Understanding the nature of household poverty in Botswana

Lesego Sekwati[1], Nettimi Narayana[2] and Mpho Raboloko[3]

Abstract

In Botswana, poverty is mainly a structural problem which arises from the pattern of economic growth. This paper is a contribution to the understanding of the nature of poverty in Botswana. The analysis is at two levels – the policy level and household level. While it is not wrong to base the success of poverty reduction initiatives on private sector development, the stark reality is that little has been achieved to date. In addition to the policy environment, this paper examined household characteristics that contribute to poverty in Botswana. A logistic regression model was estimated using urban food security baseline survey data from Gaborone to examine demographic, social and economic factors that determine household poverty. The estimation results showed a positive and significant relationship between household size, total household consumption expenditure and household poverty status. These results also carry significant information relating to the design of specific programmes targeted at addressing poverty at this level.

Keywords: poverty, structural problem, policy environment, food security, consumption.

[1]. Senior Lecturer, Department of Economics, University of Botswana, email: *sekwatil@mopipi.ub.bw*
[2]. Professor, Department of Economics, University of Botswana, email: *narayana@mopipi.ub.bw*
[3]. Graduate Student, Department of Economics, University of Botswana

Introduction

While Botswana has been hailed as a beacon of economic management compared to most African states, unemployment, poverty and inequality have remained major policy challenges. Prior to the recent global economic downturn, which resulted in an unprecedented loss of diamond revenues, Botswana was considered one of the best performing economies, with an estimated per capita income of US$6,000 as at the end of 2009 (Bank of Botswana, 2009). For many households however, these macroeconomic indicators disguise the harsh realities they have to contend with. This is because while Botswana has won many accolades for economic management over the years, for a large section of the population, unemployment, poverty and inequality define their harsh reality at the household level, with poverty incidence estimated at 30.6% at the national level (Republic of Botswana, 2008). Poverty is especially rampant in rural areas, where poverty incidence, gap and severity are all estimated to be significantly higher than in other areas (see Table 1).

**Table 1: Poverty rates based on HIES (actual) and census 2001 (predicted), by strata**

	Poverty incidence		Poverty gap		Poverty severity	
	HIES (actual)	Census (predicted)	HIES (actual)	Census (predicted)	HIES (actual)	Census (predicted)
Gaborone	0.063	0.076	0.018	0.023	0.009	0.010
Other Towns and Cities	0.135	0.149	0.043	0.051	0.019	0.025
Urban Villages	0.247	0.258	0.085	0.096	0.040	0.050
Rural Villages	0.453	0.455	0.183	0.197	0.097	0.112

Source: Republic of Botswana 2008

Development economics literature identifies employment as the principal link between economic growth and poverty reduction (see Hull 2009, Dollar and Kray 2002, Ravallion 2001). Hull (2009) argues that the growth of the economy, especially in one sector, does not automatically translate into benefits for the poor. Poverty reduction depends on the profile of growth, and its employment and productivity intensity, the sectoral location of the poor as well as the extent of mobility across the sectors. Despite the high rates of economic growth, in Botswana these are unfortunately attributed to one sector, diamond mining, which

is highly capital intensive. This has meant a very low number of jobs created within the sector (see also Malema, this volume). The non-mining sectors have also tended to lag behind in terms of growth and contribution to total economic output and employment creation. The manufacturing sector, which has high employment and productivity, and in spite of the policy support it has received from Government over the years, contributes only marginally to total economic output, and moderately to employment. Figure 2 below shows the number of paid employees for selected sectors during 2009. During this year, although contributing close to a third of the Gross Domestic Product (see Figure 1), the mining sector contributed only 2.9% to the total number of paid employees. The manufacturing sector contributed a moderate 9.9% to the number of paid employees despite having high employment intensity (see similar observations in Malema, this volume).

Figure 1 Distribution of GDP for selected sectors – 2009
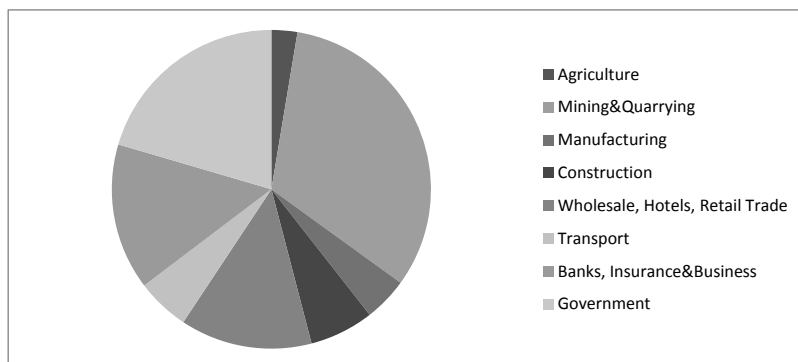
Source: Authors' calculations based on Bank of Botswana 2009 Annual Report

Figure 1 presents the sectoral distribution of GDP for selected sectors in Botswana. The share of mining and quarrying to GDP is high while the contribution to GDP by non-mining sectors, especially by manufacturing and services sectors, is low.

Figure 2: Estimated number of paid employees for selected sectors – 2009
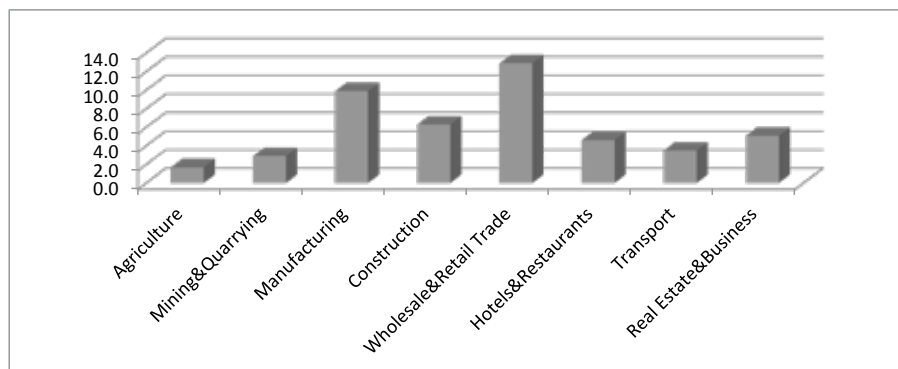
Source: Authors' calculations based on the 2009 Labour Statistics Report

The structural nature of the economy, hugely dependent on mining, and with minimal activity outside this dominant sector, has resulted in limited employment opportunities for a large section of the population, with significant consequences on income generation and poverty at the household level as shown in Figure 2. According to the 2005/06 Labour Force Survey, overall unemployment was estimated at 17.6%, with the youth being the most affected by unemployment. Preliminary results of the Core Welfare Indicators Survey 2009/10 show a marginal increase in the rate of unemployment to 17.8%. This translates to 126,349 unemployed persons out of a total labour force of 710,600 during the survey period (Republic of Botswana, 2011). Consistent with the labour force survey, the Core Welfare Indicators Survey estimates unemployment to be higher among the youth compared to other age groups (41.4% for age group 15-19 and 34.0% for age group 20-24). This is a result of the narrow economic base, and the consequent limited employment opportunities which have led to relatively high levels of poverty (30.6% of the population).

This paper seeks to understand the nature of poverty in Botswana. In addition to a review of the policy environment, the study uses Urban Food Security Baseline Survey data (2008) for Gaborone to accomplish this objective.

Poverty reduction in Botswana: The policy environment

The *National Strategy for Poverty Reduction* (NSPR) is the key policy document guiding intervention regarding poverty. The strategy

seeks to link and harmonize the various sectoral initiatives relating to poverty. Before the strategy was adopted in 2003, poverty reduction initiatives were somewhat fragmented, without a clear and concise policy framework or guidelines for addressing poverty. The result was uncoordinated interventions which yielded insignificant results in terms of reducing poverty. The NSPR was thus devised as a strategy to provide people with opportunities for sustainable livelihoods. The objective was to expand employment opportunities through broad-based economic growth, in terms of sectoral and geographic spread. At the micro level, the strategy sought to enhance access to social investment by the poor, with a view to promoting their capabilities to work and earn an income. The strategy recognized that there were sections of the population who might be unable to take advantage of the opportunities afforded by expanded employment opportunities. For this section, the Government would continue to use targeted social safety nets aimed at preventing them from falling into abject poverty (Republic of Botswana, 2003).

While the NSPR is a welcome development in terms of providing overall guidance on addressing poverty, there is little cause for optimism in terms of achieving the desired results, primarily because the objectives of the policy depend on the successes recorded in complementary policies, especially those aimed at developing a viable private sector. Key among these are the Industrial Development Policy (IDP) and the Policy on Small, Medium and Micro Enterprises (SMMEs). The aim of these two policies is to facilitate an enabling environment for private sector development and growth. However, while the Government of Botswana clearly has the desire or intent to diversify the economy, to date little has been achieved. The private sector remains narrow and shallow, with weak inter-sectoral diversity and production links. Questions continue to be asked why the private sector continues to falter despite the policy support from Government. The key to unlocking the paradox surrounding private sector development in Botswana is making the private sector to perform as per the policy support; otherwise the objectives spelt out in the NSPR are less than likely to be achieved, at least in the foreseeable future. The challenge remains with policy makers, private sector and all other institutions, including researchers, to find workable solutions to diversifying the economy. In addition to the recent economic drive (EDD) initiatives, it is hoped that privatization, which has been somewhat slow to take off, will provide the much needed boost for meaningful private sector participation and development in Botswana.

Table 2 below summarizes some of the programmes adopted by the Government in recent years to address poverty. As is often the case with most Government programmes in Botswana, many of these programmes do not clearly define the timeliness for achieving stated objectives, thus rendering performance evaluation difficult. It is always critical to attach timelines to policies and strategies to enhance monitoring and evaluation. Besides monitoring and evaluation, there are specific problems we identify in each of the programmes outlined in Table 2. The issue of sustainability is key, especially for programmes such as *Ipelegeng*. The key questions to ask include whether the programme is adding any value in terms of returns on investment by the Government, whether the process involves proper project identification to ensure sustainability, and whether the institutions involved in the implementation of the programme have the capacity/training to do proper project identification. We argue that the answer to all these questions is 'no' (see also Malema, this volume). Such a programme may provide temporary relief, but it does not really equip participants with skills to apply in other sectors of the economy. Because of these shortcomings, the programme is not likely to achieve stated objectives, but perpetuate a culture of dependency, which is not sustainable in the long term. As for the Integrated Support Programme for Arable Agriculture (ISPAAD), the key issue is whether farmers have the capacity to graduate from subsistence to commercial farming, and whether they have the requisite training capacity and entrepreneurial skills. Similar programmes have failed in the past, mainly because most farmers are more oriented towards subsistence as opposed to commercial farming. It is an issue of culture. Institutional economics recognizes that issues such as religion, tradition or culture, norms are embedded, and ordinarily take a long time to change (see Williamson 2000). Given the current cultural and institutional set up it is unlikely that the programme will succeed, especially in the short to medium term. There is need for complementary processes to be undertaken to change the institutional set up.

In addition to these initiatives, the Government also implements targeted social safety nets for those who are unable to take advantage of the opportunities afforded by expanded employment opportunities to prevent them from falling into abject poverty (Republic of Botswana 2003). These include, among others: the destitute programme, old age pension, vulnerable group feeding programme, orphans and vulnerable children programme and home based care for persons living with AIDS.

Table 2: Matrix for poverty, policies and programmes

	Policy/ Programme	Objectives/Principles	Key actions	Comments
1.	Backyard gardening	• Improve household food security thereby reducing poverty • Income generating measures for households	• Training on gardening, marketing and financial management • Drip irrigation	• Key Challenges o Performance monitoring o Less attractive in terms of income generation
2.	ISPAAD, 2009	• Increase grain production • Promote food security • Commercialize agriculture • Facilitate access to inputs and credit • Improve extension outreach	• Cluster fencing • Provision of portable water • Provision of seeds • Provision of fertilizers • Facilitation of access to credit • Establishment of agricultural service centres	• Key Challenges o Performance monitoring o Sustainability of the programme o Capacity of farmers to graduate from traditional to commercial farming o Access to credit o Access to land
3.	Ipelegeng, 2008	• Employment support for unskilled and semi-skilled labour	• Employment support for unskilled and semi-skilled labour	• Key Challenges o Monitoring and evaluation o Sustainability of the programme o Short term solution to the bigger problem o Value addition of the programme
4.	NSPR, 2003	• Provision of opportunities for sustainable livelihoods • Reduce poverty	• Provide employment opportunities • Improve poor people's access to investment resources • Targeted assistance programmes e.g. safety nets, NAMPAAD, ISPAAD, *Ipelegen*g • Promotion of community participation in development	• Key Challenges o Performance criteria, monitoring and evaluation need strengthening o Sustainability of targeted schemes such as Ipelegeng and ISPAAD o Sluggish growth of employment opportunities o Geographical imbalance in addressing poverty o Women participation in development still limited

Explaining household poverty in Botswana: Survey based evidence

The objective of this paper as has been outlined earlier as intended to understand household poverty in Botswana. It is premised on the argument that an understanding of the nature of a problem is a precondition for effective targeted actions to solving the problem. In the previous section, we looked at the policy environment as it relates to poverty reduction. In this section we focus on demographic, social and economic factors that influence household poverty status. As social and economic conditions continue to evolve, it is imperative that we continually study these key factors while designing suitable policies and programmes to address poverty. The analysis outlined below is based on the urban food security baseline survey conducted by the African Food Security Urban Network in 11 cities in 9 SADC countries including Gaborone, Botswana during 2008. The area of study in this instance was Gaborone.

The results of the estimation derive from a modified version of the model used by Achia et al (2010) in examining the key demographic, social and economic factors that influence the poverty status of a household. The model specifies poverty status as a function of demographic, economic and social characteristics of a given household. In this study, we estimated a logistic regression model defined by the Equation below.

$$p = \beta_0 + \beta_1 Size + \beta_2 Age + \beta_3 Edu + \beta_4 Gender + \beta_5 Cons + U_1 \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots .1$$

Where

p = poverty status of a household measured as a dichotomous variable, with p =1 when a household earns less than P199.95 and p = 0, otherwise.

Size = size of household

Age = age of household head

Edu = level of education for household head

Gender = gender of household head

Cons = total household consumption expenditure

U = error term

Table 3 below summarizes the results of the estimation. The results suggest a significant relationship between household poverty status and the size of the household as well as the total household consumption

expenditure. The results also show a positive relationship between household size and household poverty status (see also Okurut et al 2002). A positive relationship is similarly suggested by the results between total household consumption expenditure and household poverty status.

Table 3: Summary of estimation results

Model	Unstandardized coefficients		Standardized coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	1.686	.834		2.020.	.044
Household size	.373	.099	.185	3.759	.000
Age of household head	-.243	.185	-.064	-1.393	.190
Level of education	-.076	.070	-.049	-1.078	.282
Gender of household head	-.139	.117	-.054	-1.195	.233
Total household consumption expenditure	.941	.072	.591	13.005	.000

R = 0.429, Adjusted R2= 0.419, Durbin-Watson = 1.871

VIF: $\beta1$= 1.215   TOL: $\beta1$= 0.823

$\beta2$ = 1.179 $\beta2$ = 0.848

$\beta3$ = 1.024 $\beta3$ = 0.976

$\beta4$ = 1.017 $\beta4$ = 0.984

$\beta5$= 1.0140 $\beta5$= 1.040

TOL = tolerance factor, VIF = variation inflation factor

Conclusions and policy implications

Premised on the argument that an understanding of the nature of poverty is a precondition for effective intervention, the objective of this paper was twofold: (1) to examine the policy environment relating to poverty reduction, and (2) to examine the demographic, social and economic factors that influence the poverty status of a household.

An examination of the policy environment revealed that while the NSPR provides the general framework within which poverty is to be addressed, the success of the policy depends primarily on the successes achieved through complementary policies, particularly the Industrial Development Policy and the Policy on SMMEs in developing a vibrant, self-sustaining private sector, capable of generating gainful employment opportunities. The study has shown that to date private

sector activities remain shallow, with weak inter sectoral diversity and production links. It is important to ensure that the policies adopted by the Government to facilitate private sector development and growth work, otherwise we have to conclude that the policies are not suitably framed and implemented. We may also have to conclude that our education system and institutional framework is not supportive to private sector development. All these issues have to be addressed if progress is to be made in diversifying the economy. Until these problems are addressed, it is unlikely that meaningful poverty reduction will be achieved.

At the household level, the results of the estimation show a positive and significant relationship between household size, total household consumption expenditure and household poverty status. As the Government continues to design policies to address poverty, it is imperative that these policies be designed in cognizance of the key factors that contribute to household poverty.

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