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Determinants of Poverty in Informal Economy of Nepal: Evidence form the FGT Poverty Index

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Abstract

Background: Even though poverty has decreased in recent years, it is still challenging in Nepal, the rate of decrease is slower. Informal labor accounts for the bulk of urban livelihoods in the research area, and little is known about their susceptibility to poverty and related risk factors. To fill this gap this study examined the prevalence and major determinants of poverty in urban families at different household income quantiles levels in six metropolises of Nepal.

Methods: The determinants of poverty in the informal economy have been measured using the FGT poverty index. Similarly, the stabilized indicator (obtained by dividing per-capita income by the poverty line) has been used to examine the determinants of poverty. The inflation-adjusted poverty line income based on NLSS (2010/11) has been used as a reference.

Results: The determinants of urban informal household poverty were total family size, education, and working experience of the respondents. The study found that poverty incidence, gap, and severity were significantly higher in Lalitpur Metropolitan City compared to other five

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metropolitan cities during the study period. This study identified age, education, household size and experience as essential variables. Among them, the age of the respondents and household size are potential measures to reduce poverty in the urban informal sector. This empirical enquiry has revealed that household size is negatively related to poverty incidence. In contrast, the age of respondents is found to be positively related to poverty incidence.

Conclusion: The study provides policy suggestions for supporting informal economic activities and employment in Nepal, beneficial to local, provincial, and federal governments, and applicable to other contexts with similar informal economy and poverty.

Novelty: This study investigates at the factors that contribute to poverty in urban informal families. It reveals how substantial an impact poverty levels have on variables like family size, education, and employment experience. Household size and respondents age are important factors that impact the incidence of poverty.

Key Words: Nepal, Poverty determinants, household income, FGT index, Urban
JEL Classification: I32, D31, O18

Background

One of the biggest issues facing developing nations and many economies in transition is poverty (Aryeetey, 2015). Reducing poverty and enhancing household well-being are crucial issues for developing nations' development policies and initiatives (Eyasu, 2020). The Nepali government has been implementing several programs to combat poverty since the early 1970s. According to NLSS-I, II, III, and IV, these strategies contribute to a significant decline in poverty, which was 41.76% in 1995/96, 30.85% in 2003/04, 25.16% in 2010/11, and 20.27% in 2022/23. While poverty has decreased remarkably in general, however, it is still challenging in rural as well as urban Nepal. In this regard, the cash generated by unofficial activities has made a significant contribution to the reduction of poverty. When there are insufficient economic opportunities, informal activities have proven to be a useful tool for economic executions (Agrawal & Dhakal, 2010). Poverty alleviation is a foremost outline for viable development in underdeveloped nations. The outline of poverty alleviation not only comprises income-rising activities but also establishes the most significant prospects in the nation's economic development. Malik (1996) argued that the informal economy generates work for both inexpert and semi-skilled individuals, which plays a significant role in accommodating the poor and reducing poverty.

The informal sector plays a crucial role in poverty reduction by generating income and employment in Nepal (Adhikari, 2018). The total share of informal employment is very high, i.e., 84.6% than formal employment 15.4% in Nepal. The portion of those in informal employment was more significant among females, i.e., 90.5 percent, compared to males 81.1 percent (CBS, 2019). On the other hand, CBS (2008), reported over 11 million workers who are at least 15 years old are employed in the informal sector, making up around 96.2 percent of the workforce overall.

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Policymakers and organizations at the local, regional, and global levels are concerned about the rise in poverty. Urbanization and the expansion of the informal sector, which affects the formal economy in cities both favorably and unfavorably, are important factors (Reddy, 2007). The informal sector significantly contributes to employment generation and poverty reduction. Ignoring the informal sector in development policies also has negative effects on poverty and distribution (Ibale et al., 2024). In addition to its financial advantages, continuing informal work can help reduce poverty and promote social stability (Huang et al., 2020).

There is also a lack of study and research about the informal economy related to determinants of poverty in underdeveloped countries like Nepal. Hence, to fill this gap, the paper focuses on a research question: the extent of the determinants of poverty in urban informal economy. The earthquake in 2015 in Nepal is taken here as a reference time to show the performance of the informal economy that has enabled us to recall previous (the last five-year period) economic activities in this sector. None of the questions has been asked related to the impact/cost of earthquakes on their life.

Methodology

Research Design

The major research approach is quantitative, which is considered more suitable because of the nature of the research framework and the specific requirements of the research. The study is designed as key informant interviews by structured questionnaire are conducted to collect primary data. The chapter concludes with a discussion of the data analysis method based on theoretical foundations and practical issues. This study uses longitudinal informal sector data from 2015/16 to 2019/20, focusing on Nepal's last great earthquake. Recall bias poses a serious risk to the validity and reliability of studies because, according to Bradburn et al. (1987); Hassan (2006), 20% of important details are lost after a year and 50% after five years. Because a shock might revive recollections of past occurrences, it presents special challenges for gathering longitudinal data (Bradburn et al., 1987). So, the great earthquake of 2015 was taken as a reference period. It examines the impact of the earthquake on economic activities and occupations. Nepal's major urban areas (Metropolitan Cities), Kathmandu, Lalitpur, Pokhara, Bharatpur, Birganj, and Biratnagar, have been selected as a study area because job seekers from across the country come for the job over there. Two analytical methods have been developed for the factors that contribute to poverty in Nepal in this research. The basic data analysis and descriptive statistics are the first steps in determining informal poverty status. The second is an empirical examination of multivariate regression models and the informal economy's income determinants of poverty.

Study Area

Nepal has 753 local-level governments, 293 municipalities, and 460 rural municipalities. A study was conducted in all six metropolitan cities; to investigate the informal economy and determinants of poverty in urban areas, as most informal economic activities are found in city areas.

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Figure 1
Map of the Study Area

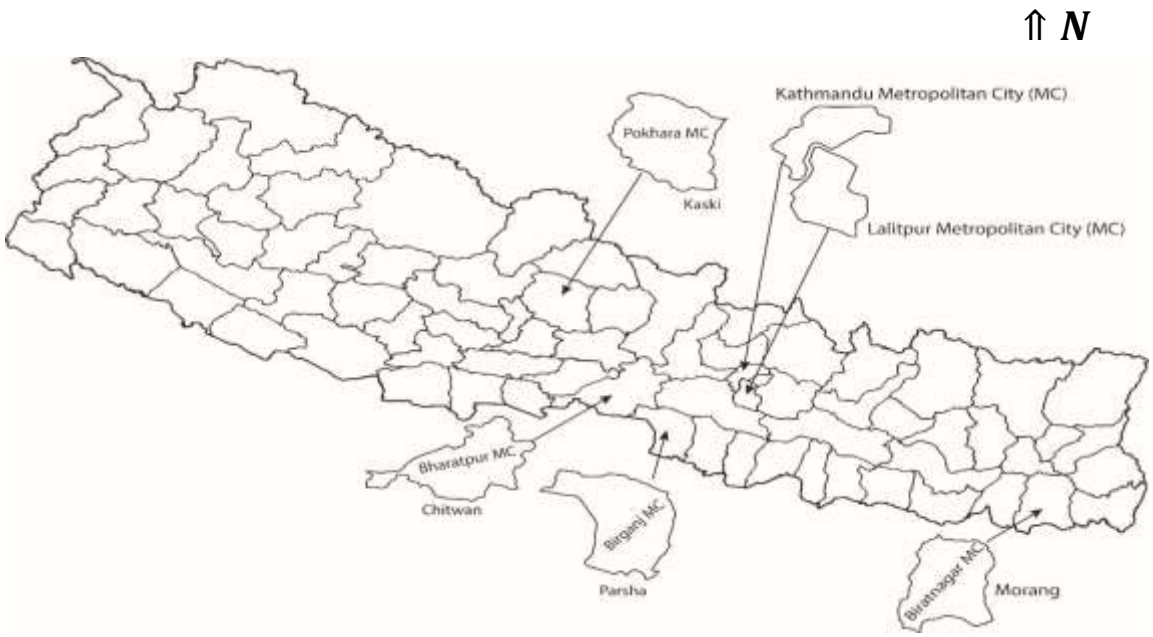

Figure 1: Shows the Map of the Selected Study Area to Know the Determinants of Poverty in the Informal Economy of Nepal.

Sampling Methods and Sample Size

The study used purposive sampling methods to select a sample size for primary data generation. Informal sector activities were clustered in central city areas, with locations randomly selected for interviews. The size of employment was determined through observation and pilot survey, with mobile, semi-mobile and fixed respondents. The study's sample size, 423, was selected for an unidentified population in Nepal's informal sector utilizing the formula $n = Z^2pq/d^2$. Because of the COVID-19 issue in the data collection time, the sample size is suitable for an infinite population with the population parameter 50%, with a margin of error of 5% (Sharma, 2019).

Ethical Issues

Researcher responsibility for maintaining the dignity, privacy, and quality of life of human subjects has been established (Rogers & Ludhra, 2013). This fact was carefully considered when performing the study, and every effort was made to avoid raising unwarranted expectations that the researcher would be unable to meet. The responders were informed that the information they provided would be kept private. The freedom of each individual to refuse to take part in the study or to answer any questions they felt were extremely private was appropriately recognized.

Data Analysis Tool

The STATA software was utilized to analyze the data and display the statistical relationship between the variables. The headcount, poverty gap, and poverty gap square have all been

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determined using FGT poverty indexes. In order to identify the factors that contribute to poverty reduction in the informal economy, the results of the multivariate regression analysis were regressed with the dependent and explanatory variables.

Poverty Function: Determinants of Poverty

The FGT poverty indices are used to measure the impact of an increase in the informal economy on urban poverty, a method widely used in empirical work.

$$\text{Poverty index} = \frac{1}{N}\sum_{i=1}^{n}\left[\frac{P_L - Y_{Pi}}{P_L}\right]^{\lambda} \ldots\ldots\ldots\ldots\ldots\ldots (i)$$

The study uses headcount index, poverty gap ratio, and poverty severity as parameters, adjusting for consumption changes if $\lambda > 0$ and income transference when $\lambda > 1$. Large values of λ highlight the poorest and small values reflect the last poorest.

The multivariate income regression model is developed to fulfill the objective of this study. In multivariate regression, investigators take a collection of two or more dependent variables into account and try to explain the value of two or more response variables (Quick, 2013). The dependent variable is the logarithm of household per-capita income divided by the poverty line. The independent variables extend an extensive range of possible poverty determinants.

Wi is the stabilized indicator obtained by dividing per-capita income by the poverty line. The value of Wi refers to unity, more remarkable than unity and less than unity. This reflects the relationship status of the sampled household by how much the poor are below, equal and above the poverty line.

$$Wi = Yi / Z \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots (ii)$$

Where, Yi is the per-capita household income per year and Z is the poverty line.

A unitary value for Wi implies that the household income is the same as the poverty line. Denoting by Xi the vector of explanatory variables. Then a normal form of regression is,

$$\text{Log } Wi = \beta Xi + e \quad \ldots\ldots\ldots\ldots\ldots\ldots (iii)$$

Where, Wi is a normalizer indicator, Xi is a determinant of urban poverty, β = Parameter of explanatory variables, e = error term.

This paper specified the following model:

$$\text{Ln } Wi = \alpha + \beta_1 \text{ AGE} + \beta_2 \text{ ED} + \beta_3 \text{ HH\_size} + \beta_4 \text{ EXP} + e \quad \ldots\ldots\ldots\ldots..(iv)$$

The given equation indicates that unit change in the independent variable leads to a change dependent variable by percent.

Where, Ln Wi = dependent variable (Normalized indicator: per capita income divided by poverty line), α= Constant term; β_i= Coefficient of independent variables (i=1,2…,4); AGE: Age of respondents, ED: Education, HH_size: Household size, EXP: Year of experience and e: error term.

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Results and Discussion

In this paper, the poverty profile is a descriptive tool that delivers main info on the correlates of urban informal poverty. The incidence of poverty captures different aspects and presents a more comprehensive picture. The study established the OECD poverty line for the absolute poverty measures in the present section. It is possible to outline the poor households and form their non-poor equivalents by drawing the extreme poverty line through the tabulated and transformed data. The poverty incidence is the proportion of the total population below the poverty line, the poverty gap shows the distance between the poverty line and an individual's income and the poverty severity index provides an indication of the degree of inequality among the poor.

Decomposition of Poverty (FGT Indices) by Study Areas

This section observed the profile of urban informal poverty based on the survey data. This study emphasis is on the decomposition of FGT (1984) poverty indices (poverty incidence, poverty depth and severity) in different years (2015/16 - 2019/20) of the study area.

Table 1 shows that the poverty incidence, depth and severity are high in Lalitpur Metropolitan City among the metropolitan cities, as 35 percent of informal households were below the poverty line in 2015/16. This city needs around 9 percent of the Rs. 5,418 to escape poverty, and 3 percent is income inequality. About 2 percent of informal households in the metropolitan cities are below the poverty line in Bharatpur and Birganj. On the other hand, the poverty gap and poverty gap square are very low in Biratnagar, which is 0.01 percent and near zero percent income inequality.

Table 1

Decomposition of Poverty in the Year 2015/16

Study Areas	Poverty Incidence (In percent)	Poverty Depth	Severity of Poverty	Minimum Amount to Eliminate Poverty (Rs.)
Bharatpur	2.08	0.013	0.007	400.50
Biratnagar	2.08	0.001	0.00009	44.31
Birganj	8.33	0.009	0.0021	300.34
Kathmandu	13.33	0.034	0.011	2139.05
Lalitpur	34.57	0.086	0.030	5418.31
Pokhara	4.17	0.023	0.014	694.15

Source: Field Survey, 2020

Table 2

Decomposition of Poverty in the Year 2016/17

Study Areas	Poverty Incidence (In percent)	Poverty Depth	Severity of Poverty	Minimum Amount to Eliminate Poverty (Rs.)
Bharatpur	2.08	0.011	0.006	368.90
Biratnagar	4.17	0.002	0.0002	97.05
Birganj	4.17	0.008	0.002	295.83

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Kathmandu	8.66	0.021	0.007	1363.28
Lalitpur	29.63	0.053	0.018	3465.05
Pokhara	2.08	0.008	0.003	269.25

Source: Field Survey, 2020

Table 2 shows that the poverty incidence, depth and severity of all metropolitan cities in 2016/17 declined as compared to 2015/16, except Biratnagar. The poverty incidence, depth and severity are high in Lalitpur Metropolitan City among the metropolitan cities as 30 percent of informal households are below the poverty line. This city needs around 5 percent of the Rs. 3,465 to escape poverty, and about 2 percent is income inequality. The poverty incidence is low in Bharatpur. Poverty depth and severity of poverty are lower in Biratnagar and Pokhara as compared to other metropolitan cities.

The decomposition of poverty in the year 2017/18 has been explained in table 3. The result reveals the highest incidence of poverty and poverty gap, which is observed in Lalitpur among the others, but the severity of poverty is highest in Biratnagar. There are no households below the poverty line in Bharatpur this year.

Table 3

Decomposition of Poverty in the Year 2017/18

Study Areas	Poverty Incidence (In percent)	Poverty Depth	Severity of Poverty	Minimum Amount to Eliminate Poverty (Rs.)
Bharatpur	0	0	0	0
Biratnagar	4.17	0.008	0.03	288.67
Birganj	4.17	0.010	0.003	354.79
Kathmandu	3.33	0.009	0.003	606.67
Lalitpur	16.05	0.039	0.011	2045.49
Pokhara	2.08	0.0002	0.00003	8.29

Source: Field Survey, 2020

In 2018/19, all the households of four metropolitan cities (Bharatpur, Biratnagar, Birganj and Pokhara) are found above the poverty line, and poverty in the informal sector has been seen in Kathmandu and Lalitpur. The poverty incidence and poverty gap are highest in Lalitpur compared to Kathmandu; however, the severity of poverty is higher in Kathmandu than in Lalitpur.

Table 4

Decomposition of Poverty in the Year 2018/19

Study Areas	Poverty Incidence (In percent)	Poverty Depth	Severity of Poverty	Minimum Amount to Eliminate poverty (Rs.)
Bharatpur	0	0	0	0
Biratnagar	0	0	0	0
Birganj	0	0	0	0

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Kathmandu	3.33	0.004	0.013	299.11
Lalitpur	11.11	0.016	0.003	1141.75
Pokhara	0	0	0	0

Source: Field Survey, 2020

The result of decompositions of poverty in the year 2019/20 in different metropolitan cities is shown in table 5. The result depicts that the incidence of poverty, poverty depth and severity of poverty are worse in Lalitpur Metropolitan City compared to the other five metropolitan cities. 37.04 percent are poor. The poverty gap is 0.112, which indicates 11.2 percent of the Rs. 8463.36 to escape poverty, and 4.7 percent is income inequality. Kathmandu and Birganj cities take in second and third place, where about 25 percent and 10 percent of households are poor, respectively. The incidence of poverty is lowest in Pohkara, but the poverty gap and severity of poverty are lowest in Biratnagar, among other cities.

Table 5

Decomposition of Poverty in the Year 2019/20

Study Areas	Poverty Incidence (In percent)	Poverty Depth	Severity of Poverty	Minimum Amount to Eliminate poverty (Rs.)
Bharatpur	6.25	0.063	0.008	784.51
Biratnagar	8.33	0.006	0.0004	219.07
Birganj	10.42	0.017	0.0042	674.11
Kathmandu	25.33	0.057	0.019	4293.81
Lalitpur	37.04	0.112	0.047	8463.36
Pokhara	2.08	0.012	0.006	432.84

Source: Field Survey, 2020

The poverty trend of the urban informal sector in Lalitpur City has been seen as very high compared to other Metropolitan Cities of Nepal. The high poverty in Lalitpur may be the sample category different from other cities. Other Metropolitan Cities' sample size is dominated by self-employed informal workers, whereas employed informal workers dominate Lalitpur.

Determinants of Poverty: Estimation with Log-Linear Regression

The survey data on 423 households in six metropolitan cities are used to estimate a long-linear model. The model is used in assessing the determinants of informal sector urban poverty that permits inferences about the direction of causality between the independent and explanatory variables. In this study, the dependent variable is taken per-capita yearly income of informal households, and many other variables can be considered as the determinants of income. The dependent variable in our study is the natural log of per-capita yearly income divided by the poverty line. It signifies the level of income of a household precisely at the level of the poverty line.

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Coefficients from the regression analysis define the most important determinants of the incidence of poverty. In this study, the explanatory variable is in natural log form; the projected regression coefficients measure the percentage change in per-capita income of households from a unit change in the explanatory variable.

Model I shows the regression estimates based on 423 urban households in 2015/16. The age of the respondents is an enormously significant and positive sign. The coefficient of age indicates that an increase in age by one year reduces poverty by around 0.88 percent. Another essential variable, household size, is also strongly significant, with a negative sign indicating that an increase in one unit household size leads to an increase in poverty by 5.06 percent. The F-test is significant at a 1 percent level, and the explained explanatory variables are only strong enough to explain about 7.6 percent.

Table 6

Determinants of Per-capita Income or Poverty in Different Period

Variables	Description of Variables	Parameters	Coefficient Model I	Coefficient Model II	Coefficient Model III	Coefficient Model IV	Coefficient Model V
Constant		α	0.577*** (0.152)	0.593*** (0.143)	0.845*** (0.137)	0.996*** (0.129)	0.580*** (0.142)
AGE	Age of respondents	β_1	0.00887*** (0.00341)	0.00943*** (0.00310)	0.00667** (0.00303)	0.00570** (0.00277)	0.00342 (0.00299)
ED	Number of schooling years	β_2	-0.00597 (0.00681)	-0.00639 (0.00613)	-0.00863 (0.00622)	-0.00848 (0.00580)	-0.00383 (0.00684)
HH_size	Household size	β_3	-0.0506*** (0.0169)	-0.0388** (0.0161)	-0.0516*** (0.0150)	-0.0533*** (0.0145)	-0.0267* (0.0162)
EXP	Years of experience	β_4	0.00145 (0.00413)	-0.000840 (0.00372)	-0.00184 (0.00358)	-0.00519 (0.00343)	-0.00586 (0.00375)
Model I: R-squared = 0.076, Number of obs = 423, Prob > F = 0.0000							
Model II: R-squared = 0.070, Number of obs = 423, Prob > F = 0.0000							
Model III: R-squared = 0.066, Number of obs = 423, Prob > F = 0.0000							
Model IV: R-squared = 0.059, Number of obs = 423, Prob > F = 0.000							
Model V: R-squared = 0.014, Number of obs = 423, Prob > F = 0.1737							

Note: Robust standard errors in parentheses*** p<0.01, ** p<0.05, * p<0.1

Source: Field Survey, 2020

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Model II shows the regression estimates based on 423 urban households in 2016/17. The age of the respondents is a strongly significant and positive sign. The coefficient of age indicates that an increase in age leads to reduced poverty in the urban informal sector. Another important variable, household size, is also strongly significant, with a negative sign indicating that an increase in one-unit household size leads to an increase in poverty by 3.8 percent. The F-test is significant at a 1 percent level, and the explained explanatory variables are only strong enough to explain about 7.0 percent.

The estimates based on the year 2017/18 urban informal households are presented in Model III. The F-statistics is significant at a 1 percent level, and the explained explanatory variables are only strong enough to explain about 6.6 percent. The age of respondents is significant at a 5 percent level with a positive sign, indicating a positive relationship between the per capita incomes of households and age. Similarly, the coefficient of household size is significant at a 1 percent level, with a negative sign indicating that there is an increase in poverty in the informal sector with an increase in household size.

Model IV reports the determinants of poverty for the year 2018/19. The coefficient of age is significant at a 5 percent level with a positive sign. The coefficient indicates that the poverty determinant income in the urban informal sector increased by 0.57 percent with the increase in the age of respondents by one year. The size of the household is another important variable. This variable is highly significant, which depicts that an increase in the size of a household by one person brings about a 5.33 percent decrease in per capita income or an increase in poverty in the urban informal sector.

In order to check the relationship between poverty and its determinants, the survey data has been analyzed for the year 2019/20 in Model V. The model is insignificant with the value of F-statistics 0.1737 and the value of R^2 also very low. It indicates that our estimated model is unexplained by explanatory variables. It is because there are other important determinants than hypothesized variables. One of the more important determinants of poverty in urban informal in 2019/20 is the COVID-19 pandemic.

Conclusion

The study examines the profile of urban informal poverty in Nepal, focusing on the decomposition of FGT poverty indices from 2015/16 to 2019/20. The results show that Lalitpur Metropolitan City has the highest poverty incidence, depth, and severity. The study reveals that a positive relationship between age and poverty, with an increase in age reducing poverty. The household size is strongly significant with negative sigh indicating that an increase in household size leads to increase in poverty.

The results of the present study produce some policy suggestions for supporting practical, informal economic activities and employment, which are helpful to local entities, the provincial

government, the federal government, and concerned departments working on similar issues in Nepal. These implications can also be adjusted and applied to another context, where the informal economy and poverty are relatively similar to those in Nepal.

References

Adhikari, D. B. (2018). Informal economy and poverty in urban Nepal. *The Economic Journal of Nepal*, *41*(3), 12-24.

Agarwal, M. K. & Dhakal, R. C. (2010). Informal sector and income generation in Nepal-A case of Chitwan district, *The Indian Journal of Labour Economics*, *53*, (2), 267-284.

Aryeetey, E. (2015). The informal economy, economic growth and poverty in sub-Saharan Africa. *Economic growth and poverty reduction in sub-Saharan Africa: Current and emerging issues*, *159*.

Bradburn, N. M., Rips, L. J., & Shevell, S. K. (1987). Answering autobiographical questions: The impact of memory and inference on surveys. *Science*, *236*(4798), 157–161.

CBS, (2005). *Poverty Trends in Nepal (1995-96 and 2003-04)*. Kathmandu: Central Bureau of Statistics, National Planning Commission Secretariat, Nepal.

CBS, (2008). *Nepal Labour Force Survey 2007/08-Statistical Report*, Kathmandu: Central Bureau of Statistics National Planning Commission, Secretariat Government of Nepal, November 2008.

CBS, (2011). *Nepal Living Standard Survey 2010/11*: Statistical Report.Volume I & II. Kathmandu: Central Bureau of Statistics, National Planning Commission Secretariat, , Nepal.

CBS, (2019). *Nepal Labour Force Survey* 20017/018-Statistical Report, Kathmandu: Central Bureau of Statistics National Planning Commission, Secretariat Government of Nepal.

Eyasu, A. M. (2020). Determinants of poverty in rural households: Evidence from North-Western Ethiopia. *Cogent food & agriculture*, *6*(1), 1823652.

Foster, J., J. Greer, & E. Thorbecke. (1984). A Class of decomposable poverty measures. *econometrica 52* (3): 761–65.

Hassan, E. (2006). Recall bias can be a threat to retrospective and prospective research designs. *The Internet Journal of Epidemiology*, *3(*2), 339–412.

Huang, G., Xue, D., & Wang, B. (2020). Integrating theories on informal economies: An examination of causes of urban informal economies in China. *Sustainability*, *12*(7), 2738.

Ibale, D. A., Docquier, F., & Iftikhar, Z. (2024). Spatial Inequality, Poverty and Informality in the Democratic Republic of the Congo. *World Development*, *173*, 106411.

Malik, M. H. (1996). Urban poverty alleviation through the development of the informal sector. *Asia Pacific Development Journal*, *3*(2), 31–48.

NPC, (2015). *The Fourteenth Three Years Interim Plan* (2015-2017). Kathmandu: National Planning Commission. Government of Nepal. Retrieved from https://www.npc.gov.np/images/category/14th-plan-full-document.pdf

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NPC, (2019). *The Fifteenth Plane Approach Paper* (2019-2024). Kathmandu: National Planning Commission. Government of Nepal. Retrieved from https://www.npc.gov.np/images/category/15th_Plan_Approach_Paper2.pdf

Quick, C. (2013). Multivariate multiple regression with applications to powerlifting data.

Reddy, M. (2007). Modelling poverty dimensions of urban informal sector operators in a developing economy. *The European Journal of Development Research*, *19*, 459-479.

Rogers, C., & Ludhra, G. (2013). Research ethics: participation, social difference and informed consent. In *Research and research methods for youth practitioners* (pp. 43-65). Routledge.

Sharma, B. (2019). *How can we determine the sample size from an unknown population?* Retrievedfrom:https://www.researchgate.net/post/How_can_we_determine_the_sample_size_from_an_unknown_population