Determinants of Vulnerability to Poverty in Afghanistan

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Abstract

The present study is devoted to identify the factors and forces that are responsible for keeping some households in poverty whereas enables other to escape low level of living and poverty in the country. In fact, the information on the probable causes of poverty and vulnerability is crucial and a pre-requisite to design the most appropriate strategy for mitigating poverty and vulnerability of the households. Policies need to be initiated to overcome the potential causes of trapping people in poverty whereas initiatives also need to be undertaken to capacitate people to escape poverty or enable them to keep above the poverty threshold level. Such factors and forces are likely to be specific characteristics of the households themselves and specific attributes associated with the overall socio-economic environment where household happens to be located. In fact such environmental attributes tend to affect households differently through exchange entitlements of the household endowments in the market (Sen, 1971). Therefore, we propose to test the role of both household specific and its environmental related factors as potential determinants of household poverty and vulnerability in Afghanistan.

Keywords: *Household poverty, Vulnerability, Poverty mitigation, Socio-economic environment*

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Introduction

The poverty and vulnerability are on the rise since 2001, despite, the international donor community had made serious efforts to map risk and vulnerability in the post-Taliban Afghanistan. A national level survey was initiated in 2003 under the 'National Risk and Vulnerability Assessment' (NRVA) project. The NRVA surveys were repeated in 2005, 2007/08 and 2011/12 with significant improvement in scope, coverage and methodology (CSO, 2013). Results of these surveys were published under NRVA Reports for each period. These reports are the only source of information about the dynamics of poverty in Afghanistan. The subject has not received adequate attention of the scholars so far. Nevertheless, a rich literature of poverty exists for other developing countries which can be a good source of information for the present study. Nevertheless, to pre-empt, main conclusion of the literature suggests that: (i) Almost whole of the empirical evidence on poverty and vulnerability in Afghanistan is based on a single poverty line for whole country and is based on the cost of basic need approach; (ii) Provincial level analysis of poverty has not received adequate attention of the researchers and organizations; (iii) Role of various household specific idiosyncratic and generic factors as determinants of poverty has not received adequate attention of the researchers; (iv) Not much evidence is available on shocks and poverty relationship and the strategies adopted by the poor households to cope with various idiosyncratic and generic shocks. In a time bound research like the present one, in-depth exploration of all these gaps is not feasible.

Review of Literature

The main objective of this study is to have a glance at the available empirical evidence on poverty and vulnerability of Afghanistan. It is not possible to include all the published and unpublished studies on

the topic; an attempt has been made to include relevant published work available in the literature.

Orbeta (2005) by utilizing Annual Poverty Indicator Survey (APIS) 2002, conducted by National Statistics Office (NSO), Philippines studied the relationship between vulnerability and family size. In particular, the author utilized cross tabulation and multivariate analyses to examine the role of family size on poverty incidence, vulnerability to poverty, savings, labor supply, earnings of parents, and human capital investments. The author found that there is a clear negative impact, on an average, from additional children on household welfare and these negative impacts are larger for poor. The author further stressed that the associations between larger family size, poverty incidence and vulnerability to poverty are strong and enduring. He further estimated that large family size also reduces household savings. The author stressed that strong population program must accompany poverty alleviation efforts.

Gaiha et al. (2007) by using Pivot Analysis identified the determinants of poverty and vulnerability of rural households. They found overlap between determinants of poverty and vulnerability. Authors found that low dependency burden is higher in upper secondary school at high level of education and larger land belongs to Kent ethnic enabled households to escape poverty and vulnerability to poverty. On the other hand, landlessness, ethnicity (Hondo, Munga, Buddhism), lack of education, location in mountainous regions and rural areas and low access in electricity and market are associated with greater risk of households proneness to both poverty and vulnerability expected to decline further with rapid globalization of Vietnam's economy and improvement in infrastructure development. They concluded that for sustained poverty reduction accelerated growth need to be complemented with lower fertility and greater

resilience of deprived ethnic groups and/or their located in remote mountainous rural regions.

Baiyegunhi and Fraser (2010) studied the determinants of poverty dynamics by employing panel dataset of 150 rural households in 2007 and 2008 Eastern Cape Province of South Africa. The authors estimated by using Probit model that the age, education level, and profession of the head of household, dependency ratio, exposure to idiosyncratic shocks, and access to credit are statistically significant in explaining a households' vulnerability to poverty. The authors recommended that social protection and promotion policies can ensure inclusiveness of vulnerable section of society into the development process.

Edoumiekumo et al (2013) studied the household vulnerability to poverty in Bayelsa state of Nigeria using National Bureau of Statistic's National Living Standard Survey (NLSS) data of year 2009-10. The authors estimated that the households with more working members aged between 15 and 60, female headed, primarily engaged in the agricultural sector, and being headed by people with lesser years of schooling were the important determinants of vulnerability. The authors recommended that policies focusing on women empowerment, subsidization of agricultural inputs, provision of unemployment benefits can go a long way to make household resilient towards vulnerability to poverty.

Deressa (2013) examined the determinants of vulnerability by employing logistics model and by using secondary data from Household Income, Consumption and expenditure Survey (HICES) and Welfare Monitoring Survey (WMS) of 2004 conducted by Central Statistical Authority (CSA) of Ethiopia. The authors estimated that larger family size, age and illiteracy of head of household significantly increase the probability of the household to be

vulnerable. Author recommended that ex ante measures to prevent vulnerable households from becoming poor should be combined with ex post measures to reduce the poverty from Ethiopia.

Muleta and Deressa (2014) examined the determinants of vulnerability to poverty in rural Ethiopia by using Ethiopian Rural Household Survey from 1999- 2000. It was estimated by using logit models that female headed households are more vulnerable to poverty than male headed households. It was suggested by the authors that gender-sensitive poverty alleviation policies aiming at enhancing endowments like increase in livestock ownership, productivity of land, and education level should be adopted in rural Ethiopia.

Megersa (2015) in his research used Ethiopian Rural Household Survey (ERHS) of 2009 and estimated that 51% of the sampled population was poor and among this majority of them (80 per cent) were vulnerable to poverty. He further estimated that 52 percent of the non-poor are also vulnerable to poverty. Among the factors impacting the vulnerability, the authors found that the household size and off-farm income impact the vulnerability of household. The author recommended an extensive and strong research to better understand rural vulnerability to poverty.

The present study is dedicated to examine the important dimensions of poverty and vulnerability in Afghanistan with the following objective:

Objective of the Study:

1. To test the role of both household specific and its environmental related factors as potential determinants of household poverty and vulnerability in Afghanistan.

Hypothesis of the study:

1.Household size is generally related with high consumption burden of the dependent children.

2. Earning of individuals has an inverted U type of relationship with age.

3. Education is widely accepted to be an important component of human resources development and income earnings and escaping poverty.

4. Geographical location of a region is a contributor to economic growth and wellbeing of the residents of Afghanistan.

Methodology

The present study is based on the unit level data collected during the four National surveys of household pertaining to the years of 2003, 2005, 2007/08, and 2011/12. Data was collected for all the three segment of household namely rural, urban and Kuchi households during remaining three national surveys. During 2003 and 2011/12 surveys, data was collected from 32 provinces only whereas during 2005 and 2007/08 surveys all the 34 provinces were covered. The number of households covered during the survey was not the same as the number of households varied in all survey from 11757 in 2003 to 30822 in 2005, 20544 in 2007/8 and 19582 in 2011/12. Furthermore, the methodology used, the sample design, data collection and coverage, contents and design of the questionnaires used, and training of staff deployed differs considerably across the four surveys. [See report 2007/08, page 6]. Each survey is an improvement on its previous one so far as coverage and collection of information is concerned.

To examine the role of proposed factors and forces as potential determinants of household poverty as well as to test the proposed hypotheses; a battery of qualitative response models has

been proposed by the researchers (Green, 2003; Amemiya, 1981). Among the models, the linear probability model is easier to apply and has straight forward intuitive interpretation of its estimated coefficients. However, the linear probability model suffers from two serious weaknesses. First is the problem of Heteroscedasticity of the error term. Second is that the predicted value of the probability of happening the dependent event might overflow the zero and one interval, which otherwise is not possible theoretically (Gujrati, 2004). Therefore, the ultimate choice falls on some other models where the predicted dependent event values must satisfy the theoretical requirement of unit interval. The logit and Probit models are two of such models that are most widely used in empirical research to deal with the problem. Empirical evidence suggests that both these models provide almost similar results and there is no specific reason to prefer one over the other (Amemiya, 1981).For our present purpose, we propose to estimate logit model on our data to examine the role of proposed determinants of household level poverty in Afghanistan. A brief description of the logit model is as following:

$$P_I = \frac{1}{1+e-(\alpha+\Sigma\beta Xi+\Sigma\delta iDi+\varepsilon i)}$$

or $\log \left[\frac{Pi}{1-Pi}\right] = \alpha + \Sigma\beta Xi + \Sigma\delta iDi + \varepsilon i$

Where

P_{i-} is the probability of ith household falling into poverty

Xi- Is the set of quantitative variables for the ith household

Di- set of qualitative (dummy) characteristics/ variables for the ith individual

α,β and δ - are parameters of the model to be estimated

ε_{i-} is the stochastic error term assumed to be independently and identically distributed with zero mean and unit constant variance.

Since the model is non-linear, so it has to be estimated by some non-linear method. The Maximum Likelihood Method is generally used by researchers to estimate the Logit model.

Potential Determinants and Proposed Hypotheses

1. Household Specific

1.1 (a) Size and Structure of household

Size and structure of a household has an important role as a determinant of its wellbeing (Lanjouw and Ravallion, 1995; Meenakashi and Ray, 2000; Meyer and *Niyimbanira*, 2016). In earlier stages of family formation, increasing household size is generally related with high consumption burden of the dependent children, hence making households more vulnerable to falling into poverty. However, after a certain stage, particularly when some children start working, adult dependency burden declines and chances of household earning minimum level of threshold income increases and hence mitigates its chances of slipping into poverty. Furthermore, when the size of family increases, increasing household size enables the family to cope with any adverse circumstances and also to diversify its economy by facilitating adult members to seek employment or invest in alternative avenues/options. At the same time, after crossing a certain threshold level, the economy of scale of consumption begins to play an important role and also overcomes the additional consumption burden of household members with increasing household size (Lanjouw and Ravallion, 1995). Therefore, size of household and its probability of falling into poverty is complex and are characterized by a non-linear relationship. This was observed in the preceding chapter as the poor tend to have bigger families whereas those vulnerable to poverty are mainly from smaller families. Since the findings in the previous chapter were based on a univariate

analysis, it was not feasible to examine the impact of household size rigorously by controlling the impact of other dimensions of household size. For present analysis, we propose that the household size and its risk of falling into poverty have an inverted U type relationship. In other words, vulnerability to poverty of a household first increases with increasing household size, reaches a threshold and thereafter starts decreasing.

1.2 (b) Dependency Burden

The composition of a household in terms of earner and non-earner members plays an important role as determinant of its wellbeing and risk of falling in poverty (Lanjouw and Ravallion,1995). Among the dependent members, children of 0-6 years age and old persons put more pressure on household's economy as they are generally not only consumers but also draw upon the time of earning adult members to take care of their personal requirements. Therefore, high proportion of dependent children is likely to be significantly associated with poverty status of the households. Like the 0-6 years children, the proportion of 60 years old in the household may also be significantly related to the risk of household falling in poverty.

However, relationship in the case of 7-16 years age children may not be that straightforward. This is mainly because children of this age are generally expected to be in schools and hence drawing upon the household resources in terms of education expenses and consumption needs. It is also possible that as a survival strategy, children of this age group may be pushed into child labour as a coping strategy of the household to meet its basic food requirements and also to cope up with adverse shocks (Chaudhry; Malik and Hassan, 2009; Gaiha, 1988) at a priori, it is difficult to visualize whether 7-16 age

children are a burden or an asset for the households, particularly those having a low level of living. Nevertheless, we propose that increasing proportion of 7-16 years children in a household poses higher risk of falling in poverty.

1.2 (c) Old Age Burden

As a stylized fact and in terms of the life cycle hypothesis, earning of individuals has an inverted U type of relationship with age(Gaiha, 1988; Lanjouw and Ravallion, 1995;Bilenkisi et.al., 2015) Such a relationship assumes that physical productivity and working capacities of an individual first increases with age, peaks and declines substantially after a certain age (generally 60 years) in underdeveloped countries like Afghanistan. Besides, the earning capacity that declines substantially beyond 60 years of age but with further advancement of age of old peoples their health also declines and may require extra time and resources for their medical care and maintenance. Therefore, higher the proportion of old age people in a household, more are expected to be at a risk of falling into poverty because of expected additional demand of extra resources and time of their care takers.

1.2 (d) Age and Gender of household head

Age and gender of a household head play important role in choices of occupation, earning capacity, cohesiveness of members and management of the household economy (Gaiha, 1988). As stated earlier, age of an individual generally depicts inverted U type of relationship with earnings. This is expected to be applicable with age of the household head and probability of the household falling into poverty. Therefore, it is expected that households with young age heads may be at a higher risk of falling in poverty and as the age of the young heads advances to middle age their probability of falling into poverty may decline with age.

Along with age, gender of the household is equally important as a determinant of earnings in traditional society like Afghanistan. Predominant role of male members, particularly of male heads, in economic, socio-cultural sphere is well accepted (Javed and Asif, 2011; Bastos, A. et al, 2009) in family succession headship passes on from fathers to eldest sons and so on. In exceptional circumstances like death of male head or the male head migrated for longer time and the other siblings are too young to handle the household affairs, the females discharge responsibilities of household headship. Therefore, it is expected that in such unfavorable circumstances, the chances of female headed households falling into poverty are expected to be higher than that of their counterpart male headed households.

1.2 (e) Education

In the present knowledge and technology intensive era, education is widely accepted to be an important component of human resources development and income earnings and escaping poverty (Thompson& McDowell, 1994; Rodriguez & Smith, 1994; Grootaert, 1995; Gaiha, 1988). In fact, higher education not only capacitates people to fetch more rewarding jobs in the labour market but also enables people to manage their household economies and household affairs more efficiently and effectively (Belinkisi, Gungor and Tapsin, 2015).Besides the economic affairs, education also enable peoples to better manage their health affairs and to deal with others in the society in the most civilized manner that tends to extent their social capital in the society. Better education plays an equally important role in maintaining law and order and creating conducive environment in the society. It's not mere literacy as such; literacy begins to bear more fruits with rising level and quality of education. Therefore, we

hypothesize that higher the education attainment of the household head, lesser would be the chances of household falling into poverty.

1.2 (f) Marital Status of Head

Husband and wife are two wheels of life cycle that are complementary to each other. Therefore, in case a household head is single due to death of his partner or having divorced by the partner, capability to earning and manage household affairs simultaneously get eroded substantially(Anyanwu, 2013); Ananat and Michaels,2008; Javed and Asif, 2011). Therefore, the chances of such widowed or divorced head households falling in poverty increased significantly vis-a-vis the households with living couples. This is specifically so in a conservative traditional society like Afghanistan where being a widow is a stigma and leads to isolation of individuals from social life that leads to substantial erosion of their capabilities to operate in social and economic spheres.

1.2 Occupation

The role of household occupation is a significant attribute of the household economy and hence its chances of falling into poverty. In fact, occupational choice of a household is a very complex phenomenon and is shaped by various countervailing factors and forces like ownership of assets and wealth, composition of family, education level of the household, social and cultural value system, market environment, magnitude and nature of the available markets, mobility of household, social status and ethnicity of the household (For excellent review refer Estudillo et.al.,2013)All these factors are directly or indirectly interrelated with the earning capacity of individuals and households. Occupations which are based on wealth and assets like land and plants, machinery and equipment or based on

higher knowledge and skills, help households to fetch higher level of earnings and escaping poverty. On the other hand, low skill based jobs like working in the farming sector and low training and skill based professions like petty trading and shepherding are low rewarding professions and the chances of people engaged in such occupations falling in poverty are expected to be higher substantially compared with the those in other occupations. Similarly, those employed in illicit activities like opium cultivation, theft or crimes are at a major risk of slipping in poverty. Therefore, we propose that households employed as wage labourers, shepherds or labourers in the opium cultivation are likely to be more prone to poverty compared to those with engaged in other professions.

1.3 Land Ownership

In Afghanistan, almost 80 per cent of the people are living in rural areas and the livelihood of rural population directly or indirectly depends upon land and agriculture production (Warriner, 1969; Gaiha, 1988; Thiesenheusen, 1989; Dorner, 1992; Binswanger et al., 1995; Finan, Sadoulet and de Janvry, 2005).In such an economy, ownership of land is an important source of earnings and livelihood. However, besides magnitude of land ownership, equally important is the type of land ownership. During the field survey, land ownership was listed in three categories; irrigated land, rain-fed land, and garden plots. Ownership of all three types of land is important but most important from productivity and earning point of view is the size of irrigated land and the garden plots possessed by the household. Compared to rain-fed land, it is now worldwide accepted that the productivity of irrigated land is almost more than twice and the risk of crop failures due to adverse weather conditions on irrigated lands are substantially reduced (Bhalla and Singh, 2011). Therefore, the role of

ownership of irrigated land in escaping from poverty is more important that rain-fed land. Ownership of garden plots is equally important because orchard is generally raised on good quality land and investment once made tends to contribute over a longer period of time. Therefore, households owing bigger sized garden plots are expected to be lesser prone to fall into poverty. Nevertheless, all three types of land are expected to significantly reduce the risk of households' falling into poverty.

1.4 Livestock Ownership

Besides ownership of land in rural economy, ownership of livestock is another important productive asset that shapes the economic status of rural households. Three types of animals are domesticated by rural households. These are working animals like mules, horses, donkeys, bullocks and camels; cattle for milk and/or meat like cows, buffaloes, goats and sheep; and poultry birds for eggs and meat like hen, broilers and partridges. In rural economy, livestock production not only complements crop income but also mitigate substantially the weather and pest related risk and uncertainties in shortfall of crop production (Maltsoglou and Taniguchi, 2004; IFAD, 2004). Therefore, larger the number of livestock owned by a household, greater would be the chances of escaping poverty.

1.5 Remittances

Generally, families trapped in low level of living do not find enough rewarding jobs in domestic markets, especially during adverse natural shocks or due to prevailing social conflict and violence (Anyanwu and Erhijakpor, 2010). Under such circumstances many forward looking and risk taking people and families seek employment elsewhere in areas having adequate job opportunity within their own

country or in neighboring countries. Migration from war or conflict torn regions like Syria, Afghanistan, and Sudan are well known phenomenon in the recent years. In some cases, families migrate under such situations or a few capable members of the family move outside and continue to send remittances for the survival of members left behind at home. In fact, a large out flux of refuges from conflict torn regions in Afghanistan occurred to other peaceful regions in the country as well as to other neighboring countries like Pakistan and Iran during last three decades. Therefore, more the remittances received by a household, lesser are the expected chances to its chances of falling in poverty compared with other families not receiving any remittances.

2.1. Environmental Factors

2.1(a) Location

Geographical location of a region is a well acknowledged contributor to economic growth and wellbeing of the residents (Jalan and Ravallion, 1997; Deichmann, 1999). Generally, rural and urban locations of individuals in themselves are indicators of access to basic facilities and emerging market opportunities. Urban areas everywhere in the world are not only preferred in terms of provision of basic civic amenities like education, health, water supply, sewage, and connectivity by different modes of transportation, but are also preferred for being hubs of industrial and services sectors and centers of investment opportunities and job markets. Furthermore, urban population is more concentrated in small geographical area compared to the rural population which dwells on thinly concentrated vast tracks of land spread in every nook and corner of the country. Therefore, not only with respect to market opportunities, rural areas also suffer more from market imperfections compared to urban areas in every walk of

life. Therefore, in this background on an average the people settled in rural areas are more vulnerable to low level of living and poverty compared to their counterparts settled in urban areas. Besides this urban rural dichotomy, there is a specific segment of pastoral tribe called Kuchi in Afghanistan who wanders from place to place with their cattle. The living conditions of such nomadic tribes are widely accepted to be worse throughout the world. Therefore, the level of living and vulnerability to poverty is likely to be higher among the Kuchi people in Afghanistan as compared with people living in rural and urban areas. However findings in the previous chapters suggest the other way round. The unexpected findings may be because of some confounding factors that may be acting simultaneously. Multivariate analysis of poverty in this chapter may throw some light on the role of geographical factors as a determinant of household poverty.

2.1 (b) Shocks

Households in Afghanistan and elsewhere encounter two types of shocks that affect their household economy adversely. First are the generic shocks in the form of the availability of the quantum and quality of water, shock to agriculture, shock to natural climates, spread of epidemic likes cholera and food prices (EU, 2009). These shocks affect all the households residing in the region equally, though the capacity to cope with shocks differs significantly depending on the endowments and exchange entitlements. The other type of shocks are idiosyncratic shocks and are related with family characteristics like death of a family member, health of family member, loss of job, bankruptcy of the family etc. These are specific to households and play an important role in shaping the status of family's economy. Information on both generic and idiosyncratic shocks was collected in all household surveys. Therefore, households suffering from any of

these generic and idiosyncratic shocks are expected to be more vulnerable to poverty. Since idiosyncratic shocks directly hit household economy adversely, we hypothesis that the risk of Afghan households falling in poverty is higher when hit by the idiosyncratic shocks compared with those affected by the generic shocks.

2.1(c) Access to basic infrastructure services

(i) Access to Roads

Road network in a country or region plays the same role for an economy as arteries for human body by carrying blood to its every part. Road networks connect and integrate all the human settlements to the regional, national, and international markets. It enables quick movements to nearby urban settlements to benefit from the emerging jobs opportunities as well as to various civic amenities related to health, education, and other day to day consumption and financial services requirements(Jacob, 1998; Van de Walle, 1998; Kwon, 2000; Ali and Pernia, 2003).Availability of various inputs required for agriculture at the most appropriate time as well as selling the surplus of the farm produce in short and quick time without much hindrance are possible only through access to road connectivity. Same is true for roads movement throughout the settlement so far as various non-farm activities are concerned. Besides the economic and commercial contributions to the economy of the households, better road network is a pre-requisite for better governance and to maintain peace and harmony in society and country. Better road connectivity through facilitating fast movements of trade and commercial activities, tends to smoothen the seasonal price volatility and help to control inflation particularly during off agricultural seasons. Besides accessibility to road, equally important for wellbeing of the household is its nearness to the market centre in the urban and semi-urban areas. Therefore, shorter the distance of a household from the main market, more are

the avenues for households benefiting from the emerging opportunity in the nearby markets through the road network compared to the household which is connected with a road network but located at a greater distance. During the NRVA surveys, information was collected on both of these accounts. In this background we hypothesize that the chances of a household falling in poverty rises with increasing distance of a household from the nearest available road.

(ii)   Access to Market Facilities

Time taken to access market is an important indicator of the household wellbeing. More time taken to go and buy food and other items of daily use draw upon the time of household earners in accessing food and also enhance the opportunity cost for the households since many areas during winter season are blocked by heavy snow fall and other adverse conditions(Emran and Hou, 2013). The time taken on foot to travel to market may also differ over the year during the summer, rainy and winter seasons. Information on time taken to market was collected during the household survey. Therefore, we propose that more the time taken involved more is the opportunity cost for the households to access the nearby market which ultimately affects their wellbeing and "other things being same" increases their risk of falling into poverty.

(iii) Access to Health Facilities

Like access to market, same argument can be extended for access to health facilities. In fact, in case of access to health facilities, besides the opportunity cost of travelling to the facility, travel time assumes greater importance for transportation of the patients to health facilities, particularly in the critical care requirements during

accidents, cardiovascular and breathing problems (Rodrigo, Moura, Viana, Tigre and Sampaio, 2015). Better access to health facilities at short distances is expected to improve the chances of households from escaping poverty compared to the households having poor accessibility to health facilities.

2.3 Development Work

The international societies and organizations have been helping Afghan community since 2002 through investments in various socio-economic fields (Latif 2002).Funds have been provided as assistance to the Afghan government and local communities for reconstruction, renovation and rehabilitation of the fragile and conflict torn country. As referred earlier, international donors promised $64.8 billion billions aid to the country to fund various developmental and reconstruction projects that generate employment opportunities for the people in community level and developing basic civic amenities. The government initiatives have been mostly focused on developing education, health, electricity, water supply, agriculture development, infrastructure, capacity building, rural development and security. The National Solidarity program (NSP) has been designed to empower local communities following 'bottom-up participatory development' approach focused on rural development programs to mitigate poverty and provide welfare for local communities. In this background, it is proposed that ignition of development works tend to alleviate poverty among households placed in their catchment locations.

4. Empirical Findings: Determinants of Poverty

We observed that though the base of all poverty measures is the minimum requirement of 2100 daily calorie intake, yet the estimates of poverty by all three methods varies. Therefore, like most of the other empirical studies, we propose to base our main analysis on the

food and non-food poverty line. Nevertheless, for comparison purposes as well as to test the robustness of our findings, we also estimated the logit model for calorie and food poverty lines also. Similarly to test the robustness of our results overtime, we estimated the logistic regression on 2011/12 data as well as on data for the year 2007/08.

The results of the logistic regression of the determinants of a household falling in poverty during 2011/12 and 2007/08 are detailed in Table. 1 and Table .2, respectively. It may be seen that the coefficient of the household size and its square term are significantly statistically and bear positive and negative signs, respectively. The evidence support our hypothesis that household size plays an important role as a determinant of household poverty and depicts an inverted U type of relationship with the risk of household falling into poverty. As mentioned earlier, evidence suggests that chances of a household falling in poverty first increases with additional household member-as indicated by a positive sign of household size variable and after reaching a certain level then starts declining-as shown by the negative sign of the square of household size variable.

Table 1: Probability of a Households Falling into Poverty in Afghanistan in 2011/12: Logit Regression [(Food + Non-Food) Poverty Line]

Variables	Regres. Coefft	Std Error	Z-Value	P>|z|	Regres. Coefft.	Std Error	Z-Value	P>|z|
Households Size	0.368	0.018	20.830	0.000	0.423	0.021	20.520	0.000
Hhdsizesquare	-0.010	0.001	-12.690	0.000	-0.012	0.001	-12.830	0.000
Head age	0.002	0.001	1.120	0.264	-0.003	0.002	-1.660	0.097
Children 0-6 years	0.242	0.043	5.620	0.000	0.213	0.048	4.410	0.000
Children 7-16	0.228	0.044	5.160	0.000	0.202	0.050	4.010	0.000

years								
Number over60 years	0.020	0.042	0.480	0.629	0.038	0.043	0.880	0.379
Female Head	0.050	1.026	0.050	0.961	0.127	0.229	0.550	0.579
Head PrimaryEdu	0.014	0.132	0.110	0.915	-0.125	0.062	-2.020	0.044
HeadSecondary Edu	0.357	0.213	1.680	0.093	-0.257	0.048	-5.340	0.000
Head Graduate Edu	-0.042	0.057	-0.740	0.460	-0.219	0.107	-2.040	0.041
Head University Edu	-0.248	0.043	-5.730	0.000	-0.247	0.134	-1.850	0.065
Head Post Graduate	-0.370	0.095	-3.870	0.000	-0.432	0.280	-1.540	0.123
Head Technical Edu	-0.380	0.118	-3.210	0.001	-0.403	0.362	-1.110	0.266
Head Widow	-0.587	0.242	-2.420	0.015	-0.078	1.208	-0.060	0.948
Head Divorced	-0.522	0.317	-1.650	0.100	0.452	0.136	3.310	0.001
Land Size-Irrigated	-0.005	0.002	-2.820	0.005	-0.021	0.003	-6.470	0.000
Land Size-Rainfed	0.001	0.001	1.530	0.126	0.001	0.001	1.230	0.220
Land-GardenPlot	-0.064	0.014	-4.440	0.000	-0.041	0.016	-2.500	0.012
Main Occup-Agr Lab	-0.173	0.076	-2.280	0.022	-0.174	0.082	-2.130	0.033
Main Ocup-OpiumLab	-0.919	0.431	-2.130	0.033	-0.532	0.504	-1.050	0.292
MainOc-ShepardLab	0.298	0.096	3.100	0.002	0.371	0.099	3.760	0.000
Main Oc-Mil/Gov job	-0.121	0.065	-1.870	0.061	-0.112	0.070	-1.590	0.113
Remittances Received	-0.232	0.102	-2.260	0.024	-0.088	0.111	-0.800	0.427
Total No. of Assets	-0.073	0.006	-12.340	0.000	-0.113	0.007	-16.080	0.000
No. of Cattle Owned	-0.078	0.011	-7.040	0.000	-0.085	0.012	-6.850	0.000
No.Working Animals	0.032	0.010	3.170	0.002	0.050	0.011	4.630	0.000

No Poultry Birds	-0.005	0.001	-7.240	0.000	-0.004	0.001	-5.120	0.000
Access to Road	-0.144	0.034	-4.250	0.000	-0.136	0.036	-3.740	0.000
Time to Food Market	0.047	0.010	4.830	0.000	0.048	0.010	4.640	0.000
Access Health Post	0.003	0.002	1.150	0.252	0.006	0.008	0.750	0.454
Distance to School	0.002	0.033	0.070	0.944	0.000	0.003	0.170	0.865
Development Work	-0.026	0.008	-3.500	0.000	-0.187	0.035	-5.350	0.000
Idiosyncratic Shock	0.113	0.038	2.990	0.003	0.108	0.039	2.770	0.006
Kuchi-Dummy					-1.157	0.128	-9.070	0.000
Rural-Dummy					-0.571	0.055	-10.310	0.000
Constant	-1.758	0.097	-18.070	0.000	-2.171	0.125	-17.400	0.000
Log Likelihood		-12309.7				-11226.8		
Chi-Square		2421.45				2443.97		
Pseudo R2		0.09				0.0982		
No. of Observations	19,598	19,598				19,598		

Source: Research findings

Besides the size, our results also support the dependency burden hypothesis as both coefficients of 0-5 age and 6-17 age children dependency variables are significant statistically in both periods and bear positive signs. This implies that the chances of a household falling in poverty declines with growing children every additional year child up to the age of 17 years in the household. However, our results do not support the role of old aged dependency burden as determinant of household poverty, as the coefficient of old age dependency burden in none of the year turn out to be significant statistically. The evidence suggests that the increasing proportion of

old aged people in the household does not exert any additional burden on the household consumption that makes it more vulnerable to poverty. The old aged people in Afghanistan seem to be contributing to the household's economy directly or indirectly to meet household consumption needs.

Table 2: Probability of a Households Falling into Poverty in Afghanistan in 2007/08: Logit Regression [(Food + Non-Food) Poverty Line]

Variables	Regres. Coefft	Std Error	Z-Value	P>|z|	Regres. Coefft	Std Error	Z-Value	P>|z|
Households Size	0.338	0.021	16.130	0.000	0.338	0.021	16.140	0.000
Hhd size square	-0.015	0.001	-16.330	0.000	-0.015	0.001	-16.320	0.000
Children 0-6 years	0.188	0.017	11.330	0.000	0.188	0.017	11.360	0.000
Children 7-16 years	0.113	0.015	7.560	0.000	0.114	0.015	7.560	0.000
Number over 60 years	-0.035	0.029	-1.190	0.233	-0.035	0.029	-1.200	0.228
Female Head	0.374	0.111	3.380	0.001	0.369	0.111	3.320	0.001
Head Primary Educ	-0.078	0.052	-1.510	0.132	-0.082	0.052	-1.580	0.114
Head Secondary Edu	-0.136	0.071	-1.910	0.056	-0.138	0.071	-1.940	0.053
Head Graduate Edu	-0.328	0.066	-4.950	0.000	-0.332	0.066	-5.000	0.000
Head University Edu	-0.630	0.158	-3.980	0.000	-0.639	0.159	-4.020	0.000
Head Post Graduate	-0.904	0.425	-2.130	0.033	-0.914	0.425	-2.150	0.031
Head Technical Edu	-0.229	0.159	-1.440	0.150	-0.232	0.159	-1.460	0.144
Land Size-Irrigated	-0.003	0.002	-1.680	0.093	-0.003	0.002	-1.710	0.087
Land Size-Rainfed	-0.006	0.003	-2.290	0.022	-0.006	0.003	-2.360	0.018
Land-Garden Plot	0.016	0.015	1.070	0.286	0.016	0.015	1.060	0.288
Main Occup-Agr Lab	-0.178	0.080	-2.220	0.027	-0.181	0.080	-2.250	0.024
Main Occp-Opium Lab	-0.754	0.329	-2.300	0.022	-0.759	0.328	-2.310	0.021
Main Oc-Shepard Lab	-0.156	0.139	-1.120	0.262	-0.147	0.140	-1.050	0.292
Main Oc-Mil/Gov.Job	-0.025	0.064	-0.380	0.701	-0.029	0.064	-0.450	0.655

Remittances Received	-0.148	0.095	-1.550	0.120	-0.149	0.095	-1.570	0.117
Total No. of Assets	-0.169	0.007	-23.620	0.000	-0.172	0.008	-22.540	0.000
No. of Cattle Owned	-0.002	0.001	-2.930	0.003	-0.002	0.001	-2.450	0.014
No.Working Animals	0.018	0.013	1.430	0.152	0.022	0.013	1.720	0.086
No Poultry Birds	-0.007	0.003	-2.390	0.017	-0.007	0.003	-2.350	0.019
Access to Road	0.045	0.035	1.290	0.196	0.047	0.035	1.330	0.183
Time to Food Market	-0.024	0.013	-1.870	0.061	-0.023	0.013	-1.790	0.074
Access Health Post	0.003	0.013	0.270	0.788	0.004	0.013	0.310	0.758
Distance to School	0.001	0.000	3.860	0.000	0.001	0.000	3.970	0.000
Development Work	-0.228	0.033	-6.800	0.000	-0.238	0.034	-6.960	0.000
Idiosyncratic Shock	-0.318	0.037	-8.530	0.000	-0.315	0.037	-8.430	0.000
Kuchi-Dummy					-0.165	0.088	-1.880	0.060
Rural-Dummy					-0.030	0.048	-0.630	0.531
Constant	-1.884	0.093	-20.360	0.000	-1.849	0.100	-18.45	0.000
Log likelihood	-12337.6				-12335.8			
Chi-Square	2141.31				2145.02			
Pseudo R2	0.0799				0.08			
No. of Observations	20,544				20,544			

Source: research findings

The empirical results are mixed for our purposed hypotheses that the female headed households are more exposed to the risk of falling into poverty compared to the chances of their male headed counterparts. The estimated coefficient of female head dummy turned out to be positive significant for the year 2007/08 but not significant for 2011/12 though it bears the expected positive sign. This implies that though female headed households tend to be in disadvantageous position and bears higher probability of slipping in poverty compared with the male headed households but the role of the gender of household head is not consistent overtime.

Empirical evidence supports another hypothesis that education of household head plays a significant role in mitigating risk of the

household falling into poverty. All coefficients of education level variables bear negative signs and are significant statistically, except the coefficient of primary education. Furthermore, the size of estimated coefficient increases with rising level of education suggesting higher earning potentials with increasing education level. This suggests that the secondary and above level of education is the most effective tool that plays a decisive role in enabling households to escape low level of living and vulnerability to poverty. The evidence supports our hypothesis that education is a potent weapon to combat poverty.

The results do not support our proposed hypothesis that marital status of the household head has a significant role as a determinant of the household poverty. The coefficient of dummy variables for widow or divorced household heads are not significant statistically, suggesting that it hardly matters whether the household head is currently living with spouse or having his/her life partner divorced or left for heavenly abode.

The empirical evidence partially supports our hypothesis that land holding being the most important productive asset in the rural areas, plays an important role in economy of the households. The results are mixed in this context. The coefficient for the size of irrigated land is negative and significant statistically, suggesting that larger is the irrigated land owned by the household, lower are its chances of falling in poverty. The coefficient for size of rain-fed land variable is negative and significant for 2007/08 but not for 2011/12. On the contrary, the coefficient for ownership of garden plots is negative and significant statistically for 2011/12 but not for 2007/08. Results for land variables taken together seem to suggest that land holdings contribute significantly in enabling the households to escape poverty but only if it has some sources of irrigation. The non-irrigated

land, probably due to high risk of drought and vagaries of weather, does not contribute much to a household's capability to escape the poverty threshold.

Estimates of Logit model support our hypothesis that choice of occupation plays an important role as a determinant of household poverty status. We proposed that people employed in low paid jobs like agriculture wage labour, shepherd labour and opium labour are at a higher risk of falling in poverty. This is not supported by our results as the coefficients are either not significant statistically or the direction of relationship is inconsistent overtime. For example, the coefficients for agricultural and opium labour are significant statistically but bears negative signs suggesting contrary to our hypothesis that being labourer pushes people in poverty. However, the coefficients of the shepherd labour as main occupation positive sign and are significant statistically for 2011/12 but not for 2007/08. The coefficient of dummy for government or military service as main occupation is negative and significant for 2011/12 but not for 2007/08. Probably, it needs further exploration as the choice of occupation is considered to be close proxy of economic status of people worldwide.

The estimated coefficients for the livestock variables indicate a mixed response to household poverty. While the coefficient for the number of cattle and number of poultry bird's variables are significant statistically and bears the expected negative sign, the coefficient of the variable of the number of working animals bears unexpected positive sign and the value is significant statistically. The unexpected results of working animals may be due to the composition of the sampled households that includes both rural and urban households. The estimates are for all households in Afghanistan, whereas households in urban areas hardly own working cattle-which are

mainly used for cultivation purposes. Non-ownership of animals in rural areas is generally considered almost sure signs of low level of living, whereas livestock ownership in general and working animals in particular is very rare in urban settlements. Therefore, the unexpected result may be due to this combined estimation of model on rural and urban households together.

Besides land and animal ownership, results suggest that larger the numbers of assets owned by a household, lesser are its chances of slipping into poverty. Similarly, the estimated coefficient also suggests that probability of a household falling into poverty is significantly low among the households receiving remittances from members or relatives living away from their residence. This seems to suggest higher earnings opportunities of the migrant family members at their present locations compared with what they would have earned otherwise. Migration, therefore, in the conflict torn country seems to be helping households in meeting their basic necessities of life and escaping poverty.

The results for the estimated coefficient for access to the basic infrastructure-roads, schools and market support our hypothesis that provision and nearness of these basic services to the households enables people to escape poverty. Results reveal that nearness of market to residential areas reduces the risk of households living there slipping into poverty as the coefficient of time travel on foot to market variable is positive and significant statistically. The results however do not support that access to the health facilities reduces the risk of falling into poverty. The unexpected results may be because that along with access to health services, equally important is the type, affordability and quality of the health services that plays an important role in containing damage to household economy due to adverse impact of illness or containing the epidemic situations under

control. Probably, the impact of health requires more rigorous analysis to arrive at a more definite conclusion. On the whole, the results validate our hypothesis that access to basic services and market reduces opportunity costs of availing these services and hence improve chances of households escaping poverty.

Probably the most interesting finding is that initiations of development work in the area where people are residing help them to escape low level of living and falling into poverty. This supports our hypothesis that development work improves the economic status of people by providing direct employment to people on such works as well as contributes indirectly through various channels that augment exchange entitlements of people and improve their access to basic civic amenities.

The estimated coefficient of the dummy for idiosyncratic shocks turned out to be positive and significant for 2011/12 but negative and significant for 2007/08. The findings suggest that during 2007/08 generic shocks like agriculture disease/pest attacks, natural disasters, epidemic, and food prices had more adverse impact on the income and consumption of households compared with the idiosyncratic shocks. However, during 2011/12, the idiosyncratic shocks like illness /death of household member(s), loss of employment, reduced wages, household bankruptcy and loss of land or productive animals were more serious and adversely affected the household economy compared with the generic or co-variant shocks. Though the findings are not in sync with the proposed hypothesis, nevertheless, the results suggest that impact of shocks are specific to their incidence and severity that together determine which of the two shocks, idiosyncratic or co-variant, contribute more to push people into low level of living and poverty.

The results are contrary to our hypothesis that location of the households in rural areas or being wandering nomadic Kuchi tribe put them at higher risk of falling in poverty. Estimated coefficients of Kuchi and rural dummies suggest that probability of Kuchi tribes and rural residents of falling in poverty is lower as compared with those living in urban Afghanistan in 2011/12. However, the coefficient for rural dummy for 2007/08 though bears negative sign yet its value is not significant statistically. Results, on the whole, support our finding that other things being same, the probability of households living in urban Afghanistan are at a higher risk of falling in poverty compared with those living in rural areas or leading life as nomadic tribes.

Sensitivity Analysis:

To test the validation of findings, we re-estimated the model by using food poverty line and calorie-based poverty line. Minor variations may be observed in case of calorie-based poverty thresholds as the results based on food-based poverty line on the whole are in line with results based on logistic regression of total consumption expenditure (food + non-food) poverty lines for both 2007/08 and 2011/12. The minor variations are related with access to health post as the coefficients for food-based poverty line for the variable bear negative signs and are statistically significant for both the years. This seems to suggest that access of households to health services contribute to their well-being and help people to escape poverty. However, the impact of remittances and road accessibility on household poverty reduced for food-based poverty line. So is the case for some educational variables for 2007/08.

In the case of calorie based logistic regression, data seems to give less fit to the proposed model of determinants of household poverty. The impact of some of the demographic and education related variables turned out to be weak for calorie based logistic

regression compared with broad-based total expenditure-based results.

On the whole, re-estimated models suggest that findings are quite robust to the choice between food and food plus non-food poverty based logistic regressions. However, results are little sensitive to the choice of calorie-based poverty norms. Nevertheless, little deviations notwithstanding and broadly speaking, major conclusions of the analysis of the determinants of household falling in poverty remain valid.

Table 3: Probability of a Households Falling into Poverty in Afghanistan, 2011/12: Logit Regression

Variables	Food Poverty Line				Calorie Poverty Line			
	Regres. Coefft	Std Error	Z-Value	P>|z|	Regres. Coefft	Std Error	Z-Value	P>|z|
Households Size	0.252	0.018	14.210	0.000	0.176	0.017	10.390	0.000
HhdSizesquare	-0.006	0.001	-8.200	0.000	-0.003	0.001	-4.840	0.000
Head age	0.000	0.001	0.170	0.868	-0.001	0.002	-0.400	0.693
Children 0-6 years	0.282	0.046	6.170	0.000	0.442	0.049	9.040	0.000
Children 7-16 years	0.171	0.047	3.640	0.000	0.027	0.048	0.570	0.569
Number Over60years	-0.056	0.042	-1.340	0.180	-0.021	0.043	-0.480	0.629
Female Head	0.484	0.213	2.270	0.023	0.135	0.223	0.610	0.545
Head PrimaryEduc	-0.031	0.058	-0.530	0.594	0.074	0.060	1.250	0.213
HeadSecondary Edu	-0.300	0.046	-6.550	0.000	-0.244	0.047	-5.130	0.000
Head Graduate Edu	-0.445	0.106	-4.220	0.000	-0.197	0.106	-1.860	0.063
Head University Edu	-0.369	0.128	-2.890	0.004	-0.214	0.132	-1.620	0.105
Head Post Graduate	-0.595	0.272	-2.190	0.028	-0.168	0.262	-0.640	0.522
Head Technical Edu	-1.060	0.398	-2.660	0.008	-1.331	0.482	-2.760	0.006
Head Widow	-0.477	1.191	-0.400	0.689	-0.024	1.153	-0.020	0.983
Head Divorced	0.036	0.134	0.270	0.790	0.279	0.135	2.070	0.038
Land Size-irrigated	-0.022	0.003	-7.030	0.000	-0.034	0.004	-9.100	0.000
Land Size-	0.001	0.001	1.450	0.147	0.001	0.001	2.270	0.023

Rainfed								
Land-Gardenplot	-0.055	0.016	-3.400	0.001	0.021	0.015	1.400	0.162
Main Occup-Agr Lab	-0.250	0.078	-3.200	0.001	-0.285	0.083	-3.440	0.001
Main Occp-Opiumlab	-0.102	0.427	-0.240	0.812	-0.725	0.546	-1.330	0.184
MainOc-Shepardlab	0.373	0.096	3.900	0.000	0.084	0.098	0.860	0.387
Main Oc-Mil/Gov job	-0.157	0.068	-2.320	0.020	-0.328	0.072	-4.520	0.000
Remittances Received	-0.122	0.106	-1.160	0.248	-0.160	0.111	-1.440	0.150
Total No. of Assets	-0.090	0.007	-13.480	0.000	-0.044	0.007	-6.630	0.000
No. of Cattle Owned	-0.117	0.012	-9.400	0.000	-0.072	0.012	-5.830	0.000
No.Working Animals	0.029	0.010	3.010	0.003	0.007	0.009	0.770	0.439
No Poultry Birds	-0.004	0.001	-5.050	0.000	0.000	0.001	-0.190	0.847
Access to Road	-0.148	0.035	-4.250	0.000	-0.204	0.036	-5.670	0.000
Time to Food Market	0.046	0.010	4.630	0.000	0.069	0.010	6.730	0.000
Access Health Post	-0.027	0.008	-3.450	0.001	-0.051	0.008	-6.370	0.000
Distance to School	0.000	0.002	-0.010	0.996	-0.004	0.003	-1.420	0.155
Development Work	-0.123	0.034	-3.660	0.000	-0.142	0.035	-4.090	0.000
Idiosyncratic Shock	0.188	0.037	5.020	0.000	0.287	0.038	7.530	0.000
Kuchi-Dummy	-1.045	0.121	-8.640	0.000	-0.975	0.127	-7.680	0.000
Rural-Dummy	-0.563	0.053	-10.620	0.000	-0.465	0.054	-8.550	0.000
Constant	-1.125	0.114	-9.890	0.000	-1.277	0.115	-11.070	0.000
Log Likelihood	-11992.7				-11414.2			
Chi-Square	1702.84				1283.06			
Pseudo R2	0.0663				0.0532			
No. of Observations	19,598				19,598			

Source: Research findings

Table 4: Probability of a Households Falling into Poverty in Afghanistan in 2007/08: Logit Regression

Variables	Food Poverty Line				Calorie Poverty Line			
	Regres. Coefft	Std Error	Z-Value	P>|z|	Regres. Coefft	Std Error	Z-Value	P>|z|
Households Size	0.210	0.020	10.750	0.000	0.176	0.021	8.560	0.000
Hhd Size Square	-0.010	0.001	-11.610	0.000	-0.008	0.001	-9.560	0.000
Children 0-6 years	0.165	0.016	10.250	0.000	0.181	0.017	10.610	0.000
Children 7-16 years	0.064	0.015	4.390	0.000	0.044	0.015	2.870	0.004
Number over 60 years	-0.038	0.028	-1.320	0.187	-0.015	0.030	-0.500	0.619
Female Head	0.260	0.108	2.420	0.015	0.177	0.116	1.520	0.128
Head Primary Educ	-0.008	0.050	-0.160	0.873	0.122	0.053	2.320	0.020
Head Secondary Edu	0.032	0.068	0.480	0.634	0.047	0.072	0.660	0.510
Head Graduate Edu	-0.216	0.062	-3.470	0.001	-0.103	0.066	-1.570	0.117
Head University Edu	-0.514	0.139	-3.700	0.000	-0.358	0.145	-2.460	0.014
Head Post Graduate	-1.003	0.395	-2.540	0.011	-0.497	0.378	-1.310	0.189
Head Technical Edu	-0.221	0.150	-1.470	0.140	0.078	0.152	0.510	0.610
Land Size-Irrigated	-0.003	0.002	-1.530	0.127	-0.002	0.002	-0.870	0.383
Land Size-Rainfed	-0.005	0.003	-1.990	0.046	-0.001	0.002	-0.560	0.577
Land-Garden Plot	0.018	0.015	1.250	0.211	0.006	0.016	0.410	0.684
Main Occup-Agr Lab	-0.308	0.081	-3.800	0.000	-0.428	0.092	-4.640	0.000
Main Occp-Opium Lab	-0.398	0.302	-1.320	0.187	-0.977	0.408	-2.390	0.017
Main Oc-Shepard Lab	-0.245	0.140	-1.750	0.080	-0.177	0.153	-1.160	0.247
Main Oc-Mil/Gov Job	0.172	0.060	2.860	0.004	0.220	0.063	3.510	0.000
Remittances Received	0.083	0.091	0.920	0.357	0.281	0.093	3.030	0.002
Total No. of Assets	-0.109	0.007	-15.200	0.000	-0.059	0.007	-7.880	0.000
No. of Cattle Owned	-0.002	0.001	-2.470	0.014	-0.002	0.001	-1.900	0.057

No.Working Animals	0.012	0.013	0.960	0.336	0.010	0.014	0.700	0.484
No Poultry Birds	-0.002	0.003	-0.690	0.491	-0.001	0.003	-0.400	0.688
Access to Road	0.000	0.034	-0.010	0.989	-0.021	0.037	-0.590	0.558
Time to Food Market	-0.010	0.013	-0.820	0.411	-0.044	0.014	-3.220	0.001
Access Health Post	-0.034	0.013	-2.750	0.006	-0.022	0.013	-1.670	0.095
Distance to School	0.000	0.000	0.890	0.375	0.000	0.000	-0.400	0.690
Development Work	-0.173	0.033	-5.210	0.000	-0.056	0.036	-1.570	0.115
Idiosyncratic Shock	0.275	0.036	7.560	0.000	0.406	0.040	10.080	0.000
Kuchi-Dummy	-0.478	0.087	-5.470	0.000	-0.310	0.096	-3.220	0.001
Rural-Dummy	-0.197	0.045	-4.320	0.000	-0.010	0.049	-0.200	0.841
Constant	-1.134	0.094	-12.110	0.000	-1.715	0.101	-17.030	0.000
Log Likelihood	-12930.6				-11703.7			
Chi-Square	1006.15				732.92			
Pseudo R2	0.0374				0.0304			

Source: Research findings

5. Conclusion and Policy Implications

The main objective of the study was to examine the role of various idiosyncratic (household specific) and generic (co-variant) factors pushing some household into poverty while facilitating others to remain above the minimum level of poverty threshold level of living. The Logistic regression model was estimated on the unit household data on the proposed determinants of the probability of a household falling into poverty. The results from the consumption-based poverty line estimates have been tested by re-estimating the model on alternative food and calorie-based poverty lines. On the whole, following are the main conclusions that emerge from the empirical results:

i. Results support our proposed inverted U type relationship between risk of a household falling in poverty and household size. Smaller and bigger sized households have low chances of falling into poverty.

ii. Findings support our hypothesis that households having higher dependency burden of children are more prone to falling into poverty. However, results do not validate our hypothesis that old age members are a burden and make household more vulnerable to falling into poverty.

iii. Our hypothesis that education, specifically higher level and technical education, is a potent weapon to combat poverty has been validated by the findings.

iv. Ownership of land, particularly the irrigated land and land under gardens, as expected, significantly reduces the probability of a household falling into poverty.

v. Ownership of more number of cattle and poultry birds capacitates household economy to mitigate its risk of falling into poverty. However, ownership of rain-fed land does not help to escape poverty.

vi. Findings support our hypothesis that shocks play a significant role as a determinant of household poverty. However, relative importance of the idiosyncratic and generic shocks is based upon the situation and relative gravity of these shocks. Idiosyncratic shocks were the main culprit in 2011/12 whereas main culprits were generic shocks in 2007/08 in pushing people into poverty in Afghanistan.

vii. Remittances augment household income and consumption and help to mitigate poverty.

viii. Increasing ownership of assets enable household to keep itself above the minimum level of poverty threshold.

ix. As proposed, access to basic infrastructure and civic services in the form of roads, health facilities, market and school helps people to escape the risk of falling into poverty.

x. Findings support our conjecture that investment in developmental works benefits local population, improve their well-being and enable them to escape risk of falling into poverty.

xi. Findings of the study do not support our proposed hypotheses that the marital status of household head, gender of the head and occupation play a significant role in the probability of a household falling into poverty.

xii. Geographical location of households matters as a determinant of their poverty status, other things being the same. Risk of household falling into poverty is more among the urban Afghans compared with those living in rural areas or wandering as Kuchi tribes.

On the whole, the household specific factors like size and structure of households, dependency burden, education level, and ownership of land and other assets play very important role as determinants of household poverty. Similarly, any development initiative by the Government or by International donors and humanitarian aid organizations also contribute significantly in helping people from falling into poverty. Access to basic infrastructure also seems to help poor households in escaping poverty threshold. Shocks make people more vulnerable to poverty though relative importance the idiosyncratic and generic shocks depend upon situation and their relative intensity. The role of various shocks as contributor to poverty seems to be complex and form the subject matter of the future studies.

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