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DOES SOUTH AFRICAN AGRICULTURE RECEIVE TOO MUCH SUPPORT? --A COMPARISON[1]

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This article puts agricultural support in South Africa in perspective with some selected countries of the developed world. The comparison of support data between countries,bearing in mind the recognised limits of these indicators, gives an indication of the relative extent of agricultural support in South Africa. With the exception of Australia and New Zealand, South Africa had a relatively low degree of support compared to the other selected developed countries. However, bearing in mind the low per capita income of the majority of South Africans, the question still remains to what extent South Africans can afford even the current relatively low levels of support within the agricultural sector.

WORD SUID-AFRIKAANSE LANDBOU TE VEEL ONDERSTEUN? - 'N VERGELYKING
Hierdie artikel plaas landbou-ondersteuning in Suid-Afrika in perspektief met die ondersteuningsvlakke in sekere lande van die ontwikkelde wêreld. Die vergelyking van ondersteuningsvlakke tussen lande, inaggenome die beperkings van hierdie indikatore, verskaf 'n goeie aanduiding van die relatiewe omvang van landbou-ondersteuning in Suid-Afrika. Met die uitsondering van Australië en Nieu Seeland, het Suid-Afrika 'n lae vlak van ondersteuning in vergelyking met ander geselekteerde lande in die ontwikkelde wêreld. As die lae per kapita inkome van Suid-Afrika ingedagte gehou word, kan die vraag gevra word, of Suid-Afrikaners selfs hierdie lae vlakke van ondersteuning kan bekostig.

1. Introduction

Agriculture is heavily subsidised and protected in most of the major industrial countries. Some of the effects are obvious through the heavy costs imposed on national budgets. Other effects, such as those on consumers or on overall economic efficiency, are less obvious but are nonetheless extremely important.

Problems created by these protectionist domestic policies have brought agriculture to the forefront of the Uruguay Round of trade negotiations under the General Agreement on Tariffs and Trade (GATT) (Harwood and Bailey, 1990). This debate is part of a larger effort to reform the global trading system. The effort, while difficult and slow moving, has been given new urgency by economic stresses reflected in national debt burdens, large trade deficits and surpluses, as well as stock market instabilities. Much needed reform will be the cornerstone of broader attempts of trade liberalization and reform under GATT. If these attempts fail, the consequences for world markets and global economic growth may be quite serious (Runge, 1988).

One commonly held view is that, if they meet certain standards of efficiency, farmers should be able to earn incomes that are comparable with those of other workers. Usually public intervention is required to achieve governments' income objectives, which are being pursued in different ways in different countries. Agricultural resources are slow in adjusting to changing market conditions because of structural, biological, climatic and other constraints. This implies instability of prices, a low return to resources and claims for support on the part of farmers (Hathaway, 1987).

On the other hand is the fact that the effects of protection almost always fall most heavily on the poorest sections of society. It is they who, because of low income, have to spend the highest proportion of their household budget on necessities like clothing and basic food products, and it is exactly in these areas that protection is most common and intense (GATT, 1993).

In a previous study by Helm and Van Zyl (1994) the total support received by the South African agricultural sector during the period 1988/89 to 1993/94 was calculated in terms of the Producer Subsidy Equivalent (PSE). The composition and changes thereof were also analyzed. This paper has a different objective, namely to evaluate agricultural support in South Africa and to put it in perspective with the rest of the developed world. The basic question addressed is: How does agricultural support in South Africa compare with selected countries in the world?

The outline of this paper is as follows: The extent of agricultural support from 1988/89 to 1993/94 is discussed first. This is followed by a comparison between countries, focusing on both PSE's and total transfers. Affordability of agricultural support is analysed next. Some brief conclusions are provided at the end.

2. Agricultural Support in South Africa, 1988/89 to 1993/94

In the calculation of the total support to agriculture in South Africa, the Producer Subsidy Equivalent (PSE) was used to determine the internal support received by producers. The PSE was not calculated on a product-specific basis, but for agriculture as a whole. These indicators, however, do not provide a complete picture of all transfers generated by agricultural policies, since they neither take into account all the output of the agricultural sector, nor all the income transfers due to policies. In order to complete the picture, it is necessary to look at all transfers from consumers and taxpayers in respect of all agricultural commodities.

Figure 1 provides this information on total agricultural support in South Africa during the period 1988/89 to.1993/94. The different calculations and support mechanisms are described in detail in Helm (1994), and are not repeated here. The question of how the information in Figure 1 compares with other countries is subsequently addressed.

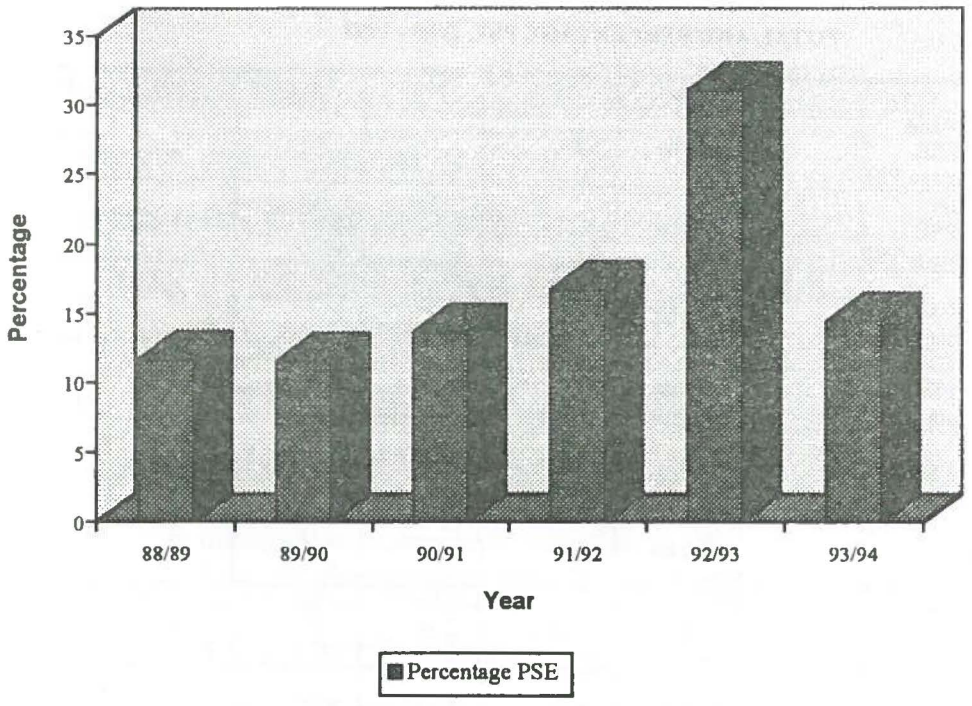


Figure 1: Total domestic support (1988/89 - 1993/94)

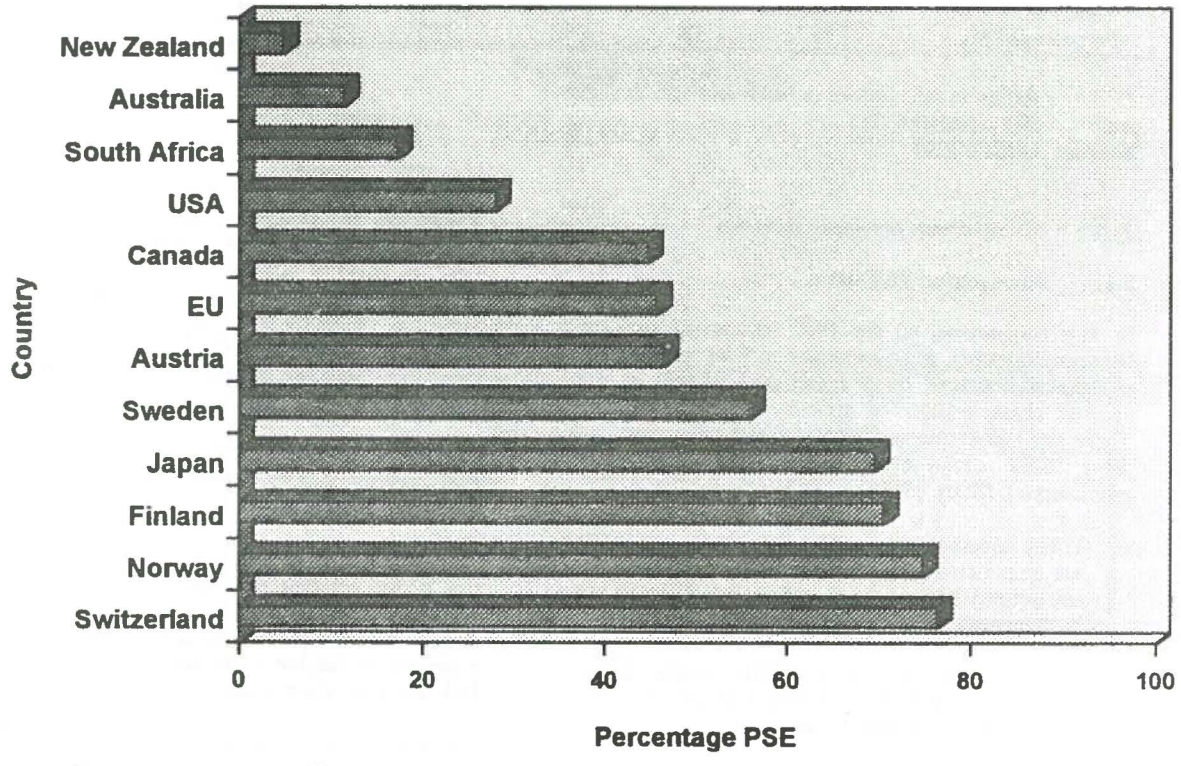


Figure 2 : Percentage PSE : Average 1988 - 1992

TABLE 1: TOTAL AND PERCENTAGE PSE, 1988 - 1993

Country	Unit	1988	1989	1990	1991	1992	1993
AUSTRALIA							
Total PSE	US$ bn	1.88	1.23	1.54	1.47	1.30	n.c.
Percentage PSE	%	9	9	13	14	12	n.c.
CANADA							
Total PSE	US$ bn	6.29	6.10	8.74	8.11	6.76	n.c.
Percentage PSE	%	43	40	49	48	44	n.c.
EU							
Total PSE	US$ bn	69.23	69.69	82.30	84.50	85.40	n.c.
Percentage PSE	%	46	41	46	49	47	n.c.
FINLAND							
Total PSE	US$ bn	3.95	4.14	5.26	4.47	3.38	n.c.
Percentage PSE	%	72	69	72	72	68	n.c.
JAPAN							
Total PSE	US$ bn	36.52	33.30	29.82	30.88	35.70	n.c.
Percentage PSE	%	74	70	66	67	71	n.c.
NEW ZEALAND							
Total PSE	US$ bn	0.26	0.20	0.16	0.12	0.10	n.c.
Percentage PSE	%	7	5	5	4	3	n.c.
NORWAY							
Total PSE	US$ bn	2.58	2.44	3.03	3.06	3.06	n.c.
Percentage PSE	%	74	72	74	77	77	n.c.
SWITZERLAND							
Total PSE	US$ bn	4.74	4.11	5.23	5.20	4.64	n.c.
Percentage PSE	%	77	72	79	79	75	n.c.
USA							
Total PSE	US$ bn	34.41	30.87	33.02	31.43	33.85	n.c.
Percentage PSE	%	32	26	27	27	28	n.c.
SOUTH AFRICA*							
Total PSE	US$ bn	0.86	0.86	1.10	1.41	2.63	1.26
Percentage PSE	%	12	12	14	17	31	15

* Refers to calculations in Helm and Van Zyl (1994)
n.c. Not calculated
Source: OECD, 1993

3. Comparison between countries

3.1 Comparing PSE data

In any comparison of the PSE indicators, such as between countries, it is important to bear in mind the recognised limits of these indicators, as well as the specific characteristics of agriculture (OECD, 1992). There are many reasons why a direct comparison of these PSE's across countries can lead to incorrect conclusions (USDA, 1990) :

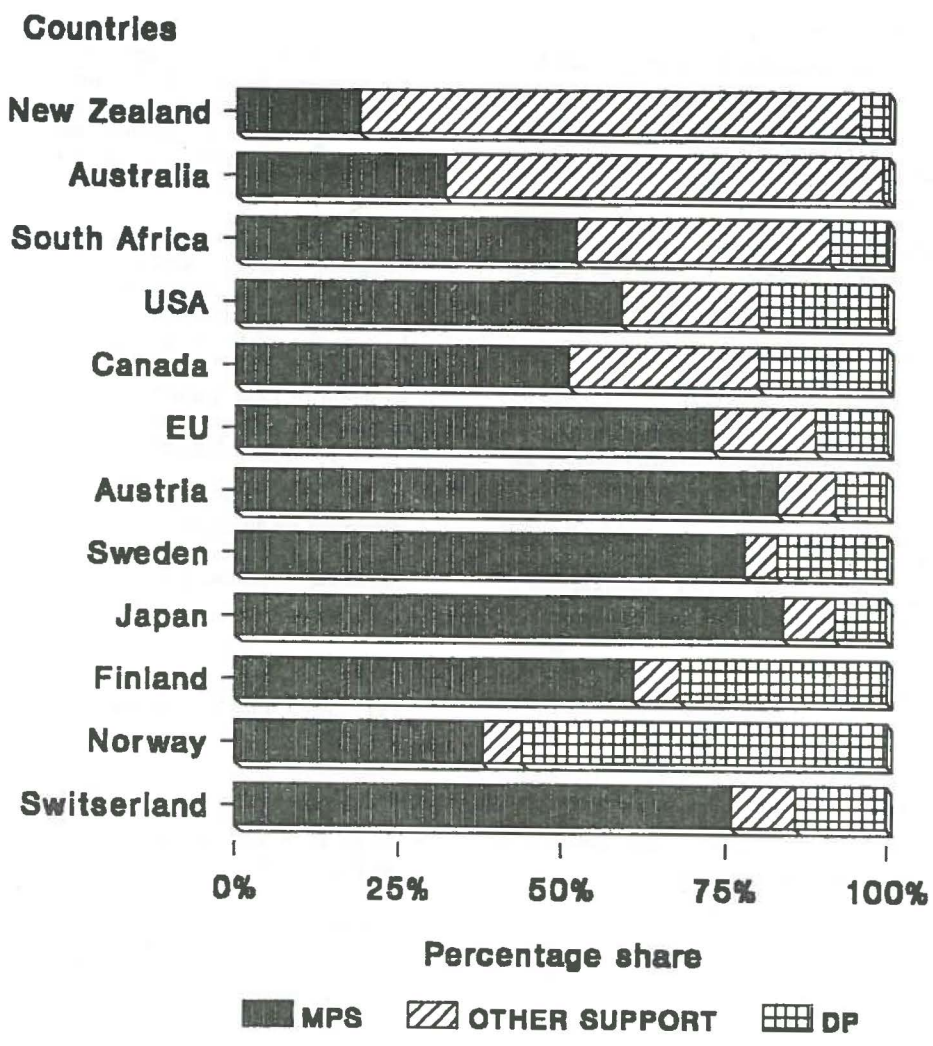
- Policy coverage may not be the same. If a major set of policies is included in the calculations for one country but not for the other, the PSE will not be comparable.
- Products and commodities differ widely across countries. Standardisation of weight units does not capture product quality differences.
- Classifying policies into categories is far from an exact science. Although the best category for policies was usually evident, a substantial minority were borderline cases which had to be classified with somewhat arbitrary judgements.
- Data availability and reliability vary widely across countries.

Assistance to producers in OECD countries, as measured by the total PSE, increased by 2.5 percent in 1992, to US$179 billion. In South Africa, taking the huge drought relief payments into account, the total PSE increased by more than 90 percent in 1992. This support, however, declined substantially in 1993, with a subsequent increase of only 5.5 percent as measured against 1991.

Table 1 gives the total PSE, as well as the percentage PSE, for selected OECD countries and South Africa for the period 1988 to 1993.

This information is depicted in Figure 2, which shows that of the selected countries, only New Zealand and Australia have a lower percentage PSE than South Africa. It is also only in the case of New Zealand where a continuous decline in the total, as well as percentage PSE, has been experienced during the past few years.

The composition of assistance in OECD countries in 1992 is presented in Figure 3, where the components of the nett total PSE are expressed as a percentage share of the total assistance in that year. The components are market price support (MPS), direct payments (DP) and other support, including indirect payments. In the case of South Africa, 1993 was used in a comparison with the other developed countries. The reason for this is the fact that in 1992, an unusual high amount of support



Source: OECD, 1993

FIGURE 3 **TOTAL PSE : COMPONENTS' SHARE**

TABLE 2: **TOTAL TRANSFERS BY COUNTRY** (billion US dollars)

Country	Transfers from taxpayers (1)		Transfers from consumers (2)		Budget revenues (3)		Total transfers (1)+(2)-(3)	
	1991	1992	1991	1992	1991	1992	1991	1992
Australia	1.2	1.1	0.6	0.4	0.0	0.0	1.8	1.6
Austria	1.2	1.3	3.0	3.0	0.1	0.1	4.1	4.2
Canada	6.7	5.4	4.1	3.7	0.0	0.0	10.8	9.1
EU	58.7	67.0	88.3	89.7	0.7	0.8	146.4	155.9
Finland	2.4	1.9	3.5	2.8	0.1	0.1	5.8	4.5
Japan	17.4	18.0	62.9	68.8	14.7	12.8	65.6	74.0
New Zealand	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Norway	2.1	2.2	2.0	2.1	0.1	0.1	4.0	4.1
Sweden	1.1	0.6	2.8	2.9	0.2	0.3	3.8	3.2
Switzerland	2.4	2.6	4.4	3.9	0.6	0.7	6.2	5.8
United States	54.6	63.4	27.4	28.6	0.9	0.9	81.1	91.1
South Africa	0.68	1.88 (0.73)	0.84	0.86 (0.65)	0.08	0.15 (0.13)	1.44	2.59 (1.25)

Figures in brackets represent 1993
Source: OECD, 1993

was allocated to the agricultural sector compared to previous years.

As in South Africa, market price support is by far the largest component of OECD assistance. This is the case in most, but not all, countries. Indirect payments and other means of support are more important in Australia and New Zealand, representing approximately two-thirds of total support in these countries. In Norway direct payments, which are paid out of public funds and include deficiency and stabilisation payments, account for more than half of the assistance allocated.

3.2 Comparing total assistance

Estimates of total transfers from consumers and taxpayers associated with the production of all agricultural commodities, and not only those to producers in respect of commodities covered by the PSE calculations, for the period 1990 to 1993 for the OECD countries as well as for South Africa, are presented in Table 2. These total transfers are defined as the sum of all transfers from taxpayers, plus all transfers from consumers, less budget receipts from tariffs on agricultural products.

Total transfers in the OECD area are estimated to have grown from US$330 billion in 1991 to US$354 billion in 1992 - an increase of 7 percent. This increase was due to an 11 percent increase in transfers from taxpayers, combined with a 3.5 percent increase in transfers paid by consumers. Budget revenues from import tariffs decreased by 9 percent (OECD, 1993).

In South Africa, total transfers increased from R3.96 billion in 1991 to R7.37 billion in 1992. During this period transfers from taxpayers increased by 186 percent, transfers paid by consumers increased by 5.5 percent whereas government revenue also increased substantially by almost 85 percent. As previously mentioned, 1992 was an abnormal year primarily due to the drought relief programmes announced during that year. In 1993, total transfers decreased to the somewhat more normal level of R4.06 billion.

Care should, however, be exercised in making comparisons across countries, due to the fact that there are considerable differences in national accounting procedures and budgetary practices. In addition, because the relative values of currencies in relation to each other move at different rates over time, the variation in total transfers expressed in an alternative currency will be different from that expressed in US dollar or in South African rand.

Of all the OECD countries, the EU, USA and Japan accounted for 44, 26 and 21 percent respectively of total assistance in 1992. In both these countries assistance increased in relation to their 1991 levels. Table 2 shows the data.

As shown in Table 3, total transfers per hectare of farmland in the OECD area increased significantly in 1992. Total transfers per hectare in Japan remained at more than 40 times the OECD average, compared to roughly one-hundredth the OECD average in Australia and New Zealand. The total assistance per hectare in South Africa compares well with Australia and New Zealand. It must be borne in mind that limited farm land available, together with the degree of intensive farming in the different countries, makes these comparisons rather meaningless. This wide range reflects differences in both absolute levels of total transfers and in the amount of land used in comparison with other resources in production.

TABLE 3: TOTAL TRANSFERS PER HECTARE OF FARMLAND

Country	US $/ha			R/ha		
	1990	1991	1992	1990	1991	1992
Australia	4	4	3	10	11	9
Austria	1 120	1 170	1 210	2 901	3 229	3 449
Canada	125	146	123	324	403	351
EU	60	1 050	1 120	2 486	2 898	3 192
Finland	2 390	2 280	1 780	6 190	6 293	5 073
Japan	11 550	12 510	14 120	29 915	34 528	40 242
New Zealand	7	6	4	18	17	11
Norway	4 230	4 120	4 240	10 956	11 371	12 084
Sweden	970	1 110	950	2 512	3 064	2 708
Switzerland	2 940	3 050	2 850	7 615	8 418	8 123
United States	160	190	210	414	524	599
South Africa	13	17	31 (15)	34	48	89 (49)

Figures in brackets represent 1993
Sources: OECD, 1993
Department of Agriculture, 1994

In South Africa, average total transfers per farming unit amounted to R65 624 in 1993.

Table 4 shows total transfers per head of population over the period 1990 to 1992. For the OECD area, transfers per capita continued to mount, reaching US$440 in 1992.

Although per capita transfers in Norway have decreased in recent years, they remained the highest in the OECD. Comparing 1992 with 1991 indicates that for five countries, i.e. Austria, the EU, Japan, Norway and the USA, total per capita transfers increased. Only New Zealand has had lower per capita transfers to the agricultural sector than South Africa.

4. Affordability of agricultural support

As previously mentioned, as regards agricultural support, South Africa compares exceptionally well to the other developed countries. In all the different analyses, only Australia and New Zealand supported their agricultural sector less than was the case in South Africa.

It is, however, important to also consider per capita income of the different countries in order to determine the affordability of agricultural support for a certain country.

According to estimates, personal income in South Africa will total roughly R340 billion in 1993/94. This sum includes the income of persons in the informal sector and income in the form of goods and services. Of the total, R44.3 billion (13%) will be paid to the state, mainly in the form of income tax, leaving the South African population with a personal disposable income of just over R295 billion to spend on goods and services or to save (Unisa, 1994). These figures do not show the skew distribution of personal income between population groups. Measured against White income (100%), the average Asian will receive 40 percent of a White's income, the average Coloured 27 percent and the average Black 13 percent (Unisa, 1994).

The importance of agriculture lies in the fact that the average household in South Africa spends 24.5 percent of their budget on food, 3.6 percent on alcoholic beverages and 2.2 percent on cigarettes and tobacco. In the case of Blacks, these percentages are considerably higher.

Table 5 shows the total transfers to agriculture, as well as these transfers expressed as a percentage of per

TABLE 4: TOTAL TRANSFERS PER HEAD OF POPULATION

Country	US $/capita			R/capita		
	1990	1991	1992	1990	1991	1992
Australia	99	103	89	256	284	254
Austria	510	520	530	1 321	1 435	1 511
Canada	350	400	330	907	1 104	941
EU	390	420	450	1 010	1 159	1 283
Finland	1 230	1 160	910	3 186	3 202	2 594
Japan	490	530	600	1 269	1 463	1 710
New Zealand	29	23	15	75	64	43
Norway	970	940	970	2 512	2 594	2 765
Sweden	380	440	370	984	1 214	1 055
Switzerland	890	910	840	2 305	2 512	2 394
United States	280	320	360	725	883	1 026
South Africa	36	46	81	93	127	231
			(38)			(125)

Figures in brackets represent 1993
Sources: OECD, 1993
Department of Agriculture, 1994

TABLE 5: AGRICULTURAL SUPPORT AS % OF PER CAPITA INCOME

Country	Per capita income	Agricultural support		
	Rand	Billion rand	Rand per capita	Percentage of per capita income
Australia	42 124	4.56	254	0.60
Canada	55 575	25.94	941	1.69
EU	54 387	444.32	1 283	2.36
Finland	71 849	12.83	2 594	3.61
Japan	85 787	210.90	1 710	1.99
New Zealand	35 833	0.29	43	0.12
Switzerland	101 201	16.53	2 394	2.37
United States	68 585	256.64	1 026	1.50
South Africa	8 428	4.06	125	1.48

Sources: China Post, 1994
Unisa, 1994
OECD, 1993

capita income, in South Africa (1993) and in some of the OECD countries (1992). Agricultural support in South Africa expressed as a percentage of per capita income, although lying third overall, was very much the same as was the case with both Canada and the United States.

Taking the uneven distribution of income in South Africa into account, the Blacks are worst off, with a percentage of per capita income of 3.39 percent, Coloureds 1.63 percent, Asians 1.11 percent and Whites only 0.45 percent.

5. Conclusion

The comparison of support data between countries, bearing in mind the recognised limits of these indicators, gave a clear indication of the relative extent of agricultural support in South Africa. With the exception of Australia and New Zealand, South Africa had a relatively low degree of support compared to the other developed countries.

Bearing in mind the low per capita income of the majority of South Africans, the question still remains to what extent South Africans can afford even the current relatively low levels of support within the agricultural sector. The issue clearly is not only how South African agricultural support compares to competitors, but also one of affordability and specifically who benefits and who pays for it.

Notes

1. This article is based on a MSc(Agric) dissertation by William Helm at the University of Pretoria.

2. This research was conducted while William Helm was employed by the Directorate Marketing, Department of Agriculture. He is presently with ABSA Bank.

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