Introduction

Creating jobs is one of the key challenges facing the South African economy. With agriculture considered to be a labour intensive industry a lot of hope is put on agriculture to make an important contribution to this challenge. The National Planning Commission for example believes that agriculture has the potential to create one million new jobs by 2030. This target is set in the context of the sector shedding almost one million jobs over the last three decades. At the same time the debate about the numbers of employed people in agriculture and the wages they receive has been misdirected due to the fact that nobody has a clear idea of the real facts. This is partly caused by the fact that the statistics on farm labour are spread between censuses of agriculture (rather incomplete and infrequent), the October Household survey and more recently the Quarterly Labour Force Survey (QLFS) and also the 2011 population census.

In this note we discuss the data, extracted for people employed in the agricultural sector only, to ensure a comprehensive picture of employment in the South African agriculture.

Adjustments to the official data sources

In our estimations of total employment in agriculture we extend the working age to include workers aged 65 and above. We have also consistently excluded workers employed in the “informal agricultural” sector and accounted for them separately. Workers in the forestry and fisheries industries are also excluded, and the latest re-weighted datasets of the QLFS are used in an effort to fathom the trends in employment in agriculture since 2008.

A key feature of the General Household Survey and the QLFS is that a rolling sample is used – a quarter of the household are replaced with a new sample in each successive round of surveying. Although this presents comparability problems it is claimed to introduce a better reflection of the dynamics of the labour market.

Farm worker types and occupations: (definitions and classifications as per data sources)

In order to ensure consistency we have adjusted the definition of the agricultural sector to only include the crops, horticultural, game and livestock industries, and excluded domestic servants. Based on the annual average of the quarterly observations (to address seasonal fluctuations and limit the effect of the rolling sample base) employment in agriculture in 2008 was 657,000 from where it decreased by 88,000 to reach 568,000 in 2011. From here it increased by 103,000 to reach an average of 672,000 during the first two quarters of 2013, see Figure 1.

In the QLFS it is possible to identify whom the work-
er is working for, i.e. working for someone else for pay, an employer (who employ one or more employees), own account workers (not employing anybody) and those workers helping without pay in a household business. Disaggregating the data by geographic distribution it becomes possible to identify commercial agricultural employment separate from informal and tribal (‘subsistence’) workers and employers.

Figure 2 compares the composition of the agricultural work force according to whom they work for, for the years 2008 and 2012. The relative composition has changed very little over the years. Ninety percent of the workers work for pay – typically 75 percent of these are working in the formal (urban and rural combined) agricultural sector. When comparing this with the results reported in the 1993 Agricultural Census some alarming trends appear:

- In 2012 there were 34,590 employers and own account workers in agriculture, down from 48,219 proprietors and tenants counted in 1993.
- The QLFS shows that South Africa had 50,332 farmers in 2009, but this declined to 34,905 by 2012 – a decrease of 15,427 in just three years.
- Working family members in agriculture currently stand at 3,582 as opposed to 20,428 in 1993. A surprising feature is that this class of labour in agriculture has almost entirely disappeared in the formal homeland areas and has been absent in urban agriculture since 2010.

Taken together, the precipitous drop in the number of farmers and the waning involvement of family members in farming spells disaster for the long run sustainability of agriculture.

**How many people are employed in agriculture for a wage?**

Figure 3 shows that in 2008 there were 589,000 workers working for a wage in agriculture. This decreased by 78,000 over the subsequent three years to reach 510,000 by 2011. Growing by an average of 9.7 percent per year paid workers reached an average of 613,000 during the first two quarters of 2013 and represented 99.2 percent of the increase in total employment in agriculture.

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1. For the years 2000 to 2007 the earlier definition of employment in agriculture includes those involved in farming for the purpose of own use. This will be revised as part of longer term research into labour trends in agriculture.
2. In 1993 the total number of farming units were 57,980 and Working Proprietors and Tenants plus Family Members were 68,647 in 1993. In Table 4.1 of the 1993 Agricultural Census Report, Family Members is quoted as 20,428. This leaves 48,219 full- and part-time Farmers and Tenants who farmed; 46,963 of which were white commercial farmers.
Did farm labour really decline since mid-1980s?
During the period from 1983 through 1994 the levels of employment of regular workers have fluctuated between 615 000 and 735 000. During the past 6 years workers working for pay in the formal urban and rural areas (taken here to refer to commercial agriculture) have reached a minimum of 385 000 and are currently at 436 000 (71 percent of total agricultural employment), almost the same level as in 2008.

Geographic distribution of farm labour
The geographic distribution of workers is classified as:
- urban formal, ordinary town or city area
- urban informal, squatter areas in urban area
- tribal, tribal authority area with villages
- rural formal, areas outside cities and towns with farms and agricultural holdings

The majority of farm workers (52 percent) have always been employed in the rural formal areas (commercial farms), followed by about 20 percent of the agricultural work force being employed in the tribal areas. Farm workers in the informal urban areas make up less than 8 percent of the agricultural work force. Taken together, the share of primary agriculture of national employment is currently 5 percent of total national employment.
Changing nature of Employment

The QLFS distinguish between permanent and seasonal workers on the basis of the nature of the contract. This relationship yields four types of workers, i.e., permanent workers, limited duration workers (casual workers), an unspecified category (which is read here as seasonal) and a not applicable category which in total add up to the sum of employers and own account workers. Figure 5 shows that:

- Seasonal and unspecified duration workers have declined from 50 percent in 2008 to 47 percent in 2012.
- The total number of permanent workers in agriculture has shown a marginal increase of four percent over the same period.
- In the formal rural areas this change has been a little more pronounced. The share of permanent workers has increased by 6.8 percent from 2008 through 2012 replacing seasonal workers.

Why did we see increase in employment in agriculture in last few quarters? By how much?

It is difficult to ascribe this increase to any single factor, however, over the 2 years since 2011 agricultural employment in the rural formal areas increased by 9.1 percent per annum, at the same time investment in agricultural machinery increased by 15.5 percent. As we have seen this coincides with a shift to more permanent workers (and a decrease in the number of employers), which hint at a greater reliance on more skilled and more permanent workers.

Farmers are employing more skilled workers

The share of paid workers in agriculture with an education level higher than primary schooling (grade 7 and more) has increased significantly from what it was in 2008. This fact is relevant for both the commercial (formal) and informal agricultural sectors (Figure 6). In the commercial sector it has grown from 43 percent of the total number of paid workers in 2008 to an average of 55 percent for the first two quarters of 2013. In the informal sector the same metric has changed from 40 percent to 49 percent, an increase of 8.6 percent.
Are farmers paying more than the rest of the economy?

Figure 7 shows the average wage per worker by geographic region for the years 2008 to 2011. In 2008 workers in the rural formal areas (commercial farms) received a higher salary than those in other regions. Stated differently, farmers in the urban formal areas paid about 61 percent of the rates paid by farmers in the rural formal areas, with urban informal and tribal areas paying only about 20 percent of the wages paid by commercial farmers in the rural formal areas.

By 2011, rural formal workers in agriculture received monthly wages that was double that of 2008. The gap between wages paid in the urban formal areas to that paid in the rural formal areas were essentially wiped out, whilst the informal areas and tribal areas were still paying much less (in the order of 50 percent and less of the formal sector).

How many people practice agricultural activities for survival?

The Population Census of 2011 included three questions that tested for peoples’ involvement in agriculture. According to this source 2.9 million households were engaged in agricultural activities in that year. We doubt this estimate since it should most likely read “persons”. The commensurate estimate of the QLFS for 2011 is 2.4 million persons (not households) with the highest estimate (2.7 million persons) in the first quarter and the lowest (2.1 million) in the second quarter. According to Figure 8 this wide fluctuation in the engagement in agricultural activities is explained by the varying involvement of a large number of non-economically active persons in agriculture – on average 52.7 percent for 2011. For the period from 2008 to the second quarter of 2013, an average of 71.3 percent of these persons were either unemployed (11.8 percent), a discouraged job seeker (7.6 percent) or not economically active (NEA) (51.8 percent). This hints that agriculture is a residual activity, not even part-time – in the household livelihood.
Figure 7: Average Monthly Wage per Agricultural Worker: Geographic Differences, 2008 to 2011

Figure 8: Engagement in Agricultural Activity, March 2008 to June 2013

Note: NEA – Not economically active
Agricultural employment in the secondary and tertiary industries of the economy

According to the QLFS, employment in agriculturally related industries in the secondary and tertiary sectors of the economy equals about 90 percent of the employment in primary agriculture. According to this broader definition of agriculture total employment were on average 1.153 million during the first half of 2013, down from 1.238 million in 2008. Quarterly observations show that this reached a minimum in March 2011 from where it increased by 1.36 percent per quarter to reach 1.216 million in June 2013; this growth was driven largely by the growth in the primary agricultural sector over this period.

If the workers in the agricultural services, food manufacturing and trade are included, agricultural and agriculturally related employment represent 9 percent of national employment. As a share of all jobs created in the rural formal areas 52 percent work in agricultural and agriculturally related industries.

Figure 9: Total Employment in Agriculture, March 2008 to June 2013
Where to find the real numbers? Data sources and important facts about the data sources.

The Abstract of Agricultural Statistics has traditionally sourced its information on regular employment on farms from the Agricultural Census and Survey of Agriculture reports of Stats SA. The numbers quoted are the total of regular workers (inclusive of domestic servants) and seasonal workers, although the census and survey reports do sporadically report statistics for farm owners and family members who regularly are working on the farms. Workers in the forestry and fisheries industries have traditionally been excluded from these numbers, as were those employed in the informal agricultural sector.

With the prolonged absence of an Agricultural Census from 1996 through 2002 (the latter only released

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Notes: ¹ Number of farm employees and domestic servants on farms
by 2005) the Directorate of Agricultural Statistics began to quote the Labour Force Survey (LFS) from 2003 in addition to observations from the Agricultural Censuses and Surveys. The first Labour Force Survey was conducted on a bi-annual basis in 2000. This source differs in terms in its definitions of farm labour used in the agricultural census in a number of important respects:

• The agricultural census includes farm workers of all ages, the LFS only report employees of a ‘working age’ (ages between 15 and 65) and often included informal employment in agriculture in the totals on employment by industry. During the late 1990s workers aged 65 and above amounted to about 50,000 persons and the informal sector upwards of 300,000. The periodic inclusion of the latter explains the major change in employment in agriculture from 2007 to 2008.

• Whereas the Agricultural Census traditionally (in this country at least) only included the agricultural and game industries, the LFS classify the Forestry and Fisheries industries as part of the agricultural sector. In the second Quarter of 2008 the Forestry and Fisheries industries accounted for 102,000 workers out of the total reported for 811,000 (14 percent) workers in the LFS definition of agriculture. This has declined to 61,000 (or 8 percent) in the corresponding quarter of 2013.

• The LFS estimates employment using an intricate method of weighting to adjust the raw counts to reflect the ‘universe’, or total population. Since its inception the published observations have been re-weighted twice to reflect the total population count obtained from the two population censuses. These changes were never replicated in the numbers quoted in the Abstract of Agricultural Statistics.