

ASSESSMENT OF STANDARD OF LIVING INDICATORS IN MEASURING HOUSEHOLD POVERTY IN RWANDA: EVIDENCE OF RUTUNGA SECTOR

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ABSTRACT

Rwanda has experienced high economic growth rates over the past decade, averaging 5.6 percent per year, while poverty rates have declined over 13.4 percent. However, conventional wisdom is that the benefits of poverty reduction have not been distributed equally. This paper sought to examine poverty trends across Rwanda from 2010 to date by using non-monetary indicators based on household assets, housing characteristics, and household size and composition. The purpose of the study was to make an assessment of Standard of Living Indicators in measuring Household Poverty in Rwanda, Evidence from Rutunga Sector in Gasabo District. The study was guided by the following specific objectives: to evaluate the extent of water accessibility so as to deduce the level of household poverty to detect the type of floor rural households have in their homes so as to conclude on the level of household poverty, to identify the different cooking fuel types used at Household level so as to decide the level of poverty within the household and to verify different types of assets owned by households so as to determine the level of their poverty. Descriptive survey design was adopted in carrying out the study. The target population comprised of 4,163 households of Rutunga Sector. The sample size of 365 households from Rutunga Sector was determined using Slovin's formula. Simple random sampling technique was used to select households which constituted the study sample. Primary and secondary data was used in this research. The study used questionnaires as instruments for data collection. The variables were subjected to correlation analysis and the Software Package for Social Sciences (SPSS V. 21) was used to analyze data. Regression analysis was performed to establish the relationship between the study variables as well as the strength of the relationship. Findings of the study will be presented using frequency distribution tables and bar graphs. From the study, it was found that accessibility of safe water, type of floor, type of cooking fuel and type of assets owned by households influences the level of poverty in households. From the study, it is concluded that there is a positive relationship between indicators of poverty and level of poverty. accessibility of safe water, type of floor, type of cooking fuel and type of assets owned by households influences the level of poverty in households. It is recommended that the government and policy makers should focus on development of remote areas in reducing the level of poverty through reach out developmental programs such as bringing water to accessible distances to all households, providing sensitization on importance of education and provide facilities.

Keywords: Standard of Living Indicators, Poverty in households, Safe water, Type of floor, Type of cooking fuel and Type of assets owned by households

1. Background.

Gradations of poverty have been an ongoing topic of study. Understanding different degrees and kinds of poverty contributes to their removal. Early pioneers of poverty measurement observed that poverty measures such as the headcount ratio – that overlooks all differences among poor people – are at once inaccurate and unethical. They completely overlook gradations among poverty that are vitally important. Being unable to distinguish the poor from the destitute, neither do they provide additional incentives for addressing the poorest among the poor, as might seem appropriate to do in some circumstances (Sen 1976, FGT 1984).

These discussions surfaced first, naturally, with respect to unidimensional measures of poverty such as income and consumption and expenditure. They have often been addressed using multiple poverty lines. For example, the World Bank's measure of global income poverty reports headcounts for the \$1.25/day and the \$2/day and the \$10/day poverty lines. National governments often also report poverty for two or three lines – for example a food poverty line, a basic needs line, and perhaps a middle-class line (Alkire et al., 2014).

Lipton (1988) identified the ultra-poor based on a more stringent threshold of calorie intake. Emran, Shilpi, and Stiglitz (2008) identified those as ultra-poor who lacked effective labor endowment such as bad health and low work capacity.

Aliber (2003), and IFPRI (2007) identified the ultra-poor based on a more stringent income threshold. The aim of poverty measurement is to aid, incentivize and acknowledge successful reduction of disadvantages that blight people's lives. Comparing poverty levels in different countries across time reveals inspiring stories about how and where poverty has been reduced. Not only do these success stories illustrate what is possible, they also provide insights into bottlenecks in places where progress has been nonexistent or slow. These comparisons open the space for 'constructive competition' between regions or countries to reduce or eradicate acute deprivations (Alkire *et al.*, June 2014).

On measuring, multidimensional poverty on the global multidimensional poverty index (MPI) which is an internationally comparable measure of acute poverty in over a hundred developing countries was drawn. It was developed by the Oxford Poverty and Human Development Initiative (OPHI) with the Human Development Report Office of the United Nations Development Programme (Alkire *et al.*, 2013).

According to Seth 2014, a new destitution measure which identifies a subset of the MPI poor who have particularly low achievements in some MPI indicators (for example, severe malnourishment, not simply malnutrition) is also drawn. The MPI measures follow a direct method by assessing the extent to which people satisfy minimum international standards in social rights or valuable ends, as opposed to indirect methods that focus on income or consumption levels which are presumed sufficient for a minimum living standard (Alkire & Santos, 2014).

This builds on the counting traditions used in Latin American and Europe (Atkinson 2003). It also seeks to advance the work of Amartya Sen (1979, 1992, 1997, 2009), who has persuasively argued for more comprehensive conceptualizations and measures of human poverty by shifting attention towards the capabilities that people may have to achieve valuable ends or functioning's.

Drèze and Sen 2013 document why this is important, by showing empirically that the level (and change) of income per capita does not necessarily predict the levels of achieved functioning's in social indicators. The MPI follows Sen's direct approach and complements global monetary measures such as the 'dollar-a day' figures published by the World Bank Povcal dataset (Chen & Ravallion, 2012). Although data-constrained, it adds value: it reflects simultaneous deprivations people experience in ten non-monetary indicators such as avoiding malnourishment or child mortality, being educated, or having access to safe water and adequate sanitation. It is identically formulated across rural and urban areas.

The MPI, like any internationally comparable poverty measure, is imperfect. Yet Alkire and Santos (2014) have undertaken sensitivity analysis of several of the choices implicit in the MPI. The analysis shows that the MPI was from the start robust to a wider range of deprivation cutoff, poverty cutoff, and dimensional weights. An important strength of the MPI is that the final measure reflects multiple deprivations faced at the same time, and so it is sensitive to the intensity of deprivation among the poor (Alkire & Santos, 2010).

According to Ravallion, 2011 published MPI figures indicate a fall from 426 to 350 between these years, while figures adjusted for comparability show a larger decrease from 460 to 330. The differences are due to the fact that the surveys in 2005 and 2010 only measure anthropometrics for a 50% subsample, but the published figure for both years included the full sample, hence assuming that all those not measured were not deprived. Following the same criteria as in other countries, the adjusted estimates for both surveys are based only on the nutritional subsample.

In addition, the survey in 2010 includes information on the “mobile phone” asset and “Male BMI”, which was not available in 2005. For comparability, parameters in the 2010 adjusted MPI were defined as in 2005. During this time there were improvements in the categories used to measure source of water and sanitation, but they do not affect the deprivation cutoff or the comparability of the MPI estimates (OPHI Country Briefing, 2013).

Nepal, Rwanda, Ghana and Tanzania had the largest absolute reductions in MPI poverty, greater than -0.018 per annum. Bangladesh, Cambodia, and Bolivia also proved to be strong performers, with reductions above -0.015 per year. In relative terms, Armenia, the Dominican Republic and Bolivia had an outstanding decrease in MPI, with an annualized reduction of more than 12%. Each of the top-performing countries – Nepal, Rwanda, Ghana, Tanzania, Cambodia and Bangladesh – decreased their original MPI by 5% to 9% per year relative to starting levels – making them successes in both relative and absolute terms (OPHI Country Briefing, 2013).

1.1 Statement of problem.

Poverty is a complex phenomenon that manifests in different ways and can be studied in many different ways. Some authors define poverty as a lack of material wellbeing considered the minimum acceptable in the society where they live (Ravallion M. 1992) or as a deprivation of basic human needs (UN 1995). Amartya expanded these concepts, arguing that poverty is a denial of choices and opportunities to live a tolerable life (Amartya S. 1992).

Poverty has traditionally been measured in one dimension, usually income or consumption. In this analysis, a basket of goods and services considered the minimum requirement to live a non-impooverished life is valued at the current prices. People who do not have an income sufficient to cover that basket are deemed poor. Income poverty certainly provides very useful information. (Santos & Alkire, 2010).

Yet poor people themselves define their poverty much more broadly to include lack of education, health, housing, empowerment, employment, personal security and more. No one indicator, such as income, is uniquely able to capture the multiple aspects that contribute to poverty. For this reason, since 1997, Human Development Reports (HDRs) have measured poverty in ways different than traditional income-based measures. The Human Poverty Index (HPI) was the first such measure, which was replaced by the Multidimensional Poverty Index (MPI) in 2010.

The MPI is an index designed to measure acute poverty. Acute poverty refers to two main characteristics. First, it includes people living under conditions where they do not reach the minimum internationally agreed standards in indicators of basic functioning's, such as being well nourished, being educated or drinking clean water. Second, it refers to people living under conditions where they do not reach the minimum standards in several aspects at the same time. In other words, the MPI measures those experiencing multiple deprivations, people who, for example, are both undernourished and do not have clean drinking water, adequate sanitation or clean fuel. The MPI combines two key pieces of information to measure acute poverty: the incidence of poverty, or the proportion of people (within a given population) who experience multiple deprivations, and the intensity of their deprivation - the average proportion of (weighted) deprivations they experience.

Rwanda is a landlocked, resource-poor country. The population is about 11.8 million, and 87 per cent of Rwandans live in rural areas. Population density in the country is the highest in Africa, with about 370 persons/km². The country is one of the poorest in Africa. Gross domestic product per capita was US\$464 in 2008, and Rwanda ranked 167th out of 182 countries in the 2009 United Nations Development Program's Human Development Index.

Poverty is widespread throughout the country. In 2006, 56.9 per cent of the total population was living below the poverty line and 37.9 per cent were extremely poor. In rural areas about 64.7% of the populations were living in poverty. The genocide of 1994, which led to the loss of about 1 million lives and the creation of some 800,000 refugees and displaced persons, had a devastating social and economic effect on the country.

It led to a change in the country's demographic structure: women today account for about 54 per cent of the Rwandan population, and many households are headed by women and orphans. Households headed by women (29 per cent of the total rural population), households headed by children, and households affected by HIV/AIDS are also affected by poverty or are at risk of falling into poverty. Close to 14 per cent of rural dwellers have become landless peasants who live in conditions of extreme poverty, and a large number of demobilized young soldiers have swollen the ranks of the unemployed.

In Rwanda no research has been carried out in determining the level of poverty using the MPI standard of living indicators. Therefore, the researcher took it upon herself to carry on an in depth investigation on the depiction of poverty in Rwanda more specifically in Rutunga Sector hence filling in the gap by answering the questions on MPI standard of living indicators.

1.2 General objective

The general objective of this research was to make an assessment of standard of some of the living indicators in measuring household poverty in Rwanda:evidence from Rutunga Sector.

1.3 Specific objectives.

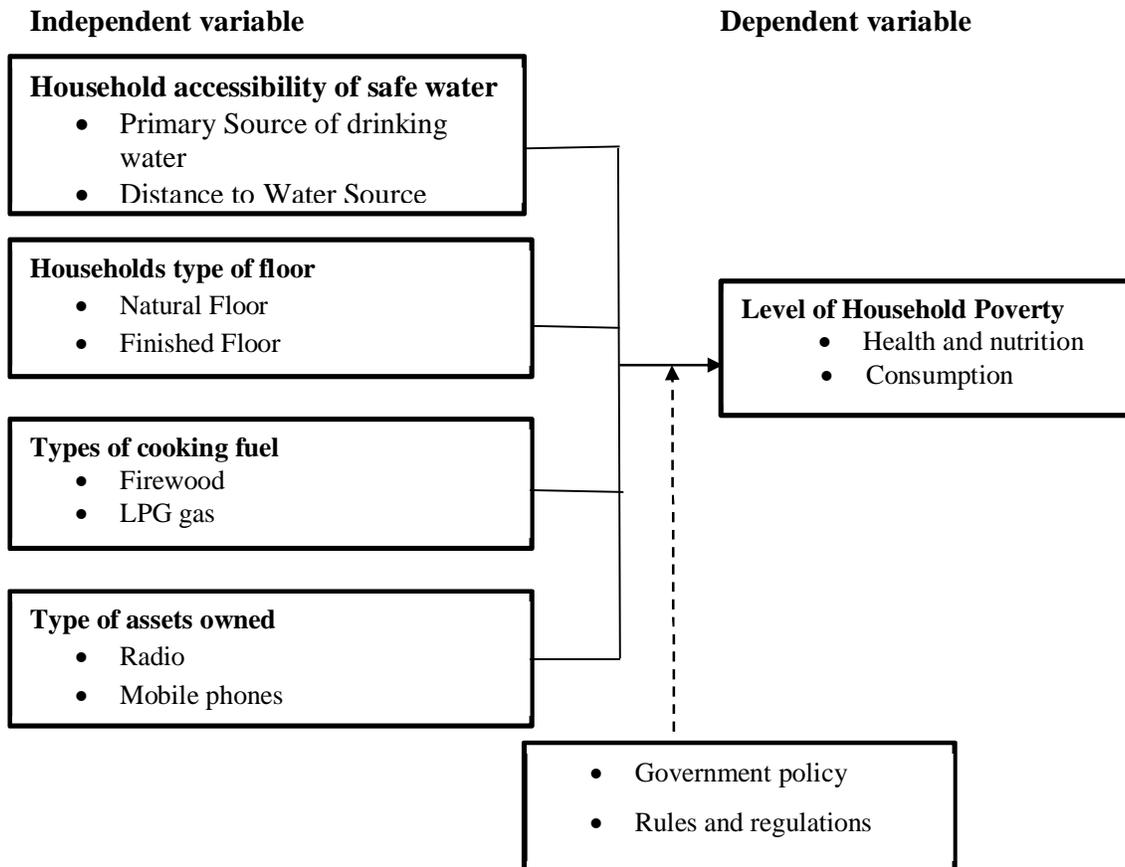
This study was guided by the following specific objectives:

1. To evaluate household accessibility of safe water among the residents of Rutunga sector in Rwanda.
2. To determine the type of floor rural households among the residents of Rutunga sector in Rwanda.
3. To identify the different cooking fuel types used among the residents of Rutunga sector in Rwanda.
4. To ascertain different types of assets owned by households among the residents of Rutunga sector in Rwanda.

2.0 Literature Review

2.1 Conceptual Framework

In this study the dependent variable is measurement of household poverty while the independent variables are accessibility of safe water, type of floor household, the type of cooking fuel and the different assets owned among the residents of Rutunga sector. The variables and their relationship are shown in the Figure 1:



This study adopted descriptive research design. A descriptive study is a study concerned with describing the characteristics of a particular individual or of a group (Kothari, 2004). The study sought to examine poverty trends across Rwanda from 2010 to date by using non-monetary indicators based on household assets, housing characteristics, and household size and composition. It adopted a case study survey. A case study involves careful and complete observation and analysis of a unit in its relationship to any other unit in the group (Kothari, 2004). A survey design is associated with a guided and quick collection, analysis and interpretation of observation (Mugenda & Mugenda, 1999).

3.1 Target population.

Target population is the specific population which the researcher may want to generalize in the study Mugenda and Mugenda (2003). According to the Fourth Population and Housing Census, Rwanda, 2012, Rutunga Sector has 4,163 households. These constituted the target population for the study.

3.2 Sample size determination.

A sample size of 365 respondents was determined from a total population of 4163 individuals using the formula by Yamane (1967). Stratified random sampling technique was used to select the managers. The sampling frame of the Rutunga Sector households was compiled from which samples were selected using simple random sampling. This technique was chosen for its ability to give an equal chance of being included in the sample to each member in the population.

$$n = \frac{4163}{1 + 4163 (0.05)^2} = 365 \text{ Respondents}$$

Table 39: Sample frame

District	Sector	Cell	Households	No. of people	Proportion	Sample size per village (Households/respondents)
Gasabo	Rutunga	Rumbogo	346	1038	0.25	91
		Nduba	285	855	0.21	75
		Karenge	400	1200	0.29	105
		Kibenga	356	1070	0.25	94
Total			1387	4163	1	365

4.0 RESEARCH FINDINGS AND DISCUSSION

4.1: Accessibility of safe water

The study sought the view of the respondents in regard to clean water so as to deduce the level of household poverty was captured using 5 -Strongly disagree; 4 – Disagree; 3 – Indifferent; 2 – Agree;1 –Strongly agree. The statements, respondents' opinions and their percentages are as shown in Table 2:

Table 40: Respondents views on accessibility to safe water

No.	Statements	Rating				
		5	4	3	2	1
a	Source of drinking water determine level of the household poverty		9 (3%)	40 (13%)	93 (30%)	168 (54%)
b	Drinking and using water accessibility determines the level of poverty household		3 (1%)	50 (16%)	102 (33%)	155 (50%)
c	Households that use tap water are less poor		31 (10%)	40 (13%)	78 (25%)	161 (52%)
d	Usage of water from protected springs is one of the signs of poor households	6 (2%)	9 (3%)	40 (13%)	133 (43%)	121 (39%)
e	Surface water is a characteristic of household poverty.		9 (3%)	40 (13%)	93 (30%)	168 (54%)
f	Households that use rain water live in absolute poverty	6 (2%)	9 (3%)	40 (13%)	133 (43%)	121 (39%)

Regression analysis was done on how accessibility of safe of water determines the level of poverty and the following results were obtained. The results of the analysis are shown in Table 3:

Table 41: Model summary showing accessibility to safe water

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.775 ^a	.570	.558	.601

b. Predictors: (Constant), Accessibility to safe water

Further analysis on the accessibility to safe water obtained an adjusted R 55.8%. This implies that the simple linear model with accessibility to safe water as the independent variable explains 55.8 % of the variations in level of households' poverty. This means that when the residents of Rutunga had accessibility to safe water level of poverty could only be explained by 55.8 %.

Table 42: ANOVA results showing accessibility to safe water on determining level of poverty ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	18.177	1	18.177	50.334	.000 ^a
	Residual	13.723	308	.361		
	Total	39.00	309			

b. Dependent Variable: level of household poverty

c. Predictors: (Constant), Accessibility to safe water

A regression analysis was done to determine the effect of accessibility to safe water on level of household poverty in Rwanda. From the analysis, a p-value less than 0.05 (p-value = 0.0000) was obtained. This implies that the simple linear model with accessibility to safe water on level of household poverty as the only independent variable is significant.

Table 43: Coefficient results showing the relationship between accessibility to safe water on level of household poverty Coefficients (a)

Model		Unstandardized		Standardized	T	Sig.
		Coefficients B	Std. Error			
1	(Constant)	.609	.412		1.478	.000
	Accessibility to safe water	.806	.114	.755	7.095	.000

a. Dependent variable: level of poverty

Correlation coefficients show that accessibility to safe water (X1) is significant (p-value = 0.0000) in level of household poverty (Y). The results of the analysis are shown in Table 9. The fitted model from this analysis is:

$$Y = 0.609 + 0.806X1$$

4.2: Type of floor rural households

The study sought the view of the respondents in regard to type of floor households on the level of household poverty was captured using 5 -Strongly disagree; 4 – Disagree; 3 – Indifferent; 2 – Agree;1 –Strongly agree. The statements, respondents’ opinions and their percentages are as shown below:

Table 44: Respondents views on the type of floor in households

No.	Statements	Rating				
		5	4	3	2	1
A	The type of floor in the household explain the level of poverty		9 (3%)	40 (13%)	93 (30%)	168 (54%)
B	Households with sand as floor in them happen to be poorer		3 (1%)	50 (16%)	102 (33%)	155 (50%)
C	Households that have cement on floor live in less poverty		31 (10%)	40 (13%)	78 (25%)	161 (52%)
D	Household that have tiles as floor are deemed not be poor	6 (2%)	9 (3%)	40 (13%)	133 (43%)	121 (39%)
E	Household that have animal dung as floor are very poor.		9 (3%)	40 (13%)	93 (30%)	168 (54%)

Regression analysis was done on the effect of the type of floor in determining the level of poverty and the following results were obtained. The results of the analysis are shown in Table 7

Table 45: Model summary showing type of floor in households

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.791 ^a	.626	.616	.561

c. Predictors: (Constant), Type of floor in households

Further analysis on the type of floor in households obtained an adjusted R 61.6%. This implies that the simple linear model with type of floor in households as the independent variable explains 61.6% of the variations level of household poverty. This means that in Rutunga sector the type of floor can only explain the level of poverty by 61.6%.

Table 8: ANOVA results showing type of floor in households on determining level of poverty ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	19.954	1	19.954	63.477	.000 ^a
1	Residual	11.946	308	.361		
	Total	31.900	309			

b. Dependent Variable: level of household poverty

c. Predictors: (Constant), Type of floor in households

A regression analysis was done to determine the effect of the type of floor in households on level of household poverty in Rwanda. From the analysis, a p-value less than 0.05 (p-value = 0.0000) was obtained. This implies that the simple linear model with the type of floor on level of household poverty as the only independent variable is significant.

Table 9: Coefficient results showing the relationship between the type of floor on level of household poverty

Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.849	.338		2.509	.000
	Type of floor in households	.776	.097	.791	7.967	.000

b. Dependent variable: level of house poverty

Correlation coefficients show that the type of floor in households (X2) is significant (p-value = 0.0000) in level of household poverty (Y). The results of the analysis are shown in Table 9. The fitted model from this analysis is:

$$Y = 0.849 + 0.776X_2$$

4.3: Types cooking fuel

The study sought the view of the respondents in regard to type of cooking fuel in households on the level of household poverty was captured using 5 -Strongly disagree; 4 – Disagree; 3 – Indifferent; 2 – Agree; 1 – Strongly agree. The statements, respondents' opinions and their percentages are as shown below:

Table 46: Respondents views on the type of floor in households

No.	Statements	Rating				
		5	4	3	2	1
a	Cooking fuel used in households determines the level of its poverty		9 (3%)	40 (13%)	93 (30%)	168 (54%)
b	Usage of firewood in households shows the level of poverty		3 (1%)	50 (16%)	102 (33%)	155 (50%)
c	Households that use grass as cooking fuel live in extreme poverty		31 (10%)	40 (13%)	78 (25%)	161 (52%)
d	Households that use gas to prepare as cooking fuel are less poor	6 (2%)	9 (3%)	40 (13%)	133 (43%)	121 (39%)
e	Households that use electricity as cooking fuel live in better condition		9 (3%)	40 (13%)	93 (30%)	168 (54%)

Regression analysis was done on the effect of the type of cooking fuel in determining the level of poverty and the following results were obtained. The results of the analysis are shown in Table 11

Table 47: Model summary showing type of cooking fuel

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.694 ^a	.782	.468	.660

d. Predictors: (Constant), Type of cooking fuel

Further analysis on the type of cooking fuel obtained an adjusted R 46.8%. This implies that the simple linear model with type of cooking fuel in households as the independent variable explains 46.8% of the variations level of household poverty. This means that in Rutunga sector the type of cooking fuel can only explain the level of poverty by 46.8%.

Table 48: ANOVA results showing type of cooking fuel on determining level of poverty ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	15.364	1	15.364	35.035	.000 ^a
1	Residual	16.536	308	.435		
	Total	31.900	309			

b. Dependent Variable: level of household poverty

c. Predictors: (Constant), Type of cooking fuel in households

A regression analysis was done to determine the effect of the type of cooking fuel in households on level of household poverty in Rwanda. From the analysis, a p-value less than 0.05 (p-value = 0.0000) was obtained. This implies that the simple linear model with the type of cooking fuel on level of household poverty as the only independent variable is significant.

Table 49: Coefficient results showing the relationship between the type of cooking fuel on level of household poverty Coefficients (a)

Model		Unstandardized		Standardized	T	Sig.
		Coefficients B	Std. Error			
1	(Constant)	1.382	.363		3.803	.000
	Type of cooking fuel	.591	.099	.694	5.942	.000

c. Dependent variable: level of house poverty

Correlation coefficients show that the type of cooking fuel in households (X3) is significant (p-value = 0.0000) in level of household poverty (Y). The results of the analysis are shown in Table 4.13. The fitted model from this analysis is:

$$Y = 1.382 + 0.591X_3$$

4.4 Types of assets owned by households

The study sought the view of the respondents in regard to type of assets in households on the level of household poverty was captured using 5 -Strongly disagree; 4 – Disagree; 3 – Indifferent; 2 – Agree; 1 – Strongly agree. The statements, respondents' opinions and their percentages are as shown below:

Table 50: Respondents views on the type of floor in households

No.		Rating				
		5	4	3	2	1
A	Assets owned by households explain the level of poverty		9 (3%)	40 (13%)	93 (30%)	168 (54%)
b	A household without a single mobile phone is poor		3 (1%)	50 (16%)	102 (33%)	155 (50%)
c	Owning a refrigerator is one of signs of not being poor		31 (10%)	40 (13%)	78 (25%)	161 (52%)
d	Not owning a motorcycle is a sign of poverty	6 (2%)	9 (3%)	40 (13%)	133 (43%)	121 (39%)
e	Not owning a television is a sign of poverty		9 (3%)	40 (13%)	93 (30%)	168 (54%)

Regression analysis was done on the effect of the type of assets owned by respondents' in determining the level of poverty and the following results were obtained. The results of the analysis are shown in Table 15

Table 51: Model summary showing type of asset on level of poverty in households

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.494 ^a	.782	.298	.660

e. Predictors: (Constant), Type of assets

Further analysis on the type of assets obtained an adjusted R 29.8%. This implies that the simple linear model with type of assets in households as the independent variable explains 29.8% of the variations level of household poverty. This means that in Rutunga sector the type of assets can only explain the level of poverty by 46.8%.

Table 52: ANOVA results showing type of cooking fuel on determining level of poverty ANOVA^b

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	15.364	1	15.364	35.035	.000 ^a
1	Residual	16.536	308	.435		
	Total	31.900	309			

b. Dependent Variable: level of household poverty

c. Predictors: (Constant), Type of assets in households

A regression analysis was done to determine the effect of the type of assets in households on level of household poverty in Rwanda. From the analysis, a p-value less than 0.05 (p-value = 0.0000) was obtained. This implies that the simple linear model with the type of assets on level of household poverty as the only independent variable is significant.

Table 53: Coefficient results showing the relationship between the type of asset on level of household poverty Coefficients (a)

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.382	.363		3.803	.000
	Type of assets	.451	.099	.694	5.942	.000

d. Dependent variable: level of house poverty

Correlation coefficients show that the type of assets in households (X4) is significant (p-value = 0.0000) in level of household poverty (Y). The results of the analysis are shown in Table 4.25. The fitted model from this analysis is:

$$Y = 0.382 + 0.451X_4$$

5.1 Conclusion

This study concluded that Rutunga Sector households experience Multidimensional poverty as far as standard of living indicators are concerned.

Based on the findings of the study the study concluded accessibility of safe water, type of floor in households, type of cooking fuel and type of assets owned in households have a positive effect on the level of poverty in households in Rwanda. The study established that the households with accessibility to safe water were deemed not poor. Households with floor tiles and cow dung determined the level of poverty the households belonged to.

The type of cooking fuel used in households determined the level of poverty as indicated by the majority of respondents' hence those who used gas and firewood as a source of fuel determined the level of poverty in households

5.2 Recommendation

This study found that households in Rutunga Sector experience multidimensional poverty as far as standard of living indicators are concerned. Therefore, the government and policy makers should focus on the development of such surprisingly remote areas through reach out developmental activities such as bringing water to accessible distances to all households, providing sensitization of citizens on the importance of education, construct schools and provide facilities, especially for the young people.

Ministries especially the one with family promotion in their attributions should base on these findings and conduct further research on how the standard of living for households in Rutunga Sector of Gasabo District in the City of Kigali can step up.

5.5 Suggestions for Further Research

The study made assessment of standard of some of the living indicators in measuring household poverty in Rwanda: evidence from Rutunga Sector. Further study should be carried out to investigate the determinants of poverty in rural households in Rwanda.

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