

Tracking Poverty in South Africa's 21 Poorest Nodes: Using the Millennium Development Goals and Other Poverty Indicators

Matthew J. Smith and David Everatt

Introduction

This paper examines how measuring the Millennium Development Goals (MDGs) in tandem with other poverty indicators provides an effective means to track and ultimately tackle poverty within the South African context. Tackling poverty in South Africa is probably one of the very few areas where consensus exists across political, racial and other lines of division. But the agreement stops right there - it does not cover how poverty is understood, how it is defined, who is or who isn't poor, what exactly to do to about poverty, who has what role to play, and so on. This paper, however is concerned less with the debates and disputes over poverty, which have been analysed elsewhere¹, than with an attempt to outline the scale and nature of poverty in South Africa. This too has been tackled in various ways and by different authors, but usually relying on official statistics and without gathering new primary data.²

In contrast this paper uses data from the 1996 and 2001 censuses as well as a 2006 baseline survey; in each case we focus on the 21 poorest 'nodes' in South Africa: 13 in rural areas comprising the foci of the Integrated Sustainable Rural Development Programme (ISRDP), and 8 doing the same for the Urban Renewal Programme (URP) (see Figure 1 and Figure 2). The two programmes were launched at the turn of the century, when the Millennium Development Goals were signed and a local 'war on poverty', we were told, was well under way.

The 21 nodes were selected for specific attention by government because of their high levels of poverty, though it is unclear what variables were used to identify the nodes (anecdotal evidence suggests that population size, unemployment and government capacity were some of the variables used, but this has not been documented). The ISRDP and URP - now over half a decade into their 10-year lifespan - aim to transform their respective nodes into economically vibrant and socially cohesive areas initially through anchor projects to kick-start the programmes, and then through better co-ordination between departments geared to providing an integrated suite of services to all citizens, especially those living in poverty. The approach of government was to work more smartly - to use existing resources better by co-ordinated planning and integrated delivery - rather than throwing more money at the nodes.

¹ These issues are discussed in detail in Everatt D. (2004) 'The politics of poverty' in Everatt D. and Maphai V. (ed.s) *The (real) state of the nation: South Africa since 1990* (Interfund, Johannesburg).

² See the various contributions in Bhorat H and Kanbur R (ed.s) *Poverty and policy in post-apartheid South Africa* (HSRC Press, 2006).

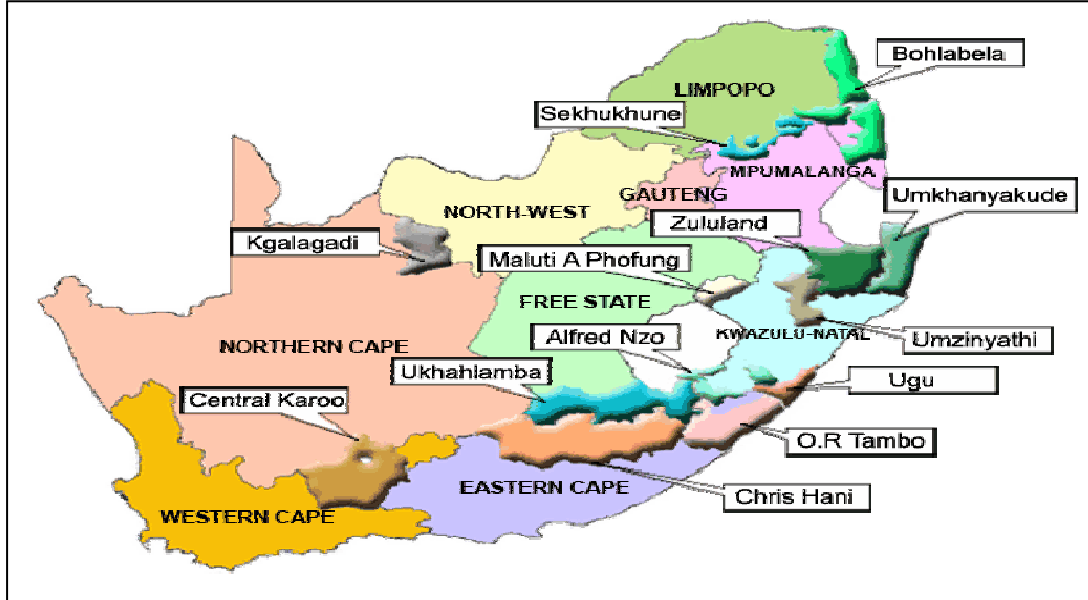


Figure 1: Integrated Sustainable Rural Development Programme nodes (Source: www.dplg.gov.za)

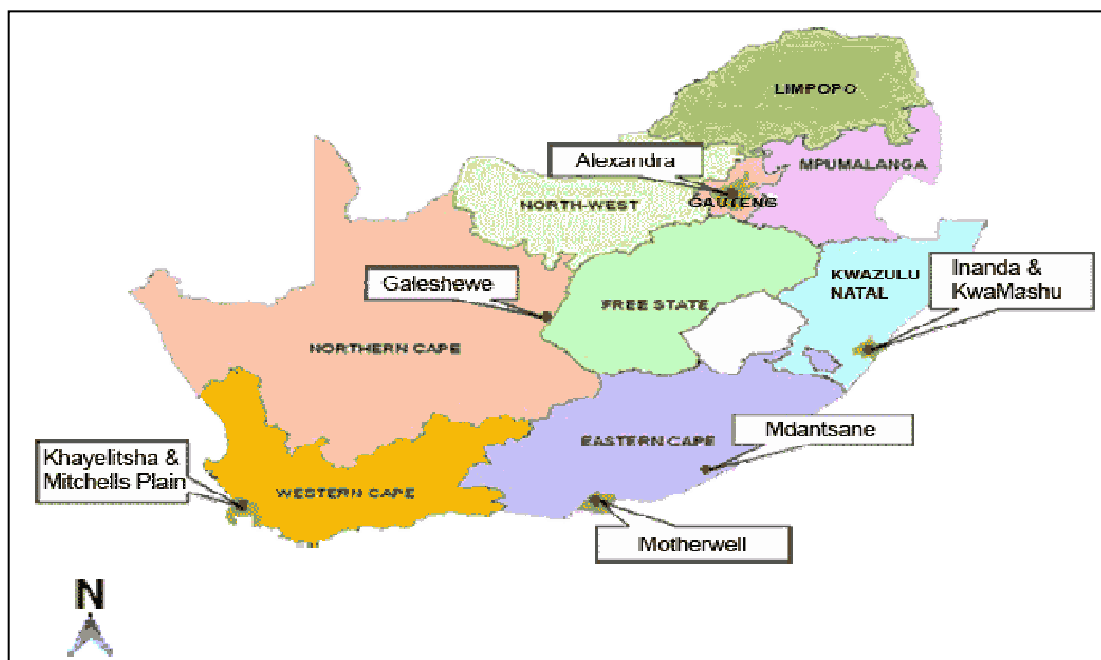


Figure 2: The URP nodes (Source: www.dplg.gov.za)

The paper uses 1996 and 2001 census data as well as data from a baseline of all 21 nodes conducted in late 2006 to map poverty in the nodes, providing time-series analysis of socio-economic and demographic indicators as well as an overall poverty matrix constructed from variables used in the census and repeated in the baseline survey. The fact that no census took place in 2006 required a survey to generate updated data. The baseline survey, sought to conduct 400 interviews in each of the 13 ISRDP nodes and the 8 URP nodes. The adult population aged 18 and older according to the Census 2001 was used as the sample frame. A total of 8 387 interviews across the 21 nodes were conducted. The realised samples in each of the ISRDP nodes were weighted back to the actual population figures across each local municipality. Given that the samples for each of the URP nodes were self-weighting, no weighting needed to be applied to these samples. It should be noted that on the one hand, 8 387 is a very large sample with a margin of sampling error of only 1.1%.

However, when the data are analysed at nodal level, each of the 21 samples of 400 have a larger sampling error of 4.9%.

Using census data has both positives and negatives, most of which are well known. Our approach is to use a poverty matrix proposed by Statistics South Africa³ to measure poverty - though, curiously, not applied by the agency to its own census (or other) data - and which we have developed and used for various government departments.⁴ The census has greater reliability than sample surveys which tend to veer away from 'deep' rural areas and deep into informal urban poverty pockets - in preference for easy-to-reach (and safer) enumeration points - and are therefore singularly unreliable where the 21 nodes are concerned, and hence the node-specific baseline survey analysed here. In short: the paper uses census and survey data; both have strengths and weaknesses; but the point is to look at the 21 identified poorest nodes in South Africa, using the most reliable and recent data, and draw some conclusions about the extent to which government is or is not addressing poverty

The paper begins by first examining what other poverty indicators tell us about poverty in the 21 nodes and then we enrich this analysis by measuring the MDGs in these nodes. Poverty is analysed in space (across all 21 nodes) and across time (1996 to 2006). In so doing, the paper finds that predictably, though still shocking, rural poverty emerges as considerably worse than poverty in urban areas, and poverty scores for the ISRDP nodes in 2001 were almost twice as high as those for the URP. This gap had widened dramatically by 2006 (to more than double the rate of poverty in rural compared with urban nodes), as poverty dropped significantly in urban nodes while declining significantly more sluggishly in the 13 rural nodes.

Poverty Indicators⁵

The construction of a detailed poverty matrix allows us to analyse poverty within and across individual nodes, for all URP and ISRDP nodes (programme level. Using census data requires an indicator-based method for both nodal and poverty profiling. For the 2006 baseline survey, individual-level data are available, and a broader picture (including issues such as alienation and anomie; security; social capital and trust; and so on) has been produced and is available elsewhere.⁶

Our understanding of poverty in South Africa is partly influenced by international indices, such as the Human Development Index produced by the United Nations Development Programme (UNDP), or the competitiveness index produced by the World Economic Forum. These reports use particular indicators and assess countries in their totality. What these reports often fail to reflect (because they are working at national level) is the set of deep inequalities that South Africa inherited from its past; or the pockets of poverty that mark urban areas and disappear when assessed at aggregate level.

³ Statistics South Africa: *Measuring Poverty* (Pretoria, 2000).

⁴ See for example Jennings R (2004) *Updating the poverty targeting strategy for Gauteng* (Strategy & Tactics, commissioned by Premier's Office, Gauteng).

⁵ This section of the paper draws heavily on Everatt, D. (forthcoming) 'Counting them out, counting them back in again: reporting on the 'war on poverty' in South Africa's 21 poorest rural and urban nodes, 1996-2006'.

⁶ See Everatt D., Smith MJ and Solanki G. (2006) 'Baseline survey of the 21 ISRDP and URP nodes' (draft report, commissioned by the Department of Social Development, Pretoria).

The paper seeks to avoid these problems by working upwards from nodes to programmes. Data for the urban nodes are specific to the nodal site, with some possible inaccuracies with the 1996 data because of the various demarcation processes that subsequently have occurred. That said, we have been able to isolate the specific nodes for analysis: data for Alexandra, for example, do not include nearby (and far wealthier) Sandton; the same goes for other URP nodes. Most URP nodes are specific administrative areas such as Mdantsane, Inanda, Galeshewe, Mitchell's Plain and so on. However, most ISRDP nodes are larger administrative units - district municipalities such as Zululand, Alfred Nzo, Central Karoo with Maluti-a-Phofung the only local municipality - and therefore automatically include larger spatial areas and populations than their urban counterparts.

There is considerable debate about the definition of poverty and the appropriate indicators to measure it⁷, some examples of which are shown in Table 1. Evidence across different countries shows that poverty and the standard of living are directly related to resource availability and income - these resources often include access to water, sanitation, electricity, housing, education, health care and land. When using a composite definition, poverty measures can generally be grouped into four major categories:

- **Economic** - including monetary indicators of household well-being, ownership of assets, etc.
- **Social** - include non-monetary indicators of household well-being, such as access to education, health and other basic services.
- **Demographic** - focus on structure and size of households.
- **Vulnerability** - focus on issues such as physical insecurity and environmental hazards.

Table 1: Different models for defining poverty

World Bank	UNDP (Human Poverty Index)	Statistics SA
Income per capita	Education Life expectancy Health services Water Malnourishment	Education Unemployment Dwelling type Household composition Household expenditure Household size Water Refuse removal Sanitation Electricity Telephone

Choosing which indicators to use in defining poverty matters - different indicators can lead to different poverty rankings, priority target groups and areas, different targeting strategies, and so on. This has important implications in terms of determining who the poor are and where they are located as well as designing programmatic responses to poverty - i.e. what is needed to move people out of poverty.

- *The poverty index*

This paper uses an indicator-based method of defining poverty, unavoidable given use of census data. The selection of indicators was influenced by current international trends and local conditions, as well as reflecting key service delivery areas of

⁷ See Everatt D. (2004) 'The politics of poverty' in Everatt D. and Maphai V. (ed.s) *The (real) state of the nation: South Africa since 1990* (Interfund, Johannesburg).

government - infrastructure, services, health, education and job creation. This nods heavily in the direction of the Copenhagen Programme of Action, which cited food, safe drinking water, sanitation, health, shelter, education and information as part of measuring absolute poverty.⁸ But it is also an unavoidable compromise between what we would like to measure and the data available, especially from the censuses, which are household based, exclude value or attitude questions (about gender, for example) and in South Africa are issued in gnomic, often deeply user-hostile formats that disallow basic cross-tabulations.

To measure poverty within the limitations of census data, the following ten indicators, and their corresponding definitions, were used:

Table 2: Indicators used to construct the poverty index

Indicator	Definition
Female-headed households	Proportion of households headed by women
Illiteracy	Proportion of population (15+) who have not completed Std 5/Grade 7
Rate of unemployment	Proportion of the economically available population who are unemployed (regardless of whether or not they recently sought work)
Household income	Proportion of households with no annual income
Over-crowding	Proportion of households sharing a room with at least one other household
Dwelling type	Proportion of households classified informal or traditional
Sanitation	Proportion of households without a flush or chemical toilet
Water	Proportion of households who have no tap water inside dwelling or on site
Electricity	Proportion of households who do not have electricity for lighting purposes
Refuse removal	Proportion of households whose refuse is not removed by local authority

For each indicator, the relevant proportion (as a score out of a 100) was calculated. The poverty index was then calculated by adding all the scores for each indicator and dividing by 10 to obtain an average overall score out of 100. A score of 100 would reflect an extremely high level of poverty while a score of 0 would reflect an extremely low level.

To make sense of the data, remember that a high score is bad news, because it means high levels of poverty. So, for example, if we find that in 1996 Central Karoo scored 28.3 on the refuse removal indicator, this means that 28.3% of households in the node did not have their refuse removed by their local authority. The same applies to the composite poverty score. For example, in 2001, Sekhukhune scored 54.0 while Alexandra scored 24.4: this means that over half (54%) of the Sekhukhune population lived in high poverty in 2001, true of a quarter (24.4%) of the population of Alexandra. The scores are proportions; and high scores are bad news.

- **Limitations**

The master sample for the 1996 and 2001 censuses were different. In addition, changing municipal demarcations will have affected some of the ISRDP nodes between the two census outings (the process has continued with recent demarcations removing cross-border nodes). The 2006 baseline sample was drawn from the 2001

⁸ United Nations: *World Summit for Social Development: programme of action* (2000) Para 19 Chapter 2.

census. Furthermore, the URP nodes were not easily extracted from the 1996 census using the data made available to the public. Two specific nodes where caution should be exercised for the 1996 census data due to potentially different geographic boundaries are Mitchell's Plain and Inanda. These problems did not recur when re-analysing data from the 2001 census

As a result of the above there may be slight population variations from 1996 to 2001, which can be explained by these administrative changes rather than actual changes in the life circumstances of the populations of these nodes. Nevertheless, the similarities in population size across the two censuses strongly suggest that only slight changes result from changing geographic boundaries; and that one should look at the changes in life circumstances across time with confidence.

- *Analysing poverty in the 21 nodes: 1996-2006*

A poverty matrix was constructed based on variables included in the censuses of both 1996 and 2001. The variables in the matrix include both household and individual-level data, and include the following:

- Female-headed households
- Illiteracy (the proportion of population aged 15 and above who have not completed Std 5/Grade 7)
- Rate of unemployment
- Household income (the proportion of households with no annual income)
- Crowding (the proportion of households sharing a room with at least one other household)
- Dwelling type (households classified informal or traditional)
- Sanitation (households without flush or chemical toilet)
- Water (households without tap water inside dwelling or on site)
- Electricity (households without electricity for lighting purposes)
- Refuse removal (households whose refuse is not removed by local authority)

We are not seeking to defend this as the 'best' or most robust definition of poverty - it lacks a substantial gender angle, has nothing to cover security/vulnerability, rights, 'voice', and so on. But the censuses are a uniquely powerful dataset deserving rigorous analysis for what they can tell us about poverty in South Africa, and avoid much of the sampling and other disputation attendant on sample surveys. Census data are a key national resource that can be analysed nationally and at lower levels - such as the 21 nodes - than virtually any national sample survey. In other words there is a trade-off between the reliability of the data at nodal level and the breadth of poverty-related variables. In the absence of a 2006 census, the Department of Social Development commissioned the nodal baseline survey to track developments in the nodes. This gives us measurably accurate statistics for each of the nodes, but cannot generate a provincial or national picture. From a data-purist view, this is heart attack territory, combining the worst of sample survey and census data; but puritanical views aside, from a practical perspective it is a happy marriage: analysis of the various data-sets using the same matrix tells a fascinating story and allows us to track developments in the 21 nodes (not possible from most survey samples) despite the fact that no census will be taking place.

We have had to draw dividing lines, which may be disputed. For example, some may feel that households with VIP pit latrines should be excluded from the definition of poor households, not included as we have done; that traditional dwellings should similarly be excluded; and so on. More importantly, it can be argued that this or that

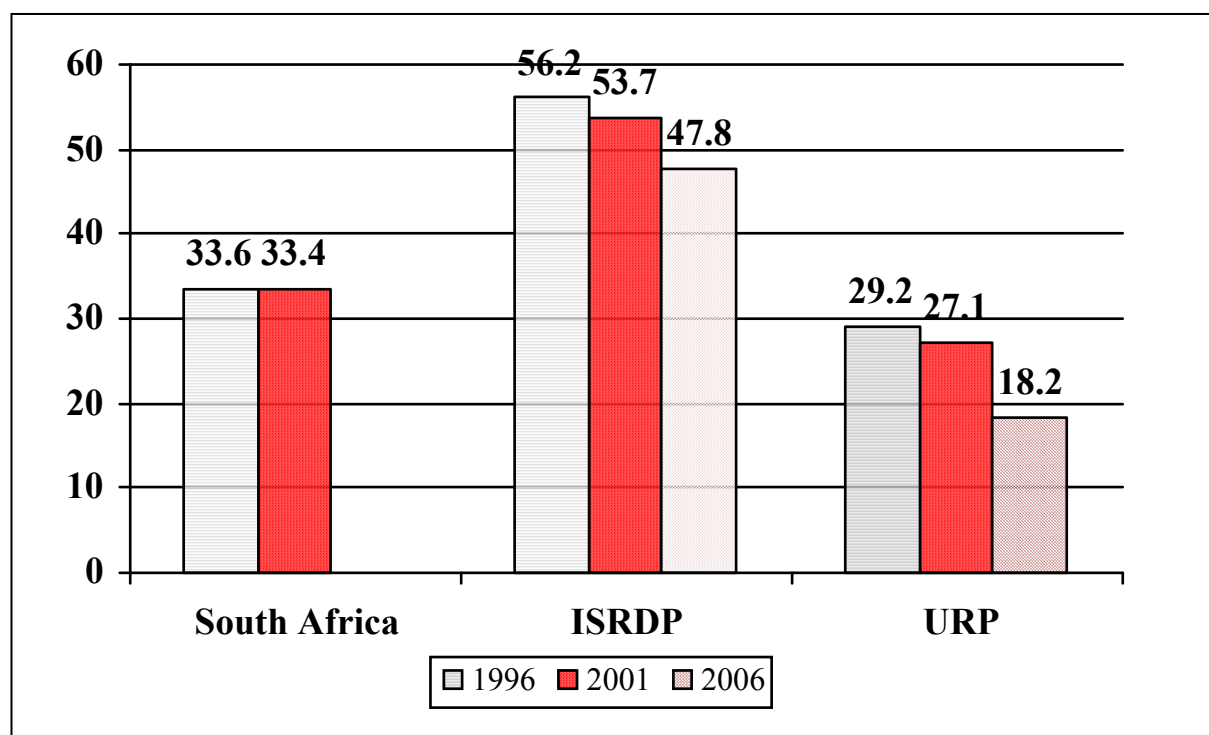
indicator should be weighted more than others. For example, unemployment may be seen as more important in measuring poverty than the indicator for over-crowding of households - that it should not merely count as 1 of 10 but should carry more weight and others less.

These are fair points; but we have decided to take the route of constructing this matrix from the censuses, then carried over into the baseline survey to ensure continuity, thus restricting analysis to specific variables; and preferred the simplicity of 10 variables without weighting any above another. Every definition is open to dispute, including this one. Ultimately, however, poverty has to be defined and lines have to be drawn somewhere, and these are the choices we have made in compiling this chapter

- *Poverty levels 1996 to 2006*

Let's start with a major finding: despite the vociferous criticism of critics, and some erstwhile allies, the African National Congress (ANC) government has succeeded in bringing down poverty in the 21 poorest nodes in South Africa. Bear in mind that many of these areas were selected by the apartheid regime precisely because they could not sustain economic growth and would force adults to migrate to urban areas and sell their labour. The achievement needs to be acknowledged and applauded, even though it is simultaneously fair to ask if poverty reduction could have gone faster or deeper.

Figure 3: Poverty scores for South Africa 1996/2001; for ISRDP & URP 1996, 2001, 2006



Looking at the figure above, we see (as we noted earlier) that poverty in the 13 ISRDP nodes is far higher than in the URP nodes. Rural poverty remains stubbornly resistant to quick fix solutions or rapid reduction. But the trend for all three sets of columns is downwards. Measured over time, we see a steady if unspectacular diminution in

poverty in the rural nodes, but still marking an important gain for the post-apartheid government. Levels of poverty in the URP nodes are on average lower than those for the country as a whole, reflecting the scale of rural poverty and its impact on poverty levels in South Africa. Urban nodes are poor, but far less poor than their rural counterparts. Even poor urban areas act as magnets attracting those capable of migrating out of the depth of poverty in many rural areas. This in turn reflects the national growth path, in which the major metropolitan centres are the drivers of growth and the major recipients of investment; smaller metropolitan centres follow; and rural areas lag way behind.

Less predictably but more importantly - we see that poverty *dropped* between 1996 and 2001 in the country as a whole (very slightly) between 1996 and 2001, by 0.2%; and did so by greater margins in the urban (2.1% down) and rural nodes (2.5%); this may seem slow and steady rather than spectacular, but is a considerable achievement. No comparable data are available for 2006, so we do not know if this trend has remained constant, been reversed, speeded up and so on.

The fact that levels of poverty dropped in the poorest urban and rural nodes in South Africa is an important finding. This is particularly true given the heated attacks on government for worsening poverty and the very high levels of poverty cited by many authors.⁹ This is also true given the attacks on government for focusing on building a black bourgeoisie at the expense of the poor, and the rural poor in particular. We are able to see this because it emerges from a matrix that deliberately moves away from reliance on any single variable - commonly unemployment - as a measure of poverty and seeks to measure poverty on a broader basis. It is generally accepted that poverty is multifaceted, and a reductionist approach that insists on equating poverty with unemployment fails to allow a sufficiently nuanced understanding of poverty in South Africa, or of how to tackle it.

In the 1960s poverty was defined by income but has consistently been broadened. In the 1970s, relative deprivation and the basic needs approach were dominant, followed with non-monetary concepts including powerlessness, vulnerability, livelihoods, capabilities and gender in the 1980s; well-being and 'voice' in the 1990s; and the rights-based approach has dominated since. Different definitions produce different results.¹⁰ Kanbur and Squire argued that "broadening the definition of poverty does not change significantly who is counted as poor"¹¹: this report soundly contradicts their assertion.

Our index moves beyond employment status and income to include a range of other variables, although it still has gaps in areas such as security, rights, 'voice' and others. This broader set of indicators reveal a drop in levels of poverty in the ISRDP and URP nodes. This should not in any way obscure the terrible fact that a third of South Africans lived in poverty in 1996 and 2001; but this is a significantly smaller portion than the often-cited half the populace; and the poorest nodes in the country saw significant poverty reduction suggesting that pro-poor programmes were having an impact. In Table 3 the 1996 and 2001 poverty scores for each node are set out. In some of the URP nodes (marked with *), demarcation made extracting data for the node particularly complex and the data should be treated with circumspection for 1996; the 2001 figures are accurate. Inanda, for example, is an extremely poor urban

⁹ See Everatt *The politics of poverty op cit.* for examples.

¹⁰ Statistics South Africa: *Measuring Poverty* (Pretoria, 2000), p.2.

¹¹ R. Kanbur and L. Squire, 'The evolution of thinking about poverty: Exploring the interactions', paper presented to the symposium on the Future of Development Economics in Perspective, 1999, p.1.

node; but extracting locale-specific data from Census 1996 proved very challenging; and thus the % change in poverty levels in Inanda should be treated with caution.

Table 3: Poverty index scores for all nodes and South Africa, 1996 and 2001

	1996	2001	2006
ISRDP Nodes			
O R Tambo	65.4	64.3	55.5
Umkhanyakude	63.8	60.6	57.6
Alfred Nzo	63.5	65.6	56.3
Umzinyathi	59.7	58.3	57.2
Sekhukhune	56.6	54	46.1
Zululand	55.7	53.9	52
Ukhahlamba	55.2	52.8	49.2
Chris Hani	53.8	51.6	47
Bohlabela	53.3	49.6	43
Ugu	50.0	50.7	50.1
Kgalagadi	50	47.6	45.7
Thabo Mofutsanyane	41.8	40.7	36.8
Central Karoo	19.2	18.5	17.6
Average ISRDP nodes	56.2	53.7	47.8
URP Nodes			
Inanda*	55.4	40.5	24.7
Mdantsane	32.8	28.6	16.5
Khayelitsha	31.8	31.5	27.1
Alexandra	26.5	24.4	17
Galeshewe	23.2	23.4	18.5
Mitchell's Plain*	22.6	20.3	10.6
Motherwell	22.4	30.7	16.7
KwaMashu*	18.2	24.5	14.1
Average URP nodes	29.2	27.1	18.2

* Demarcation impacting on data

What is immediately apparent is that poverty levels rose in 5 of the 21 nodes of the ISRDP and URP between 1996 and 2001, dropping in the remainder. By 2006, poverty levels had *dropped* in every URP and ISRDP node bar Ugu. This is a quite remarkable finding, given that these are 21 of the poorest locales in the country, many of which are located in sprawling urban townships and settlements or former homelands to which black South Africans were forcibly removed and which enjoy little economic growth or prospects of growth.

Even more striking is the massive difference between urban and rural areas. In the former, poverty levels dipped from 29.2% in 1996 to 27.1% in 2001, and then halved to 18.2% by 2006 - as we show below, the impact of social grants was singularly important in achieving this. For rural nodes, the drop has been steady and unspectacular, dropping from 56.2% in 1996 to 47.8% a decade later - slow, but still important gains that should not pass unacknowledged.

But equally striking is the lack of a clear pattern in either rural or urban areas. Some rural nodes saw poverty levels drop significantly, and some saw poverty remain static

or even (very slightly) rise. The same is true in urban nodes. In some, such as Mitchell's Plain, poverty levels have plummeted - from 22.6% in 1996 to 10.6% in 2006. But in others the drop has been considerably less dramatic. Local governance emerges as a key variable affecting nodal development. The provincial sphere seems to have a delimited role: compare nodal poverty for 1996-2001 with that of provinces, and no clear relationship can be detected. For example, within the Eastern Cape, poverty rose in Alfred Nzo by 2.1% between 1996 and 2001 - but dropped by 1.1% in O R Tambo in the same period. So nodes seem to be unaffected - in any systematic way - by either the nationally driven ISRDP or URP; by other nationally driven interventions such as Project Consolidate (which operates in virtually all of the 21 nodes); or by provincial governance.

Finally, the data remind us of the enormous differences and inequalities between already poor nodes. Look across the data in Table 4 below, and the point is starkly clear. Within the ISRDP fold, Thabo Mofutsanyane has a poverty rate of 36.8%, compared with 56.3% in Alfred Nzo. These are both massive compared with poverty in urban areas, which ranges from 27.1% in Khayelitsha to 10.6% in Mitchell's Plain. In the ISRDP, Alfred Nzo, O R Tambo, Ugu, Ukhahlamba, Umkhanyakude, Umzinyathi and Zululand all have poverty levels above the ISRDP average of 47.8%. And the relative poverty among ISRDP nodes is marked: poverty in Central Karoo is 3 times lower than in the poorest 4 nodes. In other words, even within this clutch of 21 poor nodes, there are striking priority areas.

In some cases - such as unemployment and female-headed households - there is little difference between ISRDP and URP households. But we should note that there are considerable differences between nodes (i.e. within the IRDP and/or URP) - for example, the rate of unemployment in Mitchell's Plain stands at 34.1%, but nearly doubles to 66.9% in nearby Khayelitsha. It is important that node-level differences are not masked by our unavoidable use of urban/rural axes, or URP/ISRDP programme axes, for purposes of analysis.

- *Poverty Matrix*

In the section after the table, we analyse key variables that make up the poverty index, some of which have worsened since 1996 and 2001 - most obviously unemployment, but including a major rise in female-headed households - and others that have dropped, most notably the proportion of households with no form of income at all.

Table 4: Poverty matrix scores: all nodes (source: 2006 nodal baseline survey)

2006 baseline survey	Female headed	Illiteracy	Unemployment	Income	Crowding*	Dwelling type	Sanitation	Water	Lighting	Refuse	Poverty index
Alfred Nzo	57.5	31.5	82.2	1.1	2.2	76.5	93.3	89.8	36.0	92.5	56.3
Chris Hani	58.5	50.3	79.1	2.3	2.2	58.0	70.3	59.0	28.5	62.0	47.0
O.R.Tambo	54.5	28.3	83.6	3.0	2.7	65.8	94.0	92.5	35.5	95.3	55.5
Ukhahlamba	65.0	47.0	82.4	4.9	3.0	58.3	73.0	67.8	26.0	64.3	49.2
Ugu	51.0	33.0	73.3	0.9	4.0	71.3	82.3	72.0	29.5	84.0	50.1
Umzinyathi	53.0	48.8	85.9	1.3	3.1	71.8	83.0	77.0	64.8	82.8	57.2
Umkhanyakude	45.0	41.3	81.8	0.4	5.2	77.5	96.5	75.8	61.0	91.3	57.6
Zululand	56.8	42.5	80.7	3.0	3.0	78.0	88.3	60.8	38.5	68.8	52.0
Sekhukhune	42.8	35.8	77.9	1.9	2.5	17.0	97.3	77.5	11.5	96.3	46.1
Bohlabela	51.3	24.3	86.3	0.6	3.0	16.0	93.8	59.3	4.0	91.8	43.0
Kgalagadi	50.5	42.0	83.0	5.6	3.1	37.5	77.8	72.5	5.8	78.8	45.7
Central Karoo	54.5	28.8	49.0	2.4	1.1	6.8	5.8	11.0	6.5	10.5	17.6
Thabo Mofutsanyane**	42.8	35.5	72.5	10.2	1.8	30.5	68.8	26.5	19.8	59.5	36.8
Maluti a Phofung	47.0	31.3	82.7	14.3	1.8	29.5	74.2	24.0	14.3	69.1	38.8
Mdantsane	47.8	10.8	80.2	7.1	0.9	3.0	4.3	3.8	3.8	3.0	16.5
Motherwell	43.5	13.0	77.7	3.6	2.1	16.0	0.3	0.0	1.3	9.8	16.7
Alexandra	47.3	11.5	63.3	3.1	12.7	15.3	2.0	2.5	8.8	3.0	17.0
Inanda	54.5	19.0	52.8	3.7	3.6	30.0	56.8	11.8	4.0	11.0	24.7
Kwa-Mashu	42.8	16.3	49.3	1.2	2.8	9.3	2.8	5.8	2.8	8.0	14.1
Khayelitsha	50.8	15.0	66.9	1.9	2.8	50.8	23.0	30.3	12.0	17.3	27.1
Mitchell's Plain	31.3	7.8	34.1	0.0	3.7	19.3	2.0	3.5	0.3	4.0	10.6
Galeshewe	57.0	20.5	74.9	7.9	2.1	8.5	1.8	1.3	3.5	7.8	18.5
ISRD nodes	53.1	37.6	79.1	2.6	2.9	52.0	79.4	66.2	28.4	76.2	47.8
URP nodes	46.8	14.2	62.6	3.7	4.1	19.0	11.6	7.3	4.5	8.0	18.2
Total sample	50.4	28.7	71.7	3.1	3.1	38.9	53.2	42.9	19.2	49.6	36.1

* Crowding data taken from Census 2001

** Thabo Mofutsanyane (District) shown because used as sampling basis for SSA ISRD baseline in 2001, though Maluti-a-Phofung is the node

Literacy

Functional illiteracy is one of the 10 indicators used in the poverty matrix, and one that showed evidence of steady improvement in every node barring Chris Hani where the increase (of 1.8%) is within the sampling error margin.

Overall, literacy levels are rising, although illiteracy remains unevenly distributed. Across all ISRDP nodes, illiteracy accounted for an average of 37.6% of respondents - almost 4 in 10. In urban nodes this figure was less than half the rural level, with illiteracy running at an average of 14.2%. The result is a weakened human resource base for rural development, and a squandered urban human resource base where unemployment disallows full utilisation of skills in the population.

Female-headed households and dwelling type

Female-headed households are commonly understood to be vulnerable to external shocks because of the unequal position of women in society and in the economy, which is why the variable features in the poverty matrix. But it should not be assumed therefore that all female-headed households are inherently vulnerable, weak or the result of male absence rather than female choice.

The key finding is that across all 21 nodes, 50.4% of all households sampled were headed by women - up from 37.8% in 1996 and 41.9% in 2001. This is a remarkable increase, that deserves far more detailed attention. Within the 21 nodes, the situation is very mixed, with no clear pattern emerging (beyond the overall increase). Incidence of female-headed households increased in 11 and decreased in 10 nodes in the period 2001 to 2006. Incidence rose in 6 of 8 URP nodes, and in 6 of 13 ISRDP nodes, indicating the feminisation of urbanisation - and of poverty.

But this is not just an urban phenomenon: across all ISRDP nodes, on average 53.1% of households are headed by women, dropping in URP nodes to an average of 46.8%. Mitchell's Plain at 31.3% was the only node where female-headed households appeared in less than 4 in 10 instances. The lowest corresponding figure for ISRDP nodes was 42.8% in both Sekhukhune and Thabo Mofutsanyane. This important social phenomenon must be tracked over time and its socio-economic implications carefully assessed.

Dwelling type also showed uneven movement. In urban areas, incidence of informal dwellings dropped in every node, in some cases dropping by a significant margin and presumably reflecting both the delivery of affordable housing and the growing resolve to remove informal settlements entirely in provinces such as Gauteng. But incidence of informal and/or traditional dwelling rose in 9 rural nodes and dropped in the remaining 4 nodes.

Services

Other variables used to provide a rounded measurement of poverty include access to sanitation, water, electricity for lighting purposes and refuse removal. These are core RDP goals and have featured strongly in government's on-going push to provide decent infrastructure and 'a better life' to all South Africans. Again, there is a very mixed set of results, reinforcing the importance of studying the nodal results in detail, since the situation is very node-specific.

We have already discussed access to water and the impact of 'commodification' of water and electricity. With regard to access, we found an improvement in every urban node, but a less even picture in the rural nodes. Providing decent sanitation has long been and remains a key developmental challenge with obvious health

implications. Again, the situation had improved in every urban node - but performance in the rural nodes was patchy and uneven. Inanda remained the least well served urban node, where over half (57%) of respondents have inadequate sanitation, followed by Khayelitsha (23%); but in other URP nodes, figures drop to single digits. In URP nodes, an average of 12% of households have poor sanitation (i.e. below RDP standards); this rises dramatically to include 79% of ISRDP households. In a number of ISRDP nodes some 9 in 10 households have poor quality sanitation, and this remains a key challenge.

Refuse removal provided a very uneven set of results. Some URP nodes improved but in most cases refuse removal seems to have worsened slightly; in 5 ISRDP nodes the situation had improved since 2001, in the remainder it had worsened. In most cases, the difference between 2001 and 2006 results are a few percentage points, and can be accounted for by sample error.

Electricity access has also improved - in the survey, the numbers using electricity for lighting purposes had increased in every one of the 21 nodes. There were very small numbers in urban nodes not using electricity for lighting - the highest incidence was in Khayelitsha where 12% of respondents did not use electricity for lighting. Overall, the average across all urban nodes was 4.5% of households not using electricity for lighting. The situation was predictably different in rural nodes, where the corresponding average was 28.4% of households. More households were using electricity in every node than had been recorded by Census 2001 - in every node - although some two-thirds of respondents do not use electricity for lighting in nodes such as Umzinyathi (65%) and Umkhanyakude (61%).

MDGs

The reader will be familiar with concerns about the MDGs, which range from the theoretical to the practical, and from the scope to the content of the MDGs¹². It is not the purpose of this paper to debate the shortcomings of the MDGs, suffice it note that they do provide yet another example of a means to assess poverty and that many of the issues referred to above with regards to poverty indicators also apply to the MDGs. Instead we argue that whilst there are recognised shortcomings within the construction of the MDGs they nevertheless, when used in conjunction with other poverty measures, enrich and deepen our understanding of what is taking place at the local level. The emphasis is thus on the local as opposed to the national picture.

Drawing on the data provided by the 2006 Baseline Survey discussed above we can provide some benchmarks to demonstrate the progress, or otherwise, being made towards achieving the MDGs in the 21 poorest nodes. It needs to be stated upfront that the purpose of the 2006 Baseline Survey (commissioned by the National Department of Social Development and hence shaped to meet their specific needs) was not to assess the MDGs, but rather to provide a holistic overview of the situation in each node. Nevertheless, the survey does provide specific information on six of eight MDGs, namely:

¹² See for example Bond, P. (2006) 'Global Governance Campaigning and MDGs: from top-down to bottom-up anti-poverty work' *Third World Quarterly*, 27(2): 339-354; Saith, A. (2006) 'From University Values to Millennium Development Goals: Lost in Translation' *Development and Change*, 37(6): 1167-1199; Editorial (2007) 'Millennium Development Holes' *Nature* 446: 347 - 347 (21 Mar 2007)

- MDG 1 – Eradicate extreme poverty and hunger
- MDG 2 – Achieve universal primary education
- MDG 3 – Promote gender equality and promote women
- MDG 6 – Combat HIV and AIDS, and malaria, and other diseases
- MDG 7 – Ensure environmental sustainability
- MDG 8 - Develop a global partnership for development

Those MDGs not measured (as they were beyond the scope of the survey and, for obvious methodological reasons, could not be measured using this type of survey) were:

- MDG 4 – Reduce Child Mortality
- MDG 5 – Improve Maternal Health

- *MDGs in South Africa*

South Africa, by its own admission has yet to fully realise its commitments to the MDGs and realises that:

Our failure in this regard would mean that we dishonour our promise to the poor in our country, and betray the targets we have set ourselves with regard to the MDGs. Thus would history also condemn us as a 'generation of political leaders that let the MDGs fail on their watch'¹³.

The Economic Commission of Africa (ECA)¹⁴ notes that South Africa is likely to achieve five of the eight MDGs, and that it is unlikely to achieve Goals 3 (promote gender equality and women), 4 (reduce child mortality) and 5 (improve maternal health) and within Goal 6 the ECA questions whether it is likely that South Africa will successfully combat HIV and AIDS. This stark reminder from both the President and the ECA draws attention to the fact that South Africa has some way to go towards achieving the MDGs. However, whilst not disagreeing with this assessment we do question the value of only assessing the MDGs at the country level. In fact many of the United Nations publications on the MDGs, such as the 2007 *'Millennium Development Goals Report'* prefer to report the data in terms of regions. Thus for instance the report lumps all the Southern African countries together despite their obvious political and socio-economic differences.

We believe that in terms of tracking and then tackling poverty it is far more helpful to explore the MDGs at the local level instead. By doing this one is therefore better placed to develop relevant initiatives that address specific needs. Just as the other poverty indicators discussed above illustrate subtle but important differences between the different nodes so to do the MDGs. To demonstrate this we first we highlight these differences and then we draw out the important implications of these findings.

¹³ President Mbeki (2007) in 'Letter from the President: MDGs - defences against the tsunami of world poverty' *ANC Today*, Volume 7, No. 37 . 21-27 September 2007.

¹⁴ http://www.uneca.org/mdgs/MDGs_page.asp

- *MDGs in South Africa's 21 Poorest Nodes*

MDG 1: Eradicate extreme poverty and hunger

The survey provides data that addresses both measures of this MDG, as follows

1 (a) Reduce by half the proportion of people living on less than a dollar a day

The 2006 Baseline Survey used Census 2001 income questions and definitions; therefore, the relevant questions were asked of the respondents' households, not themselves as individuals. The cut-off point used were households earning less than R500 a month (roughly \$2/day) as opposed to an individual living on \$1 a day (roughly equivalent to R230 per month). The mean for all nodes was 17%. Nevertheless, vast disparities can be found between the nodes (the nodes marked in red in the table are above the mean). In the table below the worst off nodes, with an income levels less than R500 per month (roughly \$2 per day), included nearly half (45%) of households in the Alfred Nzo node and a third in Mdantsane (33%).

One is immediately struck by the fact that this is an urban and rural phenomenon; some of the better off households are in fact in deep rural areas/nodes. What this implies is that poverty is localised and driven by local dynamics, suggesting that local solutions are needed rather than seeking to find a "one-solution-fits all" solution. Mitchell's Plain (1%) was the node where the least number of households fell under the R500 per month cut off, but followed by 2 rural nodes, to emphasise the point.

Table 5: Proportion of households below R500 per month (%)

Node	Proportion of households living below R500 per month (%)
Alfred Nzo	45%
Mdantsane	33%
Kgalagadi	28%
O.R. Tambo	27%
Alexandra	25%
Galeshewe	23%
Chris Hani	21%
Motherwell	21%
Bohlabela	20%
Maluti-a-Phofung	18%
Sekhukhune	18%
Inanda	15%
Khayelitsha	15%
Central Karoo	12%
Zululand	9%
KwaMashu	8%
Ukhahlamba	6%
Umkhanyakude	6%
Ugu	2%
Umzinyathi	2%

1 (b) Reduce by half the proportion of people who suffer from hunger

A worryingly high 45% of all respondents stated there were periods in the 12 months prior to being interviewed when they did not have enough money to feed the children in the household. In Kgalagadi three quarters (75%) of respondents reported this experience. Mitchell's Plain (14%) was again the node least likely to report incidence of chronic hunger.

There are no clear-cut patterns, for instance rural versus urban. What is apparent is that those nodes where a high proportion of households are living on less than R500 a day (see previous table), are not necessarily the nodes that have suffered the most in terms of not being able to feed the children in their household (e.g. Alfred Nzo had the highest number of households earning below R500 per month, but is ranked 17 out of 21 on this table). Whilst qualitative studies are urgently needed in these nodes to explore the reasons for this in greater detail, the data does suggest that certain low income households are more adept at finding alternative food sources (such as subsistence farming) than others, and that certain rural nodes are better able to develop sustainable livelihoods than others.

Table 6: Proportion reporting they did not have enough money to feed the children in the household?

Node	Proportion who stated there were periods when they did not have enough money to feed the children in the household (%)
Kgalagadi	75%
Mdantsane	71%
Chris Hani	63%
Ukhahlamba	61%
Zululand	55%
O.R. Tambo	55%
Umzinyathi	51%
Umkhanyakude	51%
Inanda	48%
Galeshewe	47%
Sekhukhune	44%
Maluti a Phofung	43%
Khayelitsha	43%
Motherwell	42%
Ugu	41%
Bohlabela	40%
Alfred Nzo	36%
Central Karoo	31%
Kwa-Mashu	22%
Alexandra	21%
Mitchell's Plain	14%

MDG 2. Achieve universal primary education

The 2006 Baseline Survey addressed this MDG and found that in ensuring “*that all boys and girls complete a full course of primary schooling*” nearly two thirds (63%)

of those in the 21 nodes reported they had completed **primary** school, but that more men (67%) had completed **secondary** school than women (61%) although the differential is slight and perhaps not as wide as expected.

The node where the lowest proportion had completed primary school was in Ukhahlamba, a deep rural node where less than half (44%) had done so. Worryingly, the vast majority of nodes below the mean of 63% were rural (those below are marked in red in the table below). Poor rural nodes must obviously therefore form a key target for actions around this MDG. The node with the highest reported number completing secondary school was an urban node - Mitchell's Plain (84%) - followed closely by many of the other urban nodes thus confirming our finding.

Interestingly differences could be found not only between urban and rural nodes, but also between respondents from different age groups. Youth (respondents aged 35 years and younger) were far more likely to have completed primary school than those older than 35 years. Whereas 88% of youth had completed primary school only 43% of those older than 35 had. This suggests a positive trend in the right direction and may well see South Africa achieving this MDG despite the ECA's reservations reported above.

Table 7: Proportion who had completed primary school (%)

Node	Proportion who had completed primary school (%)
Mitchell's Plain	84%
Mdantsane	82%
Alexandra	82%
Motherwell	79%
KwaMashu	77%
Khayelitsha	76%
Bohlabela	71%
Inanda	71%
Galeshewe	70%
O.R. Tambo	60%
Central Karoo	59%
Maluti a Phofung	58%
Ugu	58%
Alfred Nzo	56%
Sekhukhune	53%
Kgalagadi	52%
Umkhanyakude	51%
Zululand	49%
Ukhahlamba	44%
Umzinyathi	43%
Chris Hani	40%

MDG 3: Promote gender equality and promote women

The survey also addressed the measure used to assess this MDG, namely the goal of eliminating “gender disparity in primary and secondary education preferably by 2005, and at all levels by 2015”. The survey found that 23% of all those in living in the 21 nodes reported completing high school, the mean for the ISRDP is 18%, just

over half that for the URP (30% had completed high school). The nodes with the highest proportion completing high school (marked in red in the table below) are all urban nodes. Alexandra at 38% reported the highest proportion, whereas the lowest was Ukhahlamba and Chris Hani, were less than one in ten (9%) reported completing high school. Such low educational qualifications in the rural nodes is particularly disturbing and can certainly be equated with persistent chronic poverty in these nodes.

With respect to gender a quarter (25%) of all males had completed high school, whereas only one in five women had done so (21%). Whilst this signals a difference, there are even greater differences between youth (35 and younger) and those who are older. Of those who had completed high school, three out of four (74%) were youth. This again suggests, as noted earlier with regards to those who had finished primary school, that there is a positive trend and the achievements of the democratic state are visible. Breaking down the respondents by age produces another more startling finding: of the youth who had completed high school only a third were male (34%). Thus twice as many young females (66%) had completed high school versus young males. Further qualitative research is urgently needed to explore the reasons behind this.

Table 8: Proportion who had completed primary and secondary school (%)

Node	Proportion who had completed primary & secondary school (%)
Alexandra	38%
KwaMashu	34%
Mdantsane	31%
Motherwell	31%
Mitchell's Plain	30%
Khayelitsha	28%
Galeshewe	26%
Inanda	26%
Bohlabela	29%
Central Karoo	23%
Maluti a Phofung	23%
O.R. Tambo	19%
Ugu	19%
Kgalagadi	19%
Umkhanyakude	18%
Sekhukhune	18%
Umzinyathi	14%
Alfred Nzo	14%
Zululand	14%
Ukhahlamba	9%
Chris Hani	9%

MDG 6: Combat HIV and AIDS, and malaria, and other diseases

Although the 2006 Baseline Survey did not measure the incidence of HIV and AIDS (for obvious ethical and methodological reasons), it did explore important issues

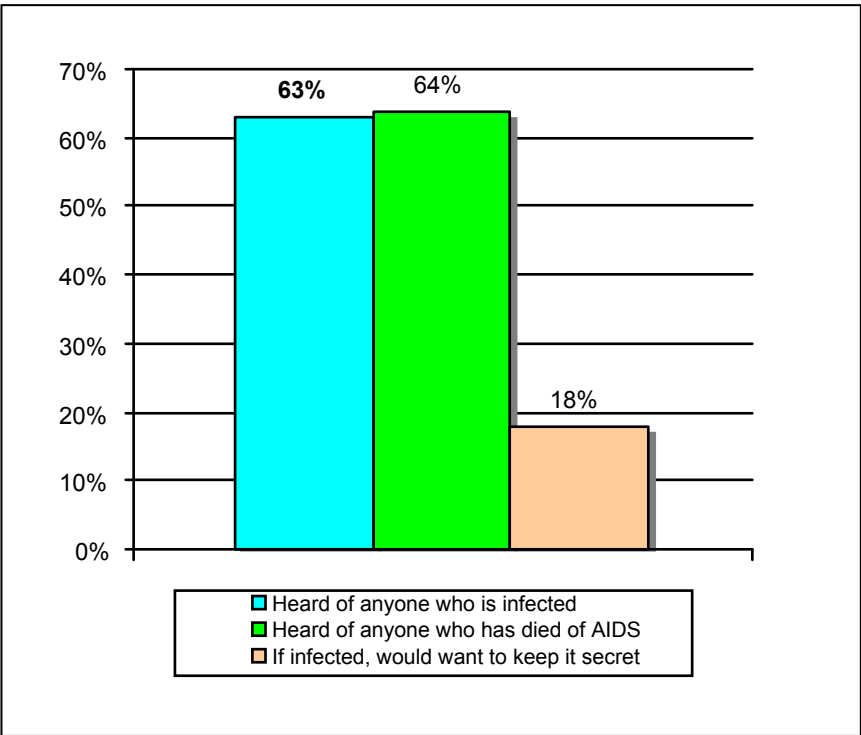
related to HIV and AIDS which are provided below. However, the survey did assess the incidence of Malaria, and these findings are presented below.

6 (a) Halt and begin to reverse the spread of HIV and AIDS

Two aspects of HIV and AIDS were explored in the survey: knowledge of those suffering from the disease in one’s community and knowledge of what leads to the transmission of the disease.

The figure below highlights how most of the respondents know people living with AIDS (63%) and know people who have died of AIDS (64%) in their respective communities. Respondents also felt it was important for their community to know their status, with only a small minority (18%) saying that if someone in their household were to be infected with the HI virus they would want to keep it a secret. The sex, age or education level of the respondent did not seem to have a significant impact on responses. Women and men, young and old and so on were equally aware of what impact the disease is having on their community.

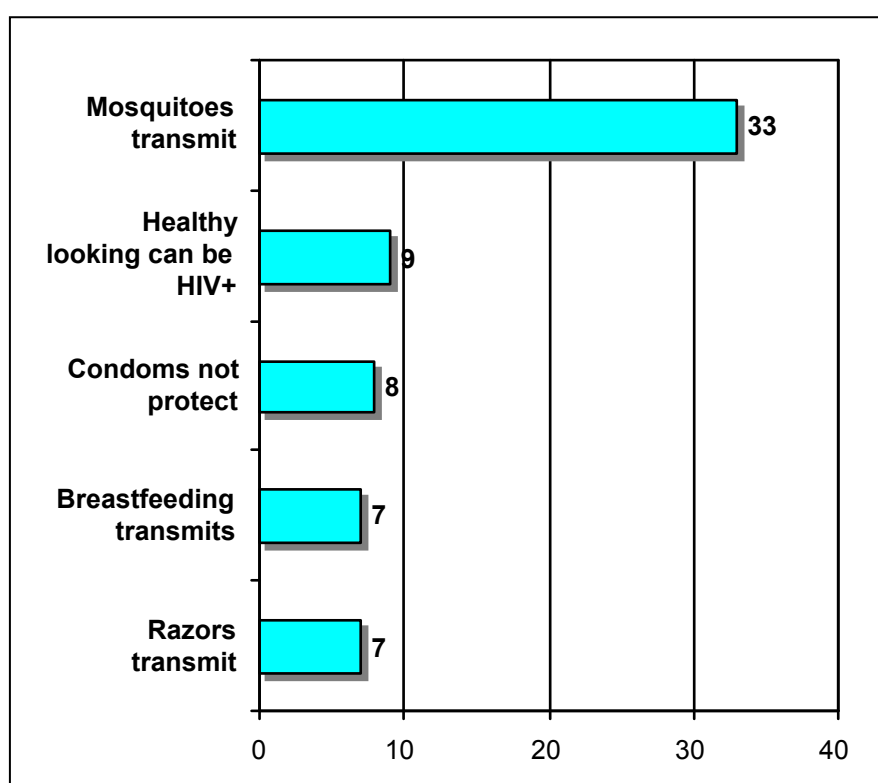
Figure 3: Proportion who were aware of others who were infected with HIV, died of AIDS and would keep that positive status of a household member a secret



Awareness of the levels of infection in one’s community does not necessarily equate with having the correct knowledge about the transmission of HIV. Positively, the survey suggests that, other than in the case of mosquitoes (33% of all respondents argued incorrectly that they transmit HIV), less than one in ten were incorrect when questioned about what does and does not transmit HIV. Interestingly, nodes where malaria is common were most likely to be incorrect about mosquitoes transmitting the virus.

However, on the other items no discernible differences could be found between different nodes, nor between males and females, youth and older adults and so on. Despite high levels of awareness of AIDS sufferers in their communities few respondents appear to be in a position to actively assist: the intersection of poverty and need appears to leave many too poor to provide much material/physical assistance. Only 7% were actively providing Home Based Care, and only 5% were receiving Home Based Care. A small 3% were able to provide support to AIDS orphans. The survey found that, other than in the case of mosquitoes (33% of all respondents argued incorrectly that they transmit HIV), less than one in ten were incorrect when questioned about what does and does not transmit HIV

Figure 4: Proportion having incorrect knowledge about the transmission of HIV



6 (b) Halt and begin to reverse the incidence of malaria and other major diseases

The (self-reported) incidence of malaria across all 21 nodes is low, only 2% of households reported it occurring in the 12 months prior to being surveyed. Interestingly, nodes where malaria is not uncommon were those most likely to be incorrect about whether or not mosquitoes transmit HIV.

MDG 7: Ensure environmental sustainability

The survey produced data that speaks to two of the three measures used to assess this MDG, namely:

7 (b) Reduce by half the proportion of people without sustainable access to safe drinking water

93% of those living in the URP have water piped into their dwelling or yard, whereas only 35% of those living in the ISRDP experience this. Of the people who access water that is not piped, 60% said that their water was not clean.

7 (c) Achieve significant improvement in lives of at least 100 million slum dwellers, by 2020

Four out of ten (39%) of all households in these nodes are living in informal/traditional dwellings (nodes highlighted in red in the table below, almost all ISRDP nodes, are those above the mean of 39%). The rural nodes reported a far greater number living in informal/traditional dwellings than did the urban nodes. This can be seen in the fact that the mean for the ISRDP nodes is 52%, whereas for URP nodes it was much lower at 19%. Zululand (78%) had the highest reported number living in informal/traditional dwellings, whilst Galeshewe (2%) had the least.

The ranking in the table below closely resembles the poverty matrix provided earlier in this paper. For instance, Zululand, Alfred Nzo, Umkhanyakude and Umzinyathi (the worst performing nodes in the table below) are also nodes that perform particularly poorly on the poverty matrix. The same can be said for Mitchell's Plain, Galeshewe and Mdantsane - the three nodes that performed best on the table below and also the nodes with the lowest score on the poverty matrix.

Table 9: Proportion who lived in an informal/ squatter dwelling (%)

Node	Proportion who lived in an informal/ squatter dwelling (%)
Zululand	78%
Alfred Nzo	77%
Umkhanyakude	76%
Umzinyathi	72%
Ugu	71%
O.R. Tambo	66%
Chris Hani	58%
Ukhahlamba	58%
Khayelitsha	51%
Kgalagadi	38%
Inanda	30%
Maluti a Phofung	30%
Sekhukhune	17%
Bohlabela	16%
Motherwell	16%
Alexandra	15%
KwaMashu	9%
Central Karoo	7%
Mitchell's Plain	4%
Mdantsane	3%
Galeshewe	2%

MDG 8: Develop a global partnership for development

In respect of MDG 8, the survey touched on one of the seven measures used to assess this MDG, namely:

8 (e) In cooperation with the developing countries, develop decent and productive work for youth

Nearly half the youth (48%) were unemployed across all nodes (the worst performing nodes are marked in red). Again there are sharp differences between the nodes. Kgalagadi reported the highest number of unemployed youth, with more than two thirds unemployed (68%). Mitchell's Plain was the node with the lowest proportion of unemployed youth (17%). There is also a big difference between the sexes. Among youth respondents, just over a third of males (38%) reported being unemployed, rising to over half the women (53%).

Table 10: Proportion of youth unemployed for two or more years (%)

Node	Proportion of youth unemployed (%)
Kgalagadi	68%
Bohlabela	65%
Chris Hani	64%
Sekhukhune	64%
Mdantsane	63%
O.R. Tambo	58%
Ukhahlamba	57%
Maluti a Phofung	55%
Galeshewe	54%
Motherwell	54%
Umkhanyakude	54%
Umzinyathi	53%
Ugu	48%
Zululand	47%
Alfred Nzo	45%
Khayelitsha	38%
Alexandra	37%
Inanda	32%
KwaMashu	28%
Central Karoo	25%
Mitchell's Plain	17%

Discussion

Having explored three different poverty measures (the poverty index, the poverty matrix and the MDGs) we can reach a number of conclusions. Overall, poverty levels have declined in South Africa - more steeply in urban than rural areas, but on average poverty has declined across all the nodes of the ISRDP and URP. The aggregate data suggests that South Africa is making progress towards achieving the MDGs but at nodal level vast discrepancies were found.

This decline has been driven in part - as was the more modest 1996-2001 drop in poverty levels - by on-going provision of infrastructure. But - crucially, and not true of the 1996-2001 period - the drop in poverty levels measured by this matrix has also been driven by widespread access (in these very poor areas) to social grants provided by the Department of Social Development and concomitant drop in households without income. These cash injections, though not large, have made a major impact on poverty levels in the nodes. It is the combination of the two - services and income support - that is impacting on poverty. That said, a high proportion of households are living below \$2 a day. Respondents also reported widespread problems in affording food. The data from the baseline survey suggests that certain nodes will require more careful thought as to how best to target (i.e. identify and reach) the most vulnerable groups to ensure greater food security

The performance at nodal level is very uneven. There is a discernible rural/urban difference, where urban municipalities are outperforming their rural counterparts in providing infrastructure and services to citizens. Moreover, the survey found little evidence of a consistent improvement across rural nodes. At this level, the drop in poverty is very evident in urban nodes - where poverty levels dropped from an average of 27.1% in 2001 to 18.2% in 2006. In rural areas, the downward movement was considerably less marked, falling from 53.7% in 2001 to 47.8% in 2006. These are major achievements for which government should be commended, but with a clear need to bolster delivery of services - infrastructure, grants and so on - in rural nodes. For instance, a high proportion of South Africans, particularly those in the ISRDP nodes, continue to access water that is not directly piped to their dwelling and consequently it is typically not clean. More than half those living in the ISRDP nodes continue to live in informal or traditional dwellings (mainly huts) and remain largely beyond the ambit of the free basic services provided by government.

Thus, the true challenge of co-ordination and integration - of government planning together and providing an integrated set of services to citizens - is in rural areas, where spatial challenges, the small local tax base and limited economic opportunities make the situation more urgent and more complex. And, according to the poverty measures, we are failing to rise to that challenge.

There are also differences within the URP and ISRDP - between different urban nodes and different rural nodes - which suggest that local governance remains a critical performance indicator and, in many rural areas, an issue of on-going concern. It is difficult to detect whether or not the URP and ISRDP are having a specific programmatic effect on the municipalities and council areas in which they are located. It is perhaps not surprising to find that respondents in the 21 nodes are sceptical as to whether or not co-ordination is occurring among and between the spheres of government. 5 years into the lifespan of both URP and ISRDP, it is a deeply unfortunate reaction. Policy makers clearly need to take local conditions into account. The evidence from above, in particular the ability of local government to deliver basic services, is having a profound effect on the attainment or otherwise of the MDGs. Strategies being developed to ensure a realisation of the MDGs must take these local circumstances into account otherwise certain nodes will continue to fall further behind those nodes where evidence of progress has been established

On a more positive note analysing the MDGs at the local level also highlighted that gains that are being made. For instance, with nearly 8 out of ten youth reporting they had completed primary school, the goal of ensuring all boys and girls

complete primary school appears to be attainable within the next ten years. A similar positive finding can be seen in the fact that high knowledge about HIV infection and openness about people infected with the virus reflect high levels of awareness of how the disease is transmitted.

Conclusion

This paper set out to demonstrate that, despite well-documented shortcomings, measuring the MDGs at the local level provides useful pointers to policy makers. This is particularly true when they are used in conjunction with other poverty indicators. By so doing they combine to provide a more nuanced picture of the depth and breadth of the development challenges required at the local level, in this instance the 21 poorest nodes in South Africa.

Nevertheless, key questions issue remain which will require further research in the future. Where are the limits to meeting basic needs through infrastructure provision? Can poverty eradication focus on service provision while the direct redistribution of wealth remains a policy taboo other than via 'free' marketism or the supposed benefits of trickle-down? Who will sustain, maintain and use the massive amounts of infrastructure that are being provided, if unemployment and attendant lack of income continues to account for 1 in 2 adults, and when the growth cycle peaks and we begin the downward spiral?