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Zambia Institute for Policy Analysis & Research

Recounting the Miseries of the Poor

A Multidimensional Measurement of Poverty in Zambia

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Executive Summary

In Zambia, poverty is traditionally measured and understood from the perspective of money or income. People living in poverty are those who fall below a pre-defined income or expenditure threshold commonly referred to as a poverty line. The current poverty line stands at US$1.90 a day.

In reality, poverty is about more than just money, incomes or expenditures. The poor do not only lack money, but other important basic needs and services whose absence may impact negatively on well-being. Amartya Sen, one of the World's renowned welfare economists, cites the freedom or ability to satisfy hunger, or to achieve sufficient nutrition, or to obtain remedies for treatable illnesses, or the opportunity to be adequately clothed or sheltered, or to enjoy clean water or sanitary facilities as some of the important aspects of life that the poor lack.

The purpose of this report therefore is to use a different approach and provide another picture of the poverty situation in Zambia. This approach is multidimensional in nature, which means it considers additional poverty indicators alongside the traditional income approach. The report therefore highlights some of the important aspects of human needs and the extent to which the population are lacking in them. These basic human needs include health, education and living conditions. In this regard, the poor are those who are deprived in health, education and a set of living conditions indicators.

The analysis presented in this report show that multidimensional poverty generally reduced between 2007 and 2014 and much of this reduction happened in the rural areas. At the provincial level, Northern-Western Province was the poorest of all provinces.

Energy remains one of the highest living conditions indicators in which the people were deprived in 2014. This means many households relied on unclean energy such as charcoal, wood and cow dung to meet their cooking energy needs. Deprivation in or lack of secondary education turned out to be the biggest contributor to acute poverty in Zambia according to this report. Many people, especially those heading households in Zambia have not attained secondary education.

Multidimensional poverty is currently being used in a number of countries around the world as a basis for formulating poverty reduction policies. The approach can become a useful tool in understanding other aspects of poverty in Zambia like never before. If data continues to be available this report would become a periodic report to be published as often as possible and its findings could fit into planning by the Government.

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List of Acronyms

AF	Alkire-Foster
CSO	Central Statistical Office
CDF	Constituency Development Fund
FNDP	Fifth National Development Plan
LCMS	Living Conditions Monitoring Survey
MDGs	Millennium Development Goals
PRSP	Poverty Reduction Strategy Papers
SNDP	Seventh National Development Plan
SNDP	Sixth National Development Plan
SDGs	Sustainable Development Goals
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
ZDHS	Zambia Demographic and Health Survey
ZIPAR	Zambia Institute for Policy Analysis and Research

1.0 Introduction

Poverty remains widespread in Zambia. Headcount income poverty in 2015 stood at 54.4% of the population. This means more than half of the population is described as poor in the sense that they do not have sufficient income to afford a pre-defined basket of goods and services. As such, reducing poverty has always been a priority for the government, which has crafted numerous anti-poverty programmes. National plans such as the revised Sixth National Development Plan (rSNDP), the Medium Term Expenditure Framework and the Vision 2030 all tend to prioritize poverty reduction in their approaches (Ministry of Finance 2013, Ministry of Finance 2014, Ministry of Finance 2006).

The Millennium Development Goals (MDGs) to which Zambia was a signatory also sought to reduce poverty and end hunger by specifically reducing the number of people living in extreme poverty by the end of 2015 (United Nations 2014a). Zambia did not achieve this particular MDG. The fight against poverty continues post-2015 as the global development agenda carries on under the successor Sustainable Development Goals (SDGs). Under the SDGs, ending poverty in all of its forms is the number one goal. Other poverty related issues include reducing at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions by 2030 (United Nations 2014b).

Measurement and understanding of poverty in Zambia relies significantly more on monetary approaches which focus on monetary deprivation to classify the poor and non-poor than on other dimensions of deprivation. Monetary approaches focus on individual or household' wealth or command over monetary resources relative to a pre-defined monetary (income or expenditure) poverty line. The poor are those who cannot spend or earn a pre-defined monetary threshold in this regard. If such people had enough money to set them on or above the pre-defined poverty line, they would cease to be considered poor.

In reality, poverty is about more than just money, incomes or expenditures. It has many facets or dimensions to it such that merely setting a poverty line may not sufficiently capture the experiences of the poor. The poor do not only lack money, but other important basic needs and services whose absence may impact negatively on well-being. Amartya Sen in his famous book, Development as Freedom, refers to some of the important aspects of life which he calls freedoms and whose lack relates directly to poverty. These include freedom to satisfy hunger, or to achieve sufficient nutrition, or to obtain remedies for treatable illnesses, or the opportunity to be adequately clothed or sheltered, or to enjoy clean water or sanitary facilities (Sen 2000).

Sen's broad view of the nature of poverty forms a good basis for seeking to measure poverty broadly. The purpose of using a broad approach is to complement the income approach and provide a different angle of viewing poverty. Multidimensional poverty approaches have the potential to provide unique insights that can contribute to the formulation of poverty reduction policies. The approach puts into consideration various factors that the poor experience in practice.

In 2015, the World Bank and Central Statistical Office published a report on 'Mapping Subnational Poverty in Zambia'. The findings of the report are rich and give a compelling reason why we should use multidimensional approaches as an addition to the understanding of poverty. Using consumption expenditure approach, the report ranked Lusaka as the

district with the lowest poverty head count - which was not surprising. However, Mwinilunga, a rural district in Northwestern province was ranked third from Lusaka. By this ranking, Mwinilunga is richer than many apparently better and urban districts including all those on the Copperbelt.

Earlier in 2014, the Zambia Institute for Policy Analysis and Research (ZIPAR) also produced a similar report assessing the welfare of districts using a multidimensional approach. Unlike the World Bank report, the ZIPAR report ranked Mwinilunga district on number 55. Meaning while Mwinilunga was nearly as rich as Lusaka in terms of income, it was very much poorer in multidimensional terms. These two disparities in understanding poverty is another reason why Zambian poverty should also be understood from alternative perspectives.

In view of the above and Sen's broad perspective of poverty, this paper seeks to provide an analysis of multi-dimensional poverty in Zambia. Recognizing that Zambian poverty has mainly been understood in monetary terms, the study provides an additional way of understanding poverty which is broader. The aim is to ensure poverty is understood from a broader perspective as Sen pointed out. The study uses the Zambia Demographic Health Survey (ZDHS) of 2013/14 which has more variables than the data from the 2010 Census of Population and Housing used in a similar paper in 2014.

1.1 Monetary Poverty Trends in Zambia

Based on assessments of official government documents, poverty reduction has been high on the government's agenda for many years. Numerous programmes and strategies have been employed to lift people out of poverty. Both the Fifth National Development (FNDP) and its successor, the Sixth National Development Plan (SNDP), put poverty at the center of their strategies.

Figure 1: Zambia Monetary Poverty Trends, 1991-2015
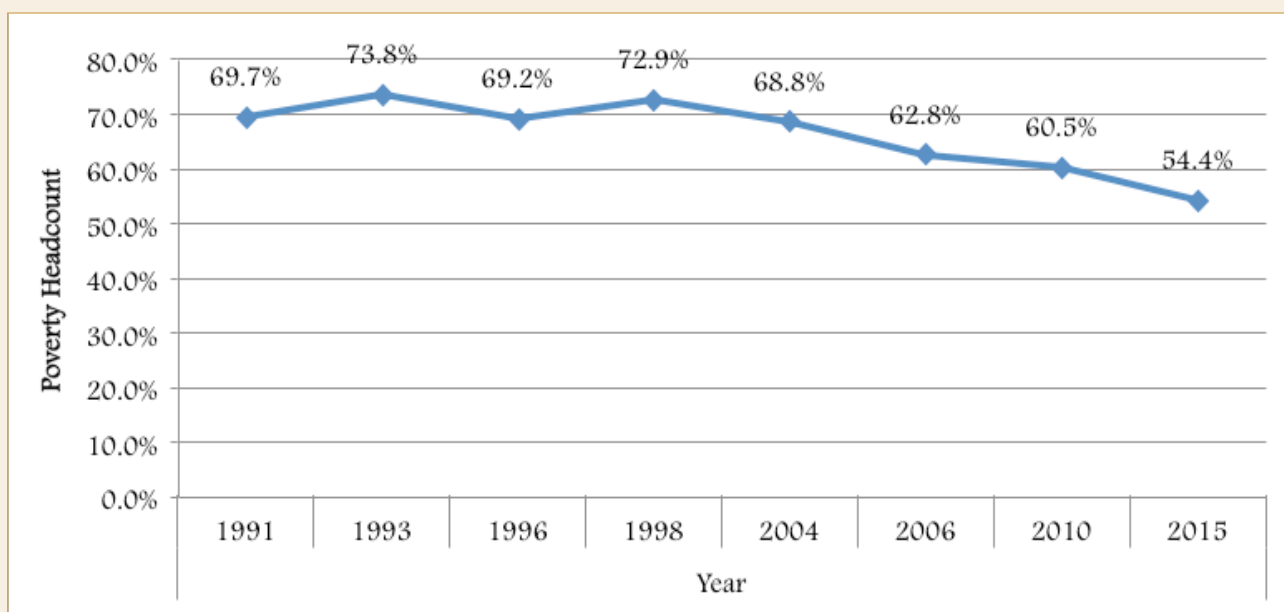
Source: Author's own construction from CSO data

The Vision 2030 also has at its core strategies to reduce poverty. Prior to the FNDP, Zambia adopted the Poverty Reduction Strategy Papers (PRSP) in 2002. PRSPs described the country's macroeconomic, structural, and social policies mainly in support of growth and poverty reduction (International Monetary Fund 2005). This indicates that the fight against poverty is an old one though approaches may have changed over time.

Poverty, measured by income has been reducing as shown in Figure 1, albeit very minimally. For nearly 25 years, poverty has only declined by about 15 percentage points: from 69.7% in 1991 to 54.4% in 2015. In terms of rural-urban differences, income poverty continues to be much higher in rural than urban areas standing at 76.6% and 23.4% in 2015, respectively. Poverty is thus still a big concern in Zambia.

Given persistent monetary poverty, it is necessary to use additional measures of poverty that reveal more about the daily experiences of the poor. This may assist in the planning and targeting of poverty programmes by concentrating on ending other forms of deprivation that people suffer besides money.

2.0   The Alkire and Foster Methodology

The methodology of measuring multidimensional poverty has been developed by Alkire and Foster (Alkire et al. 2015). Known as the Alkire and Foster (AF) methodology, the approach measures how poor the poor really are. The fundamental motivation for this alternative approach is that it helps to reflect the poor people's actual experiences of poverty.

Multidimensional poverty approaches highlight the fact that access to services such as health care, education and decent living conditions really matter to the poor. Their importance is usually reflected in many local and international development strategies and goals. The MDGs and SDGs for example tend to take a multidimensional approach to development and poverty reduction. About six goals of the SDGs look at well-being in a multi-dimensional approach as follows:

i.   Goal 1: ending poverty in all forms, including material deprivation.

ii.   Goal 3: ensure healthy lives and promote well-being for all.

iii.   Goal 4: ensure inclusive and equitable quality education, promote lifelong learning

iv.   Goal 6:ensure availability and sustainable management of water and sanitation for all

v.   Goal 7: ensure access to affordable, reliable, sustainable and modern energy for all.

vi.   Goal 11: making cities and human settlements inclusive, safe, resilient and sustainable.

Using health, education and living conditions as poverty dimensions, we estimated multidimensional poverty with the aim of providing another angle, in addition to income, through which poverty can be viewed and understood.

Living conditions in this context imply the condition of housing, state of drinking water, type of energy used and state of sanitation of a household. The reason for choosing these dimensions has been explained in a following section.

2.1   Data

We use the 2007 and 2014 rounds of the Zambia Demographic and Health Survey (ZDHS). The ZDHS is an internationally standardized survey designed to provide data to monitor population and health in Zambia. It includes information on education attainment and living conditions making it appropriate for measuring multidimensional poverty. Previous surveys were conducted in 1992, 1996 and 2001-02. The data does not collect information on income, expenditure or employment which is why income deprivation was not included in the analysis. The sample sizes for the 2007 and 2014 surveys were 7,164 and 15,920 households, respectively. The two surveys were designed to provide estimates at national and provincial levels, as well as rural and urban areas.

2.2 Deprivation Indicators/Variables

The indicators used to measure poverty are listed in Table 1. The ideal approach for selecting the most appropriate variables is through a public consultation as only the people themselves can tell what really matters to them. In the absence of this, Alkire et al (2015) recommend using national and international development plans and goals as a guide in identifying the indicators that matter most to people. This is because national and international plans such as the MDGs, SDGs and NDPs to a large extent reflect the most

Table 1: Variables Used in Estimating Deprivation

Dimension (W)	Indicator	Deprivation cut-offs	Weight
Education (1/3)	Schooling	School age child in household not in school	1/6
		Household head not completed secondary school	1/6
Living Conditions (1/3)	Flooring	Muddy or dusty floor	1/12
	Cooking fuel	Household uses wood/cow dung/charcoal	1/12
	Drinking Water	Water is from an unprotected source	1/12
	Sanitation	House has no toilet	1/12
Health (1/3)	Stunting	Stunted children in household	1/6
	Underweight	Underweight children in household	1/6

important needs of society, and that is the approach taken in this report.

The choice of education and health as deprivation indicators is also informed by the 2015 Living Conditions Survey in which the two were voted as the top desired developmental projects by the Zambian public. These indicators also remain priority indicators for development even under the SDGs. Living conditions (energy, water, sanitation) remain key indicators of development both under international and local development goals.

2.3 Multidimensional Poverty Estimation

Based on Alkire et al (2015), and using the indicators in Table 1, the AF methodology for estimating multi-dimensional poverty takes two important steps: these are identification and aggregation. The steps are outlined step by step below.

2.3.1 Identification

Identification begins by constructing a matrix X of well-being scores for n person in d domains. Such that,

$$n \times d \rightarrow X,$$

Where $X = x_{ij}$ is the achievement of person i in dimension j and x_{ij} is a non-integer.

Domains are indicators for dimensions, in this case health, living conditions and education.

A vector z of deprivation cut-offs is used to determine whether a person is deprived in each domain. If a person does not meet the deprivation cut-off, the person is said to be deprived in that dimension. The vector z is denoted as follows:

$$z = (z_{i, \ldots,} zd)$$

We then create a matrix g^o that takes the value of 1 if a person is deprived and zero, if not.

$$g^o_{ij} = 1 \text{ whenever } x_{ij} < z,$$

$$g^o_{ij} = 0, \text{ otherwise for all } j = 1, \ldots, d, \text{ and for all } i = 1, \ldots, n$$

g^o_{ij} summarizes the deprivation status value of all people in all dimensions of matrix X.

g^o_i summarizes the deprivation status values of person j in all dimensions.

g^o_j summarizes the deprivation status values of all persons in dimension j.

We also create c_i, a 1 by m vector which counts the number of dimensions that a person is deprived in.

$$c_i = \sum_{j=1}^{d} w_j g^0_{ij} = \sum_{j=1}^{d} \bar{g}^0_{ij}$$

We then set a cut-off k which identifies the poor if $c_i \geq k$. In our case, the number of domains used in the study is 8 and the cut off was set at 40% or 3 domains. This means that a person was identified as poor if they were deprived in 3 or more indicators.

Using the dual cut-off approach, the identification function is then derived as follows:

$$P_k (y_i; z) = 1 \text{ if } c_i \geq k \text{ and } P_k (y_i; z) = 0 \text{ if } c_i < k.$$

A vector w of weights is used to indicate the relative importance of different deprivations.

$$w = (w_1, \dots, w_d), \text{ such that } w_j > 0$$

In this study, we applied equal weights to each of the dimensions. We gave each dimension a weight of a third (1/3). This weight was further distributed equally across the indicators under each dimension. The allocation of weights is based on value judgement and thus open to debate.

2.3.2   Aggregation

The aggregation step of the AF methodology builds upon the standard Foster Greer Thorbecke methodology which also generates its own class of measures. This involved calculating some partial indices that provided information on some single aspect of poverty:

i.   *The poverty headcount ratio (H):* this is also referred to as the incidence of poverty. It is calculated as a proportion of people identified as poor (i.e. dividing total number of poor people by the number of population). The head count is presented in two stages:

   a.   *Raw or uncensored head count:* this is defined as the proportion of the population that is deprived in one indicator or dimension. The raw head count of indicator j is given by:

$$h_j = \frac{1}{n} \sum_{i=1}^{n} g_{ij}^0 .$$

   Where h_j is the uncensored (raw) head count of indicator j

   b.   *Censored head count:* the censored head count of an indicator is defined as the percentage of the population who are both multidimensionally poor and simultaneously deprived in that indicator. Unlike the raw head count,

censored head count considers only the deprivations of those that are poor. Meaning this particular measure drops all the non-poor or those who are deprived in one indicator only. It is given by:

$$h_j(k) = \frac{1}{n} \sum_{i=1}^{n} g_{ij}^0 (k).$$

   Where, $h_j (k)$ is the censored headcount ratio of indicator j.

c.   *Intensity of poverty (A):* A shows the deprivation share for each person. This is derived by adding up all people's share of weighted deprivations and dividing by the number of poor people. It is the average number of deprivations suffered by the poor.

$$A = \sum_{i=1}^{n} c_i(k)/q$$

d.   *Acute poverty (M0):* Using the above sets of information, we derive acute poverty or what is known as the *adjusted headcount ratio.* The M0 is the mean of the censored deprivation matrix and can also be derived by multiplying H and A (H x A). Otherwise,

$$M_0 = \mu(c(k)) = \frac{1}{n} \times \sum_{i=1}^{n} c_i(k).$$

3.0 Results

Figure 2 shows the raw poverty head counts for 2007 and 2014 showing the proportion of households deprived in each indicator. There were notable reductions in deprivation levels in each indicator between 2007 and 2014. Drinking water had the biggest improvement with deprivation levels dropping from 55% in 2007 to 37% in 2014. This indicates a marked improvement in the availability or access to safe and clean drinking water. To the contrary, deprivation levels in access to cooking fuel actually increased from 86% in 2007 to 89% in 2014. This means access to cooking fuel had actually worsened between the two periods.

Figure 2: Raw Head Count, 2007 and 2014
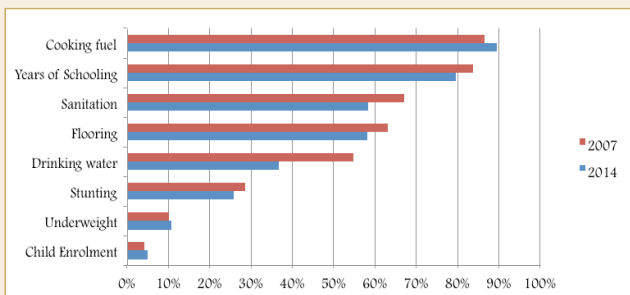
The censored head count is presented in Figure 3 and shows the proportion of those who were multidimensionally poor and deprived in one indicator. Access to basic services by the poor increased between 2007 and 2014 shown by the drop in deprivation levels. The highest reduction in deprivation was in access to safe drinking water which dropped by 15 percentage points from 50% in 2007 to 34% in 2014. This means that fewer people lacked access to safe and clean drinking water in 2014 than in 2007.

Figure 3: Censored Head Count, 2007 and 2013/14
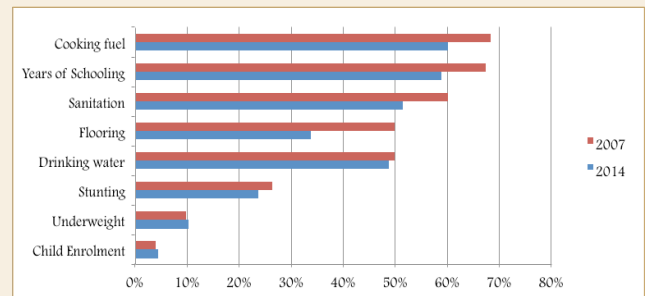
3.1   Overall Poverty Head Count

Multidimensional poverty head count was estimated at 69% and 60% in 2007 and 2014 respectively (Figure 4). This generally points to reductions in deprivation levels in the indicators in health, education and living conditions. Poverty head count was higher for rural areas than urban areas in both 2007 and 2014. Nonetheless, there were more rural poor (89%) in 2007 compared to those in 2014 (82%).

Figure 4: Multi-dimensional Poverty Head Count, 2007 and 2014
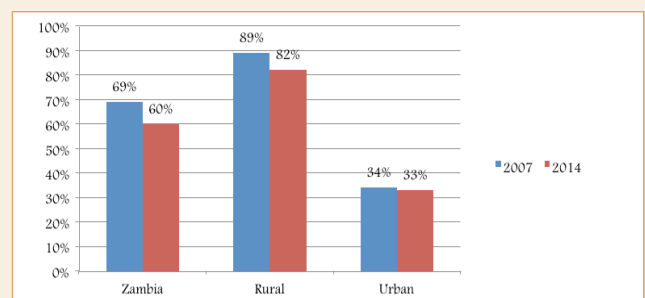
Rural poverty declined by about seven percentage points. Similarly, urban poverty declined though with a much smaller margin: from 34% in 2007 to 33% in 2014. The overall reduction in multi-dimensional poverty between the two periods was therefore largely driven by rural areas.

At the provincial level, North-Western Province had the highest proportion of people (86%) who were multi-dimensionally poor in 2007 (Figure 5). This was followed by Luapula and Western provinces which stood at 84% and 80%, respectively. Lusaka and Copperbelt had the lowest proportion of people experiencing multidimensional poverty at 29% and 51%, respectively.

Figure 5: Multi-dimensional Poverty Head Count by Province, 2007
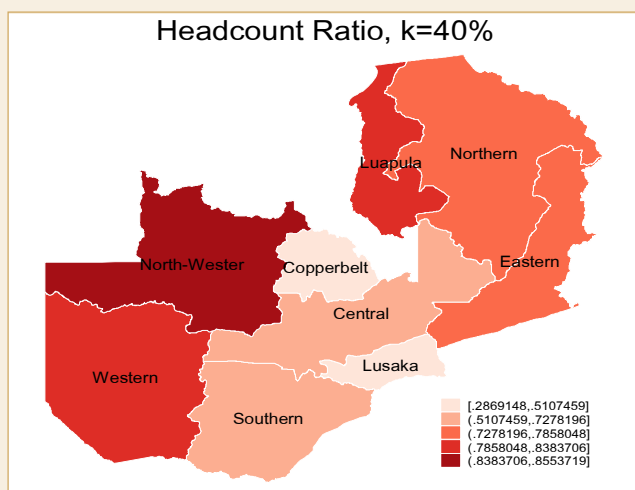
The poverty outlook was different in 2014. Overall, multidimensional poverty reduced significantly for most of the provinces. Northern Province became the poorest province, but only with marginal differences from North-Western and Western provinces which were all about 73%. This means that after 7 years, the levels of deprivation in education, health and living conditions actually reduced for these provinces.

Figure 6: Multidimensional Poverty Head Count by Province, 2014
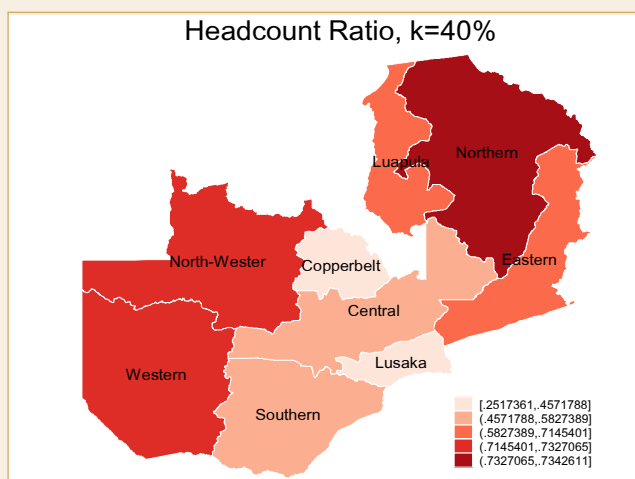
3.2 Poverty Intensity

We also estimated the intensity or extent of deprivation for those who were poor. Overall, the poor were deprived in more than half (55% and 54%) of the indicators in 2007 and 2014 respectively. This narrow disparity between the two years suggests that though multi-dimensional poverty head count dropped significantly between 2007 and 2014, those who remained poor experienced almost the same levels of deprivation in both time periods.
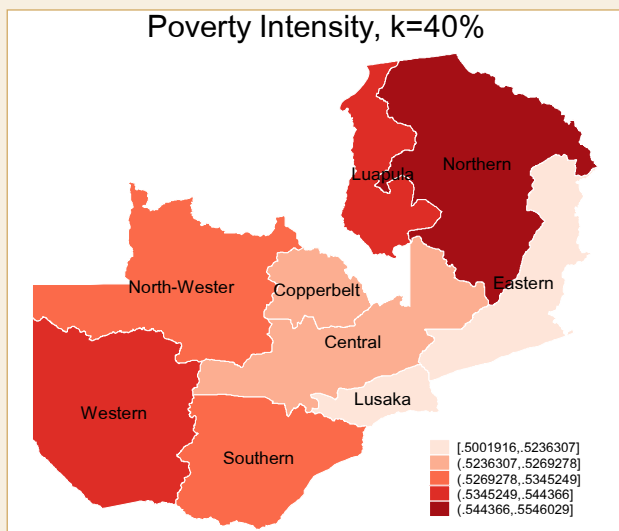
Figure 7: Poverty intensity, 2007 and 2014
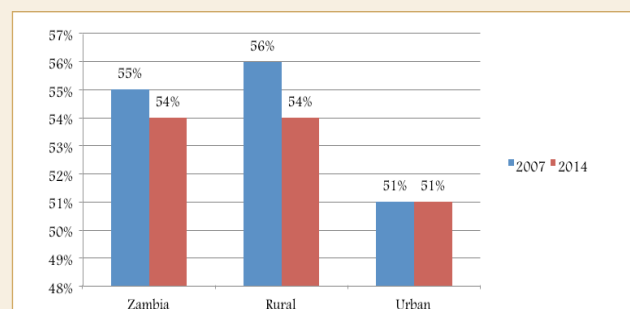
Within 2007, the rural poor were deprived in 56% of the indicators compared to 51% for the urban poor. This means that poverty was more intense in the rural areas compared to urban areas. Similarly in 2014, the rural poor suffered more deprivations on average than the urban poor though the gap became narrower pointing to a reduction in poverty intensities for both locations.

At the provincial level (Figure 8), North-Western province had the highest level of poverty intensity (56%) in 2007 compared to any other province. This means the poor of North Western Province suffered more deprivations on average compared to any other province. The least poverty intensity was observed in Lusaka.

Poverty Intensity, k=40%

Northern Province was not only the poorest province in 2014 but also the province with the highest poverty intensity followed by Western Province. This means that poverty was more intense in Northern than any other province. Lusaka and Eastern provinces had the least intensity of poverty.

Figure 9: Poverty Intensity by Province, 2014

Adjusted Poverty Intensity, k=40%
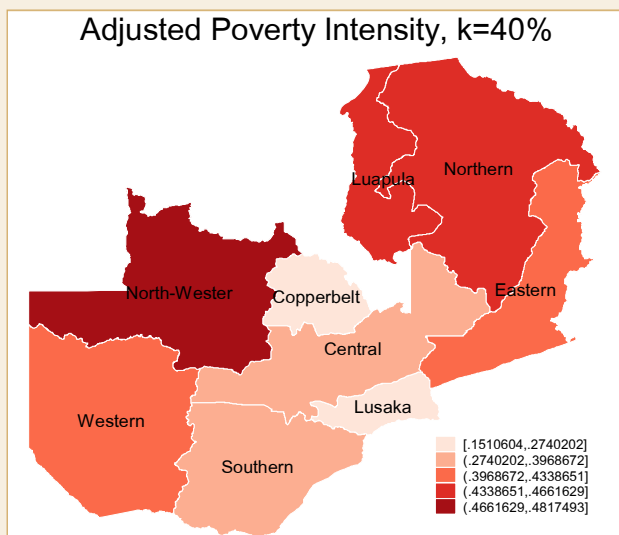
3.3 Acute Poverty

The levels of acute poverty, which is the worst form of poverty, are presented in this section. About 38% of the population was in acute poverty in 2007 compared to 32% in 2014 indicating a reduction in acute poverty.

About half of the rural population suffered acute poverty in 2007 compared to 44% in 2014. Acute poverty only reduced by one percentage point in urban areas from 18% in 2007 to 17% in 2014.

Figure 10: Acute Poverty, 2007 and 2014
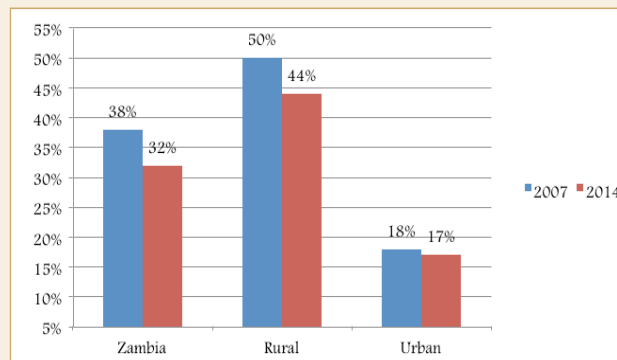
Acute poverty reduced for every province between 2007 and 2014. North-Western Province had the highest prevalence of acute poverty in 2007 compared to any other province followed by Luapula and Northern provinces. Lusaka and Copperbelt had the lowest prevalence of acute poverty for both 2007 and 2014.

Figure 11: Acute Poverty by Province, 2007

Adjusted Poverty Intensity, k=40%
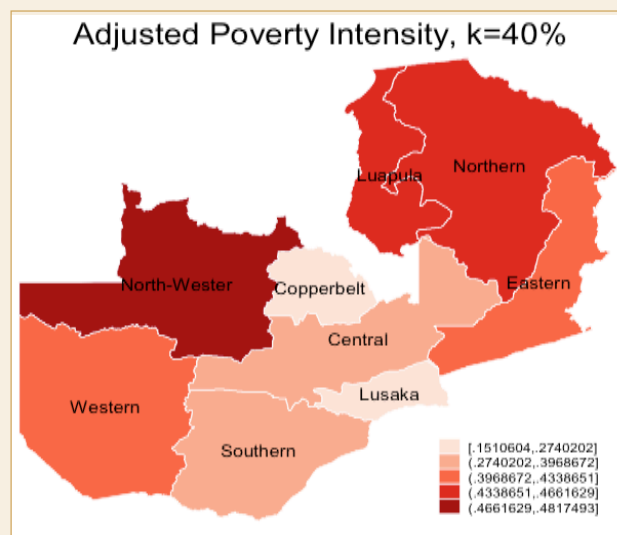
Northern Province was the province with the highest proportion of people living in acute poverty in 2014 compared to any other province. This is in line with trends in head count poverty which increased between 2007 and 2014. This means Northern Province

moved from being the province with the third largest number of people experiencing acute poverty in 2007 to being the province with the largest proportion of people experiencing acute poverty in 2014.

Figure 12: Acute Poverty by Province, 2014
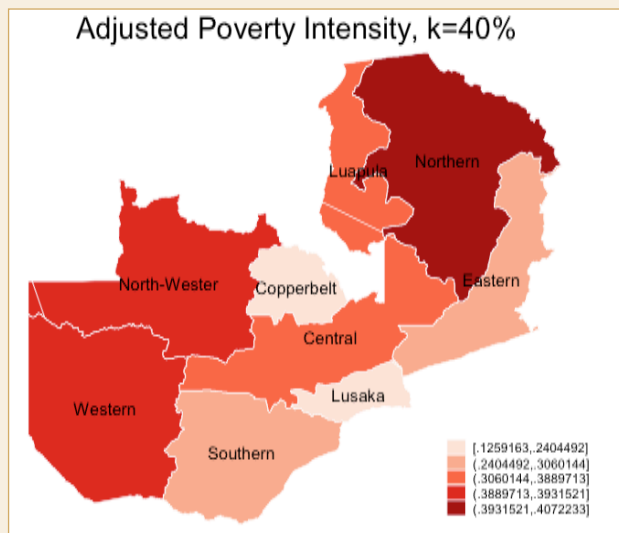
3.4   Contributions to Acute Poverty

The contribution of different indicators to acute poverty is presented in this section. Four indicators could be said to be the lead contributors to acute poverty in both 2007 and 2014 (Figure 13 and 14). These are years of schooling, cooking fuel, flooring and sanitation. Improving access to these indicators is likely to reduce acute poverty at all levels.

Figure 13: Contribution of Indicators to Acute Poverty, 2007
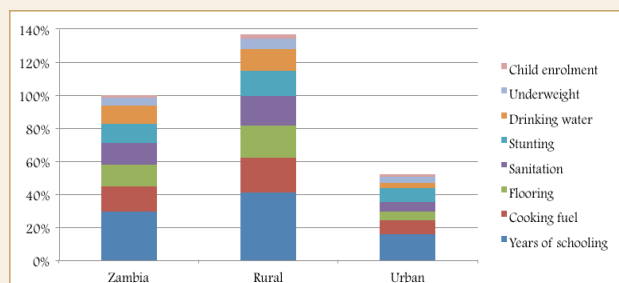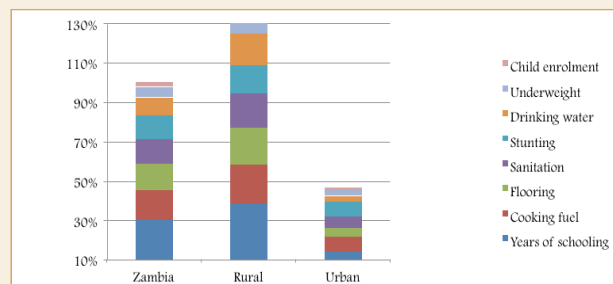

Figure 14: Contribution of Indicators to Acute Poverty, 2014

At the provincial level, Figures 15 and 16 show the contributors to poverty in 2007 and 2014. The trend is similar to the national level. Deprivation in years of schooling is the largest contributor to multidimensional poverty in all provinces. The extent of contribution of years of schooling was however low for Copperbelt and Lusaka. This is an indication that fewer people are deprived in education in these two provinces.

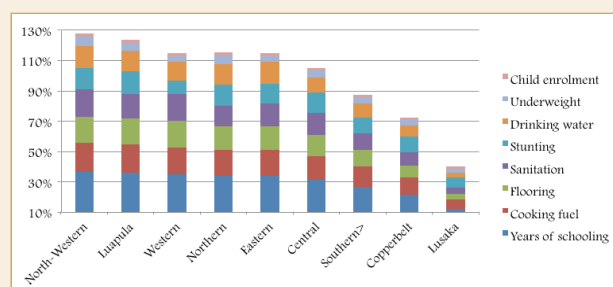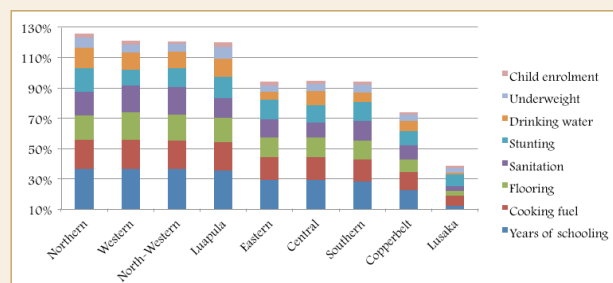Figure 15: Contribution of Indicators to Poverty by Province, 2007

Figure 16: Contribution of Indicators to Poverty by Province, 2014

4.0   Conclusion

This report has painted a picture of Zambian poverty from a multi-dimensional perspective. Policy makers, development stakeholders, researchers and the general public are rightly aware that current traditional measures of poverty (income) are widely accepted and widely used to understand poverty. These measures have served an important function to the general understanding about poverty. Multidimensional measures of poverty become especially important for augmenting the income poverty measures and partially filling the knowledge and information gaps therein.

Indeed the poor do not only lack money but a long list of basic services that make up for a decent living: clean water, sanitation, clean fuel, schooling opportunities, health care, nutrition and decent housing, to mention a few. Many Zambians are deprived in these things and failure to know and understand the extent and distribution of deprivations potentially render poverty reduction programmes and policies ineffective.

In this regard, multi-dimensional measures of poverty should be officially recognized in Zambia and be used as a complementary tool to understanding the dynamics of poverty in Zambia. It would be important, to adopt and disseminate multi-dimensional poverty indicators as often as income poverty so that poverty reduction programmes and policies can draw on this information too.

The results are clear that deprivations in energy are high across the country and many households continue to rely on charcoal, firewood, and grass or cow dung to meet their cooking energy needs. While one would expect the situation to have improved after seven years (2007-2014), it actually worsened. These trends mean that access to clean energy is still problematic in Zambia and needs urgent

attention.

Deprivation in education indicated by years of schooling remains the largest contributor to acute poverty at national and provincial level. What these results are saying is that majority households are headed by men or women who have not completed secondary education. Despite this, secondary education has become a basic requirement even for the most menial jobs in Zambia.

Being deprived in secondary education therefore means reduced chances of finding gainful employment which could lead to income deprivation. As secondary education is an important source of foundation skills covering basic literacy and numeracy, deprivation in it has adverse implications for the quality of life of not only the household head but the entire household.

Overall, there was a reduction in the levels of material deprivation over the seven years analyzed. The largest multidimensional poverty reduction was accounted for by rural areas, meaning that deprivation levels reduced more in rural areas but remained almost the same in urban areas.

At the provincial level, North-Western, Luapula and Western provinces had the highest multidimensional poverty head counts. Lusaka and Copperbelt had the lowest poverty head counts. In general, people in North-Western Province suffered the most levels of deprivation compared to any other province. This is consistent with income poverty studies which show the three provinces always ranking top in terms of high poverty levels.

Consistent with trends at the national level, provincial multidimensional poverty dropped significantly between 2007 and 2014. The most interesting finding is that whereas Luapula

Province was the second poorest province in 2007, it moved to fourth poorest by 2014. Other provinces also experienced improvements in terms of the proportion of people suffering multi-dimensional poverty between 2007 and 2014.

Nonetheless, provincial poverty was unequally distributed in both 2007 and 2014. This unequal distribution of deprivations can be addressed through resource allocation that recognizes these disparities going forward. Poorest provinces should be prioritized and receive proportionally more resources.

References

Alkire, S., Foster, J.E., Seth, S., Santos, M.E., Roche, J.M. & Ballon, P. 2015, *Multidimensional Poverty Measurement and Analysis,* Oxford University Press, Oxford.

Central Statistical Office 2015, 2015 Living Conditions Monitoring Survey report, Lusaka, Zambia.

Central Statistical Office 2010, 2010 Living Conditions Monitoring Survey report, Lusaka, Zambia.

International Monetary Fund 2005, *Zambia: Poverty Reduction Strategy Paper Progress Report*, International Monetary Fund, Washington D.C.

Ministry of Finance 2014, *The Proposed 2015-2017 Medium Term Expenditure Framework and Policies for the 2015 Budget. Green Paper*, Ministry of Finance, Lusaka.

Ministry of Finance 2013, *Revised Sixth NAtional Development Plan 2013-2016*, Ministry of Finance, Lusaka.

Ministry of Finance 2006, *Vision 2030*, Ministry of Finance, Lusaka.

Sen, A. 2000, *Deveklopment as Freedom,* Oxford University Press, New Dheli.

United Nations 2014a, *The Millennium Development Goals 2014*, United Nations, New York.

United Nations 2014b, *, Sustainable Development Goals* [Homepage of United Nations Department for Economic and Social Affairs], [Online]. Available: https://sustainabledevelopment.un.org/topics/sustainabledevelopmentgoals [2014, May].

"Working towards the formulation of sound economic policies".