Nutrition Disparity Among Dalits and Ethnic Minorities: a Case of Nepal

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Introduction

Health disparity among ethnic minorities is very concerning (Devkota and Butler, 2016; Sharma and Smieliauskas, 2022) because health disparity could cause poor human development and ultimately cause the chronic cycle of poverty. Among many reasons behind health disparity, poor diet is one of the major factors. While Nepal has witnessed a massive improvement in the food security status in recent years, the quality of diet in the Nepalese household has been a concern as without proper nutrients, the health risk remains high.

Thus, this study examines the nutritional disparity among Dalit and ethnic minority households in Nepal using the Household Dietary Diversity score (HDDS) and Food Consumption Score (FCS). Besides, this study also explores on how household income could explain the nutritional disparity. This study is very crucial as it could explain one of the reasons behind poor human capital development among Dalits in Nepal.

Data and Method

This study uses consumption and demographics data from the Household Risk and Vulnerability Survey (HRVS). The HRVS collected data on various socio-demographic and consumption-related variables from around 6,000 panelists from 2016 to 2018 for three years. Based on the consumption data for the last 7 days, I calculate FDDS and FCS scores.

FDDS uses 12 food groups to create a score, while FCS uses 8 food groups. FDDS and FCS signal the household's overall nutritional status and food security status.

Model:

To meet the objectives, I used a regression model that controls on the observables. The heterogeneous regression models are conducted on high-income and low-income households.

Where, indicates outcome variables FCS and HDDS of household i in village v, and year t. indicates a dummy variable where 1=Dalit, 0 otherwise. indicates the parameter of interest. indicates vector of household characteristics such as household size, monthly non-food expenditure. indicate the year and village fixed effect. denotes unobservable error term.

Results

Results in Table 1 suggest that being Dalit decreases the FDDS and FCS scores significantly compared to non-Dalits. Moreover, adding Janjatis and other ethnicity in the model would increase the magnitude of the estimates. Specifically, controlling other demographic and socioeconomic variables, being Dalit decreases the HDDS and FCS by 0.51 and 0.84 points, respectively. Likewise, Janajatis' HDDs and FCS scores are 0.24 and 0.28 points, respectively compared to that of higher caste households.

Table 1: Relationship between nutritional scores and Dalit and ethnic minorities

	HDDS		FCS	
Dalit	-0.382 (0.036)	-0.507 (0.040)	-0.688 (0.081)	-0.836 (0.088)
Janajati and others		-0.242 (0.031)		-0.286 (0.069)
Controls	YES	YES	YES	YES
Year and Village FE	YES	YES	YES	YES
N	17,521	17521	17521	17521
Adj R-squared	0.2596	0.262	0.189	0.190

Note: All the reported coefficients are statistically significant at p<0.01. The figures in parentheses are standard errors.

Further, given that income is a major determinant of food and nutritional security, I conducted a heterogenous study based on income categories. In this study, I use non-food expenditure to categorize households into above-median and below-median income categories. Results from Table 2 show that higher income would reduce the nutrition disparity between ethnic minorities and higher caste households. However, even in the high-income categories, there remains a significant disparity in nutritional access among Dalits and ethnic minorities. .

Table 2: Heterogenous results based on the income level

	HDDS		FCS	
	Above med income	Below med income	Above med income	Below med income
Dalit	-0.337 (0.056)	-0.485 (0.055)	-0.501 (0.123)	-0.769 (0.127)
Janajati and others	-0.159 (0.040)	-0.270 (0.048)	-0.163 (0.087)	-0.278 (0.011)
Controls	YES	YES	YES	YES
Year and Village FE	YES	YES	YES	YES
N	9,036	8,485	9,036	8,485
Adj R-squared	0.233	0.300	0.173	0.211

Note: All the reported coefficients are statistically significant at p<0.01. The figures in parentheses are standard errors.

Conclusion

The disparity in access to nutrition and healthy food could partly explain the disparity in health among ethnic minorities. Thus, this study employs the consumption-related information from the HRVS dataset and examines the nutritional disparity among ethnic minorities. The HDDS and FCS are used to measure the nutritional status of the households. Results suggest that Dalits' HDDS and FCS scores are significantly lower than those of higher castes (Brahmin and Chhetri). Likewise, Janajatis' and other castes' (groups) nutritional status is lower than that of higher castes but better than that of Dalits'.

Finally, income partly explains why lower caste and ethnic minorities have lower nutritional scores; however, there still remains significant nutritional disparity among lower castes and ethnic minorities compared to that of higher caste households.

Thus, this study recommends that government and non-government sectors create nutritional and food security safety nets, especially targeting lower caste and ethnic minorities. The programs should be more focused on low-income households.