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Measurement and analysis of rural household income in a dualistic economy: The case of South Africa

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Abstract

Government Departments in South Africa utilise a number of different data sets on income of rural households. These include the Population Census of 1996, the October Household Survey of 1995 and 2000, the Rural Household Survey of 1997 and the various agricultural censuses (1996 and 2003). All of these use different approaches in obtaining household income. The agricultural census, for example, only reports on farm income – excluding the non-farm income. This paper reviews the different sources of household income data, their measurement techniques and the utilisation thereof. The difference in application of various surveys in the former homeland areas and the so-called commercial farming areas are also shown. In the case of the former homeland areas integrated rural household data are used for poverty measurement purposes. The context and methodologies of these surveys are discussed in detail.

1. Introduction

Agriculture is constantly undergoing changes, whether in the physical environment, such as climate and topography, or in the economic and political environment. These changes create new demands and requirements to the statistical system that is a measure of the wealth and welfare of agriculture. During the past decade, these new information needs have become particularly important in the field of farm economic results and rural household income. In fact, the new demands that have been created by changes in agriculture have become so important that the recent Third Annual Conference on Agricultural Statistics (ICAS III) has focused its proceedings entirely on how the statistical community should respond to the new demands on agricultural statistics. The theme of ICAS III, held from 2 to 4 November 2004 in Cancun, Mexico, was: “Measuring sustainable agriculture indicators”. The focus was on new data challenges, specifically in the field of rural development indicators, international standards and methodologies, rural poverty and hunger, environmental sustainability, food safety, animal health

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and social welfare. Specifically the challenge of rural development indicators will be discussed and explored in this paper

As mentioned, one of the key focus areas of ICAS III was the issue of moving from agricultural to rural development indicators. Although there are many important factors and indicators concerning rural development, income is by far the most important. ICAS III has highlighted the increasing importance of focusing on farm household income rather than farm income only. This has been clearly illustrated by presentations of papers from developed as well as developing economies.

In developed economies, the number of farms has become fewer with wide differences in production costs, marketing approaches, and overall management capabilities. Farms have also become larger. More important, the wellbeing of farm families is no longer solely dependent on the outcome of farming activities. Instead, it has become a result of farm performance as well as off-farm employment and business ownership opportunities in rural communities. Today, households involved in agricultural production can receive income from a combination of sources: strictly agricultural activity, activities connected to the farm, as well as off-farm incomes. Income from 'core' agricultural production activities could be only one component of households' total income. Agricultural activity has therefore become one of the many possible sources of employment and income for farm households across the world.

In developing economies, there has also been an increasing need to take into account how off-farm income and wages affect farm resource allocation as well as the process of moving from subsistence to commercial agriculture. This is also specifically relevant in the South African context as is motivated below.

After celebrating its 10th year of democracy and experiencing remarkable political and economic stability, one important challenge remains in South Africa, namely that of addressing poverty and integrating the so-called "second economy" into the advanced and rapidly growing first world economy of the country. The challenge to rid South Africa of its dualism is not only relevant for the economy at large but even more so in the agricultural sector and the rural economy where there is still visible evidence of the legacy of apartheid. Regions characterised by poverty, unemployment, food insecurity, large migrant communities, poor infrastructure, traditional tenure and subsistence agriculture are bordered by regions within the same province characterised by freehold tenure, large commercial farming operations, mainly white land owners, good infrastructure, etc. The policy of apartheid created

“two agricultures”: the one largely neglected, backward and subsistence oriented and located in the former homeland areas and the other developed, export oriented and well supported by government systems and located in the “former white South Africa”.

This dualistic situation also applies to South Africa’s agricultural statistics. Given the statutory control of agricultural marketing (which required statutory measures on records and returns) from 1937 to 1997 a good solid database was generated on agricultural production, sales, gross value of production, exports, imports, etc. Regular agricultural censuses and intermittent agricultural surveys provided a relatively good overview of farm income, assets, land size, etc. in the so-called ‘commercial sector’. Only limited statistics on farm household activities, sales, income were available from the agricultural sector in the ‘former homelands’. None of the agricultural censuses in the pre-1994 years covered these regions, resulting in only a one-sided picture of the total agricultural sector and a total data void concerning rural households and livelihoods.

One of the first efforts during the transition years of the early 1990s to address this void was the “Project for Statistics on Living Standards and Development” implemented by the Southern African Labour and Development Research Unit (SALDRU) in 1993. For the first time this survey tried to assess the living conditions, source of household income and a range of other household statistics of a representative sample across the entire country. A large percentage of the sampled households was drawn from the rural areas of the “former homelands”.

Given this background and the continued effort by the South African government to address rural poverty and obtaining a better picture of the real living standards of rural households, a number of surveys during the 10-year period following democracy have been conducted. This paper reviews the different surveys of rural and farm households since 1994 and highlights the different approaches in measuring household income of rural and farm households.

2. Agricultural censuses and surveys

Since 1965 regular censuses of the agricultural sector have been undertaken. Almost annually this was complemented by “agricultural surveys” based on a representative sample survey of 10% of all farming units implemented during the intermittent years up to 1996. The most recent comprehensive database on the “commercial” agricultural sector originated from the agricultural censuses

of 1988 and 1993. The results of the 1993 census were only made available in 1997. The new agricultural census of 2002 has recently been completed although the full results will only be made available early in 2005. This section briefly describes the nature (and where applicable) some key results of the 1993 and 2002 census (preliminary results) and the 1994, 1995 and 1996 agricultural surveys.

2.1 Agricultural census of 1993

In 1993, the former Central Statistics Service, now Statistics South Africa, conducted a Census of Agriculture covering all commercial farming units in South Africa. The farmers in the former homelands were excluded from the census. Farmers were requested to provide information regarding production and financial activities for the year 1 March 1992 to 28 February 1993. The Census data were obtained by means of a mail questionnaire sent to farmers requesting them to complete and return the questionnaire. A total of 57,980 questionnaires were sent out to farming units and only 39,821 were completed and returned – implying a non-response rate of 32.1 %

The gross farm income estimated from the 1993 census of agriculture comprises only of income earned from agricultural activities and largely ignored non-farm income. This was partly a function of the fact that farming was considered to be full-time occupation and thus only full-time farmers were included in the sampling frame. Table 1 contains a summary of the main findings of the census with specific reference to the number of farms and gross farm income.

Table 1: The number of farming units and gross income from the results of the 1993 census of agriculture

Province	Number of farming units	Land surface	Gross income
		1 000 Ha	R million
Total	57,980	82,759	19,620
Western Cape	8,352	10,250	4,394
Eastern Cape	6,106	10,320	1,204
Northern Cape	6,593	29,962	1,032
Free State	10,252	11,321	2,492
KwaZulu-Natal	6,080	4,064	3,163
North West	7,638	6,184	1,910
Gauteng	2,500	675	1,387
Mpumalanga	5,406	4,648	2,754
Limpopo	5,035	5,335	1,285

Source: Central Statistics Service, 1998

2.2 Agricultural surveys of 1994, 1995 and 1996

Statistics South Africa conducted annual agricultural surveys from 1994 to 1996. The surveys were undertaken in the commercial agricultural sector and again excluded the former homelands. The purpose of the surveys was to collect useful information for national and provincial planning, development, policy formulation and marketing. The information obtained from the surveys was primarily used for benchmarking and rebasing of the quarterly Gross Domestic Product as well as for the calculation of the Gross Geographic Product.

The surveys were conducted in the same manner as the agricultural census of 1993 except that they were only sample surveys of approximately 6 300 farmers or roughly 10% all farming units and therefore not a census. The surveys were not representative of the total population of farming units in the commercial agricultural sector of South Africa. The response rate for these surveys was, however, much higher than in the case of the 1993 census: 78.5% in 1994, 76.0% in 1995 and 74.2% in 1996.

Gross income as reflected in the results in Table 2 below was once again defined as income earned from agricultural products sold and insurance payments for cattle and crop losses. No reference was made to non-farm income earned for the respective periods.

Table 2: The number of farming units, land surface and gross income for 1994, 1995 and 1996

Item	1994	1995	1996
Number of farming units	60,901	59,828	60,938
Total farm area (1,000 ha)	81,862	82,139	82,210
Gross income from agricultural sales (R1,000)	27,014,299	30,552,513	32,931,236

Source: Statistics South Africa, 1999a

2.3 Survey of large and small-scale agriculture, 2000

The agricultural censuses and surveys during the 1990s continued the practice of earlier surveys and clearly provided no information on farming activities of small-scale and subsistence farms in the former homeland areas. To address this data void Statistics South Africa conducted a survey on large and small-scale agriculture in August 2000 in an attempt to collect data on the small-scale and subsistence farming sector in the country.

2.3.1 Sampling methodology

A master sample was created, which was based on enumeration areas (EAs) from the 1996 Census as well as a sampling frame from the national Department of Agriculture. Approximately 1 500 Primary Sampling Units (PSUs) were selected from the former South Africa and the former homelands. The apartheid-based political geography of the country, prior to democracy, was very important to the survey. Large-scale commercial farming operations in South Africa were mostly under white ownership. This was in contrast to the mainly small-scale and subsistence farming operations of the former homelands. Consequently, different sampling designs had to be used for the different types of farming operations, one for the former South Africa and one for the former homelands.

A household was defined as a farming operation if it met at least one of the following specifications:

- a) access to land for farming purposes,
- b) possession of livestock,
- c) cultivation of crops, and
- d) the respondent considered the household or a member of the household to be involved in a farming operation.

If the respondent did not consider the household to be involved in a farming operation (d), it was classified as a farming operation if it complied with at least one of the following:

- a) It had sold crops, livestock or other agricultural products from the operation, during the 12 months prior to the survey,
- b) It had access to 0.5 hectares or more of cropland,
- c) It produced sufficient crops and livestock to feed household members for six months or more,
- d) It had five or more of any of the following animals: cattle, sheep, goats, pigs, mules or donkeys, or
- e) It had 25 or more chickens.

Of the households that qualified as farming operations in the former homelands using the above criteria, 15% were systematically selected in each EA or PSU. Tenant farmers were found in both the former South Africa as well as the former homelands. In cases where tenant farmers were identified, they were all sampled.

2.3.2 Questionnaire design and data collection

The survey questionnaire was designed by the national Department of Agriculture in consultation with the United States Department of Agriculture's Statistical Agency. Personal interviews were used as the data collection method. Trained fieldworkers collected the data from 14 August to 18 September 2000 in all nine provinces.

In this survey total income was defined as the total amount generated from agricultural and non-agricultural activities. This includes income generated from sales of crops, livestock and poultry, products from crops, other farm income (e.g. hiring out of livestock for draughting and letting farm property to others) and non-farm income (e.g. cash, gifts, grants, pension or retirement annuities). Farming income was defined as the income earned from agricultural products sold, such as field crop products, animals and animal products, while farming turnover referred to the total amount generated from agricultural activities, including farm-related income such as hiring out of livestock for drafting purposes and the letting of farm property to others, but excluding non-farm income such as grants, gifts cash gifts, remittances and pensions. Concerning the other farm-related income the largest share came from "custom work for others and machine hire", sales of machinery and letting of farm property.

2.3.3 A brief overview of the findings

It was estimated that there were 1.1 million farming operations in South Africa in August 2000. This number consisted of 150,000 farming operations in the former South Africa (including tenant farmers) and 943,000 farming operations in the former homelands (see Table 3). Care should be taken in comparing these results with those of the 1993 census and the agricultural surveys because these results only involved commercial agriculture. Small plots and weekend farms purchased by urban investors were also now included in the definition, resulting in the larger number of farming units in the former South Africa reflected in Table 3.

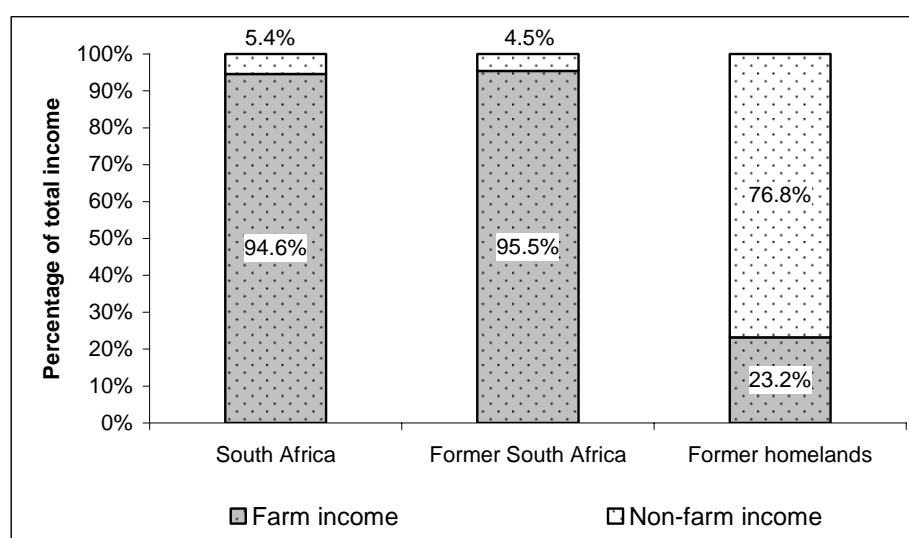
Table 3 indicates that of the estimated 1.1 million farming operations in South Africa in August 2000, 698,000 kept livestock and poultry, 855,000 cultivated cereals, tubers and roots, 349,000 grew vegetables and 245,000 grew fruit. Most of the farming operations in the former homelands cultivated cereals, tubers and roots whereas the majority of the farming operations in the former South Africa kept livestock.

Table 3: Number of farming operations by type of farming activity and geographical location

Type of farming activity	Former South Africa	Former homelands	South Africa (total)
Total	150,000	943,000	1,093,000
Livestock and poultry	84,000	614,000	698,000
Cereal, tuber and root crops	56,000	799,000	855,000
Vegetable crops	19,000	330,000	349,000
Fruit crops	17,000	228,000	245,000

Source: Statistics South Africa, 2002

The results of the survey also contained information on the total income, farming turnover, farming expenses, debt and farming profit as well as total profit. This information was useful to estimate the non-farm income received by all farming operations in the entire country. Figure 1 illustrates farm income and non-farm income as a percentage of total income for South Africa, the former South Africa and the former homelands. It indicates that for commercial farm households in the former South Africa, farm income is the main source of income whereas non-farm income is a far more important source of income for farming operations in the former homelands. This is confirmed by the discussion on the surveys of poor rural households that will follow.

**Figure 1: Farming income and non-farm income as a percentage of total income of farm households in South Africa**

Source: Statistics South Africa, 2002

The results from the survey also reveal that only 13.72% of the total number of farming operations was situated in the former South Africa, but received

98.85% of the total farm income in South Africa. The 943,000 farming operations in the former homelands covered a total land area of 97.3 million hectares while the 150,000 farming operations in the former South Africa covered a total land area of 217.98 million hectares (Figure 2).

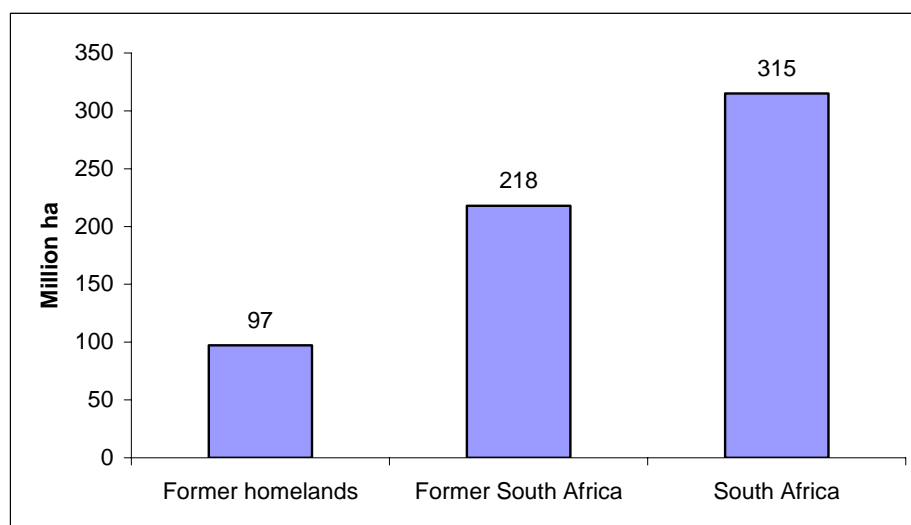


Figure 2: Total land surface of farming operations according to geographical location

Source: Statistics South Africa, 2002

2.4 The Census of Commercial Agriculture, 2002

The Census of Commercial Agriculture of 2002, conducted for the financial year 1 March 2001 to 28 February 2002 once again only covered the activities on commercial farms in South Africa. The final corrected results were released on 20 April 2005. For the purposes of the census, a commercial farm was defined as a farm that is registered for Value Added Tax (VAT).

The questionnaire consisted of a 24-page booklet with questions ordered into 15 sections. Section 6 captured all the income from farming activities while Section 7 covered all the other sources of income. This included income received for work done for other/fellow farmers such as ploughing, harvesting, threshing, baling, picking, spraying, shearing, water drilling, earth moving and transport. It also included income generated from the leasing of farming equipment, leasing of land and the sales of fixed assets, vehicles, machinery, equipment and tools. As indicated in the extract from the census questionnaire (Box 1) respondents were also asked to specify the income earned from a range of other non-farm income sources. The biggest problem here lies in the last question: "other sources of income". It is not clear whether salaries from non-farm employment were captured here.

1101-E

Part 7 – Other income

106. Income received for work done for other/fellow farmers (such as ploughing, harvesting, threshing, baling, picking, spraying, shearing, water drilling, earth moving and transport) and the leasing of farming equipment, excluding leasing of land and the sales of fixed assets, vehicles, machinery, equipment and tools R'000

107. Income earned from –

agri-tourism

game farming

farm based retail stores

processing and small manufacturing enterprises

professional services rendered

shares (dividends and interest received)

other sources (specify)

Box 1: Extract from Census of Commercial Agriculture, 2002

The release of the final results of the 2002 census provide information on the number of farming units, employment and employee remuneration, gross farming income, expenditure, market value of assets and farming debt. A summary of the main statistics is contained in Table 4.

It is not possible to evaluate the quality of the information captured on other income of farm households from the results published in the final report. Only gross farm income is reported and no reference is made to other income or to total income by farming households. It is sufficient to state that it has now become critical to do this in the correct manner. The reason lies in the fact that it became evident from casual observations that a large number of commercial farmers, especially after the period of decentralisation, currently occupy non-farm jobs, or alternatively generate income from activities on the farm (excluding the sale of crops and livestock). In addition quite frequently new entrants into farming and beneficiaries of the land reform programme continue their current non-farm careers such as teachers, taxi operators and carpenters while they establish their newly-acquired farms. In these cases, non-farm income is either used by the household to sustain their livelihoods and/or to contribute to the establishment cost of the farm.

Table 4: Principal statistics from the 2002 census of commercial agriculture

Item	Unit	1993	2002
Farming units	Number	57,980	45,818
with a VAT turnover of R300 000 and above			22,390
with a VAT turnover below R300 000			23,428
Employment	Number	1,161,912	986,846
Owners and family members		68,647	46,026
Paid employees		1,093,265	940,820
Employees' remuneration (at constant 2002 prices) (cash wages, salaries and cash bonuses)	R1 000	5,782,480	6,215,583
Gross farming income (at constant 2002 prices)	R1 000	38,813,291	52,329,052
Field crop products		9,901,329	16,476,933
Horticultural products		9,324,884	14,228,909
Animals and animal products		19,328,436	21,222,618
Other products excluding forestry		258,642	1,400,592
Expenditure (at constant 2002 prices)	R1 000	33,984,385	45,038,908
Current expenditure		29,671,164	42,092,135
Capital expenditure		4,313,221	2,946,773
Market value of farming assets (at constant 2002 prices)	R1 000	138,836,539	98,428,254
Farming debt (at constant 2002 prices)	R1 000	31,738,817	30,857,891

Source: Statistics South Africa, 2005

These findings or observations, however, clearly indicate that household income of farms in South Africa has become integrated to an increasing extent whereby income from farm sales and income from non-farm activities are totally interwoven and non-distinguishable. The agricultural census of 2002 took a first but modest step in trying to capture total farm household income. However, the capturing and recording of this information have to be improved in future.

Previous studies, such as the survey of large and small-scale agriculture of 2000 and the rural survey of 1997, have shown that households farming in the former homelands rely to a greater extent on non-farm income as a source of income as shown in the sections below. This can be directly linked to a lack of resources because of the previous one-sided approach in which the previous government only aimed to develop and uplift the commercial (predominantly white) agricultural sector. Farmers in the previous homelands basically had no choice but to seek other sources of income. Because they did not have access to agricultural product markets to sell their produce, they could not afford inputs and they had inadequate access to land.

3. Rural indicators/surveys

An often ignored but very important outcome of apartheid and the previous apartheid regime has been the absence of credible and comprehensive data on which policy, such as poverty reduction strategies, can be based. The previous government had little interest in collecting information of this nature. For most of the pre-1994 years, official statistics excluded any information from the former homelands. This meant that most of the poor were excluded automatically from official statistics, because most resided in the homelands.

Although surveys were undertaken in these areas, the commissioning and release of both reports and data were often subject to the whims of governments from these independent state and territories. Various studies and data “panel-beating” exercises, such as those undertaken by the Development Bank of Southern Africa (DBSA) (1987a, 1987b, 1991, 1994), tried to fill this information gap. It was not until the 1993 Project for Statistics and Living Standards and Development (PSLSD) that a comprehensive household database for development was created.

3.1 PSLSD, 1993

The first South African national household survey, the PSLSD was undertaken in the last half of 1993 by a consortium of South African survey groups and universities under leadership of the South African Labour and Development Research Unit (SALDRU) (1993) at the University of Cape Town (UCT), with financial and technical support from the World Bank and the governments of Denmark, The Netherlands, and Norway (PSLSD, 1994).

The PSLSD was a comprehensive household survey collecting a broad array of information on the socio-economic conditions of households. It included sections on household demographics, household environment, education, food and non-food expenditures, remittances, employment and income, agricultural activities, health and anthropometry. In addition to the household questionnaire, a community questionnaire was also administered in each cluster of the sample to collect household information such as school availability, health care facilities and prices of various commodities.

An important component of the design, as in any household survey, was the definition of a household. In order to account for the complexity of the South African situation with its history of residential restrictions and migrant labour, a two-tiered definition for household members, resident or non-resident, was

formulated based on time spent in residence. Only a limited volume of information was collected from non-resident household members.

The PSLSD has played an important role in guiding policy. The allocation of state revenue between South Africa's nine provinces has drawn extensively on the data from the PSLSD survey in order to target poverty programmes such as the Community Based Public Works Programmes. The 1993 PSLSD survey is, therefore, an example of a cross-sectional survey – a one-time representative survey – and continues to serve as a benchmark for related studies in South Africa.

3.2 KIDS 1993 - 1998

With the aim of addressing research questions in South Africa concerning the dynamics of poverty, households surveyed by the PSLSD in KwaZulu-Natal province were resurveyed from March to June 1998. The resurvey was directed by a research consortium including the University of Natal, the University of Wisconsin, and the International Food Policy Research Institute and was known as the KwaZulu-Natal Income Dynamics Survey (KIDS). KwaZulu-Natal was chosen partly because of practical considerations and because of the feasibility of locating the households interviewed during the 1993 PSLSD survey.

The 1993 PSLSD sample was representative on a provincial level for KwaZulu-Natal. However, this was conditional on the accuracy of the 1991 census and other information used as the sampling frame. The sample contained 1,558 households of all race groups. It was decided not to re-survey white and coloured households in 1998. In order to ensure comparability, the 1998 household questionnaire largely followed the 1993 version. There were however, some important changes. One of these was a greater focus on individual ownership of assets and control over the use thereof to enable gender-differentiated analysis. A second underlying change was a greater emphasis on the set of individuals not living in the household but economically linked to it. Four new sections were added, including economic shocks, social capital, assets brought to marriage, and household decision making.

3.3 The rural survey of 1997

In 1997, Statistics South Africa (STATSSA) conducted a survey of households in rural areas. As in the case of the population census, the rural survey included a number of questions regarding living conditions of households

engaged mainly in subsistence and small-scale farming. The survey was specifically designed to provide in-depth information on living conditions of rural households in the former homelands of South Africa.

The database established during the 1996 population census constituted the sampling frame for the selected Enumerator Areas (EA). The EAs were restricted to the former homeland areas. A total of 600 EAs were drawn and 10 households were selected from each EA. This yielded a sample of approximately 6,000 households. The sample selection was carried out independently in each stratum. A two-stage sampling procedure was applied. In the first stage, systematic sample of EAs followed by the second stage in which a systematic sample of households within the selected EAs were drawn.

Although the 1997 rural survey produced a myriad of results, only some of the key findings are presented here. In June 1997, about 12.7 million people, or 31.4% of the total South African population, lived in rural areas of the former homelands of the country. Access to farmland is crucial for these rural households because they either depend entirely on farming activities for their survival and generation of income, or depend on these activities to supplement their main source(s) of income.

As this paper is primarily concerned with household income of farm households, a brief review is given of some of the results on income from the 1997 rural survey in which elected households were asked to state their most important source of income during the past 12 months prior to the survey.

As many as 71% of the 2.4 million households (approximately 1.7 million) in the rural areas in the former homelands had access to land for farming purposes. About 800,000 households who had access to land, reported that the farming land that was cultivated for crops in the past year was smaller than one hectare. The majority of households (93%) were engaged in subsistence farming with very little income generated from the sale of crops, livestock and animal products. Only 3% of the 2.4 million households in the sample relied on farming activities as their main source of income. Household income was mostly generated from household members' salaries and wages as well as pensions received by the senior citizens of the household as illustrated by Figure 3.

Approximately 71% of the 1.7 million households, who had access to land, received some form of assistance with regard to crop production or animal herding. Employment from these activities was either for family members or in kind payments or access to land rather than cash payments.

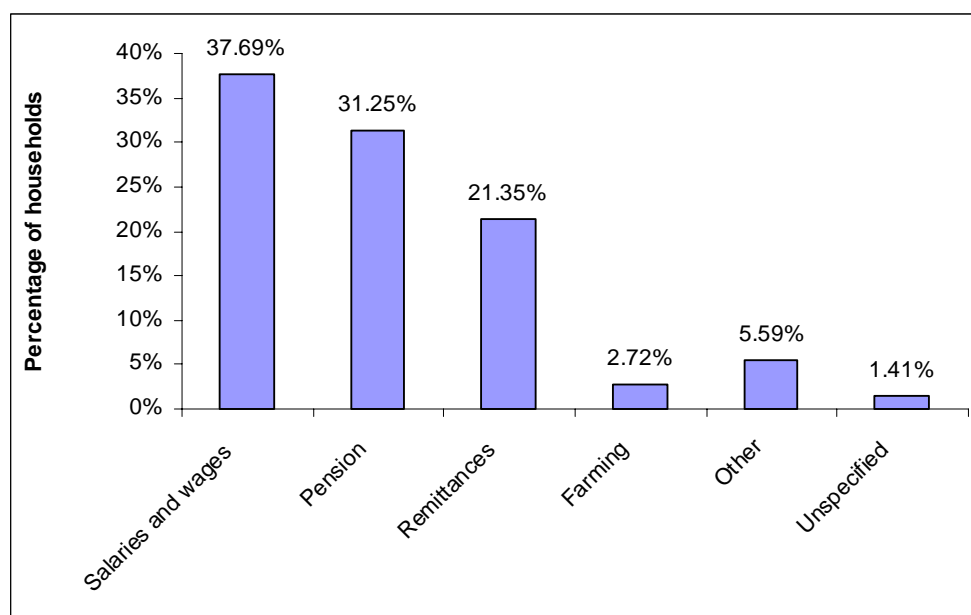


Figure 3: Most important sources of income of households in rural areas

Source: Statistics South Africa, 1999b

4. Conclusion

To a great extent the agricultural statistics landscape in South Africa mirrored the dualism in the sector. The agricultural census and surveys conducted during the first decade of democracy were still not representative of the entire agricultural sector and, therefore, makes it difficult for the South African government to obtain a true picture of the size and structure of the sector. Without this information it is difficult to see how the South African government can effectively promote its vision of a united (read inclusive) and prosperous agricultural sector. There is no baseline and, therefore no targets. As a result it is very difficult to record progress towards achieving this vision. The one component of the vision refers to the prosperity of the sector. It is in this light that the current handling of non-farm income in the agricultural censuses is problematic because considering only farm income will clearly under record the total household income.

This paper provided an overview of the different approaches followed in various surveys and censuses to record farm household income. Table 5 provides a summary of how different surveys have treated household income. This shows that South Africa has applied various definitions for household income. Commercial agriculture operations were generally considered to be full-time farmers and therefore only farm and farm-related income were included. However, surveys of small-scale farmers in the former homelands

generally considered household income to be consisting of a large number of sources. In this respect these surveys applied the same approach as household surveys in many developing countries. However, in the agricultural censuses and surveys of the commercial agricultural sector the approach of the developed nations of only considering the income of the farm business was applied continuously.

Table 5: Treatment of household income in different agricultural and rural surveys

Survey/Census	Coverage	Income definition
Agricultural census 1993	Only commercial farms in former "white" South Africa	Sales of farm products and farm-related income
Agricultural census 2002	Only commercial farms (farms registered for VAT)	Sales of farm products and farm-related income PLUS other income
Agricultural surveys: 1994, 1995, 1996	10% of commercial farms in former "white" South Africa	Sales of farm products and farm-related income
Survey of large and small-scale agriculture, 2000	Farm households in "former homelands" and commercial farms	Total income from agricultural and non-agricultural activities
PLSDS 1993	Sample of 9000 urban and rural households	Total income from agricultural and non-agricultural activities
KIDS, 1998	Same households from PSLDS in KwaZulu-Natal	Total income from agricultural and non-agricultural activities
Rural Survey, 1997	Households in former homelands	Total income from agricultural and non-agricultural activities

From casual observation, it has become evident that currently a large number of commercial farmers, especially after the period of decentralization, occupy non-farm jobs or alternatively generate income out of activities on the farm other than the sale of crops and livestock suggesting that more attention should be paid to the nature and composition of the "other income" component of future surveys. In addition new entrants into farming and beneficiaries of the land reform programme frequently continue their current non-farm career such as teachers, taxi operators, and carpenters while they establish their newly acquired farms. In these cases, non-farm income is either used to sustain the livelihood of the household or to assist with the establishment cost of the farm – therefore another reason why an integrated concept of household income should be used in future. The agricultural census of 2002 took a first but modest step in trying to capture total farm household income but the capturing and recording of this information have to be improved in future.

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