

Article

Are rural households in the Kargil district of Ladakh multidimensionally poor?

Marzia Banoo, P. K. Mishra*

Department of Economic Studies, Central University of Punjab, Bathinda 151401, India

* **Corresponding author:** P. K. Mishra, pkmishra1974@gmail.com

CITATION

Banoo M, Mishra PK. Are rural households in the Kargil district of Ladakh multidimensionally poor?. *Sustainable Social Development*. 2025; 3(1): 3082.
<https://doi.org/10.54517/ssd3082>

ARTICLE INFO

Received: 19 November 2024
Accepted: 1 January 2025
Available online: 9 January 2025

COPYRIGHT

Copyright © 2025 by author(s). *Sustainable Social Development* is published by Asia Pacific Academy of Science Pte. Ltd. This work is licensed under the Creative Commons Attribution (CC BY) license.
<https://creativecommons.org/licenses/by/4.0/>

Abstract: Reducing poverty and inequality of any kind is a pre-condition for achieving improved quality of life and overall well-being of the masses for attaining sustainable development. In this pre-text, this paper examines the multidimensional aspects of poverty in the rural households of the Kargil district of Ladakh, India. The analysis of primary data collected from 315 sample households using the Alkire-Foster method reveals the presence of multidimensional poverty in about 66.03% of households. In contrast, about 33.33% of households are vulnerable to such poverty. It is found that deprivations in education, standard of living, nature of employment, women empowerment, and social security dimensions are critical in contributing to multidimensional poverty in the district. Besides, the estimation of the multiple regression equation infers that the intensity of multidimensional poverty is positively influenced by the age of the household head and family size, and negatively influenced by monthly food and non-food expenditures. Therefore, the policy focus is required on all these aspects to help households escape from multidimensional poverty so that inclusive growth can be ensured.

Keywords: multidimensional poverty; household poverty; Kargil; India

1. Introduction

Recently, India has envisioned its mission to become Viksit Bharat by 2047 with the lowest poverty and inequality. In this connection, it is pertinent to cite a report released by the NITI Aayog¹ that India has been successful in reducing poverty from 29.17% in 2013–2014 to 11.28% in 2022–2023 in the multidimensional framework. This concept of multidimensional poverty tries to capture the deprivations of people with the help of multiple indicators instead of measuring poverty in terms of household income or consumption expenditure [1]. The primary argument behind the concept of multidimensional poverty is that enhancing people's capabilities rather than achieving economic progress is the true pre-requisite for Viksit Bharat@2047. Since the welfare of households depends on employment, housing, sanitation, health, education etc. and only income or consumption expenditure cannot appropriately capture the well-being of the masses, measuring poverty in a multidimensional framework is quite justified [2]. It's advantageous in (a) directly capturing the deprivations of people; (b) including both monetary and non-monetary dimensions of well-being; (c) justifying poverty as a measure of the outcomes of economic progress; (d) containing the distributional aspects of national income and (e) reflecting the outcomes of various development initiatives of the government.

It is with this backdrop, that this paper is an attempt to answer the research questions: Whether rural households in the Kargil district of Ladakh are multidimensionally poor, and what are the factors significantly determining the intensity of multidimensional poverty in the district? The recent report released by NITI Aayog² states that about 12.70% of the population in Ladakh was multidimensionally poor in 2015–2016, and this number has been reduced to 3.53% in 2019–2021 which has further been estimated to be 1.73% in 2022–2023. Although this is very encouraging for Ladakh, lots of debates are there regarding the relevance of the NITI Aayog report as it is based on actual estimates of headcount ratio for 2005–2006, 2015–2016, and 2019–2020 from the National Family Health Surveys data, but interpolated for the year 2013–2014 and extrapolated for the year 2022–2023. Besides, Kargil district is selected for the study due to its distinct characteristics—(a) the entire district is the border region and mountainous with high altitudes of more than 4500 meters above the sea level; (b) it is one of the largest districts of India dominated by tribal people and about 88.40% of the population living in rural areas; (c) the region is extremely cold throughout the year with poor conditions of roadways, limited transport facilities etc.; (d) the district is vulnerable to landslides, cloudbursts, and flash floods; (e) the district is agriculture dominated with meagre land area availability for the purpose; (f) about 71.34% literacy as per Census 2011; (g) per capital income was Rs.15,269 in 2015 and current data is not available; (h) due to extreme cold conditions, health standard of people are not favourable for productive socio-economic outcomes; and (i) poor industrial development and the majority of people are engaged in the informal sector. All these indicate the likely presence of poverty in a multidimensional scale in the district. Further, this study has been conducted only at the household level although individual-level aspects of multidimensional poverty are more implicative. The primary reason is the lack of availability of all family members in the daytime when the survey was conducted. This constitutes a major limitation of the study which may be addressed in the future course of time. Despite this limitation, the study has important implications for similar regions in and outside the country.

This study has been conducted to observe the actual scenario of multidimensional poverty in Kargil at the ground level. By adopting the Alkire-Foster methodology and based on primary survey data of 315 households, it has been found that about 66.03% of rural households in Kargil are multidimensionally poor. It has been revealed that the fundamental causes of such a high rate of multidimensional poverty in Kargil include informal employment of people, indebtedness of households, unhygienic fuel for cooking, poor housing conditions, and lack of opportunities for health insurance and old age pensions in the region. The rest of the paper is organised as follows: Section 2 reviews the relevant literature; Section 3 describes the material and methods of the study; Section 4 analyses the data and discusses the results; and Section 5 concludes.

2. Literature review

Since alleviation of poverty is crucial for giving appropriate access to basic essentials of life of people such as food, clothes and shelter, and basic essentials of

households such as health, education, sanitation, electricity, clean fuel etc. studies are warranted for its proper conceptualization and measurement for framing suitable policy actions. The Goal-1 of Sustainable Development Goals (SDGs) also aims at poverty eradication in all its forms by 2030 for achieving sustainable development [3]. In this context, poverty needs to be conceptualised both at national and international levels, and should be measured both in monetary and multidimensional frameworks [4,5]. The concept of poverty in monetary terms—income or consumption expenditure—has been subjected to criticism based on the argument that the monetary aspect can't always truly be translated into the basic needs of people [6]. In this line of thought, poverty has been conceptualized as deprivations of people in health, education, standard of living, and in their socio-political status. Thus, the measurement of poverty is a multidimensional phenomenon, and it embraces two interpretations—(a) poverty is a deprivation in people's capabilities [7]; and (b) poverty is a counting measure of deprivation [8].

According to Amartya Sen, “poverty is not just a lack of money, it is not having the capability to realize one's full potential as a human being”. Thus, human progress depends on the progress of human freedom and the capability of people to lead a decent life [9]. In other words, well-being should not be gauged in terms of money, but needs to be assessed through the functioning and capabilities of people. The World Bank also corroborates the thoughts of Amartya Sen that poverty is the deprivations in multiple aspects of the life of people which affect their well-being thereby making them incapable of accessing the basic necessities [10]. Accordingly, the concept of multidimensional poverty has been developed, and the removal of such poverty has become the pre-requisite for human development. This concept of poverty tries to capture human deprivations in multiple dimensions that are not directly measurable in monetary terms, and thus, measured by employing aggregate and household data [11]. These days estimation of this poverty has been proved useful for tracking the progress of national development goals, and SDGs.

It is observed by NITI Aayog that India has been successful in reducing multidimensional poverty from 29.17% in 2013–2014 to 11.28% in 2022–2023, i.e., about 24.82 crores of Indians have escaped poverty in this period [12]. It is also observed by the Aayog that about 5.94 crores of people have escaped from poverty in Uttar Pradesh during this period. Added to this crucial observation, a study found that multidimensional poverty has declined in Uttar Pradesh, but its rural concentration persisted [13]. Another study corroborates by stating that extreme poverty is primarily a rural issue [14].

The observation by the World Bank in 2013 was that globally “more than three-quarters of those living in extreme poverty are in rural areas and nearly two-thirds of the extremely poor earning a living from agriculture” [15]. In 2013, four out of every five persons living in rural areas were below the international poverty line of USD 1.90 per day [16]. As per the report of the UNDP³ released in 2024, people in rural areas are poorer than people in urban areas, and about 28% of the global rural population is poor. In this line of observation, it is also found that a higher level of multidimensional poverty is among farming households [17]. Regarding the primary causes of multidimensional poverty in rural areas, it is observed that age of the household head, and education play a significant role [18]. Literature also notes the

critical role of deprivations of people in nutrition, asset ownership, sanitation, and cooking fuel in causing multidimensional poverty in the rural region [19]. Similarly, age of household head, family size, years of education, household expenditure, ownership of agricultural land, credit access, and access to safety nets have been found to be the key factors of multidimensional poverty in rural regions [20]. Also, larger family-size has been observed to increase the risk of households falling into multidimensional poverty in rural areas [21]. Further, the non-existence of land ownership, and food shortage have been evidenced to influence the incidence of poverty [22]. Despite these observations, there has been a significant decline in rural poverty over the last few years primarily due to the success of public policies which promote economic opportunities for rural people while enhancing their social safety and security [23]. Particularly, agriculture and rural development interventions have the potentials to reduce global multidimensional poverty by providing access to finance, training, and markets [24].

In the existing literature, most of the studies related to household-level multidimensional poverty consider health, education and standard of living dimensions of human well-being. However, in the Kargil district and also in the country context, other dimensions such as employment, women's empowerment, and social security are important in inferring the multidimensional aspects of poverty. In the Kargil district, due to limited industrialization, limited transportation facilities, and insufficient infrastructure development, people have limited choices in occupational domains. Similarly, the socio-economic empowerment of women in the district is also adversely affected due to limited opportunities and freedom available both in the household and society. Further, the availability and access to social safety nets are limited due to unfavourable topography, and lack of public awareness in the district. Hence, the current study is an attempt to include these three dimensions in addition to the standard dimensions of health, education and standard of living. Furthermore, this study is justified based on the prior observation that Kargil ranked last in the inter-district dimensions of socio-economic development in the erstwhile State of Jammu and Kashmir [25]. This study is an attempt to validate the observations by Mondal et al. [14], and that by Arora [13] that multidimensional poverty persists in rural areas. Especially, this study covers the rural region that has round-the-year harsh weather conditions, shares a sensitive border of the nation, mountainous landscape, tribal dominance, and agriculture-base. In this pre-text, this study examines the multidimensional aspects of rural households in the Kargil district of Ladakh based on a framework of people's deprivations in health, education, livelihood, living conditions, empowerment, and social security.

3. Materials and methods

The study adopted an exploratory empirical research design based on primary data to examine multidimensional aspects of poverty in the rural households of the Kargil district of Ladakh. Required data have been collected from 315 sample households through a field survey by administering a semi-structured interview schedule during 2021 and 2022 depending on suitable weather conditions. The sample households from the rural villages have been randomly selected following a

multi-stage sampling framework. *First*, the Kargil district of Ladakh has been conveniently chosen for the study. *Second*, seven blocks out of nine blocks of Kargil district have been randomly selected. These blocks are Kargil, Drass, Shargole, Shakar Chicktan, Taisuru, Gundmanglpur, and Sankoo blocks. *Third*, one village from each of these seven blocks has been randomly chosen by using the random number generation method. These villages are – Minjee village from the Kargil block; Muradbagh village from the Drass block; Skambo village from the Shargole block; Yogmakharbu village from the Shakar Chicktan; Achambur village from the Taisuru block; Gundmanglpur village from the Gundmanglpur block; and Thasgam village from the Sankoo block.

In this study, the sampling frame consists of a total of 1223 households in the seven selected villages which constitute the population in the study. Then using the Cochran sample size formula (Raosoft online sample size calculator) a total of 293 households was obtained as the minimum sample size at 95% confidence level. However, for better village-wise allocation of households, this minimum sample size has been increased to 315, and then the number of sample households in each village has been calculated proportionately. Thus, in the *fourth* step, 80 households from the Minjee village; 25 households from the Muradbagh village; 25 households from the Skambo village; 20 households from the Yogmakharbu village; 20 households from the Achambur village; 65 households from the Gundmanglpur village; and 80 households from the Thasgam village have been randomly selected at 95% confidence level. The summary of this multi-stage sampling framework is presented in **Table 1**. This sampling design is free from biases to make the outcomes representative of the population.

Table 1. Multi-stage sampling framework.

Sample Blocks in Kargil	Total No. of Villages in Sample Blocks	Name of Sample Villages	Total No. of Households in Sample Villages	No. of Sample Households @ 95% confidence level
Kargil	22	Minjee	322	80
Drass	18	Muradbagh	89	25
Shargole	15	Skambo	96	25
Shakar Chicktan	11	Yogmakharbu	72	20
Taisuru	17	Achambur	64	20
Gundmanglpur	05	Gundmanglpur	257	65
Sankoo	14	Thasgam	323	80
Total			1223	315

Source: Authors' construction.

Alkire-Foster methodology [26] has been employed to measure multidimensional poverty in the region by calculating the Multidimensional Poverty Index (MPI). In this calculation, six dimensions have been used. These are: Education, health, standard of living, employment, women's empowerment, and social security. The selection of these dimensions has been made based on the literature and observations during the pilot study. The extant literature provides evidence in support of health, education, and standard of living as standard dimensions of MPI [26]. The field observations of household deprivations

concerning occupation type, women's socio-economic empowerment, and provision of social safety nets in the region justify the inclusion of employment, women's empowerment, and social security as three region-relevant dimensions of MPI.

In each dimension, certain relevant indicators have been taken. These are specified as follows: (i) In the education dimension, the indicators are years of schooling, child school attendance, and access to online education; (ii) in the health dimension, the indicators are child mortality, and nutrition; (iii) in the standard of living dimension, the indicators are electricity connection, sanitation quality, drinking water provision, flooring quality, cooking fuel, ownership of assets, and land holding; (iv) in the employment dimension, the indicators are formal employment, informal employment, and labour migration; (v) in the women's empowerment dimension, the indicators are female educational attainments, female economic empowerment, and female autonomy in the household; and (vi) in the social security dimension, the indicators are health insurance, old age pension, and government direct money transfer (transfer payments). Therefore, a total of 21 indicators in 6 dimensions of well-being have been considered in this study. The weightage of each of these dimensions is 1/6, and it is equally distributed between the indicators.

In the next step, the deprivation of a household in each indicator in a particular dimension has been defined. In the education dimension, a household is deprived if no member has completed 5-years of schooling, a school-aged child is not attending school upto age 13, and there is no access to online education at home. In the health dimension, the household is deprived if there is evidence of child mortality in the family in last one year, and any child or adult has nutritional information as malnourished. In the standard of living dimension, a household is deprived, if there is no electricity connection at home, sanitation quality is not good, no access to drinking water or available at 30-min walk, poor quality of flooring, unhygienic cooking fuel, poor asset ownership, and no land holding. In the employment dimension, a household is deprived if no member is employed in the formal and informal sectors, and no member is on migration due to job or income loss. In the women's empowerment dimension, a household is deprived if no female member has access to online education, no working-aged female member is engaged in economically productive activity, and no female member of age 15 or more has autonomy in consumption decisions. In the social security dimension, a household is deprived if no member has health insurance, no member is getting an old-age pension, and no member has received any transfer payments from the government.

The Alkire-Foster methodology provides techniques of calculating MPI based on the incidence and intensity of poverty. The former captures the percentage of households who are multidimensionally poor while the later infers about the percentage of deprivations of each household. The incidence of multidimensional poverty (also called headcount ratio) is given by $H = q/n$ where q is the total number of multidimensionally poor households, and n is the total number of households. Similarly, the intensity of multidimensional poverty is given by $A = \frac{1}{q} \sum_1^q c_i$ where $\sum_1^q c_i$ is the sum of the proportion of total weighted deprivation that each household suffers, and q is the total number of multidimensionally poor households. Then, the

MPI is calculated by multiplying the scores of incidence and intensity of multidimensional poverty of a household. In the final step, a taxonomy of households based on the MPI scores has been prepared according to the following criteria: (i) If $0.50 \leq \text{MPI} \leq 1$, the household is under severe multidimensional poverty; (ii) if $0.33 \leq \text{MPI} < 0.50$, the household is under multidimensional poverty; (iii) if $0.20 \leq \text{MPI} < 0.33$, the household is vulnerable to multidimensional poverty; (iv) if $0 \leq \text{MPI} < 0.20$, the household is not multidimensionally poor.

In the final step, the significant determinants of the intensity of multidimensional poverty of households in the sample villages as well as in the Kargil district have been identified by estimating the following multiple regression model with robust standard errors.

$$MP_{hi} = \beta_1 \text{Age} + \beta_2 \text{Faz}_i + \beta_3 \text{Fdx}_i + \beta_4 \text{Nfx}_i + \beta_5 \text{Dbt}_i + \beta_6 \text{Ced}_i + \beta_7 \text{Ldz}_i + \varepsilon_i \quad (1)$$

Here, MP_{hi} stands for the intensity of multidimensional poverty of i^{th} rural household; *Age* is the age of the head of the household; *Faz* is the family size in the household; *Fdx* is the monthly food expenditure of the household; *Nfx* is the monthly non-food expenditure of the household; *Dbt* is the amount of debt standing in the household; *Ced* is the number of household members continuing their study; and *Ldz* is the size of agricultural land holding by the household.

In this approach, the covariates have been taken from the literature keeping in view their importance in determining multidimensional poverty in rural regions. The age of the household head, years of education, family size, household expenditure, credit access, and ownership of agricultural land have been empirically found to cause multidimensional poverty in rural regions [18–22]. However, in this study for better implications, household expenditure has been segregated into food and non-food expenditure, credit access has been replaced by out-standing household debt, and years of education has been replaced by a number of household members continuing their study to reflect life-long learning as it creates a current financial burden on the household.

Similarly, based on available literature and observations, it is hypothesized in this study that (i) the age of the household head, family size, and household debt determines the intensity of multidimensional poverty of households positively, and (ii) monthly food expenditure, monthly non-food expenditure, number of household members continuing their study, and size of agricultural land holding determine the intensity of multidimensional poverty of households negatively. The primary argument here is that the intensity of multidimensional poverty of rural households in the district can increase with the rise in the age of the household head, larger family size, and with increase in household debt. This argument justified the hypothesis stated at (i) above. Similarly, the intensity of multidimensional poverty of rural households in the district increases with a fall in the monthly food and non-food expenditures, a fall in the number of household members continuing their study, and size of agricultural land holding. This argument justified the hypothesis stated at (ii) above. It is proposed to test these hypotheses by estimating the econometric specification (1) by the Ordinary Least Square (OLS) method with robust standard

errors. Then, the estimated values of the coefficients are interpreted to draw relevant implications.

4. Results and discussion

At the outset, the extent of multidimensional poverty in the rural households of Kargil district has been calculated using the Alkire-Foster method, and the findings are summarized in **Table 2**. It is inferred that the incidence and intensity of multidimensional poverty in the Minjee village are 48.97% and 36.85% respectively. The MPI of this village is 0.180. It means on the average, households are not multidimensionally poor in this village.

Table 2. Extent of multidimensional poverty in rural households of Kargil.

Sample Villages In Kargil	No. of Sample Households	Incidence of Poverty or Headcount Ratio (H)	Intensity of Poverty (A)	Village Level MPI	Severity of Multidimensional Poverty
Minjee	80	48.97%	36.85%	0.180	Not Multidimensionally Poor
Muradbagh	25	60.00%	37.47%	0.225	Vulnerable to Multidimensional Poverty
Skambo	25	92.86%	39.14%	0.363	Multidimensionally Poor
Yogmakharbu	20	32.77%	36.20%	0.119	Not Multidimensionally Poor
Achambur	20	90.08%	39.09%	0.352	Multidimensionally Poor
Gundmanglpur	65	71.00%	38.70%	0.275	Vulnerable to Multidimensional Poverty
Thasgam	80	66.21%	37.84%	0.251	Vulnerable to Multidimensional Poverty

Source: Authors' calculation from primary data.

In the Muradbagh village, the incidence and intensity of multidimensional poverty are 60.0% and 37.47% respectively. The MPI of this village is 0.225. It means on average, households are vulnerable to multidimensional poverty in this village. In the Skambo village, the incidence and intensity of multidimensional poverty are 92.86% and 39.14% respectively. The MPI of this village is 0.363. It means on the average, households are multidimensionally poor in this village. In the Yogmakharbu village, the incidence and intensity of multidimensional poverty are 32.77% and 36.20% respectively. The MPI of this village is 0.119. It means on average, households are not multidimensionally poor in this village. In the Achambur village, the incidence and intensity of multidimensional poverty are 90.08% and 39.09% respectively. The MPI of this village is 0.352. It means on average, households are multidimensionally poor in this village. In the Gundmanglpur village, the incidence and intensity of multidimensional poverty are 71.0% and 38.7% respectively. The MPI of this village is 0.275. It means on average, households are vulnerable to multidimensional poverty in this village. In the Thasgam village, the incidence and intensity of multidimensional poverty are 66.21% and 37.84% respectively. The MPI of this village is 0.251. It means on the average, households are vulnerable to multidimensional poverty in this village.

In the next step, the exact number of rural households under multidimensional poverty in the sample villages of Kargil has been obtained, and summarized in **Table**

3. It is revealed that the total number of rural households under severe multidimensional poverty in the Kargil district is nominal, i.e., it is just 02 out of a total sample of 315 rural households. However, the total number of rural households under multidimensional poverty in the district is 208 out of a total sample of 315 rural households which is about 66.03%. This finding validates the observations that multidimensional poverty persists in rural areas, put ward in the studies by Mondal and others, and by Arora. Further, the total number of rural households vulnerable to multidimensional poverty in the district is 105 out of a total sample of 315 rural households which is about 33.33%.

Table 3. No. of rural households under multidimensional poverty in Kargil.

Sample Villages In Kargil	No. of Sample Households	Households under Severe Poverty	Households under Poverty	Households Vulnerable to Poverty
Minjee	80	01 (1.25%)	41 (51.25%)	38 (47.5%)
Muradbagh	25	-	16 (64.0%)	09 (36.0%)
Skambo	25	01 (4.0%)	22 (88.0%)	02 (8.0%)
Yogmakharbu	20	-	08 (40.0%)	12 (60.0%)
Achambur	20	-	18 (90.0%)	02 (10.0%)
Gundmanglpur	65	-	48 (73.85%)	17 (26.15)
Thasgam	80	-	55 (68.75%)	25 (31.25%)
Kargil District	315	02 (0.63%)	208 (66.03%)	105 (33.33%)

Source: Authors' calculation from primary data.

After understanding the extent of multidimensional poverty in the rural households of Kargil, the pattern of deprivation structure in each sample village under multidimensional poverty has been analysed. The outcomes are presented in **Table 4**. It is found that no village under the study is having deprivation in the health dimension. Thus, the health dimension has no contribution to multidimensional poverty. The highest percentage of deprivation has been noticed in the social security dimension thereby contributing to multidimensional poverty the most. The second highest deprivation has been observed in the employment dimension, and thus, its contribution to multidimensional poverty is also significant. The third highest deprivation has been observed in the women's empowerment dimension, and thus, its contribution to multidimensional poverty is noteworthy. Furthermore, the deprivations in education and standard of living dimensions are also important in contributing to the multidimensional poverty in the Kargil district. This implies that the policy-circle needs to focus on improving the performance of indicators in the employment, social security, and women's empowerment dimensions. However, it does not mean that other dimensions such as health, education, and standard of living should not be ignored. This means the policy interventions in these dimensions need moderate improvements for better performance. This will help rural households come out of their vulnerability to multidimensional poverty.

Table 4. Deprivation structure under multidimensional poverty in Kargil.

Sample Villages In Kargil	Health dimension (%)	Education dimension (%)	Standard of living dimension (%)	Employment dimension (%)	Social Security dimension (%)	Women's Empowerment dimension (%)
Minjee	0.00	6.82	4.78	29.04	44.28	15.08
Muradbagh	0.00	9.20	8.30	24.30	43.38	14.83
Skambo	0.00	10.52	7.70	23.52	42.58	15.68
Yogmakharbu	0.00	1.18	6.75	30.69	46.04	15.35
Achambur	0.00	13.43	7.43	24.12	40.42	14.60
Gundmanglpur	0.00	9.76	5.53	27.30	43.06	14.35
Thasgam	0.00	5.59	8.25	27.43	44.04	14.68

Source: Authors' calculation from primary data.

In the final step, factors determining the intensity of multidimensional poverty of households in the sample villages as well as in the district as a whole have been found by estimating the regression specification (1) using the OLS method with robust standard errors. But before the results of OLS estimation are generated, the descriptive statistics for each of the variables for sample villages and the Kargil district have been calculated (Please see Appendix). The summary statistics on Mean, Standard Deviation, Minimum and Maximum Observations have been calculated which indicate the presence of heterogeneity across sample villages. Thus, the intensity of multidimensional poverty seems to be differently affected by the covariates of the study. The results of OLS estimation are reported in **Table 5**.

It is noticed from **Table 5** that in the Minjee village, the intensity of multidimensional poverty of households is positively determined by the age of the head of the household at 5% level of significance; and by the family size at 1% level of significance, but negatively determined by the monthly non-food expenditure at 1% level of significance. *Second*, in the Thasgam village, the intensity of multidimensional poverty in households is positively influenced by the age of the head of the household, family size and household debt at 1% level of significance. *Third*, in the Gundmangalpur village, the intensity of multidimensional poverty of households is positively by the family size at 1% level of significance, and by the household at 10% level of significance. Besides, it is evidenced that the monthly food expenditure exerts a negative impact on the intensity of multidimensional poverty in households at 1% level of significance. *Fourth*, in the Muradbagh village, the intensity of multidimensional poverty of households is negatively determined by the monthly non-food expenditure at 1% level of significance. *Fifth*, in the Achambur village, the intensity of multidimensional poverty of households is positively determined by the family size at 1% level of significance, and by the non-food expenditure at 1% level of significance. *Sixth*, in the Skambo village, the intensity of multidimensional poverty of households is positively determined by the family size at 1%, and negatively by the household debt at 5% level of significance. *Seventh*, in the Yokamakharbu village, the intensity of multidimensional poverty of households is positively determined by the age of the household head and household debt at 1% and 5% levels of significance respectively. Besides, the intensity of

multidimensional poverty in this village is negatively determined by the size of land holding at 10% level of significance.

Table 5. Determinants of multidimensional poverty in rural households in Kargil.

Variables	Minjee	Thasgam	Gundmangalpur	Muradbagh	Achambur	Skambo	Yokmakharbu	Kargil District
Age	0.022**	0.031*	-0.003	0.027	0.004	-0.003	0.029*	0.020*
Faz	0.292*	0.335*	0.355*	-0.324	0.495*	0.397*	0.150	0.316*
Fdx	-0.00008	-0.0002	-0.0001*	0.0003	-0.0001	-0.0001	0.00003	-0.0002*
Nfx	-0.0001*	-0.0001	-0.00004	-0.00003*	-0.00002*	0.00005	-0.00007	-0.00003*
Dbt	0.0000003	0.0000009*	0.000001***	-0.000001	-0.00000005	-0.000002**	0.00009**	0.0000003
Ced	0.029	0.233	0.261	0.322	-0.108	0.065	-0.007	0.179**
Ldz	0.082	-0.210	0.712	-0.503	0.198	0.547	-1.422***	-0.227
Adj. R-sq.	0.58	0.73	0.75	0.60	0.93	0.95	0.69	0.70
R-Sq.	0.61	0.75	0.77	0.70	0.95	0.96	0.79	0.71
F-Stat.	15.56*	127.83*	30.40*	7.45*	218.26*	264.43*	8.91*	107.15*

Source: Authors' calculation; Note: *, **, *** stand for significance at 1%, 5%, 10% levels respectively. Note on Description of Variables: Age—Age of the Head of the Household; Faz—Family Size; Fdx—Monthly Food Expenditure of the Household; Nfx—Monthly Non-food Expenditure of the Household; Dbt—Amount of Debt Standing in the Household; Ced—No. of Household Members Continuing Their Study; Ldz—Size of Agricultural Land Holding by the Household.

Last, for the Kargil district as a whole, it is evidenced that the intensity of multidimensional poverty of households is positively determined by the age of the household head and family size at 1% level of significance; and also positively by the number of household members continuing their study at 5% level of significance. But it is negatively determined by monthly food and non-food expenditures at 1% level of significance.

These results lend support to the hypothesis that the intensity of multidimensional poverty in households is positively determined by the age of the head of the household, particularly in the Minjee, Thasgam and Yokmakharbu villages, and also in the Kargil district as a whole. The hypothesis that the intensity of multidimensional poverty of households is positively determined by family size gets validated, particularly in Minjee, Thasgam, Gundmangalpur, Achambur and Skambo villages, and also in the Kargil district as a whole. The hypothesis that the intensity of multidimensional poverty of households is positively determined by the household debt gets validated, particularly in Thasgam, Gundmangalpur and Yokmakharbu villages. The hypothesis that the intensity of multidimensional poverty of households is negatively determined by the monthly food expenditure of households gets validated, in the Gundmangalpur village and also in the Kargil district as a whole. The hypothesis that the intensity of multidimensional poverty of households is negatively determined by the monthly non-food expenditure of households gets validated, particularly in Minjee, Muradbagh and Achambur villages, and also in the Kargil district as a whole. The hypothesis that the intensity of multidimensional poverty of households is negatively determined by the size of land holding of households gets validated, in the Yokmakharbu village. However, the results could not validate the hypothesis of the study that the number of

household members continuing their study negatively determines the intensity of multidimensional poverty of households in the Kargil district.

In the Minjee village, the intensity of multidimensional poverty is primarily determined by the higher age of household head, and larger family size; and elevated non-food expenditure is a contributing factor towards poverty reduction. In the Thasgam village, the intensity of multidimensional poverty is mainly due to the higher age of the household head, larger family size, and outstanding household debt. In the Gundmangalpur village, the intensity of multidimensional poverty is essentially due to larger family size, and outstanding household debt; and enhanced food expenditure is a contributing factor towards poverty reduction. In the Muradbagh village, higher non-food expenditure is a contributing factor towards poverty reduction. In the Achambur village, the intensity of multidimensional poverty is primarily due to larger family size, and larger non-food expenditure is a contributing factor towards poverty reduction. In the Skambo village, the intensity of multidimensional poverty is primarily due to larger family size. In the Yokmakharbu village, the intensity of multidimensional poverty is essentially due to the higher age of the household head and outstanding household debt, and the bigger size of agricultural land holding is a contributing factor towards poverty reduction.

In the Kargil district as a whole, the age of household head and family size are the most important contributing factors to multidimensional poverty, whereas household expenditure on food and non-food items helps reduce the intensity of poverty in the region. This finding corroborates the findings in the literature [27]. Particularly, the finding that family size increases poverty intensity is consistent with that of Anyanwu [28] and Meher et al. [19], but contradicts the findings of Roy et al. [29]. The possible reason may be that households with less number of economically engaged members are more likely to fall into multidimensional poverty due to increased family burden. Similarly, the finding that the age of household head increases poverty intensity is consistent with the findings of Bersisa and Heshmati [30]. The reason may be a decline in the capacity to earn and manage the household burden at a higher age. Further, the finding that an increase in household consumption expenditure reduces poverty intensity agrees with that of Eze and Alugbuo [31]. This finding also corroborates the findings of the Household Consumption Expenditure Survey⁴ undertaken by the National Sample Survey Office, Government of India that elevated non-food expenditure in rural areas is the main cause of poverty reduction in India. Last, it is observed that an increase in the number of children in the household attending schools adds to the poverty intensity is supported by the findings of Zambak and Cagatay [32].

5. Conclusions

In the *Amrit Kaal*, when India has already stepped forward to become *Viksit Bharat@2047*, it is quintessential to reduce poverty and inequality of any kind to their least possible levels for achieving the highest degree of human development with peace and happiness. In this context, the multidimensional aspects of poverty have been examined for the rural households in the Kargil district of Ladakh. The analysis of primary data collected from 315 sample households infers the presence of

multidimensional poverty in about 66.03% of households. It is further found that about 33.33% of households are vulnerable to multidimensional poverty. The key findings of the study reveal that social security, nature of employment, women empowerment, standard of living, and education dimensions play a critical role in contributing to the multidimensional poverty in the Kargil district.

Regarding the contributing factors of vulnerability to multidimensional poverty in the Kargil district, social security, nature of employment, women empowerment, and the standard of living of households play a determining role. In both the cases of multidimensional poverty and vulnerability to multidimensional poverty, the major contributing indicators to deprivations include lack of access to social security measures such as health insurance, dearth of economic empowerment of women, abundance of informal employment, poor housing, and unhygienic cooking fuel use. In the Kargil district, the benefits of social security schemes such as the Public Distribution System, Pradhanmantri Awas Yojna, Old Age Pension Scheme and Janani Suraksha Yojna may not be reaching the bottom of the pyramid [33]. Social security measures can directly impact health, education, employment and living standards [34]. These measures can also protect vulnerable households from economic shocks etc. [35]. Thus, careful monitoring and control in the implementation of social safety-net schemes in the Kargil district is required from the governmental point of view. Similarly, the employment status of households has been observed to influence families that are multidimensionally poor and also vulnerable to poverty because those employed in the formal sector have a better chance of escaping poverty [27,36]. In the Kargil district, people are mainly employed in the informal sector thereby exposed to economic shocks and multidimensional poverty. Thus, it is important to deepen education and skill development to increase the penetration of formal employment among households. Furthermore, women's empowerment has an important influence on the health, education, employment, decision-making, and overall well-being of a household [37–39]. It is observed that the lack of proper empowerment of women in the Kargil district is a significant cause of multidimensional poverty. Thus, increased women's access to education, employment and self-employment, and autonomy in decision-making can significantly reduce multidimensional poverty in the district.

Moreover, in the Kargil district living standard of households as measured by the extent of electricity connection, sanitation quality, drinking water provision, flooring quality, cooking fuel, ownership of assets, and land holding contribute to multidimensional poverty. The primary reason is the limited access to socio-economic opportunities such as good healthcare, quality education, and decent employment [40]. Hence, the implication is that the policy-circle needs to focus on improving these aspects of well-being for fostering decent living, and achieving enhanced human development in the region. It is important to improve the conditions for better health outcomes and educational attainments in the region. Based on the findings of the study, the economic implication is that the intensity of multidimensional poverty of households in the Kargil district can be reduced by ensuring better healthcare, quality and skill-based education, improved standard of living, formal employment and assured social security outcomes of household members by catalysing available demographic dividend, land holding, foods habits

of people, and availability of agricultural land holding. Despite the elegance of the study, its scope and depth are limited. The important limitations of the study are: Non-consideration of individual-level multidimensional aspects of poverty, non-coverage of the entire Ladakh region, non-inclusion of other aspects of the socio-economic profile of households such as remittances, savings, dependency ratio, financial inclusion etc. which have bearings on human well-being. Therefore, the study can be extended to include other dimensions of well-being such as banking habits of people, dependency ratio etc. for a better picture of multidimensional poverty. The study can also be extended to analyse individual level poverty status in the district.

Author contributions: Conceptualization, MB and PKM; methodology, PKM; software, MB and PKM; validation, PKM; formal analysis, MB and PKM; investigation, MB; resources, MB; data curation, MB and PKM; writing—original draft preparation, MB and PKM; writing—review and editing, Mishra; visualization, MB and PKM; supervision, PKM. All authors have read and agreed to the published version of the manuscript.

Acknowledgments: We sincerely acknowledge the inputs given by editors and anonymous reviewers for improving the quality and quantity of the manuscript.

Conflict of interest: The authors declare no conflict of interest.

Notes

- ¹ https://www.niti.gov.in/sites/default/files/2024-01/MPI-22_NITI-Aayog20254.pdf.
- ² https://www.niti.gov.in/sites/default/files/2024-01/MPI-22_NITI-Aayog20254.pdf.
- ³ https://www.undp.org/sites/g/files/zskgke326/files/2024-10/2024_global_multidimensional_poverty_index.pdf.
- ⁴ <https://timesofindia.indiatimes.com/business/india-business/massive-dip-poverty-comes-down-to-8-5-from-21-says-new-survey/articleshow/111477517.cms>.

References

1. Tripathi S, Yenneti K. Measurement of multidimensional poverty in India: A State-level analysis. *Indian Journal of Human Development*. 2020; 14(2): 257–274.
2. Mishra PK, Kumar S, Arif M, et al. Poverty in multidimensional perspective: Policy insights from selected North Indian Districts. *Millennial Asia*. 2022; 13(2): 289–316.
3. United Nations. *Transforming our world: The 2030 agenda for sustainable development*. United Nations. 2015; 1: 41.
4. Atkinson AB. *Measuring poverty around the world*. Princeton University Press; 2019.
5. Alkire S, Nogales R, Quinn NN, Suppa N. On track or not? Projecting the global Multidimensional Poverty Index. *Journal of Development Economics*. 2023; 165: 103150.
6. Sen AK. Equality of What? In: McMurrin S (editor). *Tanner Lectures on Human Values*. Cambridge University Press; 1980. pp. 197–220.
7. Sen A. *Development as Freedom*. Oxford University Press; 1999.
8. Atkinson AB. Multidimensional deprivation: Contrasting social welfare and counting approaches. *The Journal of Economic Inequality*. 2003; 1: 51–65.
9. Drèze J, Sen A. *An uncertain glory: India and its contradictions*. Princeton University Press; 2013.
10. World Bank. *World Development Report 2000/2001: Attacking Poverty*. World Bank. 2000.
11. Mohanty SK, Vasishtha G. Contextualizing multidimensional poverty in urban India. *Poverty & Public Policy*. 2021; 13(3): 234–253.

12. Chand R, Suri Y. Multidimensional poverty in India since 2005–06. NITI Aayog Discussion Paper. 2024; 1–12.
13. Arora A. Epicentre of multidimensional poverty: A Regional Analysis of Uttar Pradesh. *Economic and Political Weekly*. 2024; 59(14).
14. Mondal S, Kumar S, Mishra AP. Contextualizing spatiality of multidimensional poverty in rural and urban India: A geographical perspective. *Belgian Journal of Geography*. 2023; 16(1): 1–32.
15. Olinto P, Beegle K, Sobrado C, Uematsu H. The state of the poor: Where are the poor, where is extreme poverty harder to end, and what is the current profile of the world’s poor. *Economic premise*. 2013; 125(2): 1–8.
16. Castañeda A, Doan D, Newhouse D, et al. A new profile of the global poor. *World Development*. 2018; 101: 250–267.
17. Bigwa S, Ibrahim OHY. Multidimensional Poverty among Farming Households in Katsina State, North-Western Nigeria. *Journal of Agribusiness and Development*. 2024; 2(72): 245–254.
18. Septa D, Acharya R, Dhanora M. Determinants of Multidimensional Poverty: A Study of the Rural District of Madhya Pradesh. *Journal of Development Policy and Practice*. 2024. doi:10.1177/24551333241285537
19. Meher AK, Venkatachalapathy TK, Panda PK, Mishra PK. Multidimensional Poverty among the handloom weavers in Odisha, India: Prevalence and Determinants. *Indian Journal of Human Development*. 2024; 18(2): 340–355.
20. Jerumeh TR. Incidence, intensity and drivers of multidimensional poverty among rural women in Nigeria. *Heliyon*. 2024; 26;10(3): e25147.
21. Haque S, Salman Md, Hira FT, Hossain ME. Multidimensional Poverty Status in Rural Bangladesh and the Pathways of Sustainable Poverty Alleviation, *Forum for Social Economics*, 2022; 1–22.
22. Ali G. Multidimensional Poverty among Sudanese Farmers: Evidence from Gezira Scheme, 2023. *Open Journal of Social Sciences*. 2024; 12: 216–231.
23. Lee YF, Kind M. Reducing poverty and inequality in rural areas: Key to inclusive development. United Nations, Department of Economic and Social Affairs. 2021; 1–4.
24. Hossain, M, Mendiratta V, Savastano, S. Agricultural and rural development interventions and poverty reduction: Global evidence from 16 impact assessment studies. *Global Food Security*. 2024; 43.
25. Rather JA, Bhat MS, Andrabi ZABR. Inter district dimensions of Socio-economic development in Jammu and Kashmir State: A geographical analysis. *Periodic Research*. 2017; 6(1): 92–101.
26. Alkire S, Foster J. Counting and multidimensional poverty measurement. *Journal of Public Economics*. 2011; 95(7–8): 476–87.
27. Esrael E, Worku A, Cucchi C, et al. Status and determinants of multidimensional poverty in Wolaita Sodo Town, Southern Ethiopia. *Journal of Agriculture and Food Research*. 2025; 19: 101562.
28. Anyanwu JC. Marital Status, household size, and poverty in Nigeria: Evidence from the 2009/2010 survey data. *African Development Review*. 2014; 26(1): 118–137.
29. Roy P, Ray S, Halder SK. Socio-economic determinants of multidimensional poverty in rural west Bengal: A Household level analysis. *Journal of Quantitative Economics*. 2019; 17: 603–622.
30. Bersisa M, Heshmati A. A distributional analysis of uni and multidimensional poverty and inequalities in Ethiopia, *Social Indicator Research*. 2021; 155(3): 805–535.
31. Eze E, Alugbuo JC, Financial inclusion and poverty reduction in Nigeria: A survey-based analysis. *GSC Advanced Research and Reviews*. 2021; 7(3): 75–84.
32. Zambak M, Cagatay S. Increasing number of children and poverty: A multidimensional approach. *Ege Academic Review*. 2021; 21(4): 299–317.
33. Septa D, Acharya R, Dhanora M, Suryawanshi AK. Impact of Social Security Schemes on Multidimensional Poverty: A study from rural tribes of Madhya Pradesh (India). *Journal of Humanities, Arts and Social Science*. 2022; 6(4): 500–508.
34. Pinilla-Roncancio M. Multidimensional poverty and social protection. University of Oxford; 2024.
35. Borga LG, D’Ambrosio C. Social Protection and Multidimensional Poverty: Lessons from Ethiopia, India and Peru. *World Development*. 2021; 147: 105634.
36. Sunga SH, Sekatane MB. Determinants of Employment Status and Its relationship to poverty in Bophelong township. *Mediterranean Journal of Social Sciences*. 2014; 5(21): 215–220.
37. Biswal SN, Mishra SK, Sarangi M. Does Women’s empowerment influence multidimensional poverty? Empirical insights from rural Odisha of India. *Pertanika Journal of Social Sciences & Humanities*. 2023; 31(2): 607–635.

38. Zambak M, Soycan S. Econometric analysis of factors affecting women's multidimensional poverty. *Women's Studies International Forum*. 2023; 100: 102800.
39. Wei W, Sarkar T, Zukiewicz-Sobczak W, et al. The influence of women's empowerment on poverty reduction in the rural areas of Bangladesh: Focus on health, education and standard of living. *International Journal of Environmental Research and Public Health*. 2021; 18: 6909.
40. Dehury B, Mohanty SK. Multidimensional Poverty, household environment and short-term morbidity in India. *Genus*. 2017; 73(3): 1–23.

Appendix

Table A1. Descriptive statistics of variables for sample villages & Kargil district.

Variables	Minjee	Thasgam	Gundmangalpur	Muradbagh	Achambur	Skambo	Yokmakharbu	Kargil District
<i>MP_{hi}</i>	Mean: 1.31 S.D.: 1.43 Min.:0.0 Max.:5.23 N: 80	Mean: 2.04 S.D.: 1.85 Min.:0.0 Max.:7.2 N:80	Mean:1.8 S.D.: 1.5 Min.:0.0 Max.:6.2 N: 65	Mean: 1.62 S.D.: 1.33 Min.:0.0 Max.:3.5 N:25	Mean:2.13 S.D.: 1.26 Min.:0.0 Max.:4.3 N:20	Mean:2.24 S.D.: 1.30 Min.:0.0 Max.:6.2 N:25	Mean: 0.71 S.D.: 1.00 Min.: 0.0 Max.:3.4 N:20	Mean:1.72 S.D.: 1.57 Min.:0.0 Max.:7.2 N: 315
<i>Age</i>	Mean: 57.9 S.D.: 12.1 Min.:35.0 Max.:88 N:80	Mean: 53.7 S.D.: 9.7 Min.:28 Max.:72 N:80	Mean:52.4 S.D.: 12.9 Min.:28 Max.:85 N:65	Mean:54.1 S.D.: 14.6 Min.:23.0 Max.:80.0 N:25	Mean:62.0 S.D.: 16.5 Min.:40 Max.:90 N:20	Mean:55.9 S.D.: 14.5 Min.:30.0 Max.:85,0 N:25	Mean:55.4 S.D.: 10.9 Min.:35.0 Max.:80.0 N:20	Mean: 55.3 S.D.: 12.6 Min.: 23 Max.: 90 N: 315
<i>Faz</i>	Mean: 7.3 S.D.: 2.5 Min.: 3.0 Max.:14.0 N: 80	Mean: 8.2 S.D.: 3.7 Min.:4.0 Max.:19.0 N:80	Mean:6.6 S.D.: 3.02 Min.:2.0 Max.:16.0 N:65	Mean:7.2 S.D.: 2.8 Min.:3.0 Max.:14.0 N:25	Mean:6.1 S.D.: 2.8 Min.:3.0 Max.:13.0 N:20	Mean:6.2 S.D.: 2.7 Min.:2.0 Max.:15.0 N:25	Mean:5.9 S.D.: 2.2 Min.:3.0 Max.:11.0 N:20	Mean: 7.11 S.D.: 3.1 Min.:2.0 Max.:19.0 N: 315
<i>Fdx</i>	Mean: 9275 S.D.: 4182.5 Min.:3000 Max.:20,000 N:80	Mean:8375 S.D.: 2582.2 Min.:4000 Max.:15,000 N:80	Mean:7461.5 S.D.: 3400.7 Min.:2500 Max.:15,000 N:65	Mean:8240 S.D.: 2350.2 Min.:4000 Max.:13,000 N:25	Mean:6325 S.D.: 3001.2 Min.:3000 Max.:15,000 N:20	Mean:6240 S.D.: 1774.4 Min.:3000 Max.:11,000 N:25	Mean: 7760 S.D.: 2912.3 Min.:4000 Max.:15,000 N:20	Mean:8065.7 S.D.: 3331.1 Min.: 2500 Max.:20,000 N: 315
<i>Nfx.</i>	Mean: 13,169 S.D.: 6126.3 Min.:4000 Max.:27,000 N:80	Mean:12,025 S.D.: 4304.8 Min.:5000 Max.:20,000 N:80	Mean:12,669 S.D.: 8019.6 Min.:2000 Max.:50,000 N:65	Mean:16,800 S.D.: 19,166 Min.:4000 Max.:105,000 N:	Mean:15,500 S.D.: 20,940 Min.:3000 Max.:100,000 N:20	Mean: 8100 S.D.: 3763.9 Min.:2500 Max.:17,000 N:25	Mean:18,238 S.D.: 9366.8 Min.:7000 Max.:40,950 N:20	Mean: 13,131 S.D.: 9678.6 Min.: 2000 Max.:105,000 N: 315
<i>Dbt</i>	Mean:50,963 S.D.: 229,040 Min.:0.00 Max.:1,900,000 N:80	Mean:33,725 S.D.: 196,890 Min.:0.00 Max.:1,700,000 N:80	Mean:32,631 S.D.: 79,977.0 Min.:0.0 Max.:500,000 N:65	Mean:92,000 S.D.: 263,150 Min.:0.0 Max.:1,200,000 N:25	Mean:29,900 S.D.: 53,927 Min.:0.0 Max.:200,000 N:20	Mean:52,280 S.D.: 129,570 Min.:0.0 Max.:600,000 N:25	Mean:1500 S.D.: 3663.5 Min.:0.0 Max.:10,000 N:20	Mean: 41,686 S.D.: 177,160 Min.:0.0 Max.:1,900,000 N: 315
<i>Ced</i>	Mean: 2.4 S.D.: 1.3 Min.:0.0 Max.:6.0 N:80	Mean:2.9 S.D.: 1.3 Min.:1.0 Max.:8.0 N:80	Mean:2.5 S.D.: 1.7 Min.:0.0 Max.:7.0 N:65	Mean:2.9 S.D.: 1.6 Min.:0.0 Max.:6.0 N:25	Mean: 1.9 S.D.: 1.04 Min.:1.0 Max.:5.0 N:20	Mean:2.4 S.D.: 1.2 Min.:0.0 Max.:6.0 N:25	Mean:2.3 S.D.: 1.3 Min.:0.0 Max.:4.0 N:20	Mean: 2.6 S.D.: 1.4 Min.: 0.0 Max.:8.0 N: 315
<i>Ldz</i>	Mean:0.73 S.D.: 0.22 Min.:0.4 Max.:2.0 N:80	Mean:0.88 S.D.: 0.36 Min.:0.0 Max.:2.0 N:80	Mean:0.66 S.D.: 0.15 Min.:0.0 Max.:1.0 N:65	Mean:0.64 S.D.: 0.14 Min.:0.4 Max.:1.0 N:25	Mean:0.68 S.D.: 0.16 Min.:0.5 Max.:1.0 N:20	Mean:0.55 S.D.: 0.14 Min.:0.30 Max.:1.0 N:25	Mean:0.63 S.D.: 0.28 Min.:0.0 Max.:1.0 N:20	Mean: 0.72 S.D.: 0.26 Min.: 0.0 Max.: 2.0 N: 315

Source: Authors' calculation; Note on Description of Variables: *MP_{hi}*—Intensity of Multidimensional Poverty; *Age*—Age of the Head of the Household; *Faz*—Family Size; *Fdx*—Monthly Food Expenditure of the Household; *Nfx*—Monthly Non-food Expenditure of the Household; *Dbt*—Amount of Debt Standing in the Household; *Ced*—No. of Household Members Continuing Their Study; *Ldz*—Size of Agricultural Land Holding by the Household.