POVERTY BEYOND INCOME AND CALORIES:
A STUDY OF MULTIDIMENSIONAL POVERTY IN A BACKWARD DISTRICT OF HARYANA WITH RESPECT TO GENDER AND SPATIAL DISPARITY

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ABSTRACT

Two principle issues that are central to the discourse on development are poverty and inequality and a lot of research has been done in this regard dealing with these issues either collectively or separately. But, the majority of research has been done following the income or expenditure approach which is quantitative and perceived as a narrow approach. Only recently, the qualitative aspects of poverty and inequality are taken into consideration in their measurement. Aspects such as incidence, intensity and inequality of poverty were covered in this study. A primary survey was conducted in the Nuh district of Haryana state of India to measure Multidimensional poverty in its three aspects across the gender and spatial dimensions. The study concludes that variation is experienced between male and female and urban as well as rural areas.

KEYWORDS*: Deprivation, Gender, Regional Disparity, Multidimensional Poverty, Inequality.*

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Introduction

In development economics, two principle issues that are central to the discourse in recent times are poverty and inequality and a good quantity of research has been undertaken in this area of knowledge. In India, to identify poor and non-poor, the NITI Aayog (erstwhile Planning Commission) found the base of consumption expenditure. In 1962, an expert working group defined the poverty criteria in term of monthly per capita consumption expenditure of Rs. 20 and Rs. 25 for rural and urban areas respectively and this amount continue to revised in due course of time. Subsequently,2400 calories in rural and 2100 calories in urban areas were considered as measurement also and revision was made in expenditure and poverty with calorie intake. This approach of planning Commission has been challenged on the argument that calorie intake and nutrition is simply not the same thing (Patnaik, 2010; and Deaton &Dreze, 2010). Sen (1976; 1983) explored that the identification of poverty and measurement of poverty is a challenging issue rather than its existence and having multiple dimensions also including qualitative. The monetary approach is misleading from various perspectives and needs to redefine (Sharma and Chakravarty, 2015).Under such an approach, an attempt is made to measure the poverty in Nuh district covering all the aspects of poverty i.e. incidence, intensity and inequality between region and gender.

Data, Survey Design and Research Methodology

The study is empirical and based on the primary survey in the Nuh district of Haryana a sample of 400 respondents. As per the recent estimates of the income method of poverty measurement, Nuh district is the poorest district of Haryana state in India. However, in a state where the sex ratio is below the national average, Nuh has the highest sex ratio in the state but the standard of living is very low in terms of power supply, low access of LPG for cooking, *kuccha* houses, low sanitation facilities etc. (Sehgal Foundation, 2015;Institute for Human Development, 2008). Hence, it was interesting to conduct a study on Nuh district and measure the three main aspects of poverty, i.e. incidence, intensity and inequality across the gender and spatial dimensions in Nuh District. The multistage sampling technique was used to collect the field-level data. In the first stage, four blocks from Nuh, namely, Tauru, Nuh, Punhana and Jhirka were selected for the study. In the second stage, sixteen villages were selected from

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four villages in each block and in the third stage, the households were randomly selected from these villages. The study used the methodology of Alkire and Foster, (2007) which consists of four steps and the inequality index was developed to measure the inequality among gender and region which are used be earlier studies i.e. Seth and Alkire (2014); Mahoozi (2015). Education, health and standard of living were taken to measure MPI in line with earlier studies. The first dimension of education was represented by years of schooling and attendance; the dimension of health was represented by nutrition; and concerning electricity, drinking water, sanitation, flooring, cooking fuel and assets were taken to measure the standard of living. The present study also used a counting approach suggested by Seth and Alkire (2014) to assess the inequality in Nuh district. The study attempts to explore the inequality in gender as well as regional disparity. The study used Seth and Alkire (2014) methodology to explore the decomposition formulation of the inequality measure.

Results and Discussion

Incidence, Intensity and Multidimensional Poverty in Nuh

Table 1: Incidence, Intensity and Multidimensional Poverty in Nuh

Indices	Male	Female	Gender Difference	Nuh	Regional Difference
H	0.455	0.73	-0.275	0.637	0.165
A	0.527	0.564	-0.037	0.554	0.005
MPI	0.24	0.412	-0.172	0.355	0.094

Source: Field level data
"H= Incidence of Poverty or Multidimensional Head Count Index, A= Intensity of Poverty
MPI= Multidimensional Poverty Index".

Table 1 shows the incidence, intensity and multidimensional poverty index among the head of households in Nuh district. Based on the different three dimension and indicators 63 percent of households are poor. The intensity index is about 0.55 which shows the average fraction among those who are multidimensional poor households and the MPI is 0.355. The table also depicts poverty among gender. The table clearly shows that there are gender differences in Nuh district. About more than half of the female-headed are deprived of various indicators of poverty. The gender gap in the incidence of poverty is more than 25 percent. The same types of results are found in the intensity and multidimensional poverty index. The study also highlights the gender and regional difference in different indices of multidimensional poverty among households. The poverty in Nuh district is not only gender issues but also issues of spatial disparities.

Multidimensional Poverty Indices among Rural households in Nuh District

Table 2: Multidimensional Poverty Indices among Rural Households in Nuh District

Indices	Male	Female	Gender Difference	Total
H	0.52	0.83	-0.31	0.675
A	0.525	0.564	-0.039	0.552
MPI	0.273	0.47	-0.197	0.373

Source: Field level data

Table 2 shows the incidence, intensity and multidimensional poverty index in rural areas of Nuh district and its shows that 67.5 percent of households are poor; the intensity of poverty is 0.552 and Multidimensional Poverty Index I) is 0.373. If we analyze the results based on gender, there are big differences in H, A and MPI in male, as well as female-headed households, 52 per cent of male, headed households, are deprived while about 83 percent of female-headed households are poor according to Multidimensional Head Count Index. Around 31 percent of female-headed households are derived more with their counterpart male. The same type of picture is reflected in A and MPI in the case of male-headed households and female-headed households. The male-headed households have 0.525 intensity of poverty while female-headed households have about 0.564 intensity of poverty among the poor.

Multidimensional Poverty Indices among Urban households in Nuh District

Table: 3. Multidimensional Poverty Indices among Urban households in Nuh District

Indices	Male	Female	Gender Difference	Total
H	0.39	0.63	-0.24	0.51
A	0.521	0.561	-0.04	0.547
MPI	0.203	0.354	-0.151	0.279

Source: Field level data

Table 3 shows multidimensional poverty indices among urban households of Nuh district of Haryana. In the urban areas, the incidence of poverty is 0.510 which shows that about 51 percent of households are multidimensional poor; the intensity is 0.547 among the poor households and MPI is 0.240. Here, we also fond huge inequality among gender in H, A, and MPI. About 39 percent of male-headed households are multidimensionally poor while about 63 percent of female-headed households are deprived. The study found the spatial disparity in incidence, intensity and multidimensional poverty index.

Contribution of each dimension in Multidimensional Poverty

Further, this study analyses the percentage contribution of each dimension in the Multidimensional Poverty Index.

Table 4: Contributions of each Dimension to MPI

|	Rural			Urban			Total (Rural + Urban)		
	Male	Female	Total	Male	Female	Total	Male	Female	Nuh
Education	41.29	50.14	46.86	27.72	51.51	42.82	35.54	50.74	45.2
Health	27.62	19.83	22.72	37.62	19.73	26.26	31.85	19.7	23.9
Standard of Living	31.09	30.03	30.42	34.66	28.76	30.92	32.61	29.48	30.89

Source: Field level data
Male HH = Male Head of Households, and Female HH = Female Head of Households.

Table 4 shows the proportional contribution of each of the three dimensions to the Multidimensional Poverty Index. In Nuh, as per our results, education was 45.2 percent followed by health (23.9) and standard of living (30.89) percent respectively to the multidimensional poverty index. This study also states the impact of these dimensions' gender-wise and area-wise in making them poorer. For female-headed households, the contribution of education in rural and urban areas is more as compared to male-headed households. Health contributes more to male-headed households in making them poorer than in female-headed households. Similarly, the role of the standard of living is greater in male-headed households in making them poor as compared to female-headed households. Education contributes more in rural areas than in urban areas, while, the contribution of health and standard of living is relatively more in urban areas than in rural areas.

The study also shows the percentage contribution of each indicator to MPI gender-wise and region-wise. In the rural area, years of schooling are the largest contributor to MPI. Nutrition is the second-largest while school attendance is the third-largest contributor to MPI. Similar results are observed in the case of urban areas. Here, nutrition is the first, years of schooling are the second and school attendance has been observed as the third-largest contributor to MPI. In the case of male-headed households, the largest contribution is Nutrition, the second-largest contribution is of years of schooling and the third-largest contribution is of school attendance in both rural and urban areas. For female-headed households, the largest contributor is years of schooling, the second-largest in school attendance and the third-largest is nutrition. The main finding of this study is that all the six indicators have an impact on the MPI; however, schooling, attendance and nutrition are the main contributors which make the impact of other indicators negligible.

Figure 1: Contribution of each Indicator to Multidimensional Poverty Index
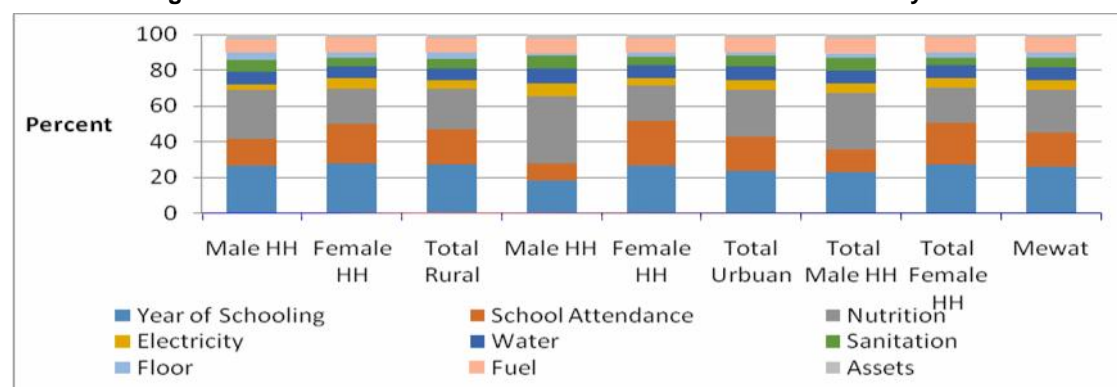
Source: Primary Survey Male HH = Male Head of Households, and Female HH = Female Head of Households.

Gender Inequalities and Regional Disparity

Table 5: Gender Inequality and Regional Disparity in Nuh District

Region	Indices	Inequality Among Poor
Rural	Gender Inequality Index	0.179
Urban	Gender Inequality Index	0.085
Nuh	Regional disparity Index	0.187

Source: Field level data

Table 5 shows the gender inequality and regional disparity in Nuh according to the methodology suggested by Seth and Alkire (2014). The results depict that the overall inequality is 0.179. The inequality measure for urban areas among poor male-headed households and poor female-headed households is 0.085. If we compare the gender and region-wise inequality, this study found that in the case of rural area multidimensional poor female-headed households have higher inequality as compared to the poor male head of households. However, the scenario is quite opposite in the case of the urban area. Here, poor male-headed households have relatively greater inequality than poor female-headed households. Further, the results depict that the regional disparity among households is measured to be 0.187.

Conclusion

The present study focuses on two major aspects of development discourse i.e. poverty and inequality. Poverty in this paper has been studied in two ways, i.e. incidence and intensity. The study tries to correlate these issues with gender and spatial characteristics of Nuh region. Nuh is the most deprived district of Haryana as per the criterion of income poverty and other socio-economic indicators. However, a significant question to be addressed here is whether incidence, intensity and inequality are the same or different across genders and regions in Nuh. It was found that the multidimensional poverty and inequality are not the same across the male and female-headed households either in rural or urban areas and the same is more rampant in rural areas than urban. Also, the female-headed households depict greater incidence, intensity and MPI in both rural as well as urban areas and overall. Lack of education contributes highest followed by health and standard of living Also, the contribution of education to MPI is more in female-headed households as compared to male-headed households in both rural and urban areas. Whereas, the contribution of health and standard of living to MPI is more in male-headed households as compared to female-headed households in both rural and urban areas. If we look upon the indicators that largely affect the MPI, then, we may say that all the six indicators have an impact on the MPI, however, the years of schooling, attendance and nutrition are the main contributors which make the impact of other indicators negligible, irrespective of gender and spatial disparity. In terms of inequality, we found urban areas to possess greater gender inequality as compared to rural areas. Also, female-headed households depict greater inequality in rural areas than male-headed households, whereas the reverse is true for urban areas.

To frame the poverty alleviation strategies, it is suggested that the government schemes should be implemented in a focused way to address the issue of a particular section or region. Such programmes or schemes are of limited utility if they are universally implemented for the population as a whole. The schemes should be categorized based on rural or urban areas and male or female-headed households for achieving greater benefits in terms of poverty reduction.

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