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Determinants of Poverty in Rural Zimbabwe- A Case Study of Ward 31, Makoni District of Manicaland Province

Englebert Dzimbanhete[1], Lighton Dube[2*]

[1]College of Health, Agriculture and Natural Sciences, Africa University, P. O. Box 1320, Mutare, Zimbabwe
[2]Faculty of Commerce and Law, Zimbabwe Open University, National Office, P.O. Box MP-111, Mt Pleasant, Harare, Zimbabwe

*Corresponding Author
Lighton Dube
Email: dubelig@gmail.com

Abstract: This study analysed the socio-economic determinants of poverty among rural farmers in Ward 31 of Makoni district in Zimbabwe using primary data collected using a structured questionnaire from a random sample of 103 farm households. The study adopted the basic needs approach in identifying poor and non-poor households. The data were analysed using descriptive statistics and the binary logistic regression analysis. 75% of the sample households were male headed and the average age of the head of household was 53.28 years. The average household size was 6.55 and 49% of the household were classified as poor based on their failure to meet their monthly basic needs. The result of the binary logistic regression analysis show that the probability of a household being poor reduces with male headed households, age of the head of household, household size, life skills training, distance to nearest economic niche, total cropping area, maize production and total livelihood options. On the other hand, the probability of a household being poor is higher for households with self-employed head of households. The study recommends that the government must promote life skills training as a viable poverty alleviation strategy for diversifying the livelihood options available for rural households. The government must also identify strategies that help address the poverty vulnerability of female headed households as the result clearly shows that female headed households had a higher probability of being poor.
Keywords: Determinants of poverty, binary logistic regression, Makoni district, Smallholder farmers

INTRODUCTION

Since year 2000, Zimbabwe has suffered several socio-economic challenges which included rising poverty amongst citizens, corruption, poor governance, low productivity in key sectors of the economy, and high levels of inflation experienced prior to the adoption multi-currency regime. Rising poverty levels has been one of the major factors fuelling unrest and economic instability in most parts of Africa. In 2016 the Global Finance Magazine ranked Zimbabwe 168 out of 189 on the World's Richest and Poorest Countries (https://www.gfmag.com/global-data/economic-data/worlds-richest-and-poorest-countries). The greatest proportion of people living in absolute poverty is in rural areas.

Poverty is multifaceted and the concept of poverty has been very difficult to articulate. There are many approaches to defining poverty [1]. The most widely used is the income approach that defines poverty as deprivation of income needed to meet basic needs. The capabilities approach defines poverty in terms of what people are able to do and to become [2]. The social exclusion approaches views poverty as a state in which individuals are sidelined by societal structures from accessing resources [3]. The participatory approach defines poverty as a state in which people have limited participation in the governance of their community [4-5]. The United Nations Committee on Economic, Social and Cultural Rights in 2001 defined poverty as 'a sustained or chronic deprivation of the resources, capabilities, choices, security and power necessary for the enjoyment of an adequate standard of living and other civil, cultural, political and social rights" [21]. The UN definition adopts a multi-dimensional approach to poverty and defined poverty as a condition characterized by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. This approach does not only focus income but also on access to basic social services. Zimbabwe views poverty from a multidimensional approach and in worst case scenario poverty is regarded as deprivation of food and essential or basic non-food items [1].

In Zimbabwe, poverty is largely a rural phenomenon although in some parts, urban poverty is also notably high [6]. The 2015 Zimbabwe Poverty Atlas shows that poverty was most prevalent in Matabeleland North Province (86.7%) and least prevalent in Harare (36.4%) and Bulawayo (37.2%). The rest of the provinces had poverty prevalence rates ranging between 65% and 76% (Table 1).

Table-1: Household Poverty Incidence: Small Area Estimation

Province	Poverty Incidence (%)
Bulawayo	37.2
Manicaland	71.8
Mashonaland Central	75.6
Mashonaland East	67.3
Mashonaland West	73.3
Matabeleland North	85.7
Matabeleland South	73.6
Midlands	68.7
Masvingo	65.7
Harare	36.4

Source: ZimStat 2015 Small Area Estimation [6]

Poverty alleviation and eradication are at the centre of development policy in Zimbabwe and a substantial amount of international donor resources have been challenged towards poverty alleviation interventions since the dawn of Zimbabwe's independence in 1980. In year 2013 alone, Zimbabwe received a total of US$811million in development funds of which US$92 was for humanitarian assistance (www.globalhumanitarianassistance). Despite government and the donor community channelling substantial resources towards poverty alleviation programmes, a significant proportion on rural Zimbabweans still remain in extreme poverty. In order to come up with more effective poverty alleviation programmes, there is need to have a better understanding of the factors that determine households vulnerability to poverty. Very few studies have been conducted in Zimbabwe to establish the determinant factors of rural poverty. It is against this background that this study sought to establish the determinants of poverty in rural Zimbabwe.

METHODOLOGY

Study Area, Population and Sample

The study was conducted in Ward 31 of Makoni district in Manicaland province. According to the Zimbabwe Poverty Atlsa, Makoni district had a poverty prevalence of 68.2%. Ward 31 had the highest prevalence of poverty in the whole district at 86.1%. The ward predominantly falls under agro-ecological IV and V resulting in little success of rain fed crops. The Ward has a total household population of 800.

Data was collected using a structured question from a randomly selected sample of 103 households during the period January and February 2016.

Analytical Approach

The study used the participatory poverty assessment approach to identify poor and non-poor households based on the basic needs approach.

The study used both descriptive and inferential statistics. Descriptive statistics were used to analyse the socioeconomic characteristics of the sample households. The Binary Logistic model was used to identify the determinants of absolute poverty for the sample households. The variables used in the binary logistic model, their explanation and the a priori expectations are provided in Table 2.

Table-2: Definition of binary logistic Regression Variables

Variable	Description	Variable Measurement	Hypothesis
DEPENDANT VARIABLE			
Poverty	Household classified as being poor (lack of access to basic needs)	Dummy: 1=poor household, 0=non poor household	
INDEPENDENT / EXPLANATORY VARIABLES			
HHSEX	Gender of household head	Dummy: 1= male, 0= otherwise	-
HHSIZE	Household size	Number of people in a household	-/+
HHYRS	Age of household head	Number of years	+
HHEMPLOY	Employment status of household head	Dummy: 1=household head is self-employed, 0= otherwise	+
LIFESKILLS	Household head had received life skills training	Dummy: 1= household head has received life skills training, 0= otherwise	-
CROPS_AREA	Cropping area	Total area in hectares	-

Variable	Description	Variable Measurement	Hypothesis
GROWMAIZE	Household produces maize	Dummy: 1= yes, 0= otherwise	-
NICHE_DIST	Distance of homestead to nearest economic niche	Number of kilometres	+
LIVELIHOODS	Total number of livelihood options available to household	Total number	-
COPYING_STRAT	Total number of copying strategies available to household	Total number	-

RESULTS AND DISCUSSION

Socio-economic Characteristics of the Sample Households

75% of the sample households were male headed and the average age of the head of household was 53.28 years. The average household size was 6.55 and 49% of the household were classified as poor based on their failure to meet their monthly basic needs. 72% of the head of households were self-employed and only 34% had participated in life skills training.

Table-3: Summary Socio-Economic Characteristics of the Sample Households

Variable	Mean	Standard Deviation
Poverty	0.49	0.502
HHSEX	0.75	0.437
HHSIZE	6.55	3.385
HHYRS	53.28	15.257
HHEMPLOY	0.72	0.452
LIFESKILLS	0.34	0.476
CROPS_AREA	3.10	1.256
GROWMAIZE	0.90	0.298
NICHE_DIST	2.14	0.852
LIVELIHOODS	2.75	1.377
COPYING_STRAT	3.56	1.398

The average cropping area was 3.10 hectares and 90% of the household were growing maize as the major crop. The average livelihood options and copying strategies available to each household was 2.75 and 3.56 respectively. The average distance to the nearest economic niche was 2.14 kilometres indicating that most households were located within reasonable distances from a major centre of economic activity.

Determinants of Absolute Poverty

The estimates of the logistic regression are shown in Table 3 below. Of the 10 variables that were analysed, the variable that did not significantly influence the probability of a household being poor was age of the head of household (HHYRS). A priori, it was expected that as people age their chances of growing wealth narrow and they are likely to be de-investing [7,8].

Table-4: Binary logistic regression estimates of determinants of absolute poverty

Independent Variables	B	S.E.	Wald	Sig.	Exp(B)
HHSEX	-1.246	0.714	3.045	0.081*	0.288
HHSIZE	-0.486	0.173	7.908	0.005***	0.615
HHYRS	-0.023	0.022	1.133	0.287	0.977
HHEMPLOY	1.200	0.668	3.232	0.072*	3.321
LIFESKILLS	-2.030	0.729	7.759	0.005***	0.131
CROPS_AREA	-0.479	0.270	3.154	0.076*	0.619
GROWMAIZE	-4.868	2.010	5.863	0.015**	0.008
NICHE_DIST	-0.770	0.360	4.575	0.032**	0.463
LIVELIHOODS	-0.363	0.216	2.829	0.093*	0.696
COPYING_STRAT	1.109	0.330	11.314	0.001***	3.031
Constant	-0.033	2.472	0.000	0.989	0.968

Note:
***indicates that the coefficient is statistically significant at 1% level.
**indicates that the coefficient is statistically significant at 5% level
*indicates that the coefficient is statistically significant at 10% level.

Gender of the household head has a significant and negative effect on poverty. Male headed households have a lower probability of being poor when compared to female headed households and the result is significant at 1% level of significance. The odds indicates that the probability of a household being poor for a male headed household is 0.712 lower when compared to that of a female headed household. This result is consistent with Abrar ul haq *et al*. [9], Awopeju [7], Muleta and Deressa [10], Nisar *et al.* [11] and Apata *et al.* [12].

The probability of a household being poor reduces with an increase in household size. An additional household member reduces the probability of a household being poor by a factor of 0.615 and the result is significant at 1% level of significance. A priori it was expected that the probability of being in poor is higher for larger families and is supported by Abrar ul haq *et al.* [9], Igbalajobi *et al.* [8], Chaudhry [13] and Hassan and Babu [14]. This result may be explained by the fact that larger families have access to family labour which positively contribute towards sustaining the families.

Households with household heads who are self-employed have a higher probability of being poor and this result is significant at 10% level of significance. The probability of being poor for a household with family head who is self-employed increases by a factor of 3.321 when compared to a household with a household head who is not self-employed. This result is consistent with Nisar *et al.* [11].

Life skills training reduce the probability of a household being poor. The odds indicates that the probability of a household being poor for households with household heads who had received life skills training is 0.869 lower when compared to that of households with household heads who had not received life skills training and the result is significant at 1% level of significance. This result supports the findings of Apata *et al.* [12].

The probability of a household being poor reduces with an increase in cropping area. A hectare increase in the cropping area reduces the probability of a household being poor by a factor of 0.619 and the result is significant at 10% level of significance. Given that the research community is an impoverished agriculture dependent rural community, much of the production takes place with minimal injection of commercial inputs. Those with larger pieces of land have an advantage of rotating fields allowing the fallow ones to regain nutritionally allowing them to have higher yields which would translate into improved access of basics. Possession of large pieces of land also probably allows for leasing out of part of the land which can be a source of income for the household. This result is supported by Muleta and Deressa [10], Nisar *et al.* [11], Dartanto and Otsubo [15], Dartanto and Nurkholis [16] and Bogale *et al.* [17]. Households who produce maize have a lower probability of being poor and this result is expected given that maize is the most important staple grain for rural households. Failure to have food, especially the maize staple food is commonly identified as an indicator of poverty amongst rural households in Zimbabwe. The probability of a household being poor is 0.992 lower for household producing maize than that of a household producing other crops and the result is significant at 1% level of significance.

The probability of a household being poor reduces with its distance from the nearest economic niche and this result is unexpected. Communities that have greater access to markets, good infrastructure (health and education), and public administration face lower transaction costs and more livelihood options, leading to lower poverty levels [12, 18, 19]. An additional kilometre from the nearest niche reduces the probability of a household being poor by a factor of 0.463 and the result is significant at 5% level of significance.

The probability of a household being poor reduces with an increase in the number of livelihoods options available to the household and the result is significant at 10% level of significance. An additional increase in the livelihoods options available to a household reduces the probability of the household being poor by a factor of 0.696. The higher the number of livelihoods options available to a household, the better the chances of a household meeting its basic household needs and this is consistent with Ibrahim and Umar [20] and Okwi *et al.* [19]. However, the study also found that the probability of a household being poor increases with an increase in the number of coping strategies available to the household and this result is unexpected. An additional increase in the number of coping strategies available to a household increases the probability of a household being poor by a factor of 3.031 and the result is significant at 1% level of significance.

CONCLUSION AND RECOMMENDATIONS

The purpose of this study was to analyse the socio-economic determinants of poverty among rural farmers in Ward 31 of Makoni district in Zimbabwe. The study found that 75% of the sample households were male headed and the average age of the head of household was 53.28 years. The average household size was 6.55 and 49% of the household were classified as

poor based on their failure to meet their monthly basic needs.

The study found that the factors that significantly and negatively affected the probability of a household being poor are gender of the head of household, age of the head of household, household size, life skills training, distance to nearest economic niche, total cropping area, maize production and total livelihood options. On the other hand, the probability of a household being poor is higher for households with self-employed head of households and also increases with an increase in the copying strategies available to the household.

The study recommends that the government must promote life skills training as a viable poverty alleviation strategy for diversifying the livelihood options available for rural households. The government must also identify strategies that help address the poverty vulnerability of female headed households as the result clearly shows that female headed households had a higher probability of being poor.

REFERENCES

1. Manjengwa, J., Feresu, S., and Chimhowu, A. (2012). *Understanding Poverty, Promoting Wellbeing and Sustainable Development: A Sample Survey of 16 Districts of Zimbabwe.* Institute of Environmental Studies, University of Zimbabwe.
2. Sen, A. (1999). *Development as Freedom.* Oxford University Press, Oxford.
3. Ludi, E. and Bird, K. (2007). Understanding Poverty. Brief No. 1.
4. Chambers, R. (2006). What is poverty? Who asks? Who answers? In: *Poverty in Focus: What is Poverty? Concepts and Measures.* UNDP, International Poverty Centre.
5. De Campos Guimaraes, J. P. (2009). Participatory Approaches to Rural Development and Rural Poverty Alleviation. Paper prepared for the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) Workshop on Emerging Issues in Rural Poverty Reduction: The Role of participatory Approaches.
6. ZimStat. (2015). *Zimbabwe Poverty Atlas: Small Area Poverty Estimation, Statistics for Poverty Eradication statistics*. Harare: Zimbabwe: Government printers.
7. Awopeju, S. O. (2014). Determinants of Poverty Depth among Households in Rural Urban Nigeria. Presentation at the *14th EADI General Conference, Bonn, Germany*.
8. Igbalajobi, O., Fatuase, A. I., and Ajibefun, I. (2013). Determinants of Poverty Incidence among Rural Farmers in Ondo State, Nigeria, *American Journal of Rural Development*, 1(5): 131-137.
9. Abrar ul haq, M., Ayub, K., and Ullah, M. I. (2015). Micro-level Determinants of Rural Poverty in Pakistan, *International Journal of Scientific and Research Publications*, 5(2): 1-4.
10. Muleta, A. N., and Deressa, D. F. (2014). Determinants of Vulnerability to Poverty in Female Headed Households in Rural Ethiopia, *Global Journal of Human-Social Science: E Economics*, 14(5): 8-15.
11. Nisar, R., Anwar, S., Hussain, Z., and Akram, W. (2013). An Investigation of Poverty, Income Inequality and Their Shifters at Household Level in Pakistan, *Journal of Finance and Economics*, 1(4):90-94.
12. Apata, T. G., Apata, O. M., Igbalajobi, O. A., and Awoniyi, S. M. O. (2010). Determinants of rural poverty in Nigeria: Evidence from small holder farmers in South-western, Nigeria, *Journal of Science and Technology Education Research*, 1(4): 85 – 91.
13. Chaudhry, S.I. (2003). *An empirical analysis of determinant of poverty rural poverty in Pakistan. A case study of Bahawalpur district with special reference to Cholistan. Unpublished PhD Thesis.* The Islamia University of Bahawalpur, Pakistan.
14. Hassan, R. M., and Babu, S. C. (1991). Measurement and Determinants of Rural Poverty, Household Consumption Patterns and Food Poverty in Rural Sudan, *Food Policy*, 16(6): 32-44.
15. Dartanto, T., and Otsubo, S. (2013). *Measurements and Determinants of Multifaceted Poverty: Absolute, Relative, and Subjective Poverty in Indonesia*, JICA Research Institute Working Paper No. 54.
16. Dartanto, T. and Nurkholis, N. (2011). *Finding out of the Determinants of Poverty Dynamics in Indonesia: Evidence from Panel Data.* MPRA Paper No. 41185.
17. Bogale, A., Hagedorn, K., and Korf, B. (2005). Determinants of Poverty in Rural Ethiopia, *Quarterly Journal of International Agriculture*, 44 (2): 101-120.
18. Adeyemi, S. L., Ijaija, G. T., and Raheem, U. A. (2009). Determinants of Poverty in Sub-Saharan Africa, *African Research Review*, 3(2): 162-177.
19. Okwi, P. O., Ndeng'e, G., Kristjanson, P., Arunga, M., Notenbaert, A., Omolo, A., Henninger, N., Benson, T., Kariuki, P., and Owuor, J. (2007). Spatial determinants of poverty in rural Kenya, *PNAS Scientific Journal*, 104(43): 16769-16774.
20. Ibrahim, H. and Umar, H. S. (2008). Determinants of Poverty among Farming Households in Nasarawa State, Nigeria, *Production Agriculture and Technology Journal*, 4 (1): 11-21.
21. Committee on Economic, Social and Cultural Rights: E/C.12/2001/10.