Determinants of Poverty among Urban Households in Afghanistan: Case study of Mazar-e-Sharif

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Abstract

This paper appraised urban poverty determinants in Afghanistan considering Mazar-e-Sharif as a case study. The data was collected from 326 households using a multi stage sampling approach. The logit model was applied to estimate the influencing factors on poverty status among targeted households. The findings reveal that age of household head, remittances, number of male employed and number of female employed are negatively correlated with poverty status. While, household size and number of illiterate households member have positive impact on poverty in the study area. Thus, current research suggests government to invest more on education sector in order to increase the literacy among different social segments to finally reduce poverty through supply of literate manpower to the market "Policy implication".

Keywords: *Urban poverty, Logit model, Afghanistan*

1. Introduction

Poverty means feeling shortage materially, emotionally and socially. It causes less spending on basic needs such as food, heating and clothing due to less income on daily or monthly bases than someone who has an average income (Oppenheim & Harker, 1996) as cited in (Alcock, 1997, p. 3). In most of the definitions poverty is defined as lack or shortage of basic necessities needed for survival and welfare of human beings, yet there is no common belief regarding what these basic necessities are. Among dif-

ferent approaches, one of them is to use income or expenditure to identify and separate poor groups. Although only income or expenditure cannot describe human welfare, in practice it is most common to use it. The argument is that some other cases of poverty are deeply correlated with income and expenditure. The common approach to identify poverty based on income is so-called poverty line. As cost of living across the world is different and it evolves time to time, the new global poverty line is updated to US$1.90 in 2015 by The World Bank (The World Bank, 2015). In most of the literature we face two types of poverty which is absolute poverty and relative poverty. Absolute poverty is defined as the minimal requirement needed to manage standards of living such as poverty line, while relative poverty is defined in terms of economic inequality in a specific location (Akinbode, 2013, pp. 323-324).

Historically it was extensively accepted that we can deal with poverty through urbanization and by transferring labor force from agriculture to modern industry, however it was questioned by development planners during the 1970s. After 1970s in many third world countries urban poverty started to became common view among development agencies (Wratten, 1995, p. 12 & 18). The number of urban poor is expanding partially due to urbanization at least in absolute terms in recent years, for instance, the number of people living below the national poverty line is about 100 million in India. China was successful to control urban poverty for a long time by restricting migration, although it might be increasing now. There is a general agreement that urban poverty is becoming more crucial and it should earn more consideration in research and policy making. Rural poverty has been discussed widely, although urban poverty deserves more attention and urban itself carries a wide definition indicating areas with more than 5000 inhabitants (Haan, 1997, p. 2). Not only in developing countries mentioned above, urban poverty is even a matter of debate in the advanced industrialized world (Mingione, 1996, p. 3).

Researchers have utilized different methods to analyze and measure poverty. Since poverty is a multi-dimensional phenomenon, it is not easy to measure. One of the dimensions which come from material privation is lack of goods and services needed for a living and it could be measured through income or consumption as poverty indicators (Alemu, Bewket, Zeleke, Assefa, & Trutmann, 2011, p. 24).

In order to determine urban poverty in Kathmandu, Nepal, (Dahal, 2010, p. 33) has classified person having income less than Rs.12000 annum as poor. In another study, using socio-economic status of the households in Bangladesh (Khudri & Chowdhury, 2013, p. 1 & 8) have determined poor groups and have found variables such as education level and employment status to be key determinants of poverty in their study. In his study in South Africa (Sekhampu, 2012, p. 409 & 413) has classified poor and noon-poor households based on their per capita income and has found that household size was positively correlated with the probability of being poor, while the age and employment status of the household head decreases the chance of being poor. Beside income approach, per capita household expenditure is also one of the methods which is used to identify poor groups among households as adopted by (Okunola & Nigeria, 2020) to measure poverty in Nigeria. They have found total income as the most significant determinants of poverty in their research. Poverty can be measured through multitude approaches; among several a prevalent approach is to use household income to obtain a minimum level of income mandatory for a household to be considered above or below the poverty line (Dunga, 2017, p. 20). The method generally followed in studies related to poverty line is the minimum standard level of subsistence required to continue a living, however such requirements may differ individually according to age, gender and place of residence (Erdoğan, 2002, s. 1).

Researchers have included various variables in order to define poverty and one of these factors is remittance. In general remittance points out the money and goods which are transferred by workers and migrants to the country of their origin (Azam & Haseeb, 2016, p. 266). As (Ratha, 2013, p. 1) claims that, remittances in developing countries act as a considerable vehicle for poverty reduction. According to (van der Berg, 2008, p. 10) poverty is not only lack or shortage of financial assets, yet it is absence of ability to perform effectively in community. Therefore incompetent education or illiteracy could be counted as a form of poverty. In addition, his findings show that higher education raises the chances of being employed and employment decreases probability of being poor by increasing income.

Today Almost 9 million People in Afghanistan are not able to meet their basic needs (Rahimi, 2015, pp. 183-184). Although Afghanistan has been experiencing a positive economic growth in the last couple of decades mainly as a result of foreign aid

inflow, poverty has remained high in most of the regions in the country (Floreani, Acevedo, & Rama, 2016, pp. 1-2). According to Asian Development Bank report in 2016 "In Afghanistan, 54.5% of the population lives below the national poverty line" and 40.1% of the employed population earn below $1.90 PPP a day (Asian Development Bank, 2016). In the year 2010, almost 28% of Afghanistan's urban population lived below the national poverty line and Afghanistan experienced 14% annual growth in its urban area between 1999 and 2010, which is fastest in the South Asian region (Ellis & Roberts, 2016). National poverty line is defined to be 70 AFN or about 1 USD per person a day (Jain, 2018). The number and percentage of the poor among sampled households of current study is identified based on above mentioned 1 USD per day as national poverty line.

Afghanistan has been suffering from years of conflict, which has had harmful impacts on the various areas, counting the economy and society. In spite of record economic growth and huge foreign aid inflows after 2001, poverty remained intractable high in Afghanistan including in the regions such as Mazar-e-Sharif that suffered less from conflict. The reduction in the number of international troops and foreign aid after 2014 led to an increase in conflicts and lower per capita consumption (Floreani, López , & Rama, 2019, pp. 2-5).

The sample city of this study chosen to analyze urban poverty is Mazar-e-Sharif which is the fourth largest city of Afghanistan with a population of almost 427,000 inhabitants (Central Statistics Organization,, 2015). The Mazar-e-Sharif city is located in the northern part of Afghanistan, almost 425 kilometer north of the country's capital, Kabul. It is bordering by Uzbekistan in the north, Sari Pul and Jowzjan provinces in the southwest, Kunduz and Samangan provinces in the south east. Mazar-e-Sharif is the center of Balkh province and Balkh has traditionally been an important center of trade and political power in terms of its location at the historical crossroads of Central Asia, China, the Indian sub-continent and Persia. The economy of Balkh province mainly consists of service sector (43.2%), agriculture sector (38.5%) and manufacturing sector (16.2%) (Samuel Hall, 2019). The spread of armed conflict and related insecurities in the northern provinces of Afghanistan in the last years, particularly after 2018, has caused an influx of internally displaced families from neighboring provinces and districts in Mazar-e-Sharif, which in turn has contributed to increasing urban pov-

erty and hunger (Emergency Response Mechanism, 2019). A study of poverty and food security in Afghanistan's major cities including Mazar-e-Sharif, concludes that, the urban poor are becoming poorer in those cities over the past 3 years. The report claims that, 78,2% of urban households were found to fall below the poverty line and were characterized by high levels of food insecurity. Among other factors, work opportunities, security, education and health services have been listed as the main reasons of moving to big cities. It further concludes that funding and programs of the humanitarian organizations are largely concentrated on rural issues, while urban poverty remains unaddressed by national and international actors. (Samuel Hall, Urban Poverty Report, 2014).

Urban poverty remains unexplored in Afghanistan and lack of academic literature in this area could be a limitation for researchers, on the other hand it highlights the necessity of conducing further research in this field. Only some reports about urban poverty are available which have been provided by international institutions. The purpose of this research is to explore urban poverty in Afghanistan especially in the target area and to achieve this purpose we state the following research questions:

How is the poverty condition among urban households in Afghanistan?

What are some socio-economic factors affecting urban poverty among sampled households in Mazar-e-Sharif?

2. Methodology

This is a quantitative research relying on primary data collected through questionnaire. The data were collected from 326 households living in Mazar-e-Sharif city of Afghanistan through an administrated questionnaire. The reason behind using primary data was, first, there was lack of literature or research to explain the topic from the local point of view, second most of the literatures and partially research topics were either reports or estimated poverty incidences explained the case based on simulation from countries which has the same socio-economic status like Afghanistan. The households were selected using a multi-stage sampling approach. This sampling technic is normally used in national wide researches to divide population in to small groups, in order cover the target population in a good way. Considering the aforemen-

tioned approach, at the first step, four townships that are locally called "Karta" were selected randomly including Tafahosat, Ariana, Dashti Shor and Zera-at. In the second step, five streets were chosen from each township and continued by selection of first street, left the second street and surveyed the third street. At the last step, 12 up to 18 households were selected from each street and the survey was performed by face to face interview with the available household member.

The questionnaire measured participants using binary and Likert scale, while demographic variables measured by intervals, numbers and coding. A team of well-trained male and female enumerators were hired to carry on the data collection process from the targeted areas. Poverty incidence was stated as dependent variable and variables such as household size, age of household head, marital status of household head, remittance receiving and number of working members were considered as independent variables. Table 1 shows the variables with necessary description and measurement items:

Table 1: Variables and measurement items

Variable	Type	Description
Dependent variable		
Poverty Incidence	Dummy	Poverty status, 1= poor, 0 = non-poor
Independent variables		
Age of HH Head	Continues	year
Gender	Dummy	1= male, 0 = female
Employment Status	Dummy	1= employed, 0 = otherwise
Household Size	Continues	Number of members
Number of Female Employed	Continues	Number of members
Number of Male Employed	Continues	Number of members
Number of Illiterate	Continues	Number of members
Remittance	Dummy	1 = receiving, 0 = otherwise

Source: field work data, 2019

This study adopted logit model as a parametric approach to estimate poverty determinants in Afghanistan. Poverty status stated as dependent variable and it is measured by 0 and 1. When dependent variable is dummy, logit is a proper function to use. The following function was applied by Okunola and Ojo (2020) in Ondo state, Nigeria.

$$\ln\left(\frac{p}{1-p}\right) = \beta_0 + \beta_i x_i \dots\dots\dots\dots\dots\dots\dots\dots\dots.1$$

Where "p" shows probability, β stands for coefficients and x denotes the independent variable.

3. Results

This study analyzes the socio-economic determinants of urban poverty status in Afghanistan, using Mazar-e-Sharif as a case study. The primary data were analyzed with both descriptive and inferential approaches. In descriptive analysis several indexes including mean, standard deviation, frequency and percentage were calculated. Table 1 shows socio-economic characteristics of targeted households. The average age of household heads is estimated 32 years. Education level of household heads which was measured by schooling years, indicates that more than 55% of the respondents have 12 years of schooling, while 14% of household heads were illiterate and the remained observations have primary and secondary education. The average education level of the household heads was 10 years. The average household size is 8 members. This finding is in line with CSO (2018) that reports the average household size as 7.7 members in Afghanistan.

Table 2: Socio-economic characteristics of households

Variables	Mean	Std. Dev
Age of Head	32.11	14.33
Education level of Head	10.14	5.33
Household Size	7.94	3.85
Number of Male	4.19	2.24
Number of Female	3.77	2.28

Number of Male Employed	1.86	1.27
Number of Female Employed	0.31	0.65
Number of Illiterate	2.22	2.69
Monthly Income Per Capita	3425	3896
N	326	

Source: field work data, 2019

The proportion of male and female indicates 4.19 and 3.77 members for male and female respectively. This implies unequal sex ratio among the targeted households. Similarly, NSIA (2019) reports unequal sex ratio in both urban and rural areas of Afghanistan. Specifically, the sex ratio is (102 male for every 100 female) in Mazar-e-Sharif and (104 male for every 100 female) in rural areas of Balkh province. There is a big difference between number of male employed and number of female employed in the study areas. The average number of male employed is around 2, while the average number of female employed is only 0.31 members. This means that women and men may not have the same opportunities to participate in the labor market. The average number of illiterate is more than 2 out of 8 members. This indicates that literacy rate is around 75% among sample size. This finding is much larger compared to estimates by UNESCO Institute for Lifelong Learning (2020) that confirmed a literacy rate of 45% in Afghanistan, particularly 65% for youth aged 15-24. The average monthly income per capita is estimated AFN 3425. It is almost equal to that of the World Bank's report for GDP per capita (3400 AFN) in 2018.

Table 3: Employment status of household heads

Employment status	Frequency	Percentage
Employed	229	70.25
Unemployed	93	28.53
Retired	4	1.23

Source: field work data, 2019

The employment status of household heads is shown in Table 2. It is classified into three categories; employed, unemployed and retired. The majority of heads are

employed (70%). Subsequently, around 29% are unemployed and only 1% is retired. Furthermore, the collected data reveals that 24% of employed heads work at governmental organizations. Following up, 6% engage at NGOs and the remained part employed at private organizations and family businesses. This implies that private organizations and family businesses play a significant role on job creation in Balkh province.

The households generate income from difference sources including salary, remittance, farming, pension and rent. Salary and wage compose a substantial part in household total income. It is estimated AFN 15662 or 72% of monthly income. Subsequently, remittance 11%, farming 8.5%, rent 7.2% and pension 1.2%.

Table 4: Monthly Income sources of households

Income source	Mean	Std. Dev
Salary and Wage	15662	15112
Remittance	2460	7624
Farming	1858	4189
Pension	289.2	1625
Rent	1573	6234

Source: field work data, 2019

The estimated coefficients of logit model reveal that several variables including age, remittance, number of female employed and number of male employed are negatively correlated with household poverty status. Variables like household size and number of illiterate have positive and significant effect on household poverty. The age of household head diminishes the probability of poverty status; one year increase in age of head reduces the likelihood of being poor by 0.01. This outcome is supported by Sekhampu (2012) exposed that age and poverty are negatively associated in South Africa. This implies that experienced head may generate more income compared to a novice head. External remittances have negative impact on household poverty status; remittance receiving household has a higher probability (0.29) to move out of poverty than non-receiving household. This finding is consistent with Adam (2004) that found international remittances had a significant effect on the severity of poverty and poverty rate in Guatemala. Similar conclusions were drawn by Adams (1991), Lopez Cordova

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(2004) and Acharya and Leon-Gonzalez (2012) as well. Households diversify and accumulate income through receiving remittances from overseas, which increase income per capita and leads the household to move out of poverty (Table 4).

Table 5: Determinants of poverty status among urban households

Variable	Coefficient	Std. Error	z- Statistic	Marginal Effect
C	-0.3764	0.7486	-0.5027	-
Age	-0.0260***	0.0098	-2.6382	-0.0064
Gender	-0.5083	0.6289	-0.8082	-0.1803
Employment status	-0.1613	0.3063	-0.5267	-0.0448
Remittances	-1.3659***	0.4147	-3.2933	-0.2886
Number of female employed	-0.4996**	0.2206	-2.2640	-0.1309
Number of male employed	-0.4127***	0.1322	-3.1212	-0.1032
Household size	0.3125***	0.0576	5.4185	0.0771
Number of illiterate	0.1511**	0.0703	2.1472	0.0378

Source: field work data, 2019

Employment status of head is negatively correlated with poverty, but it is not statistically significant. While numbers of female and male employed decline the chance of being poor, both variables are significant at 0.05 and 0.01 level respectively. The marginal effect depicts that both variables have influence on poverty; female labor (0.13) has stronger impact compared to male labor (0.10). This denotes that with more working members, their income per capita would enhance and as a result the household moves out of poverty. A similar result was found by Okunola and Ojo (2020) in Ondo state, Nigeria and Teka et al. (2019) in Ethiopia. Illiterate members increase the probability of being poor; each additional member augments the likelihood of staying poor

by 0.04. Educational level may play a significant role on labor force participation, thus it could be tough for illiterate person to find a job and generate income, and consequently the household stays under poverty line.

Household size effects poverty status positively and remains significant at 1 percent. A one member increase in household size enhances the likelihood of staying poor by 0.077. The possible interpretation is that as household size augments the income per capita declines and as a result the household remains at poverty. This outcome is consistent with conclusion of Datt and Jolliffe (2005) that household size was negatively linked with poverty in both rural and urban areas in Egypt. Similar finding was estimated by Lanjouw and Ravallion (1995) and Malik (1996).

4. Conclusion and Policy Implication

Poverty which is defined as a state in which a person or community lacks the necessities for a minimum standard of living is one of the biggest challenges in the world specially in developing countries. While rural poverty is a matter of debate in many of the literature, in fact rapid migration of labor forces from rural areas towards big cities for finding a source of income in recent years highlights the importance of urban poverty. Different methods have been suggested by scholars in order to measure poverty, among them income approach in a common one. An income approach has been utilized in this study to measure poverty among urban households in Afghanistan. Although Afghanistan has been experiencing a positive economic growth in the last couple of decades mainly as a result of foreign aid inflow, poverty has remained high in most the regions in the country. The empirical findings indicate that factors such as numbers of employed and literate members in a household can decline the chance of being poor, while factors such as household size can increase the probability of being poor. Therefore, increasing employment opportunities, providing access to schools for youth especially for females and implication of birth control programs could be effective policies to be taken.

Urban poverty remains unexplored in Afghanistan and lack of academic literature in this area was a limitation for researchers, we hope this research opens the way for further studies.

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