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Rural Livelihoods in South Africa

by

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Rural Livelihoods in South Africa

Reza C. Daniels¹, Andrew Partridge², Dineo Kekana³ & Sibongile Musundwa³

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Abstract

This paper discusses the changing profile of rural livelihoods in South Africa using the National Income Dynamics Study Waves 1 – 3 data (Southern Africa Labour & Development Research Unit (SALDRU), 2013a, 2013b, 2013c). The rural sector is undergoing a form of compositional change, with the literature suggesting that a phenomenon of de-agrarianisation is taking place as households become more dependent on government grants while moving away from agricultural-based activities. Furthermore, Tribal Authority Areas (TAAs) retain a communal form of land tenure that implies very different social and behavioural norms in these areas compared to formal rural areas. We find that there are indeed very different labour market, migration and subsistence agricultural trends between TAAs and formal rural areas. For the rural sector in general, selected findings include that rural migrants who have moved to urban areas between 2008-2012 have a higher probability of being employed than rural stayers; that among the employed population, the major transition out of agriculture was to the transport, storage and communication sector while the major transition into agricultural employment was from the wholesale & retail sector; and finally that there is indeed evidence that de-agrarianisation is taking place in the NIDS rural sample, with individuals much more likely to transition out of either commercial or subsistence agricultural activities than to start doing these activities.

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Introduction

A strategic vision for the rural economy of South Africa to 2030 was outlined in the National Development Plan (NPC, 2011). This vision envisions a multiplicity of interventions that increase the capabilities of rural communities, but the specifics of the plan itself give strong attention to agricultural activities. Indeed, it is stated: “(a)s the primary economic activity in rural areas... (a)griculture has the potential to create close to 1 million new jobs by 2030...” (NPC, 2011: 197). This paper utilises the National Income Dynamics Study (SALDRU, 2013a, 2013b, 2013c) to evaluate the changing profile of rural livelihoods between 2008 and 2012. Specific attention will be given to the role of agriculture in rural communities, including from an employment and subsistence point of view. In this way, we demonstrate how the NIDS can shed light on progress towards the NDP’s targets.

The National Income Dynamics Study (NIDS) is a nationally representative longitudinal household survey that tracks the lives of continuing sample members of the study. The first wave of the NIDS was conducted in 2008, the second in 2010 and the third in 2012 (see De Villiers, Brown, Woolard, Daniels and Leibbrandt, 2013). We focus on the migration, employment and participation in subsistence agricultural activities of the sample of individuals in the NIDS that were observed in both 2008 (Wave 1) and 2012 (Wave 3). In this way, we observe the way in which our panel of individuals change their livelihood strategies over a four-year window of time. This capacity to evaluate changes in livelihood strategies is what makes NIDS unique among South African datasets.

By profiling migration, employment and participation in subsistence agricultural activities among rural dwellers, this paper makes a significant contribution to the literature on rural livelihoods in South Africa. The existing literature tells the story of a rural sector characterised by the ambiguous effects of comprehensive policy changes over the last 20 years. Perhaps the most important combined impact of all these changes has been a steady de-agrarianisation of the rural sector, something also found in rural sectors of other countries in the world (see Bryceson, 2002). This paper tells the story of individuals who lived in rural communities in 2008 and the livelihood strategies they have employed since then.

The rest of the paper proceeds as follows: first a background to the literature on the contemporary rural economy in South Africa is given. Then, we explore findings from the NIDS, commencing with a review of the basic differences in urban and rural areas before turning to migratory movements, employment changes and participation in non-employment agricultural activities.

Background on Rural Livelihoods in South Africa

International research on rural livelihoods points to a growing concern that peasant farmers are veering away from commercial farming opportunities and opting instead for more secure cash earnings (Bryceson, 2002; Puttergill, Bomela, Grobbelaar & Moguerane, 2011; Rigg, 2006). Peasant farmers seem to use farming for subsistence purposes, such as using home garden plots for own-consumption (Bryceson, 2002, Puttergill et al, 2011; Rigg, 2006). This research paints an ambiguous picture of the contemporary nature of rural livelihoods. Two issues need to be considered when evaluating rural livelihoods: (1) the domestic context of the country concerned, which can differ vastly within different regions of the same country, let alone between countries; and (2) the measurement of rural livelihoods. We proceed with a review of the domestic rural context in SA first before discussing measurement issues.

The Domestic Context

Scoones (1998) investigated rural livelihoods utilising a framework that focused on the asset holdings and livelihood activities of different households in two previously marginalised rural communities, namely Khomani San and Dirisanang in the Northern Cape Province. The study found that the two beneficiaries had asset holdings so low that it prevented them from engaging in the process of developing their land and drew upon two main income sources: public transfers predominantly for the poor and wage income for the non-poor (Bradstock, 2006).

More recent beneficiaries of the post 1994 land restitution process showed how agricultural activities' contribution to household survival strategies has been declining despite the regained land. One such study was based on three rural communities, namely Mashishimale (Limpopo), Momphele (Kwazulu-Natal) and Ebenhaeser (Western Cape), that accommodated the geographic and demographic land restitution profile of the country as well as the pre- and post-settlement context (CLRDP, 2010: xiv, xv). These three rural communities were located in areas that were suitable for agriculture but it was found that beneficiaries preferred securing employment rather than engaging in small-scale agricultural activities, especially in cases where households had no access to capital, regular water supply, labour and fencing. Puttergill et al (2011) suggest that the reason for this is shifting community preferences towards a consumer-based lifestyle in which secure cash income plays a key role.

The land tenure policy review indicated that this policy needed to be developed alongside other policies, resources and financial incentives (Adams, Sibanda & Turner, 1999). According to Carter and May (1999), SA rural poverty was characterised by low returns to uneducated labour and often failed to effectively utilize the limited productive assets and land that they had. The authors therefore contend that additional claims on other economic or social assets were necessary to eradicate poverty. Bradstock (2006) also notes

that rural black South Africans are markedly different from their continental African rural counterparts as they were prevented from making farming the main component of their livelihoods for over 100 years during the Apartheid era, and as such the de-agrarianisation observed elsewhere may not necessarily be compared to the unique South African socio-economic and institutional setting.

There has been a growing consensus among researchers that closer attention needs to be paid to how rural households can employ subsistence farming efficiently in order to sustain rural livelihoods. The concept of de-agrarianisation in the SA context is difficult to establish given that the land tenure policy reform requires long-term budgetary commitment, extensive planning, institutional developments and complementary policies in order for its implementation to successfully fulfil its intended purpose of helping to sustain rural livelihoods in the country (Adams, Sibanda & Turner, 1999).

The Measurement of Rural Livelihoods

There are important methodological issues that need to be considered when quantifying the contribution of different sources of production and consumption in rural areas. For example, Bryceson (2002) found that non-farm activities contributed 60-80% of rural household incomes in South Africa. This figure can also be attributed to the generous rural pensions for South Africans that increased rural disposable incomes for the elderly who constitute a sizeable portion of the rural population and boosted rural purchasing power and investment generally (Bank & Qambata, 1999; Manona, 1999; McAllister, 1999).

However, the value of non-farm activities to rural household incomes also has to be taken into consideration. For example, in valuing non-farm activities' contribution to rural household incomes, researchers often ignore the direct home use values of agricultural resources and focus on market values (Dovie, 2001). This would yield results that fail to consider the cash saved from using free wild resources such as fuel wood, construction wood, wild fruits and herbs, and fodder as opposed to buying them (Shackleton, Shackleton & Cousins, 2009). Livestock home use also represents direct cash saving and trade provided additional cash income and locally traded goods and services are sold at lower prices compared to selling at commercial outlets. The lower selling prices provide savings for the buyers and sellers in that region (Shackleton, Shackleton & Cousins, 2009).

Dovie (2001) assessed all incomes and direct use-values and found that land-based activities (livestock, cropping and natural resources) accounted for about 57 percent of total annual value per household. These types of studies suggest that considering the direct value in use of resources sheds some light on the significance of land-based strategies in direct provisioning (subsistence farming). Studies on direct value in use acknowledge that land-based strategies also form part of a rural safety net compared to conventional studies on sustainable rural livelihoods (Shackleton, Shackleton & Cousins, 2009).

Measurement of Rural Livelihoods in the NIDS

The NIDS questionnaires are the key instrument to evaluate rural livelihoods. They include sections on employment, different sources of income (including government grants), and subsistence agricultural production. However, questionnaire design differences between Waves 1, 2 and 3 provide some limitations to the data that researchers need to be aware of. The most important of these is the changes to the agricultural modules of the household questionnaire (see the Appendix for a detailed discussion of questionnaire design differences between the Waves). Reflecting back on the literature, an important limitation with the NIDS questionnaires in all three Waves is that it is not possible to calculate the concept of use-value of subsistence agricultural production to the household or community. However, that was never the intention of this module, which instead does measure household subsistence agricultural activities, which we review below.

Results

The results in this section are based on both the cross-sectional and longitudinal dimension of NIDS using the following dataset versions: Wave 1 [Anon_V5.0, 2008 (SALDRU, 2013a)], Wave 2 [Anon_V2.0, 2010-2011 (SALDRU, 2013b)] and Wave 3 [Anon_V1.0, 2012 (SALDRU, 2013c)]. The next three subsections look at compositional changes in the rural sector, rural employment and non-employment agricultural activity in rural areas. These sections use a cross-sectional analysis, looking at each Wave individually using post-stratified weights. Then in the final section a longitudinal analysis is undertaken which looks at a panel consisting of all individuals who were interviewed in both Wave 1 and Wave 3. This allows us to analyse changes to individuals rural livelihoods which have occurred over the four year period between 2008 and 2012. This longitudinal analysis uses the panel weight. All income data are deflated to December 2012 constant prices to make comparisons across Waves 1-3 valid.

Compositional Changes in the Rural Sector

This section evaluates the composition of the rural sector in South Africa. NIDS separates households into four geographical types (henceforth geotypes). There are two rural geotypes, namely rural formal and tribal authority areas (TAAs). There are also two urban geotypes, namely urban formal and urban informal. Table 1 below shows a cross-sectional view of some basic differences between the households belonging to the four different geotypes across the three Waves of the data.

Table 1: Household Size & Income Summary Statistics by Geotype

	Wave 1	Wave 2	Wave 3
	Household size		
Rural formal	3.8	4.0	3.9
Tribal authority	5.2	5.5	5.0
Urban formal	3.7	3.8	3.4
Urban informal	4.4	4.5	4.0
Total	4.2	4.4	4.0
	Mean household income from labour market		
Rural formal	3 512	3 852	7 153
Tribal authority	3 055	4 274	4 367
Urban formal	9 391	10 485	9 967
Urban informal	2 874	3 481	3 630
Total	6 832	7 884	7 894
	Mean household income from government grants		
Rural formal	1 262	1 131	1 265
Tribal authority	1 260	1 432	1 468
Urban formal	1 016	1 247	1 234
Urban informal	1 030	1 220	1 163
Total	1 133	1 314	1 317

*December 2012 prices

Across waves, households living in TAAs were made up of relatively larger average household sizes with roughly one additional member than the other geotypes. Interestingly, in 2012, the average household size of a household in rural formal areas did not vary much from their urban informal counterparts.

Mean incomes from government grants to households in TAAs was consistently above the sample average between 2008 and 2012. This is very likely due to more household members receiving grants in TAAs compared to other areas. The mean income from government grants to households in rural formal areas was similar in 2012 to 2008, exhibiting almost no real growth over the period. However it remained higher than the average income from government grants to households in either of the two urban geotypes, despite there also being an increase in the mean value for these households.

Although the average household income from the labour market for households living in rural areas were lower compared to their urban counterparts, rural households were always better off compared to the households in urban informal areas between 2008 and 2012. On average, urban formal households have sizeably higher incomes than all three other categories. Mean incomes in TAAs and rural formal households

are below the total sample means. The growth in formal rural labour incomes between 2010 and 2012 was driven partly by outliers.

Rural Employment

At the national level, NIDS figures for the composition of rural employment are similar for certain sectors to data from Statistics South Africa's (Stats SA) Quarterly Labour Force Surveys (Stats SA, 2014a-l), notably for employment in community and social services, and private households. However, for other sectors, the data differ more substantially in magnitude.

A strong finding from the table is the low levels of agricultural employment in the rural sector, and points to a rural economy where the importance of the agricultural sector is perhaps lower than expected. This is particularly evident in the NIDS dataset which shows a rapid decline in agriculture's share in employment in rural areas between 2008 and 2012. The QLFS data averages the numbers across four quarters in each year, thereby neutralising possible seasonality effects.

Table 2: QLFS Rural Employment Shares Compared to NIDS Rural Employment Shares for Regularly Employed Working Aged People

All South Africa (incl. urban)	QLFS: Annual Average			NIDS Employment Shares		
	2008	2010	2012	2008	2010	2012
Agriculture	6,03%	5,15%	5,31%	7,86%	5,54%	6,06%
Mining	2,83%	2,77%	3,03%	5,11%	4,30%	5,21%
Manufacturing	15,07%	13,93%	13,22%	15,90%	11,08%	9,79%
Utilities	0,81%	0,79%	0,83%	1,05%	0,97%	1,53%
Construction	7,72%	7,18%	6,45%	5,95%	6,80%	4,35%
Trade	18,29%	17,94%	17,52%	14,65%	19,10%	19,88%
Transport	5,67%	5,80%	6,02%	4,85%	5,97%	7,03%
Finance and business services	12,75%	13,46%	13,89%	12,22%	10,49%	11,12%
Community and social services	20,30%	22,32%	23,63%	23,38%	28,93%	26,88%
Private households	10,51%	10,61%	10,06%	9,03%	6,83%	8,14%
Other sector	0,03%	0,03%	0,03%	0,00%	0,00%	0,00%
Total	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
All Rural						
Agriculture	16,86%	15,55%	16,14%	24,91%	19,70%	15,54%
Mining	3,81%	4,25%	4,36%	6,18%	5,64%	8,94%
Manufacturing	8,76%	7,88%	7,60%	13,67%	6,89%	7,39%
Utilities	0,64%	0,54%	0,61%	0,46%	1,48%	1,21%
Construction	9,20%	9,76%	9,54%	6,10%	8,10%	6,13%
Trade	22,79%	22,06%	21,57%	10,97%	11,62%	14,72%
Transport	4,11%	4,66%	4,13%	3,80%	3,61%	6,33%
Finance and business services	5,33%	5,36%	5,76%	4,43%	4,90%	6,32%
Community and social services	17,48%	18,86%	19,58%	17,49%	26,61%	22,85%
Private households	11,02%	11,09%	10,70%	12,00%	11,45%	10,58%
Other sector	0,00%	0,00%	0,01%	0,00%	0,00%	0,00%
Total	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%

Rural Formal Only						
Agriculture	51,81%	49,43%	53,62%	43,57%	38,13%	28,62%
Mining	4,88%	4,42%	4,59%	3,04%	3,60%	3,99%
Manufacturing	5,05%	5,24%	6,10%	17,49%	9,34%	11,86%
Utilities	1,21%	0,79%	0,68%	0,68%	1,58%	2,10%
Construction	3,79%	5,45%	2,65%	3,72%	5,81%	3,46%
Trade	8,80%	7,23%	7,81%	8,94%	8,58%	16,00%
Transport	1,57%	1,75%	1,55%	3,50%	2,75%	6,37%
Finance and business services	2,55%	3,89%	3,35%	2,15%	3,18%	6,28%
Community and social services	6,99%	8,10%	6,63%	4,41%	15,37%	10,85%
Private households	13,36%	13,69%	13,01%	12,49%	11,67%	10,46%
Other sector	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
Total	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%
Tribal Authority Areas Only						
Agriculture	7,41%	6,92%	6,58%	7,81%	6,35%	7,56%
Mining	4,66%	5,63%	5,68%	9,05%	7,11%	11,95%
Manufacturing	9,60%	8,30%	7,48%	10,17%	5,12%	4,66%
Utilities	0,63%	0,63%	0,79%	0,25%	1,41%	0,66%
Construction	9,91%	9,53%	9,64%	8,29%	9,76%	7,76%
Trade	16,80%	16,44%	16,39%	12,83%	13,83%	13,95%
Transport	4,81%	5,28%	4,75%	4,07%	4,24%	6,31%
Finance and business services	7,51%	7,22%	7,78%	6,51%	6,14%	6,34%
Community and social services	24,57%	25,82%	27,21%	29,48%	34,74%	30,17%
Private households	14,09%	14,24%	13,68%	11,54%	11,28%	10,65%
Other sector	0,01%	0,00%	0,01%	0,00%	0,00%	0,00%
Total	100,00%	100,00%	100,00%	100,00%	100,00%	100,00%

An important finding from the table is that agricultural employment in Tribal Authority Areas is generally very low, averaging 7% in both data sets. Rather, in TAAs rural employment seems to be dominated by wholesale and retail trade and community and social services. In formal rural areas, farming is the main employer followed by wholesale and retail trade and private household employment.

Non-Employment Agricultural Activity

Participation of households in non-employment agricultural activity is an important indicator of rural livelihoods. Figures 1 to 3 show the proportion of households which participate in agricultural activities outside of paid employment, broken down by geotype, for Waves 1,2 and 3 respectively.

Figure 1 & Figure 2

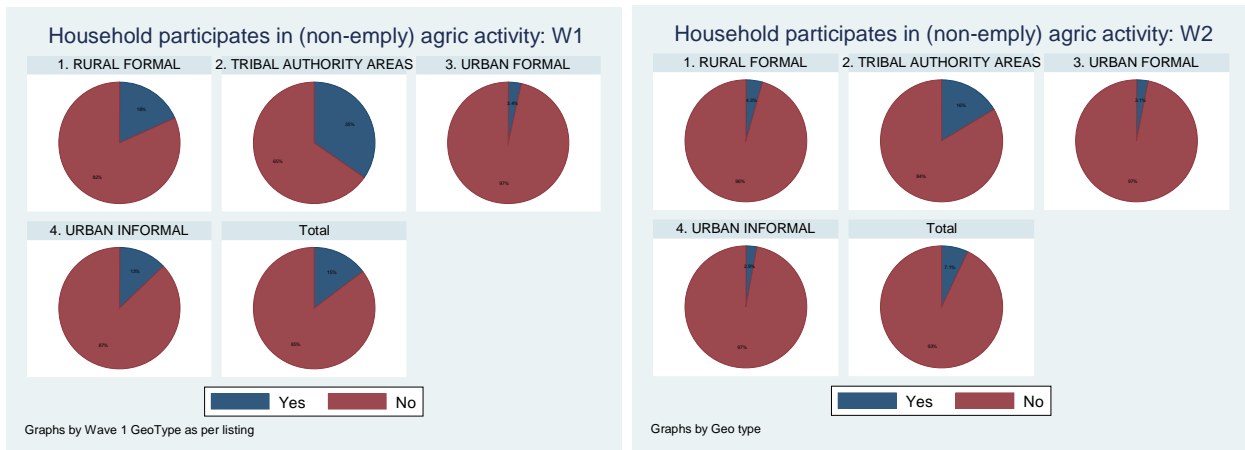
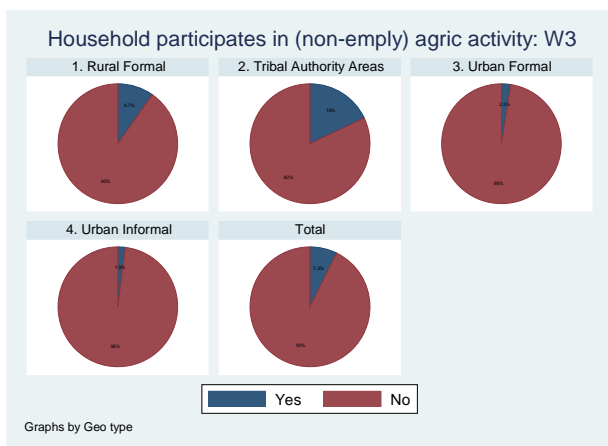


Figure 3

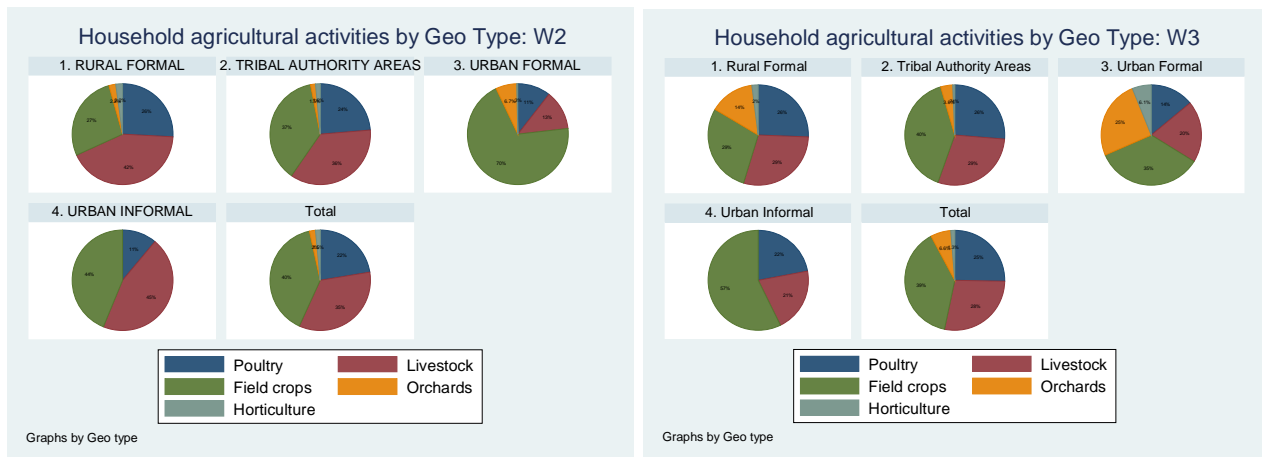


We can see from the figures that participation in non-employment agricultural activity is more prominent for those households living in TAAs. Rural formal households also participate in agricultural activities, more so than their urban counterparts, but less so than those households in TAAs. Specifically, 35%, 16% and 18% of households in TAAs participated in agricultural activities in 2008, 2010-2011 and 2012 respectively. This large reduction suggests that households have reduced their participation in subsistence agricultural production between 2008 and 2012. The reasons why this is the case is presently unclear, but it could be due to an increase in grant income over the period. We investigate this in more detail in the results for the panel.

Considering the nature of agricultural activities undertaken between 2010 and 2012 only as depicted in Figures 4 and 5 respectively, about a third of agricultural activities undertaken by TAAs were in livestock, and another third in poultry. Field crops were the most dominant agricultural activity undertaken by households. Horticulture and orchards make up a very small portion of the agricultural activities for the agriculture-active households in TAAs. The rural formal households' agricultural activities aligned quite

closely with those of the TAAs, differing mainly in that in 2010-2011 almost half the activities undertaken by the rural formal households were in livestock.

Figure 4 & Figure 5



Changes in Livelihoods of Panel Sample

This section utilises a panel made up of all individuals appearing in both Wave 1 (2008) and Wave 3 (2012). This enables us to see the transitions individuals experienced in terms of their rural livelihoods. First, the state of the rural economy is examined at 2008 before the transitions which occurred over the proceeding four year period followed are analysed. The reason why we do this is because panel data analyses need to be sensitive to the initial conditions of the panel. By 2008, the rural sector had undergone 14 years of post-democracy policy changes, including land reform and the widescale rollout of grants. Consequently, in the period subsequent to 2008 we are more interested in the subtle changes in livelihood strategies that panel members have undertaken.

Table 3 shows the details for South Africa’s urban and rural populations according to the 2008 NIDS study. At the national level, 39% of the population lived in rural areas at the time of interviews. Compared to the urban population, the rural population is proportionately slightly less male, although both populations are close to a fifty-fifty split. The rural population has a far higher proportion that is African and a significantly lower proportion that are of working age⁴.

Table 3: Rural and Urban Populations as at 2008

	<i>Urban</i>	<i>Rural</i>
Observations	13 343	14 883
Weight	30 286 723	19 274 533
Share of National Population	61%	39%
Proportion of Population who are:		

⁴ Working age is classified here as being inclusive of the age range 15 to 64 years old.

<i>Male</i>	49%	47%
<i>African</i>	69%	95%
<i>Working Age (15-64 years)</i>	69%	57%

Population Averages

<i>Household Income per Capita (monthly)</i>	R 2 517.55	R 629.68
<i>Household Expenditure per Capita (monthly)</i>	R 2 179.63	R 511.18
<i>Age (years)</i>	28	25
<i>Years of Education (Working Age Only)</i>	8	5

*Income and expenditure measured in 2008 prices

There is a large income gap between the two geographical areas as highlighted by differences in household income per capita. The average monthly household income per capita in rural areas is only 25% of the average for urban areas. This is also evident in the average monthly household expenditure per capita for the two groups. If we calculate the marginal propensity to consume as the ratio of household monthly expenditure per capita to household monthly income per capita, we observe that despite much lower average incomes, rural dwellers have a lower marginal propensity to consume (0.81) compared to urban dwellers (0.87), suggesting that rural individuals tend to save a greater portion of their incomes.

We also observe urban dwellers having a higher average age than that for rural dwellers and urban dwellers tend to possess more years of education than their rural counterparts.

Combining the NIDS 2008 study with the one completed in 2012 we can obtain a panel which allows us to observe some interesting changes which reveal important information regarding rural livelihood dynamics over the four year period. Due to the concern with rural livelihoods, the panel used in the analysis from here on focuses exclusively on the working age population⁵.

Table 4 shows a transition matrix for the geographic locations of South Africa's working age population between 2008 and 2012. The rate of rural-urban migration was higher (7%) than that for urban-rural migration (4%). If we break down the rural and urban categories, shown in Table 5, we see that there were different dynamics for the expanded classifications. There were proportionately more individuals moving out of rural formal areas than tribal authority and the largest rate of out-migration in terms of the expanded definitions actually occurred from urban informal areas, although most of these movements were to urban formal areas.

⁵ Working age is classified here as being between the ages of 15 and 64 years old at the time of the 2008 interview

Table 4: Geographic Transition Matrix for the Working Age Population, 2008-2010

		2012 (%)		<i>Observations</i>	<i>Weight</i>	<i>Share</i>
		Rural	Urban			
2008	Rural	93	7	12 403	18 999 913	41%
	Urban	4	96	9 916	27 595 483	59%

Table 5: Expanded Geographic Transition Matrix for the Working Age Population, 2008-2010

		2012 (%)				<i>Observations</i>	<i>Weight</i>	<i>Share</i>
		Rural Formal	Tribal Authority Areas	Urban Formal	Urban Informal			
2008	Rural Formal	88	5	6	1	2 087	3 048 252	7%
	Tribal Authority Areas	1	92	5	2	10 316	15 951 661	34%
	Urban Formal	1	3	95	1	8 479	22 149 638	48%
	Urban Informal	1	3	13	83	1 437	5 445 845	12%

Historically, one of the key motivations to move away from rural areas to the city rather than remain in a rural household has been for employment opportunities (Sjaastad, 1962; Todaro, 1969). This could be either due to a lack of job opportunities in the rural area or just due to more attractive opportunities in the country's urban centres. Table 6 shows the changes in employment status for all individuals who were in a rural household in both 2008 and 2012⁶. There were significant changes in employment over this period. Whilst we observe only 58% of the employed in 2008 remaining employed in 2012 we also see a significant portion of the unemployed and not economically active population gaining employment.

At the aggregate level if we use a balanced panel we see approximately 3.31 million weighted observations employed in 2008 which drops very slightly to 3.26 million in 2012. There was also a similar slight decrease in the amount of individuals classified as not economically active and a slight rise in those unemployed. Only a third of the unemployed in 2008 remained classified as unemployed in 2012 with approximately a third gaining employment and the other third becoming not economically active.

Table 6: Changes in Employment Status for Rural Stayers, 2008-2012

		2012 (%)			<i>Observations</i>	<i>Weight</i>	<i>Share</i>
		Not Economically Active	Unemployed	Employed			
2008	Not Economically Active	58	23	19	2 438	3 982 672	44%
	Unemployed	35	33	32	1 141	1 855 664	20%
	Employed	28	15	58	2 018	3 308 313	36%

⁶ This includes individuals in a rural household in 2008 and either did not change their place of residence and individuals who moved but their new place of residence was also in a rural area

If we compare Table 6 with the experience of rural-urban migrants we can get an idea of how successful urban migration is as a job-searching strategy relative to remaining in a rural area. This also helps get an indication of the nature of employment opportunities in rural areas compared with urban. Table 7 shows the same information as Table 6 but for rural-urban migrants. When reaching these conclusions it should be noted that there is a high probability of selection bias, people often migrate because they have already been offered a job or alternatively move knowing that they will be able to definitely get a job which means that we should expect to see a high proportion of rural-urban migrants actually getting jobs post-migration (DaVanzo, 1980). As expected we do see more movement into employment for the rural-urban migrants. We also see a larger proportion of the employed in 2008 remaining employed in 2012.

Table 7: Changes in Employment Status for Rural-Urban Migrants, 2008-2012

		2012 (%)			<i>Observations</i>	<i>Weight</i>	<i>Share</i>
		Not Economically Active	Unemployed	Employed			
2008	Not Economically Active	36	24	39	284	436 975	50%
	Unemployed	15	29	56	133	230 600	26%
	Employed	12	11	76	137	206 448	24%

If we look at changes in income we actually observe a tendency towards larger increases in household income per capita for individuals in rural households in comparison to urban households⁷. This can be seen from the kernel density plot in Figure 6 which plots the natural logarithm of the change in household income per capita. The fact that the curve for rural individuals sits slightly to the left of that for urban individuals suggests that on average their incomes increased by more than urban individuals. This difference is more pronounced if we limit the analysis to look at income changes for only those who were employed in both years, displayed in Figure 7 below.

⁷ Individuals in rural and urban households are those who remained in the same geographic classification for both 2008 and 2012

Figure 6 Kernel Density Showing the Natural Logarithm of the Change in Household Income per Capita Between 2008 & 2012 for the Rural and Urban Working Age Populations

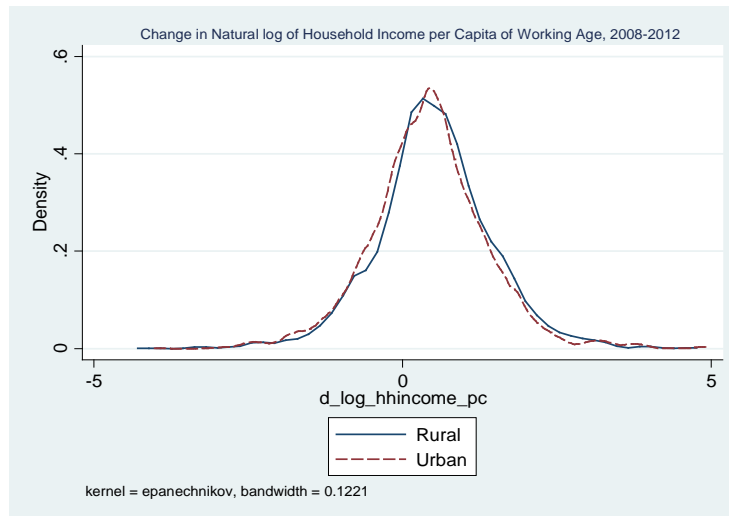
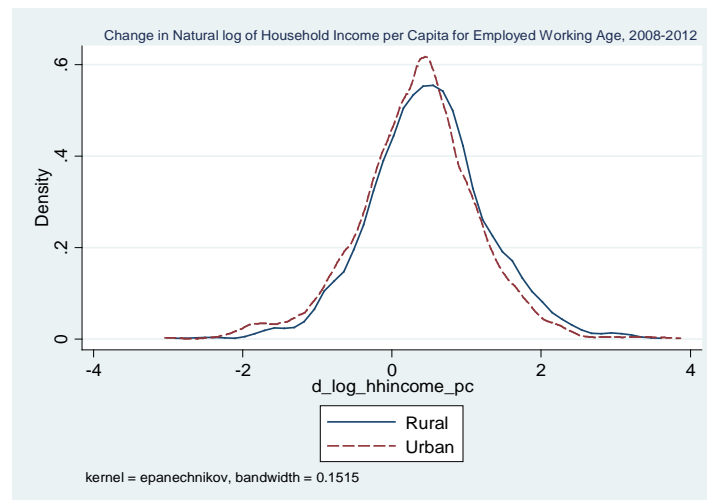
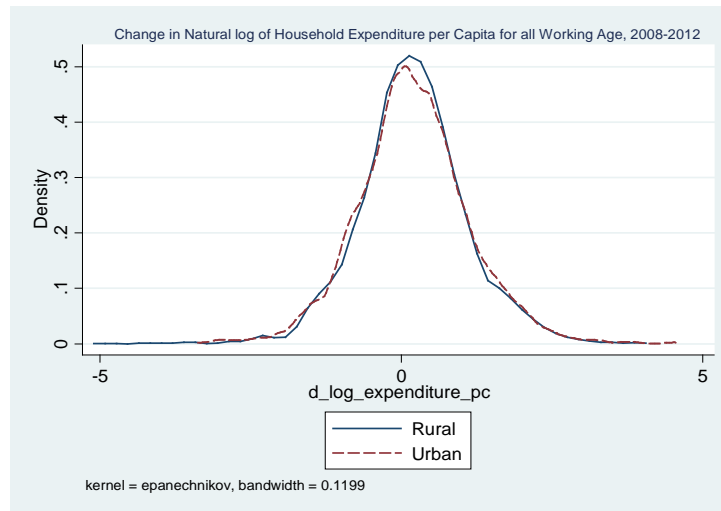


Figure 7 Kernel Density Showing the Natural Logarithm of the Change in Household Income per Capita Between 2008 and 2012 for Individuals Employed in Both Years



The changes to household expenditure do not follow the same trend we saw in Figure 6 when looking at household incomes. This is shown for rural and urban individuals in Figure 8 where both curves are very similar. Despite the better performance in terms of increasing incomes of rural individuals compared to urban individuals, this did not lead to relatively more household expenditure per capita.

Figure 8 Kernel Density Showing the Natural Logarithm of the Change in Household Expenditure per Capita Between 2008 and 2012 for the Rural and Urban Working Age Populations



Of the individuals who were employed in both 2008 and 2012 we also see significant transitions in terms of the sector employed in. Table 8 shows the sectoral transition matrix for all working age rural individuals who remained employed between 2008 and 2012. Of the ten sectors used in the breakdown, private households, agriculture, mining & quarrying, utilities and community, social & pension all retained 70% of their workers within the panel. In particular community, social & pension retained 82% of their workers whilst also seeing a significant inflow of workers moving from other sectors. There were large movements of workers from manufacturing into wholesale & trade and from construction into agriculture whilst both utilities and financial sectors saw a large portion of their workers moving into community, social and pension.

Table 8

Sectoral Transition Matrix for Rural Individuals who Remained Employed Between 2002 and 2012

		2012 (%)												
		Private Households	Agriculture	Mining & Quarrying	Manufacturing	Utilities	Construction	Wholesale & Retail	Transport Storage & Communication	Financial	Community, Social & Pension			
2008 (%)		71	9	0	1	2	4	8	0	4	1	Observations	Weight	Share
	Private Households	71	9	0	1	2	4	8	0	4	1	63	98 754	9%
	Agriculture	7	74	2	4	0	1	3	7	0	2	229	268 873	23%
	Mining & Quarrying	0	1	76	6	0	5	0	10	0	2	34	80 155	7%
	Manufacturing	4	11	0	44	0	0	24	2	6	11	76	190 982	17%
	Utilities	0	0	0	0	75	0	0	0	0	25	4	10 268	1%
	Construction	9	27	0	0	0	33	14	3	0	13	24	62 414	5%
	Wholesale & Retail	9	11	2	9	0	2	43	7	1	17	52	101 747	9%
	Transport Storage & Communication	0	1	6	19	2	3	8	51	0	10	26	46 235	4%
	Financial	16	4	5	0	0	0	3	0	43	30	27	53 213	5%
	Community, Social & Pension	3	1	1	4	0	2	0	5	3	82	132	241 266	21%

Within the panel of individuals who are both employed and living in a rural household for both 2008 and 2012 we see 74% of the individuals employed in agriculture remaining employed in agriculture, the rest moving to other sectors. When we also consider the number of individuals moving into agriculture from other industries the number of individuals employed exhibits a slight decrease, from 0.27 million to 0.26 million. This is only looking at movements between sectors and only within rural areas. If we also take into consideration movements into and out of employment as well as migration from and to urban areas, we see a similar story with rural agricultural employment falling very slightly but remaining at approximately 0.44 million.

In addition to providing employment, rural households also undertake farming activities on available land, the produce of which can be used to sell to earn income or for the household's own consumption. The NIDS household questionnaire asks whether anyone in the household has been involved in any agricultural activities outside of paid employment. As South Africa is said to have a highly dualistic agricultural sector (Sandrey & Vink, 2008), we break down these activities into those done on a commercial scale and on a non-commercial level reflecting smallholder farmers.

Table 9 shows the transition matrix for rural individuals in terms of their household's involvement in agricultural activities. In general there is much more tendency for individuals' households to stop their involvement in these activities rather than to start. For those individuals that were in households not undertaking any agricultural activities in 2008 but were in a household undertaking such activities in 2012, the activities were more likely to be on a non-commercial level.

Table 9: Transition Matrix for Household Involvement in Agricultural Activities Outside of Paid Employment for Rural Individuals Between 2008 and 2012

		2012 (%)			<i>Observations</i>	<i>Weight</i>	<i>Share</i>
		Yes - Commercial	Yes - Non-Commercial	No			
2008	Yes - Commercial	6	32	62	93	148 323	2%
	Yes - Non-commercial	0	23	76	2 253	3 306 900	34%
	No	1	14	86	3 597	6 249 698	64%

Another key aspect of rural livelihoods is government grants. Table 10 and 11 below show the transition matrices for whether or not individuals' households receive a government grant for rural and urban individuals respectively. Proportionately more rural individuals were part of a household which received a government grant in 2008 (69%), compared to urban individuals (44%). Of those not receiving grants in 2008, almost half of such individuals in rural households did receive government grant income by 2012, this compared to only 25% for urban households. It should, however, also be noted here that it is 25% from a much larger figure so in terms of net movement of

people we actually see more movement of individuals in this direction in urban areas. We also see proportionately less individuals in rural areas stopping being part of a household receiving a government grant (16%) compared with urban households (28%)

Table 10: Transition Matrix for Rural Household Receipt of Government Grants

		2012 (%)			<i>Observations</i>	<i>Weight</i>	<i>Share</i>
		Yes	No				
2008	Yes	84	16	4 314	6 710 835	69%	
	No	47	53	1 604	2 958 832	31%	

Table 11: Transition Matrix for Urban Household Receipt of Government Grants

		2012 (%)			<i>Observations</i>	<i>Weight</i>	<i>Share</i>
		Yes	No				
2008	Yes	72	28	3 224	7 812 299	44%	
	No	25	75	2 713	9 984 375	56%	

Aside from this greater tendency towards receiving grants for rural individuals and significant growth in the proportion of rural households receiving grants, we also observe an increase in the share of household monthly income which is attributable to government grants. Table 12 shows details of the share of household income attributable to government grants for only those individuals who were part of a household which received a government grant in both 2008 and 2012. For rural individuals government grants on average make up a much larger portion of total household income. For both urban and rural individuals there was an increase in the mean share, by 3% and 4% respectively. In both cases there were just over 60% of individuals who experienced an increase in the importance of government grants for household income

Table 12: Details for Individual's Receiving Government Grants in both 2008 and 2012

	Rural	Urban
n	3 427	2 260
weight	5 237 009	5 319 488
Mean Gov Grant Share in Household Monthly Income		
<i>2008</i>	<i>50%</i>	<i>34%</i>
<i>2012</i>	<i>53%</i>	<i>38%</i>
<i>Change in Mean</i>	<i>3%</i>	<i>4%</i>
Individual's With Increasing Share of Gov Grant	61%	62%

All in all, there is clear evidence of key differences between rural and urban households as well as specific dynamics experienced in terms of rural livelihoods in South Africa in recent years. There is also clear evidence of de-agrarianisation in the country's rural areas in favour of other income sources, despite agriculture being cited as the key sector for development and employment creation in rural areas. This section has also highlighted the usefulness of longitudinal analysis in the analysis of livelihoods and in particular how useful the NIDS data can be for informing policy relevant to these issues.

Conclusion

Rural livelihoods in South Africa are affected by numerous factors, many of them unique to the country and stemming from the legacy of the country's Apartheid history which featured policies which excluded the black majority of South Africans from the nation's productive assets. By 2008, when the NIDS panel started, the rural sector has already undergone 14 years of policy changes associated with the transition to democracy, which included land reform policies as well as the wide-scale rollout of government grants.

This paper analysed changes to rural livelihoods in South Africa between 2008 and 2012, in terms of both compositional changes and changes across the panel of individuals observed over this time period. The results revealed very different livelihood strategies employed by rural individuals compared to their urban counterparts. We also observed differences between formal rural areas when compared to tribal authority areas. Over time we also observe some clear trends in terms of rural livelihoods which are in places in sharp contrast to the experience of individuals residing in urban areas.

The most important finding is clear evidence of de-agrarianisation in rural areas. This should be of particular concern due to the sector's prominence in rural development policy. Specifically it is cited as the key sector in terms of promoting rural development and employment growth in South Africa's National Development Plan. Yet the evidence presented in this paper does not support the idea that agricultural activities are currently playing that role.

In reality we observe surprisingly low levels of employment in agriculture in rural areas. We also see the proportion of employed individuals in the sector declining relative to other sectors. This finding is reinforced when we compare the findings from NIDS with Stats SA's Quarterly Labour Force Surveys (QLFS). At the individual level we get a similar picture when we look at the transitions of

individuals at the sector level, showing very little movement of individuals into the agricultural sector and in net terms no job creation happening over the four year period.

What is even more noticeable is the tendency away from non-employment agricultural activities, an important activity for providing income and subsistence for rural communities. The data analysed in this study reveals that of the individuals who were in a household which partook in some form of non-employment agricultural activity in 2008, most had stopped these activities by 2012. Additionally there was very little movement in the other direction as a very small portion of those who were not in a household involved in non-employment agricultural activities in 2008 took up such activities by 2012.

There was also evidence of increasing reliance on government grants as a source of income in rural areas. Firstly, there was a high proportion of individuals who in 2008 were not part of a household receiving a grant but in 2012 were part of such a household. Secondly, there was a significant increase in the already high share of household income attributable to government grants for rural households.

These findings have important implications for policy makers, in particular those involved in shaping policy for rural development. It highlights the need for greater support for the agricultural sector if it is to achieve the development goals set out in the country's National Development Plan. There is clear consensus on the importance of agriculture for rural livelihoods through provision of employment and food security. However as things currently are, the desired progress is not going to be achieved. More focus needs to be given to creating an environment that both provides incentives for individuals to undertake non-employment agricultural activities as well as providing employment opportunities through agricultural expansion.

Appendix: Questionnaire Design Differences in the Agricultural Modules of NIDS Waves 1 - 3

There are important differences in questionnaire design in the household agricultural module across the three NIDS Waves. The agriculture section of NIDS' household questionnaires can be identified as having roughly five sections. Differences between the questionnaires include:

- In the first section that investigates households' participation in agricultural practices and access to land for agricultural purposes, Wave 2 introduced four new questions about agricultural land the household and/or its individual members have access to. These four questions also appear to have been a substitute for those in Wave 1's section H3.
- The next section of the questionnaire obtains information about the farming and/or growth of crops by the household. There are two discernible differences with this section: first, the number of crops has been reduced from twenty-seven options in Wave 1 to only nine options in Waves 2 and 3. This reduced the size of the agricultural module dramatically across these Waves. Also, the respondent was allowed to report any type of unit in Wave 1 whereas in Waves 2 and 3 this was standardised to kilograms.
- There are also differences across crop production, livestock and poultry between Wave 2's agricultural module relative to both Wave 1 and 3. Here, in Wave 1 and 3 there are questions about the sale of crops harvested, the money received from sales and, in Wave 1 only, about the harvested crops given away and/or retained for consumption by the household. Similarly for livestock and poultry, Wave 2 doesn't feature questions on the sale of poultry and livestock, the amount from selling, and again in Wave 1 details about the numbers given away, losses to theft, etc. and slaughter for consumption.
- There is a reduction in the number of options for livestock and poultry from nine in Wave 1 to seven in Waves 2 and 3. What Wave 2 did include in the livestock and poultry sections which the other two Waves didn't is: "If you were to buy all of these [...] today, how much would you pay in total?" which was a component of Wave 2's wealth module.
- In the section on eggs and milk produced the details included in Wave 1, regarding the produce sold, given away and/or consumed has been removed in subsequent Waves. This reduces the ability to try to estimate the use-value of agricultural production.

References

Adams, M., Sibanda, S., & Turner, S. (1999). Land tenure reform and rural livelihoods in southern Africa. *Natural resource perspectives*, 39, 6.

Bank, L. J., Qambata, L. (1999). No visible means of subsistence: Rural livelihoods, gender and deagrarianization in the Eastern Cape, South Africa. Working Paper Vol. 34. *Grahamstown: Institute of Social and Economic Research and Leiden: African Studies Center*

Bradstock, A. (2006). Land reform and livelihoods in South Africa's Northern Cape province. *Land Use Policy*, 23(3), 247-259.

Bryceson, D. (2002), The scramble in Africa: Reorienting rural livelihoods. *World Development*, 30 (5) , 725-739.

Carter, M. R., & May, J. (1999). Poverty, livelihood and class in rural South Africa. *World Development*, 27(1), 1-20.

CLRDP (SADC Centre for Land-Related Regional and Development Law and Policy). 2010. "Restitution Operational Manual". CLRDP University of Pretoria, Pretoria.

De Villiers, L., Brown, M., Woolard, I., Daniels, R.C., & Leibbrandt, M, eds. 2013, "National Income Dynamics Study Wave 3 User Manual", Cape Town: Southern Africa Labour and Development Research Unit

DaVanzo, J., 1980. *Microeconomic Approaches to Studying Migration Decisions*, s.l.: Rand Corporation, Paper Prepared for the National Institute of Child Health and Human Development, National Institutes of Health, S R01-HD10864-02

Dovie, D. 2001. Woodland resource utilisation, valuation and rural livelihoods in the lowveld, South Africa, *Johannesburg: University of the Witwatersrand. MSc dissertation*

Manona, C. (1999). Deagrarianization and the urbanization of a rural economy: agrarian patterns in Melani village in the Eastern Cape, South Africa. Working Paper, Vol. 32. *Grahamstown: Institute of Social and Economic Research and Leiden: African Studies Center*

McAllister, P. (1999). Agriculture and co-operative labor in Shixini, Transkei, South Africa. Working Paper, Vol. 33. Grahamstown: Institute of Social and Economic Research and Leiden: African Studies Center

NPC, 2011. *National Development Plan*. Pretoria: National Planning Commission.

Puttergill, C., Bomela, N., Grobbelaar, J., & Moguerane, K. (2011). The limits of land restitution: Livelihoods in three rural communities in South Africa. *Development Southern Africa*, 28(5), 597-611.

Rigg, J. (2006). Land, farming, livelihoods, and poverty: rethinking the links in the rural South. *World Development*, 34(1), 180-202.

Sandrey, R. & Vink, N., 2008. Deregulation, Trade Reform and Innovation in the South African Agricultural Sector, s.l.: OECD Trade Policy Working Paper No. 76.

Scoones, I. (1998). Sustainable Rural Livelihoods: A Framework for Analysis, IDS Working Paper, No. 72, *Institute of Development Studies, Brighton*.

Sjaastad, L., 1962. The Costs and Returns of Human Migration. *Journal of Political Economy*, 70(5), pp. 80-93.

Shackleton, S., Shackleton, C., & Cousins, B. (2009). Re-valuing the communal lands of southern Africa: new understandings of rural livelihoods.

Southern Africa Labour and Development Research Unit (SALDRU). National Income Dynamics Study 2008, Wave 1 [dataset]. Version 5.0. Cape Town: Southern Africa Labour and Development Research Unit [producer], 2012. Cape Town: DataFirst [distributor], 2013a

Southern Africa Labour and Development Research Unit. National Income Dynamics Study 2010-2011, Wave 2 [dataset]. Version 2.0. Cape Town: Southern Africa Labour and Development Research Unit [producer], 2012. Cape Town: DataFirst [distributor], 2013b

Southern Africa Labour and Development Research Unit. National Income Dynamics Study 2012, Wave 3 [dataset]. Version 1.0. Cape Town: Southern Africa Labour and Development Research Unit [producer], 2013. Cape Town: DataFirst [distributor], 2013c

Stats SA. 2014a. Quarterly Labour Force Survey (Revised), 1st Quarter 2008 [online] Available: <http://interactive.statssa.gov.za:8282/webview/> (Accessed: 10 July 2014)

Stats SA. 2014b. Quarterly Labour Force Survey (Revised), 2nd Quarter 2008 [online] Available: <http://interactive.statssa.gov.za:8282/webview/> (Accessed: 10 July 2014)

Stats SA. 2014c. Quarterly Labour Force Survey (Revised), 3rd Quarter 2008 [online] Available: <http://interactive.statssa.gov.za:8282/webview/> (Accessed: 10 July 2014)

Stats SA. 2014d. Quarterly Labour Force Survey (Revised), 4th Quarter 2008 [online] Available: <http://interactive.statssa.gov.za:8282/webview/> (Accessed: 10 July 2014)

Stats SA. 2014e. Quarterly Labour Force Survey (Revised), 1st Quarter 2010 [online] Available: <http://interactive.statssa.gov.za:8282/webview/> (Accessed: 10 July 2014)

Stats SA. 2014f. Quarterly Labour Force Survey (Revised), 2nd Quarter 2010 [online] Available: <http://interactive.statssa.gov.za:8282/webview/> (Accessed: 10 July 2014)

Stats SA. 2014g. Quarterly Labour Force Survey (Revised), 3rd Quarter 2010 [online] Available: <http://interactive.statssa.gov.za:8282/webview/> (Accessed: 10 July 2014)

Stats SA. 2014h. Quarterly Labour Force Survey (Revised), 4th Quarter 2010 [online] Available: <http://interactive.statssa.gov.za:8282/webview/> (Accessed: 10 July 2014)

Stats SA. 2014i. Quarterly Labour Force Survey (Revised), 1st Quarter 2012 [online] Available: <http://interactive.statssa.gov.za:8282/webview/> (Accessed: 10 July 2014)

Stats SA. 2014j. Quarterly Labour Force Survey (Revised), 2nd Quarter 2012 [online] Available: <http://interactive.statssa.gov.za:8282/webview/> (Accessed: 10 July 2014)

Stats SA. 2014k. Quarterly Labour Force Survey (Revised), 3rd Quarter 2012 [online] Available: <http://interactive.statssa.gov.za:8282/webview/> (Accessed: 10 July 2014)

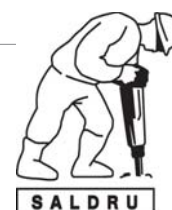
Stats SA. 2014l. Quarterly Labour Force Survey (Revised), 4th Quarter 2012 [online] Available: <http://interactive.statssa.gov.za:8282/webview/> (Accessed: 10 July 2014)

Todaro, M., 1969. A Model of Labor Migration and Urban Unemployment in Less Developed Countries. *The American Economic Review*, 59(1), pp. 138-148.

southern africa labour and development research unit

The Southern Africa Labour and Development Research Unit (SALDRU) conducts research directed at improving the well-being of South Africa's poor. It was established in 1975. Over the next two decades the unit's research played a central role in documenting the human costs of apartheid. Key projects from this period included the Farm Labour Conference (1976), the Economics of Health Care Conference (1978), and the Second Carnegie Enquiry into Poverty and Development in South Africa (1983-86). At the urging of the African National Congress, from 1992-1994 SALDRU and the World Bank coordinated the Project for Statistics on Living Standards and Development (PSLSD). This project provide baseline data for the implementation of post-apartheid socio-economic policies through South Africa's first non-racial national sample survey.

In the post-apartheid period, SALDRU has continued to gather data and conduct research directed at informing and assessing anti-poverty policy. In line with its historical contribution, SALDRU's researchers continue to conduct research detailing changing patterns of well-being in South Africa and assessing the impact of government policy on the poor. Current research work falls into the following research themes: post-apartheid poverty; employment and migration dynamics; family support structures in an era of rapid social change; public works and public infrastructure programmes, financial strategies of the poor; common property resources and the poor. Key survey projects include the Langeberg Integrated Family Survey (1999), the Khayelitsha/Mitchell's Plain Survey (2000), the ongoing Cape Area Panel Study (2001-) and the Financial Diaries Project.



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