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Prospects for On-Farm Self-Employment and Poverty Reduction: An Analysis of the South African Income and Expenditure Survey 2000

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This paper explores aspects of the relationship between rural poverty and the cash income (or consumption goods) that black rural households are able to derive, after almost a decade of land reform, from farming their own land.[1]

In the South African context, as well as elsewhere in sub-Saharan Africa, there is general agreement that small-plot agriculture "remains important for most rural households, mostly for domestic consumption", and it is claimed that "people look to farming or natural resource harvesting as sources of livelihood". Many have echoed Michael Lipton's old call for "abandoning negative stereotypes of smallholder production, and embracing a positive view of the possibilities for land-based rural livelihoods" (Cousins 2005a; International Food Policy Research Institute (IFPRI) 2002; New Economic Partnership for African Development (NEPAD) 2002; Commission for Africa 2005:44). Their policy conclusion is that the central thrust of anti-poverty strategy should focus on these promising possibilities for family farming by implementing a land reform that improves the access of the poor to productive assets including not only land but also micro-credit, access to inputs, marketing facilities, and extension advice. "Possibilities" are not the theme of this paper, partly because the theoretical underpinnings and flawed logic of these arguments for redistributive land reform and smallholder support have been criticised in earlier work (Sender and Johnston 2004).

Instead, the present aim is to examine the characteristics of the poorest rural people in South Africa to account for their failure (or refusal) to rely on farming in their struggles to survive. The evidence offered here suggests that, in the politically surprising event that these very poor rural households were granted access to more land, or even to credit and the necessary farm inputs, marketing facilities and extension advice, they would still be unlikely and unwise to rely on own-account farming in their mix of survival strategies. Part of the explanation for this is to be found in the demographic and structural features of the poorest rural households.

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We begin by looking at problems that arise when using the data published by Statistics South Africa in the Income and Expenditure Survey 2000 (IES 2000). One of the main difficulties, discussed at some length, is determining the proportion of total consumption in rural households that can be explained by own production. Yet, although the data problems are certainly serious, the fact remains that IES 2000 probably provides a better basis for analysis and policy debate than the ad hoc selection of small samples of African farmers to support the most fashionable poverty reduction proposals.

We then show that the overwhelming majority of black rural households currently rely on incomes derived from the labour market, together with public transfers, in order to survive. The key arguments compare two types of poor black rural household, 'farming' and 'non-farming' on the basis of important differences in demographic structure and sources of income. The last section briefly discusses some implications of the IES 2000 data.

A Cautionary Note on the Income and Expenditure Survey

Statistics South Africa conducts a five-yearly survey of income and expenditure in South Africa. The main purpose is to collect data to determine weights for items in the basket of goods and services used to calculate the consumer price index. The data is collected in face-to-face interviews with the 'household head', and detailed questions are asked regarding household income and expenditure.[2] The sample is drawn from households surveyed in the 1996 census, and is stratified by province and urban or non-urban area. This type of income and expenditure survey suffers from several important limitations that have been well discussed in the South African and international literature. However, IES 2000 is the most recent survey available and it does provide information on the demographic make-up of households, their spending patterns and sources of income, as well as on agricultural production by households. Nevertheless, the shortcomings highlighted below should be kept firmly in mind when interpreting the data.

Household income and expenditure surveys typically use extremely long and detailed questionnaires. The potential sources of error include: recall errors due to memory failure; reporting errors where respondents are overwhelmed by the length of the questionnaire and the number of items covered; 'prestige' errors, resulting from misreporting due to social pressures; conditioning effects from being in the survey; respondent effects, where the identity of the respondent affects the answers given; and interviewer effects, which may be particularly serious when data collection is outsourced and privatised (Deaton and Grosh 2000; Scott and Amenuvegbe 1990). It is also widely acknowledged that richer groups are undersampled in household surveys (Szekely and Hilgert 1999; Deaton 2001; Srinivasan 2001). In many household surveys, including those in South Africa, some of the poorest people are definitely not captured: seasonal and temporary migrants, hostel dwellers, workers living on construction sites or on temporary accommodation on farms, squatters or those in illegal housing, and sex workers

are among those who may well not be included in the national sample (Sender 2003; Sender *et al* 2005). If rural households depend on remittances from and irregular visits by this type of mobile worker, but the latter are not defined as 'household members' and not sampled as individuals living in other 'households', then published estimates of rural household income and attempts to understand the survival strategies of the poor will be misleading (Posel 2003).

Some criticisms of the quality of the IES 2000 data have already been published (Van der Berg and Louw 2003; Roberts 2005). We stress three major problems. First, it was found that agricultural production did not always equal consumption derived from own agriculture plus sales of agricultural products. For a number of households, sales plus consumption exceeded production. Secondly, the value of agricultural sales was poorly recorded, with almost a third of households declaring sales of maize but not a value for the maize sold. Thirdly, agricultural incomes were recorded inconsistently. They are not recorded as a separate category in the IES, and are meant to be included under self-employment income. However, only 23 per cent of those households who declared that they sold farm products declared any self-employment income. The methods used in this paper to cope with these problems, and with the fact that farm income was not recorded separately by the IES 2000 but had to be calculated by subtracting the value of declared sales of farm products from recorded self-employment income, are described in Appendix 1 and Appendix 2.

For the purposes of this article, a particularly serious limitation of the data is that, although IES 2000 asks questions about the quantity and value of crops produced and livestock owned, it does *not* record access to land. It is thus not possible to investigate the extent to which land access determines involvement in agricultural production. Some of those rural households which do not produce any crops may have access to arable land, and vice versa, but the number of these households cannot be established with IES 2000 data.

In addition, using IES 2000 may result in an underestimate of the importance of agricultural income in rural areas, for several reasons. For example, if a significant proportion of the households classified in IES 2000 as rural are not in fact based in rural areas but in urban or semi-urban areas that have not yet been proclaimed 'urban', then the importance of farming incomes for genuinely rural households may be underestimated. The lumping together of rural and semi-urban/urban households in IED 2000 probably distorts our understanding of the specificities of rural poverty, and underestimates the role of farming in rural areas (Ardington and Lund 1996).

There are other grounds too for believing that IES 2000 underestimates the importance of agricultural income. First, IES 2000 asks questions about only production, consumption and sales of maize, other grains, fruit, vegetables, milk, eggs and home-brewed beer, and ownership of cattle, sheep, pigs, goats, poultry and other livestock. This list omits many important crops in South Africa, notably cash crops such as sugar cane. Secondly, Andrew *et al* (2003b) suggest

that most studies underestimate the importance of land-based incomes because they fail to incorporate income from the harvesting and processing of natural resources. Shackleton *et al* (2001) find that the majority of rural households in some areas of South Africa make some income from selling natural resources. For example, all the women in a series of participatory rural appraisal workshops in Bushbuckridge were trading in at least one natural resource on a regular or ad hoc basis. The authors conclude that neglecting earnings from these sources results in an understatement of the importance of land-based incomes. Similarly they argue that the use of natural resources should be included when assessing the contribution of agriculture in terms of self-provisioning. Finally, Lahiff and Cousins (2005) suggest that poor recording by households means that home production and sales are often understated, while Shackleton *et al* (2001) suggest that households often do not declare produce harvested during the growing season and consumed directly, resulting in an underestimation of crop production by a third or more.

The Contribution of Agriculture to the Survival of Poor Rural Households

Much of the South African literature on rural households agrees that agriculture's contribution in terms of cash income is small.[3] Even those analysts, such as Shackleton *et al* (2001), Andrew *et al* (2003b) and Cousins (2005b), who suggest that agriculture does have a significant role to play in rural livelihoods, focus largely on its part in self-provisioning, and as a safety net in times of crisis.

In this section, agriculture's contribution to black rural households in South Africa is evaluated using data from the IES 2000, ignoring the fact that some of these 'rural' households may in fact reside in urbanised areas that IES has defined as rural. This black rural group is disaggregated into four expenditure categories, ranging from the 'very poor' to the 'wealthy', based on per-adult-equivalent expenditure.[4] Most of this paper focuses on the 'very poor' group. This group, as shown in **Table 1**, accounts for 20 per cent of the black rural population, but is responsible for only 3 per cent of expenditure.

Table 1: Population and Expenditure Distribution of Black Rural Households by Adult-Equivalent Expenditure

	Very Poor	*Poor*	*Non-Poor*	*Wealthy*
Share of households (%)	15	15	50	20
Share of population (%)	20	19	48	13
Share of expenditure (%)	3	6	37	54
All black rural households: N = 9376				

Black rural households are also disaggregated by defining the degree of their involvement in farming. Unfortunately the dividing lines between households, which could theoretically be drawn by measuring the scale or intensity of their farming operations, cannot be drawn precisely with IES 200 data. In this article, farmers are divided into two crude groups, 'subsistence producers' and 'surplus producers', by defining the latter group as those households which sold 25 per cent or more of their production of maize, grain, milk, eggs, fruit, vegetables and beer.[5]

Table 2: Population and Expenditure Distribution of Black Rural Households by Involvement in Farming

	No Farming	*Subsistence Farmers*	*Surplus Farmers*
Share of households (%)	52	44	3
Share of population (%)	43	53	4
Share of expenditure (%)	50	45	5
All black rural households: N = 9376.			

In some cases, the amounts produced and sold by "surplus" producers were quite low, and in fact the mean annual farming income earned by very poor surplus producers, defined according to the 25 per cent rule, is lower than that earned by those very poor producers defined as subsistence producers, who did sell some of their produce – R376 per annum for very poor surplus producers, compared to R846 for very poor subsistence producers. This classification thus does not differentiate farmers in terms of their scale or efficiency of farming, but aims to separate those who farm primarily with the aim of selling their output, even if on a small scale, from those who farm primarily with the aim of consuming their output directly.[6] The results of the classification are presented in **Table 2**. Note that the surplus farming group is very small; only 3 per cent of all black rural households are surplus farmers. **Table 2** also shows that the majority of black rural households do not farm at all.

Table 3 applies a less demanding criterion than sales of more than 25 per cent of output. All black rural households who sold some output are included yet these households still only account for a tiny proportion of the total number of black rural households (4 per cent) and there are no significant differences in the proportions of poorer and richer households who sell any produce (or livestock). The low prevalence of farming for own consumption reflected in these figures has been noted in the literature.

Table 3: Farming and Sales by Black Rural Households

	All Black Rural Households	*Very Poor Black Rural Households*	*Poor Black Rural Households*	*Non-Poor Black Rural Households*	*Wealthy Black Rural Households*
Reporting farming (%)	48	54	59	49	32
Selling any produce (%)	4	3	4	4	4
Selling any livestock (%)	6	5	6	6	5
All black rural households: N = 9376; very poor: N = 1406; poor: N = 1406; non-poor: N = 4688; wealthy: N = 1876.					

Table 3 also shows that the poor group of black rural households, as opposed to the very poor, the non-poor or the wealthy, are more likely to be engaged in farming. There is a striking difference between the small proportion of wealthy and non-poor households (32 and 49 per cent) who report some farming, compared to that of poor households who report some farming (59 per cent). The finding that very poor households are *less* likely to farm than poor households is not uncommon, either in South Africa or elsewhere (Sender 2000; Sender 2003; Sender *et al* 2005). For example, in their study of a group in the deep rural area of Nkandla in KwaZulu-Natal, Taylor and Cairns (2001) found that wealthy and middle-income groups were more likely to farm for themselves, while poorer groups relied on employment as labourers on neighbours' farms rather than farming for themselves. The poorest rural people may be compelled to rely on sources of income other than self-employment on their own farms.

Table 4: Contribution of Income from Farming, Salaries, Wages and Remittances and Public Transfers to the Total Income of Black Rural Households

	Income as Percent of Total Income (%)			*Mean Annual Income (Rands)*		
	Farming	*Salaries, Wages and Remittances*	*Public Transfers*	*Farming*	*Salaries, Wages and Remittances*	*Public Transfers*
All black, rural households	1	65	18	2076	11 612	7 764
Subsistence producers	2	57	23	2107	10 710	8005
Surplus producers	10	45	15	2023	12 641	7863
All black rural households: N = 9376; subsistence producers: N = 4148; surplus producers: N = 315.						

In fact, very few black rural households are able to derive a significant cash income from farming. **Table 4** shows that farm income accounts for only 1 per cent

of the total income of black rural households. This table also indicates the important contribution of public transfers, salaries, wages and remittances to the total income of all black rural households, as well their contribution to the total income of households defined as subsistence and as surplus producers.[7] Even for surplus-producing households, farming makes only a marginal contribution to cash incomes. Besides, the mean income from farming is extremely low in absolute terms (about R2000) for all groups of households, and much lower than the mean incomes derived from other sources.

The income from farming shown in **Table 4** was calculated for those households who did not declare a value for their sales by using the median values of declared sales. Using higher values (earned by 75 per cent of the sample) to calculate farm income makes almost no difference to the importance of farm income. Thus, when a sensitivity analysis was conducted using these higher values, farm income still contributed 1.2 and 10 per cent of total income for all farmers (subsistence farmers and surplus farmers respectively). Mean annual farm incomes were R2134, (R2111 and R2181 respectively).

Although these farm incomes appear rather low when compared to other surveys, confirming the understatement of farm incomes in the IES noted above, most other surveys have also found that farming contributes less than 10 per cent to the income of rural households. According to a survey conducted by the South African Labour and Development Research Unit (SALDRU) in 1993, for example, agriculture contributes only 6 per cent of income for rural black and coloured households, and 63 per cent have no agricultural income at all (Standing *et al* 1996). The 1997 Rural Survey conducted by Statistics South Africa, intended specifically to determine the extent of access to land and income-generating opportunities in rural households in the former 'homelands', found that agriculture contributed less than 3 per cent of household income and concluded that "income-generating activities were insignificant" (StatsSA 1999a:7).[8]

However, some smaller case studies suggest that farming does make a more significant contribution to the incomes of rural households in certain areas of the country. Machethe (2004) finds that farm income makes up 41 per cent of household income for one particular group of 138 farmers on an irrigation scheme in Limpopo Province,[9] while Makhura *et al* (1998) say that it yields 28 per cent of income for a group of smallholder farmers in Mpumalanga. The importance of agriculture is likely to vary within provinces and from province to province, according to availability of irrigated and arable land and varying rainfall levels. Easy access to markets and technology, or favourable prices in particular areas, may result in higher agricultural incomes and a greater dependence on agriculture, as noted by Andrew *et al* (2003b) with regard to sharecropping in Ditsobola.

Nevertheless **Tables 2** to **4** imply that, while income from agriculture is important for some rural households, the IES 2000 data indicate that for most black rural households, income from the labour market and public transfers is far more significant. Even those households who do earn some income from farming

activities depend heavily on other cash income sources to survive. This conclusion is not disputed in the literature (MERG 1993; Standing *et al* 1996; Leibbrandt *et al* 1996; Aliber and Johnston 1997; Carter and May 1999; Sender 2000; Taylor and Cairns 2001; Dieden 2004; Lahiff and Cousins 2005).

However, many authors insist that agriculture plays an important role in rural livelihoods as a means of self-provisioning, and that a focus on the contribution of agriculture to monetary income thus underestimates its significance (Shackleton *et al* 2001; Andrew *et al* 2003b; Lahiff and Cousins 2005). Thus, it is argued that calculations of the food contribution of agriculture should not neglect the consumption of wild plants, notably fruit and herbs. Besides, agricultural *non-food* goods, including hides and dung from livestock, also make an important contribution to consumption that should not be ignored, as does indigenous firewood used as fuel, fencing and for utility goods; and clay, thatch and mud (Shackleton *et al* 2001). Finally, livestock provide non-monetary *services* to households, most notably as draught or transport. Taylor and Cairns (2001) find that a third of the food requirements of households in Nkandla in KwaZulu-Natal are met by own production. Using the expanded definition of agriculture suggested by Shackleton *et al* (2001), and including the value of non-food goods and services derived from agriculture, Dovie (cited in Shackleton *et al* 2001) finds that land-based activities constitute 57.7 per cent of the total annual value added per household.

Since the IES 2000 did not ask about the use of natural resources or agricultural non-food goods, it was not possible to include these in the assessment of the non-monetary contribution of agriculture. The rest of the discussion here therefore focuses on the importance of households' consumption of cultivated foods (grains, fruit and vegetables, milk, eggs and livestock), starting with the recent claim by the Human Sciences Research Council (HSRC 2004:34) that "even where agriculture contributes only a modest share of overall household income, it plays an important security role, not least in making households less reliant on purchased food, which can vary greatly in price".

Unfortunately, it is difficult to use IES 2000 to determine the proportion of total consumption that is supplied by own production. IES 2000 asked questions about *quantities* of food produced, but not of *values* of food purchased. Values for produced food must therefore be imputed in order to compare totals for food production and purchases –- an awkward process and prone to error (Deaton and Grosh 2000). The choice of an appropriate set of local prices at which to value home-produced food requires highly disaggregated price data, since 'the market price' of food varies dramatically from place to place. Poorer rural households are likely to pay much more for purchased food than their richer neighbours in the same area.[10] And how do we compare, say, a kilogram of home-produced maize and a purchased loaf of bread or bag of maize flour? Some food security studies tackle this problem by estimating the calorific value of each individual item, and then guessing at the proportion of total calories consumed by the house-

hold that are supplied by own production; but there are good grounds for doubting the reliability of estimates of the precise nutritional values of different food items consumed by households in rural Africa (Svedberg 2000).

Table 5: Expenditure on Food (per adult equivalent) and Budget Share Devoted to Food for Black Rural Households

	Very Poor Black Rural Households			*Poor Black Rural Households*	*Wealthy Black Rural Households*
	Non-Farming	*Subsistence Producers*	*Surplus Producers*		
Food expenditure p.a.e. (Rands in the last 12 months)	569	555	579	996	3319
Food expenditure as a percentage of total expenditure	48	46	45	46	23
Very poor non-farming households: N = 649; very poor subsistence producers: N = 728; very poor surplus producers: N = 29; poor households: N = 1406; wealthy households: N = 1876.					

We prefer to gauge self-provisioning by seeing whether or not increased production of home-produced food had any discernable impact on the levels and patterns of expenditure on food recorded in IES 2000. **Table 5** presents absolute expenditures on food per adult equivalent for different groups of black rural households, and the proportion of total expenditure that they devote to food purchases.

Obviously, expenditures per adult equivalent are much higher in wealthy households, and it is not surprising to find the familiar Engel relationship, with poor and very poor households devoting close to half their budgets to food, while only 23 per cent of expenditure in very wealthy households is on food. The more interesting feature of **Table 5** is the insignificance of differences in expenditures on food purchases between the very poor non-farming, subsistence and surplus producers. All these groups of very poor households spent a very similar amount (about R568 p.a.e.) on purchasing food. **Table 5** indicates that very poor farming households are as dependent on purchased food as non-farming households. Cash incomes remain important even for households that farm. A similar conclusion was reached in a study of agriculture and food security in South Africa, which argued that sources and levels of cash income are critical for food security, and not own-farm production.[11]

It is possible that farming households spending similar amounts on food to non-farming households but also producing some food may be better nourished. Yet studies of the impact of own-account farming on nutritional status in KwaZulu-Natal and of vegetable growing in Bophuthatswana found that most

farming households are not better nourished than non-farming households (Kirsten *et al* 1998 and 2003). Nevertheless, the role of farming as a source of security and as a safety net for poor and vulnerable groups is still emphasised by some analysts. For example, it is argued that the availability of own-farm produce for consumption provides a fallback in times of need, while Shackleton *et al* (2001) claim that the psychological value of land-based goods and services as a safety net is far greater than the physical value of the goods and services themselves.[12] In a study of households in Hlabisa, Murphy (1995) found that although pensions and remittances made the largest contributions to household incomes, most men and women identified farming as their most important income source, because pension and remittance income was irregular, while farming could be relied on. This perception of farming income as reliable seems misplaced, given the high risks associated with farming. The historical evidence is that the survival of almost all types of farms in South Africa has regularly been threatened by severe droughts, recurrent crop and livestock diseases, and extreme price fluctuations (Schirmer 2000).

While agricultural incomes do not add much to the total incomes of the majority of rural households, they are important for those with no other sources of cash income. May (1996) finds that agriculture comprises 81 per cent of the income of a category of people that he classified as "marginalised". This group accounts for 4 per cent of households and has no access to wages, remittances or public transfers. He concludes that agriculture represents an important safety net. As noted by Standing *et al* (1996), the conclusion that the marginalised group are heavily dependent on agriculture is tautological – by definition they do not depend on other income sources. Besides, while income from self-employment in agriculture may be regarded as providing a means of survival for a small minority of destitute households, it is unlikely to provide a path out of poverty. Keller (2004) finds that 45.3 per cent of households classified as poor in 1993 but not in 1998 moved out of poverty due to changes in the labour-market earnings of household members, while only 3.4 per cent did so due to changes in farm earnings.

One conclusion based on analyses such as May's (1996) and De Swardt's (2003) is that additional support to small-scale agriculture is important in order to improve the security of the poorest, most vulnerable households. However, policy-makers could also consider the possibility that the destitution of these marginalised rural households is the outcome of failures in the distribution of public transfers in South Africa, and a major effort to improve and simplify the distribution of social-security transfers would achieve more sustainable security for the poorest than continued neo-liberal advocacy of the benefits of entrepreneurial efforts in small-scale agriculture.

Who Farms? Differences Between Farming and Non-Farming Households

Within the very poor group of black rural households, we considered three types – non-farming, subsistence farming and surplus farming. Reliable access to non-farm income sources is a critical factor that enables some households to farm productively. Access to these income sources depends heavily on patterns of labour demand, which in turn depend on the effectiveness of industrial strategy, levels of investment in rural infrastructure, macroeconomic performance, and fiscal policy. However, access to non-farm incomes is also influenced by the demographic composition of households (household size, and age and gender of household members), so some households are structurally better placed to acquire non-farm incomes and to farm than others

Sources of Income

Farming almost always requires significant start-up capital, as well as access to working capital to purchase inputs and smooth shocks. Credit constraints are widely believed to constrain production. For example, a study of the experience of land reform in the Northern Cape province notes that lack of financing has prevented some land reform beneficiaries from realising the productive potential of their land, and concludes that many households are simply too poor to farm (Bradstock 2005). Historical research shows the importance of access to cash income sources in differentiating those South African farmers who farmed intensively and achieved the highest incomes (Schirmer 2000).[13]

The levels and sources of income available to the three groups of households are very different, as shown in **Table 6**. Even excluding farm income, farming households have higher incomes than non-farming households, indicating an association between higher incomes and the capacity of households to farm. Secondly, farming households, and surplus farming households in particular, have *more diversified income sources* than non-farming households, although they remain heavily reliant on salaries, wages and remittances and public transfers. A high proportion of surplus-farming households do *not* rely on a single main income source (28 per cent), compared to only 6 per cent of non-farming households; and farming households receive a larger proportion of their income from sources other than salaries, wages and remittances and public transfers. In particular, a larger proportion of farming households receive income from non-farm self-employment. It is possible that this is due to the way in which self-employment income was disaggregated into farm income and other self-employment income.[14] However, it could be that the factors allowing a few households to become relatively productive farmers, such as access to working capital and availability of labour, also enable them to participate more successfully in other self-employment activities.

Table 6: Composition of the Income of Very Poor Black Rural Households

	Very Poor Non-Farming Households	*Very Poor Farming Households*	
		Subsistence Producers	*Surplus Producers*
Mean income per household, excludingfarm income (Rands in the last 12 months)	4878	5958	5993
Number of income earners per household	1.07	1.22	1.45
Income as percentage of total income			
Salaries, wages and remittances	62	52	49
Public transfers	30	36	28
Agricultural income	0	2	6
Other self-employment income	3	4	9
Capital income	1	1	5
Other	3	5	3
Percentage of households receiving any income from			
Salaries, wages and remittances	81	77	79
Public transfers	23	33	34
Agricultural income	0	12	100
Other self-employment income	6	10	17
Capital income	2	2	7
Other	19	23	28
Percentage of households with this as a *main income source**			
Salaries, wages and remittances	69	55	38
Public transfers	19	24	24
Agricultural income (5)	0	0	3
Other self-employment income	4	4	3
Capital income	0	1	3
Other	2	3	0
No main income	6	13	28
Very poor non-farming households: N = 649; very poor subsistence producers: N = 728; very poor surplus producers: N = 29.			

* Following Dieden (2003) a main income source is defined as one that contributes 67 per cent or more of the total household annual income.

Thirdly, farming households, and especially surplus-producing farmers, typically have more household members bringing income into the household. This may simply be because farming households are often larger than non-farming households, and contain more working-age adults, as shown in **Table 7**. Finally, a larger proportion of farming households receive income in the form of public transfers. The old-age pension is particularly important: it makes up 78 per cent

of the public transfers received by all very poor households in the IES 2000. In addition to providing a large proportion of the income of poor people in South Africa, the old-age pension represents a reliable income source, and is thus used as a basis for credit in local markets (Case and Deaton 1998). The larger proportion of farming households receiving income from public transfers thus signals the importance of a reliable source of cash income as a prerequisite for involvement in farming.

In sum, **Table 6** shows that farming households have higher incomes than non-farming households, and receive these incomes from a larger number of sources. The latter is particularly true of surplus-producing farmers. Lower reliance on a single income source diversifies the households' financial risk, which is in turn likely to be important in enabling them to farm productively.

Availability of Labour

There is very little discussion in the literature regarding the demographic differences between households who farm and those who do not. However, Andrew *et al* (2003b) note that a shortage of labour due to the absence of male labour and constraints on female labour may be one cause of the underfarming of arable land in the rural areas of South Africa.[15] Similarly, Zimmerman (2000) notes that the poverty alleviation potential of land redistribution depends heavily on the assumption that there is surplus rural labour. He argues that time spent on household maintenance tasks such as fetching wood and water in rural areas contributes to what he terms "time poverty" and that a shortage of labour may represent a constraint on poor people benefiting from improved access to land.

The IES 2000 data suggests that labour availability is indeed a constraint on participation in agriculture, particularly agricultural production for the market. **Table 7** presents the mean household size, number of working-age adults, available labour and number of children per household for very poor farming and non-farming households. In this table, the working age is defined as between 25 and 54 years. Although the legal working age in South Africa is 15 years, labour force data indicate that participation rates are extremely low in the 15 to 24 year group. For example, the September 2004 Labour Force Survey found a participation rate of only 28 per cent among 15 to 24 year olds, compared to 71 per cent for 24 to 25 year olds, 74 per cent for 25 to 44 year olds and 67 per cent for 45 to 54 year olds. This was confirmed by the IES 2000: 70 per cent of those earning salaries and wages in the 'very poor' group were between 25 and 54 years old.[16]

Table 7: Very Poor Black Rural Households by Household Size, Number of Working-Age Adults, Labour Availability, and Number of Children

	Very Poor Non-Farming Households	*Very Poor Farming Households*		
		All	*Subsistence Producers*	*Surplus Producers*
Mean household size	5.6	7.0	6.9	7.3
Mean number of working-age adults	1.42	1.61	1.60	1.79
Mean labour available*	2.51	2.98	2.96	3.47
Mean number of children	2.39	3.05	3.05	3.07
Very poor non-farming households: N = 649; all very poor farming households: N = 757; very poor subsistence producers: N = 728; very poor surplus producers: N = 29.				

Farming households are larger than non-farming households; and within the group of farming households, the surplus-producing ones are larger than the subsistence ones. The pattern is the same for available labour and number of working-age adults.[17] While the mean number of children per household does not appear to differ significantly for surplus- and subsistence-farming households, those that farm have more children than those that do not.

Although **Table 7** suggests that availability of labour constrains household farming, it has been argued that if rural households could get additional land, migrant workers would then be encouraged to return from cities to farm (Lipton and Lipton 1993). This is unlikely to occur, for two reasons. First, as we have seen there are large differentials between incomes from agricultural self-employment and wage employment incomes**,** therefore the opportunity cost of diverting labour from wage employment to own-account farming is very high (MERG 1993). Unless the income-earning potential of agriculture is very significantly improved, it seems unlikely that working-age adults currently employed in the non-agricultural sectors will choose to leave to work on family farms. Secondly, Zimmerman (2000) notes that most studies indicate that the desire for land expressed by respondents in rural areas does *not* reflect an interest in farming. This finding is confirmed in a recent study by the Centre for Development and Enterprise (CDE, 2005), which indicates that the demand for land is driven largely by the desire for a place to stay, rather than a place to farm.[18] The study finds little evidence of a propensity to shift into agricultural self-employment: only 9 per cent of rural black people currently not involved in farming expressed an aspiration to farm. Zimmerman (2000) concludes that the labour constraints in rural areas are likely to persist, even if more households obtain access to land.

The larger number of children in farming households suggests that access to child labour may influence involvement in farming. In a study on children's work activities in South Africa, Stats SA (1999b) found that 51 per cent of children

in rural areas aged five to seventeen years were involved in economic or non-economic work activities. While farming occupied three hours per week for only 7 per cent of black children (urban and rural), 29 per cent were involved in fetching wood and water. Thus, while children may not be involved in labour on family farms themselves, the availability of child labour relieves adults of some of the burden of household maintenance tasks, thus freeing their time for farming. Of course, it is possible to hire labour in order to overcome shortages of family labour, and a far larger number of black rural households do employ domestic servants (and other wage workers) than is generally recognised (Sender *et al* 2005). However, this requires financial resources, and so once again access to non-farm cash income is the key to enable households to overcome the constraints that prevent them from farming.

Presence of Working-Age Men

Farming and non-farming households also differ in terms of the relative number of men and women they have. **Table 8** provides the male:female ratios for very poor farming and non-farming households, as well as the percentage of households that lack any working-age men.

Table 8: Very Poor Black Rural Households: Male:Female Ratios and Percentage of Households with No Working-Age Men

	Very Poor Non-Farming Households	*Very Poor Farming Households*		
		All	*Subsistence Producers*	*Surplus Producers*
Male:female ratio (mean)	0.49	0.54	0.54	0.65
Households with no working-age men (%)	56	51	51	45
Very poor non-farming households: N = 649; all very poor farming households: N = 757; very poor subsistence producers: N = 728; very poor surplus producers: N = 29.				

Male:female ratios in farming households are higher than in non-farming households, and a smaller proportion of farming households contain no working-age men. However, the presence of more men in farming households may not reflect direct access to more male agricultural labour, since most farm labour in South Africa, as elsewhere in Africa, is performed by women, and men may be unwilling to undertake a range of farming tasks which they regard as 'unmasculine' (Walker 2002). Instead, farming households may be more likely to contain men because men have better access to land than women, so that households without an adult male face social and legal difficulties in acquiring a farm. "Access to land is mediated through patriarchal structures of authority

and control" and women are restricted from inheriting land (Walker 2002:28).[19] However, the SALDRU survey provides some data on the relationship between gender and access to land, albeit using an unsatisfactory classification of households by gender of the household's 'head',[20] that suggest that the relationship between access to land and gender is rather complex. **Table 9** pesents this data and indicates that access to land does not always require the presence of an adult male.

Table 9: Percentage of Rural African Households with Access to Land by Gender and Presence of Household Head

Male Headed (Head Present)	*Male Headed (Head Absent)*	*Female Headed (Head Present)*	*Female Headed (Head Absent)*
21.4	36.8	28.3	28.7

Source: Aliber and Johnson 1997

Besides, the male:female ratio in surplus-producing households is very much higher than in subsistence-producing ones (0.65 vs. 0.54), although *all* the households in these two groups have obviously succeeded in acquiring land to farm. It is thus not only preferential access to land that permits households containing relatively more men to farm. Other causal mechanisms may be at work. For example, households containing men are also likely to be financially better off because male wage incomes are considerably higher than female wage incomes in South Africa (Budlender 1998). Households containing more men are thus likely to be better able to afford to farm.[21]

The gender differences between farming and non-farming households also reflect perceptions of gender roles and intra-household power relationships. Cross and Friedman (cited in Walker 2002) note that men generally see themselves as providers of cash incomes and savings, while women are regarded as the immediate providers of food. Access to male incomes can thus be regarded as freeing women from the need to enter the labour market, and allowing them to farm. Viewed differently (as in Sender and Smith 1990), some rural men (in poor rather than very poor households) are able to appropriate the labour of women and children and resist their proletarianisation, forcing them to work for very low returns on family farms rather than enter the labour market.

Presence of Pensioners

It has already been noted that farming households rely more heavily than non-farming households on public transfers as a source of income, and that access to pension income in particular may be critical in overcoming the capital constraints that prevent poor households from farming. Unfortunately, the real

value of old-age pensions in South Africa declined by approximately 20 per cent between 1993 and 2002 (Seekings and Nattrass 2004).

The social pension in South Africa is means-tested and is theoretically available to all men over 65 and women over 60 years of age. A larger proportion of farming households contain a pension-eligible person, compared to non-farming households, as may be seen in **Table 10.** More importantly, this table also shows that a larger proportion of farming households actually receive the pensions to which they are entitled.

Table 10: Very Poor Black Rural Households: Access to Pensions

	Very Poor Non-Farming Households	*Very Poor Farming Households*		
		All	*Subsistence Producers*	*Surplus Producers*
Percentage of households containing pension-eligible household members	21	29	30	28
Percentage of households receiving pensions	16	23	23	21
Very poor non-farming households: N = 649; very poor farming households: N = 757; very poor subsistence producers: N = 728; very poor surplus producers: N = 29.				

The analysis of income sources in this article suggests that pensions are vitally important for those households that receive them. Indeed, 86 per cent of very poor households who receive a pension rely on it as their main income. However, pensions do not always reach households who are eligible for them, and up-take of pensions is lower among the poorer groups. According to the IES 2000 data, only 68 per cent of very poor pension-eligible men and women received their pensions, while 80 per cent of the poor, non-poor and wealthy received theirs. Administrative constraints, including the need to provide documentary evidence of age, can prevent many poor people from accessing pensions (Sender 2000).[22]

Conclusions

Despite the inadequacies of the national survey evidence, it is possible to conclude that own-account farming has for some time made only a small contribution to the income of the majority of black South Africans. It contributes less than 10 per cent to rural income, and the majority of households make no income whatsoever from such farming. Some may supplement their diets by consuming crops they have cultivated, but they remain as reliant on purchased food as

non-farming households. While farming may be significant as a risky activity of last resort attempted by the very few rural households whose members have no other source of cash income, for most poor rural households it is involvement in the labour market and access to public transfers that determine prospects for survival.

Farming households differ structurally from non-farming ones. They contain more adult men, so they are more likely to have access to the higher incomes received by males. They also contain more old people, resulting in better access to old-age pensions. In addition, their access to pensions is greater because they have the resources to negotiate means-testing, corruption and other administrative obstacles. Farming households also derive their higher incomes from a larger number of sources than non-farming households.

This suggests that even with access to land, *some* households are much less likely to be able to farm than others. The poorest rural households and the rural women, who are the poorest people in South Africa, are justifiably sceptical about the possibility that self-employment in agriculture could offer them an escape route from poverty. An analysis of micro-survey data collected about a decade before IES 2000 (Sender 2002) concluded that improved opportunities for rural wage employment, both in agriculture and other rural sub-sectors, would offer them more realistic survival prospects. The IES 2000 data confirms this conclusion.

If it is agreed that the rural poor are dependent on wage incomes and public transfers, then there is a case not only for universalised social security transfers (Samson *et al* 2002) and the allocation of substantial additional resources to improve the health, education and bargaining power of poor rural female labour market entrants, but also for other forms of state intervention. These interventions are required to: promote wage labour intensive industries and agro-industries; improve rural infrastructure (such as irrigation and roads); and provide direct and immediate wage employment in construction, as well as incentives to increase output on wage-labour-intensive farms. Although many analysts such as Lipton and Lipton (1993) and Van den Brink *et al* (1996) believe as an article of faith that the reallocation of land from large to small farms will create substantial employment, they, as well as most other advocates of agrarian reform, have paid insufficient attention to those macroeconomic policies, sectoral investments, and legislative and social expenditure initiatives that would be more relevant to the poorest rural people.

One cost of the widespread and persistent advocacy of the familiar mix of neoliberal policies to promote rural self-employment – credit, subsidised inputs, extension services, and easier market access (through rent and purchase) to 'assets'[23] – is the continued neglect of policy initiatives to increase the bargaining power of the poor in wage-labour markets, as well as the failure to rethink the role of the state in accelerating levels of rural investment, raising overall levels of demand, and tightening the markets for unskilled labour. The positive arguments

in favour of these neglected policy initiatives have not been made here, but have been elaborated in earlier work (MERG 1993; Sender, Cramer and Oya 2005).

Notes

1. Earlier versions of this article were submitted as an MSc dissertation in the Economics Department at SOAS, University of London, by Kim Palmer in September 2005 and presented by both authors at the Institute of Social Studies conference "Land, Poverty, Social Justice and Development" at the Hague (January 12–14, 2006).
2. The well-known problems with defining "household heads" and indeed "households" are ignored, as is the fact that different respondents within "households" will give very different answers to questions about monthly or annual expenditures (Guyer and Peters 1987; O'Laughlin 1995; Sender 2002).
3. MERG (1993), Standing *et al* (1996), Leibbrandt *et al* (1996), Aliber and Johnston (1997), Carter and May (1999), Taylor and Cairns (2001), Lahiff and Cousins (2005).
4. To compare the expenditure levels of households composed of different mixes of adults and children, expenditure is converted to 'per adult equivalents': a household of given size and demographic composition is taken to have the same needs as a given number of adult males. Woolard and Leibbrandt (1999) use an equivalence scale of the form $E = (A+\alpha K)^{\theta}$, where θ is the number of adult equivalents, A the number of adults and K the number of children 15 years and younger. They find that adjustments to á and è have little impact on the proportion of households identified as poor, and proceed to use $\alpha=0.5$ and $\theta = 0.9$. These values are used here.
5. Livestock holdings and sales were not taken into account in the classification of subsistence- and surplus-producing households. Note that the term 'subsistence' covers farmers selling up to 24.9 per cent of their production and is therefore potentially misleading.
6. Of course, it is dangerous to hypothesise about 'aims' or intentions on the basis of *ex-post* data; no such hypotheses are central to the arguments of the paper. Farmers who regularly fail to sell very much (or any) of their output may well have hoped or intended to sell all of their produce.
7. These are not the only income sources recorded in the IES 2000, and so the sum of their contributions to income is not 100 per cent. A more complete analysis of the composition of incomes for the very poor group is presented later in this paper.
8. For other examples, see Nattrass and Nattrass (1990), May (1996), Ardington and Lund (1996).
9. However, this study also found that farm income was a far more important source of income for the richest households, while poor farmers on the irrigation scheme relied on wages and remitted wage incomes, as well as pensions, far more than on their farm incomes (Machethe 2004:Tables 4 and 5).
10. Price data were collected for basic consumption items such as salt, sugar, oil, soap, candles and dry beans from 18 shops in a small Mpumalanga survey area between December 1993 and January 1994 (Sender 2002). There were very large differences indeed in the prices for these basic items in different shops in the same vicinity, but the prices in the nearby 'white' town of Hoedspruit were far lower than any of the rural ones. Rural shopkeepers also charged very high and varying effective rates of interest to different categories of consumer for the purchase of basic food (maize meal).
11. A study of rural households in Mount Frere in the Eastern Cape found that although almost 90 per cent of surveyed households cultivated maize, only a tiny proportion of these households (5 per cent) was self-sufficient in this staple food for more than six months a year. Moreover, purchased food accounted for a higher proportion of the total expenditures of Mount Frere than was the case for non-farming households in nearby areas. The author concludes: "Thus, despite available arable land and the fact that most households indeed utilize the land, land-based livelihood strategies/subsistence agriculture as an attempt to improve food security is not successful" (De Swardt 2003:17).

12. It has also been argued that farming a tiny parcel of land will significantly increase the bargaining power (reservation wage) of those seeking waged work, raising the level of the real wages of the rural poor (IFAD 2001:86). However, no empirical evidence covering trends in, or the distribution of, rural wages between landed and landless households is available to demonstrate these effects.
13. Schirmer (2000:155) quotes Beinart: "cash income is vital for any success in agricultural ventures and is more important than access to land alone". Similarly, Marcus *et al* (1996) note that surplus producers invariably have more sources of income and more cash income. De Haan (1999) notes that access to cash remittances from migrant workers is often vital in promoting agricultural production.
14. Recall that farm income was not recorded as a separate category in IES 2000. Farm income was calculated from declared sales of farm products, and declared self-employment income was then disaggregated into farm income and other self-employment income based on the difference between calculated farm income and declared self-employment income. See Appendix 2 for details.
15. Case studies in Transkei suggest that the death of a husband and the absence of children were factors that coincided with the discontinuation of field cultivation. More generally, field cultivation was abandoned due to resource shortages, particularly in cattle and labour (Andrew and Fox 2004).
16. One explanation for low levels of labour-force participation among the youth (aged 15 to 24 years) may be extended time taken to complete schooling. Fifty-one per cent of those not active in the labour force claimed that the reason was that they were scholars (Stats SA 2004).
17. Available labour is defined here as the number of working-age adults plus 0.5 times the number of household members aged between 10 and 25 years.
18. Respondents are likely to differ in their views on the prospects for farming: "while some older men, or men who believed that women should work the land, place considerable weight on agriculture, many women and younger people are far more sceptical about agriculture's importance and are fearful of the implications of agricultural initiatives [promoting self-employment] for their own position and prospects in society" (Breslin and Delius 1996:90).
19. See Aliber and Johnston (1997) and Sender and Johnston (2004) for discussion of women's access to land, and additional references.
20. Much of the literature on poverty in South Africa and internationally focuses on female-headed households as being particularly disadvantaged (Woolard and Leibbrandt 1999).
21. The way in which households are defined in the IES 2000 limits the usefulness of the absence of males as an indicator of lack of access to male incomes, since no distinction is made between those absent men who regularly support rural households financially and those who do not. There is a case for redesigning survey methods to define households in terms of the economic and financial relationships that exist between members, rather than as a group of people who have recently 'lived together' (Sender 2000).
22. "One of the major problems with the present social grant system is that many severely poor people are excluded. The likelihood of chronically and severely poor people accessing social grants is lower than for any other segment of the population. The administrative infrastructure for the existing grant system is cumbersome, under-resourced" (De Swardt 2003:41). See also Lund (2006:165), who argues that millions of poor South Africans do not receive social assistance transfers and that "the system is uneven and patchy".
23. These policies have been criticised in some detail in Sender (2003).

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Appendix 1: The Recording Of Agricultural Activities And Incomes in the IES 2000

The Recording of Volumes of Production, Consumption and Sales of Farm Produce

The IES asks questions about the amount of maize, other grains, milk, eggs, fruit, vegetables and beer produced, consumed and sold by the household. There are some inconsistencies in the recording of this data as reflected in **Table A1.1**.

Table A1.1: Anomalies in the Recording of Farm Production, Consumption and Sales in the IES 2000

	Maize	*Other Grains*	*Milk*	*Eggs*	*Fruit*	*Vege-tables*	*Beer*
Number of households declaring sales:	154	44	16	26	40	131	71
Number of households for whom production exceeds consumption:	156	34	13	34	26	112	54
Percentage of households declaring production for whom *consumption* plus sales exceeds production	2	4	5	7	4	4	6
Percentage of households declaring *sales* for whom consumption plus sales exceeds production	27	34	31	42	50	29	30
All black rural households: N = 9 376.							

Agricultural production does not always equal consumption of agricultural produce plus sales. For example, the number of households declaring sales does not equal the number of households for whom production exceeds consumption. In particular, there are a number of households for whom consumption plus sales exceeds production. These households are concentrated among those households who claim to have sold produce in the last year. So, for example, while only 2 per cent of those households who claimed to have produced any maize recorded consumption and sales that exceeded production, 27 per cent of those households who claimed to have sold maize did so.

In the analysis in this paper, the data on volume of sales in the IES is taken at face value. However, the discussion above indicates that the volume of sales of

farm produce is certainly not accurately recorded in the IES, and conclusions based on this data should thus be treated with caution.

The Recording of Values of Agricultural Sales

It was shown above that the volume of farm sales appears to be recorded poorly in the IES. The *value* of sales is also not consistently recorded. For example, 154 households in the sample declared that they sold some maize, but only 112 households recorded any value for the maize sold.

Table A1.2: Inconsistencies in the Recording of Value of Agricultural Sales in the IES 2000

	Maize	*Other Grains*	*Milk*	*Eggs*	*Fruit*	*Vegetables*	*Beer*
Number of households declaring sales:	154	44	16	26	40	131	71
Percentage of households declaring sales but no value for sales	27	41	19	38	50	24	56
All black rural households: N = 9376.							

Inconsistent recording of the value of farm sales has implications for the calculation of farm income, which are discussed in Appendix 2.

The Recording of Agricultural Income

Agricultural income is meant to be included in self-employment income in the IES. However, Leibbrandt *et al* (1999) have noted that agricultural income is not captured well by the survey. **Table A1.3** confirms this conclusion.

Table A1.3: Percentage of Black Rural Households Declaring Any Self-Employment Income

	All Households	*Households Declaring Sales of Farm Products*	*Households Declaring No Sales of Farm Products*
Percentage of households declaring self-employment income:	10	23	8
All households: N = 9376; households declaring sales of farm products: N = 827; households declaring no sales of farm products: N = 8549.			

Of those households who declared that they sold farm products, only 23 per cent recorded any self-employment income. That said, the proportion declaring self-employment income is significantly higher for those households who declared sales of farm products than for those households who declared no sales. This suggests that agricultural income is captured inconsistently in the IES. The higher proportion declaring self-employment income among farming households suggests that some farming households did declare their agricultural income as self-employment income. However, the fact that only 23 per cent of this group declared self-employment income suggests that the majority did not.

If agricultural income is not well captured by the IES 2000, it would be expected that expenditure and income would not balance. And indeed, total expenditure exceeds total income for households who declared sales of farm products by 10 per cent of total expenditure, but by only 2.6 per cent for households who declared no sales of farm products.

Table A1.4: Divergence Between Total Income and Total Expenditure for Black Rural Households

	All Households	*Households Declaring Sales of Farm Products*	*Households Declaring No Sales of Farm Products*
Expenditure less income as a proportion of total expenditure:	3.5	10	2.6
All households: N = 9376; households declaring sales of farm products: N = 827; households declaring no sales of farm products: N = 8549.			

Appendix 2: The Calculation of Farm Income and Disaggregation of Self-Employment Income into Farm Income and Other Self-Employment Income

One element of the analysis presented in this paper is the assessment of the contribution that farm income makes to total income. In order to determine this, farm incomes had to be calculated, and recorded self-employment income disaggregated into farm income and other (non-farm) self-employment income.

The Calculation of Farm Income

Many households declared that they had sold agricultural products, but did not declare a value for these sales. In order to estimate farm income, it was necessary first to assign a value to all sales. The median value per unit of recorded sales was assigned to those households who did not declare a value for their sales, and used to calculate the farm incomes quoted in the body of the paper. As a sensitivity test, farm income was also calculated using the value per unit of sales earned by

75 per cent of the sellers. This has almost no impact on the importance of farm incomes, as discussed in the main paper.

Table A2.1: Value per Unit of Sales for Agricultural Produce

	Maize	*Other Grains*	*Milk*	*Eggs*	*Fruit*	*Vege-tables*	*Beer*
Median	1.40	2.50	2.75	5.50	2.67	2.50	2.00
Earned by 75 % of sellers	2.25	5.60	3.00	21.00	5.00	8.80	3.74
Minimum	0.04	1.5	2.00	2.64	0.4	0.17	0.27
Maximum	201.00	20.00	3.00	600.00	100.00	333.00	60.00
All black rural households: N = 9376.							

Table A2.2: The Disaggregation of Self-Employment Income into Farm Income and Other Self-Employment Income for Households Who Declared Sales of Farm Products

	Number of house-holds	Assumption
No self-employment income declared	637	Farm income was not declared. The household has no other self-employment income.
Calculated farm income equals declared self-employment income	24	Farm income was not declared. All declared self-employment income is from other self-employment.
Declared farm income equals declared self-employment income	49	Farm income was declared. All declared self-employment income is farm income. The household has no other self-employment income.
Calculated farm income less than declared self-employment income	117	Farm income was declared. Declared self-employment income includes farm income and other self-employment income. Other self-employment income equals declared self-employment income less farm income.
Households declaring sales of farm products: N= 827.		

If farm income had been consistently included in self-employment income by respondents, then other self-employment income could be determined simply by deducting calculated farm income from declared self-employment income. However, as discussed in Appendix 1, farm income did not appear to be consistently included in self-employment income. In addition to households declaring sales of farm products but no self-employment income, it was found that in a number of cases calculated farm income exceeded declared self-employment income. It was assumed that farm income had already been included in self-employment income for those households for whom self-employment income equalled or exceeded

farm income. All the assumptions used to disaggregate self-employment income into farm income and other self-employment income are given in **Table A2.2**.

Table A2.3: Divergence Between Total Income and Total Expenditure, and the Impact of Including Calculated Farm Income

	All Households in Sample	*Those Households Who Declared Sales of Farm Products*	*Those Households Who Declared No Sales of Farm Products*
Total recorded income Total expenditure	134 223 129 139 062 910	14 820 562 16 482 653	110 402 567 122 580 257
Expenditure less recorded income as a proportion of total expenditure Undeclared farm income*	3.5 1 405 169	10 1 405 169	2.6 0
Expenditure less income (including undeclared farm income) as a proportion of total expenditure	2.5	1.6	2.6
All households: N = 9376; households declaring sales of farm products: N = 827; households declaring no sales of farm products: N = 8549.			

* Undeclared farm income is the calculated farm income for those households declaring farm sales but no self-employment income, and for those for whom calculated farm income exceeds declared self-employment income.

As shown in **Table A2.3** above, including farm income for those households who record farm income but no self-employment income and for those for whom farm income exceeds the recorded self-employment income eliminates much of the gap between total income and total expenditure noted in Appendix 1.

Table A2.3 indicates that poor recording of farm income may be responsible for the larger gap between income and expenditure noted for those households who declared sales of farm products.