

Number of observation = 3398

Number of covariance patterns = 2894

Pearson chi2 (2878) = 2846.39

Pro>chi2 = 0.6589>0.05, this model is correct.

Normality Test:

The Jarque-Bera test is performed to test the normality

Jarque-Bera normality test: 2.0_e +0.4 Chi (2)

Jarque-Bera test for H₀: normality: (resid)

Multicollinearity Test

The variance inflation factor (VIF) test is performed to test the multicollinearity.

Table 6: Variance Inflation Factors

Variables	VIF	1/VIF
Bagmati Pradesh	2.29	0.436
Koshi Pradesh	2.01	0.496
Lumbini Pradesh	1.97	0.508
Gandaki Pradesh	1.72	0.580
Sudurpaschim	1.67	0.597
Karnali Pradesh	1.58	0.634
Completed school year	1.23	0.815
House ownership	1.16	0.861
Urban	1.08	0.926
Ever-married	1.07	0.931
Household size	1.07	0.935
Time spent in farm	1.07	0.939
Communication	1.06	0.941
Male	1.05	0.951
Training	1.05	0.953
Mean VIF	1.41	

Heteroscedasticity Test

The Breusch-pagan/cook-weisberg test for heteroscedasticity is used.

H_0 : Constant variance

Variables: Fitted values of youth unemployed

Chi2 (1) = 200.24

Prob>Chi2 = 0.0000<0.05 the model is incorrect. To address the heteroscedasticity, robust the model,

Table 7: Robust Standard Error Estimator

Youth unemployed	Co-efficient	Standard Error	Z	P>Z	(95% Confidence Interval)	
Time spend in farm	0.014	0.002	8.2	0.000	0.011	0.017
Urban	-0.110	0.094	-1.16	0.244	-0.295	0.075
Ever-married	0.041	0.093	0.44	0.657	-0.142	0.225
House ownership	-0.108	0.119	-0.91	0.363	-0.341	0.125
Communication	0.282	0.246	1.15	0.251	-0.200	0.763
Male	-0.010	0.093	-0.11	0.912	-0.192	0.171
Completed school year	0.115	0.015	7.48	0.000	0.085	0.145
Training	0.004	0.120	0.04	0.970	-0.231	0.240
Household size	-0.024	0.016	-1.48	0.139	-0.056	0.008
Koshi Pradesh	-1.120	0.153	-7.3	0.000	-1.421	-0.819
Madhesh Pradesh	Being	reference	Category	-	-	-
Bagmati Pradesh	-1.445	0.160	-9.04	0.000	-1.758	-1.131
Gandaki Pradesh	-0.889	0.172	-5.17	0.000	-1.226	-0.552
Lumbini Pradesh	-1.099	0.152	-7.23	0.000	-1.396	-0.801
Karnali Pradesh	-1.366	0.202	-6.76	0.000	-1.762	-0.970
Sudurpaschim Pradesh	-1.193	0.171	-6.96	0.000	-1.528	-0.857
Cons	-1.521	0.314	-4.85	0.000	-2.136	-0.907
Log Likelihood	-1615.7846					
Wald chi2(15)	201.77					
Prob>Chi2	0.0000					
Pseudo R2	0.0629					
No. of obs.	3398					

(Source: Author's Calculation Using STATA)

Conclusion

The main objective of the study is to analyse the determinants of youth unemployment for the age group (15-24) years old in Nepal. The study used cross sectional data. It was collected

by central Bureau of statistics. This study included summary statistics, Logistic regression model, odds ratio, marginal effect analysis, goodness of fit, normality test, multicollinearity test and heteroscedasticity test. The theoretical background of this paper is human capital theory of unemployment.

The logistic regression model shows that overall model is significance and all the logistic regression co-efficient of explanatory variables are not zeros. It also shows that the samples variables like time spend in farm, completed school year, Koshi Pradesh, Bagmati Pradesh, Gandaki Pradesh, Lumbini Pradesh, Karnali Pradesh and Sudurpaschim Pradesh are the major determinants of youth unemployment.

The study concluded that probability of youth unemployment is found to increase with time spend in farm. It implies that longer time spend in traditional farming is one of the cause of youth unemployment. The coefficient of completed school year is found to have positive and significant relationship with probability of unemployment among youth. This shows that probability of youth unemployment increases with increase in completed school year. Workers with higher human capital level, may become conscious and like to wait until they get suitable jobs or decent jobs. Similarly, the coefficients of Koshi Pradesh, Bagmati Pradesh, Gandaki Pradesh, Lumbini Pradesh, Karnali Pradesh and Sudurpaschim Pradesh show that negative relationship with probability of being youth unemployment with respect to the Madhesh Pradesh reference category. It implies that regional disparity in human investment is another cause of youth unemployment. This study suggests that more investment on productive education for decent jobs, improvement in agriculture sector, reduce regional disparity in human capital, and consider the other determinant factors.

Limitation of the Study

This study is emphasized on supply side of labour for the determinants of unemployment. It ignores the demand side of labour. It may be the new research on demand side determinant of youth unemployment. The study is based on cross sectional data, so it does not address the time and space. Similarly, due to the time and resource, it includes Nepalese economy only.

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