SOUTH AFRICA: ESTIMATES OF SUPPORT TO AGRICULTURE

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DEFINITIONS AND SOURCES

Table 1. Agricultural Support Estimates / Total Transfers contains country Total Support Estimate (TSE) and derived indicators, which cover all agricultural production, i.e. all agricultural commodities produced in the country. Definitions of basic data sets refer to the specific programmes applied in the country. For the Producer Support Estimates (PSE) and Consumer Support Estimates (CSE), where relevant the description of policy measures indicates where the policies are related to specific commodities. "MPS commodities", which vary across countries, are those for which market price support is explicitly calculated in Tables 4.1 – 4.14.

Table 2. Breakdown of PSE by Commodity and Other Transfers provides a breakdown of the total PSE into four categories reflecting the flexibility given to farmers regarding which commodity to produce within the various policy measures. These categories are: Single Commodity Transfers (SCT); Group Commodity Transfers (GCT); All Commodity Transfers (ACT); and Other Transfers to Producers (OTP). All data sets in Table 2 come from Tables 1 and 3.1 – 3.14 where definitions are included.

Tables 3.1 – 3.14 Producer Single Commodity Transfers contain producer SCT by commodity, which are calculated for SOUTH AFRICA for the following commodities: Wheat, Maize, Sunflower, Peanuts, Table grapes, Oranges, Apples, Milk, Beef and veal, Pork, Sheep meat, Poultry and Eggs. In addition, SCT for "other commodities" is also calculated (Table 3.15), which covers transfers *to single commodities other than MPS commodities*. All data sets in the calculation of producer SCT by commodity come from Tables 1 and 4.1-4.14 where definitions are included.

Tables 4.1 – 4.14 contain **Market Price Support** (MPS) and **Consumer Single Commodity Transfers** (consumer SCT) by commodity, calculated for the same set of commodities as **Tables 3.1** to **3.14**. Definitions are provided only for basic data sets from which all the other data sets in this table are derived.

Definitions of the indicators, criteria for classification of policy transfers included in support estimation, and methods of calculation are contained in the PSE Manual (*OECD's Producer Support Estimate and Related indicators of Agricultural Support: Concepts, Calculations, Interpretation and Use*).

TABLE 1. SOUTH AFRICA: TOTAL SUPPORT ESTIMATE

Definitions:

I. Total value of production (at farm gate):

Total agricultural production valued at farm gate prices, i.e. value (at farm gate) of all agricultural commodities produced in the country [1].

I.1. Of which share of MPS commodities (%):

Share of commodities for which MPS is explicitly calculated (in Tables 4.1 – 4.14) in the total value of agricultural production.

II. Total value of consumption (at farm gate):

Consumption of all commodities domestically produced valued at farm gate prices, and estimated by increasing the value of consumption (at farm gate) of the MPS commodities according to their share in the total value of agricultural production [(II.1) / (I.1) x100].

II.1. Of which MPS commodities:

Sum of the value of consumption (at farm gate prices) of the MPS commodities as indicated in Tables 4.1 – 4.14.

III.1 Producer Support Estimate (PSE)

Associated with total agricultural production, i.e. for all commodities domestically produced [Sum of A to G; when negative, the amounts represent an implicit or explicit tax on producers].

A. Support based on commodity outputs

A.1. Market Price Support:

On quantities domestically produced (excluding for on-farm feed use -- excess feed cost) of all agricultural commodities, estimated by increasing the MPS for the MPS commodities (sum of the MPS for the MPS commodities listed in the rows bellow) according to their share in the total value of agricultural production [(ΣMPS commodities) / (I.1) x 100].

A.2. Payments based on output

B. Payments based on input use

B.1. Variable input use

PIV1 Interest Subsidy to Producers (1994 – 2000):

Interest concessions managed through the Land Bank of South African and farmers' cooperatives (estimated as a differential between the applied rate and the average interest rate).

- An interest rate subsidy scheme was initiated in the 80's during the Bush war to establish and keep farmers on farms in "Designated Areas". These areas include mainly farms on the border to Botswana. This was done for the sake of National security and to establish a stable community in these areas. Subsidised loans were granted to farmers who do not own the land they farm on, to buy it, and to farmers who do not farm on an economical unit, to increase the farm size. The repayment period of these loans were set on 33 years. Subsidised loans were also extended to farmers in these areas who experienced financial problems due to circumstances beyond their control and could not obtain assistance elsewhere. In the 80's these farmers also acquired financial support and soft loans to purchase or convert their own vehicles into land-mine protected vehicles. The final payments to institutions that supplied these soft loans were made in 1997.

- Interest subsidies were granted to sugar cane farmers to re-establish sugarcane fields, repair, reconstruction and replacement of roads, tramlines, crossings and bridges after floods in 1986 caused by cyclone Demoina in KwaZulu Natal. Final payment to financial institutions that extended soft loans was made in 2000.

- Scheme for farmers in the summer and winter rainfall cropping areas – a special drought assistance scheme under which State guaranteed Land Bank loans were made available to cooperatives to make it possible for them to postpone payment of production dept by members who had suffered crop losses and grant them production credit for the next production season. Final payment was made in 1997.

Use of labels: Production and payment limits: NO; Variable payment rates: NO; Input constraints: NO; included in ACT.

PIV2 Subsidy for prevention of sequestration (bankruptcy)

1994-95: Payments (loans) to indebted farms, to prevent their confiscation, granted to farms that were supposed to recover, thereby retaining them in agricultural production.
Use of labels: Production and payment limits: NO; Variable payment rates: NO; Input constraints: NO. Included in ACT.

PIV3 Fuel tax subsidy

From 2001: A repayment of the fuel tax is granted to 80% of the fuel consumption in agriculture. The amount of repayment per litre is specified every year.
Use of labels: Production and payment limits: NO; Variable payment rates: NO; Input constraints: NO. Included in ACT.

PIV4 Water quota subsidy

1994-98, 2001: A water quota subsidy was paid out in areas where droughts caused the water quota level to fall under 50%. The amount of payment was determined according to the production potential of specific areas and according to the level of water available. Only bona fide irrigation farmers who obtain 60% or more of their income from irrigation farming qualified for assistance under the scheme. Moreover, permanent workers had to be employed, the plot had to be maintained and the farmer had to reside in the area. The water quota subsidy paid out in 2001 was paid to previously disadvantage farmers being resettled on land

previously owned by the government. Support was paid to assist the emerging farmers in affording irrigation water.
Use of labels: Production and payment limits: NO; Variable payment rates: NO; Input constraints: NO. Included in GCT 11.

PIV5 Stock feed Purchase loans

1994-96: To enable producers to maintain a nucleus herd during an extended drought. Available assistance include: A rebate on the transport costs of registered stock-feeds and approved licks, Incentives for stock reduction actions, State contribution to feed costs for the maintenance of nucleus herds in the form of loans and subsidies, State contributing to the finishing of stock and feedlot facilities.
Use of labels: Production and payment limits: NO; Variable payment rates: NO; Input constraints: NO. Included in GCT 10.

PIV6 Transport of Livestock and fodder

1994-96: To enable producers to maintain a nucleus herd during an extended drought. Available assistance include: A rebate on the transport costs of registered stock-feeds and approved licks, Incentives for stock reduction actions, State contribution to feed costs for the maintenance of nucleus herds in the form of loans and subsidies, State contributing to the finishing of stock and feedlot facilities.
Use of labels: Production and payment limits: NO; Variable payment rates: NO; Input constraints: NO. Included in GCT 10.

PIV7 Boreholes

1994-95, 2003-05, from 2010: Payments financing (partly) sinking of boreholes in times of drought for livestock. (This programme is different from the borehole programme under Infrastructure as this is linked to drought; a larger share of the cost is covered and can be applied for as an emergency measure.) From 2010, this programme is part of the package supporting the developments of smallholder farming sector.
Use of labels: Production and payment limits: NO; Variable payment rates: NO; Input constraints: NO. Included in GCT 10.

PIV8 Water transport

1994-95: Financing transport of water to cattle and humans in areas affected by severe drought (50% allocated to E1, rest not in PSE).
Use of labels: Production and payment limits: NO; Variable payment rates: NO; Input constraints: NO. Included in GCT 10.

B.2 Fixed capital formation

PIF1 Special assistance scheme for bee keepers

1994-95: Payments to compensate beekeepers who suffered losses as a result of the infiltration of Cape intruder bees, for expenses incurred in the re-establishment of bee colonies. Payments are included in the other commodity SCT sheet: Tables 3.15.
Use of labels: Production and payment limits: NO; Variable payment rates: NO; Input constraints: NO. Included in XE.

PIF2 Fire damage Subsidy

1994-95, 2002-03: Compensation for losses with disaster fire damages. Direct payments provided to farmers to re-build fences and to compensate for loss of natural grazing and livestock (20% allocated to E3, 80% allocated to G1).
Use of labels: Production and payment limits: NO; Variable payment rates: NO; Input constraints: NO; GCT 10.

PIF3 Land grants

From 1996: Payments provided within the land redistribution programmes to finances land acquisitions.
Use of labels: Production and payment limits: NO; Variable payment rates: NO; Input constraints: NO; included in ACT.

PIF4 Investment on farms (Land reform grants)

From 1996: Payments provided within the land redistribution programmes to finance on farm investment or the acquisition of on farm fixed assets.
Use of labels: Production and payment limits: NO; Variable payment rates: NO; Input constraints: NO. Included in ACT.

PIF5 Investment on farms (CASP Infrastructure)

From 1996: Support to investments provided within the infrastructural part of the Comprehensive Agricultural Support Programme (CASP).
Use of labels: Production and payment limits: NO; Variable payment rates: NO; Input constraints: NO. Included in ACT.

PIF6 Interim Natural Grazing Recovery Scheme

1994-95: Assistance granted for a limited period to livestock farmers who, in specific areas are compelled to allow their veld that has been damaged by prolonged drought, the necessary time to recover. This programme is strongly linked to the disaster aid programmes. To prevent over-grazing after a severe drought farmers were assisted in buying additional fodder for their livestock or game. Support was granted in the form of direct payments to producers or through the purchase and supply of fodder at a central point in the region by the provincial departments. Use of labels: Production and payment limits: NO; Variable payment rates: NO; Input constraints: YES; GCT 10.

B.3. Based on use of on-farm services

PIS1 Project services

From 1996: Payments financing farm project development provided to the beneficiaries of the Land reform.
Use of labels: Production and payment limits: NO; Variable payment rates: NO; Input constraints: NO. Included in ACT.

C. Payments based on current area planted/animal numbers/revenues/incomes

C. 1. Single commodities

C.2. Specific groups of commodities

PC1 Conversion of marginal lands

1987-98: Payment per hectare to producers to convert marginal arable land into permanent pastures in the dry land areas (these payments were also linked with the abolition of the programmes compensating crop damages in the dry land areas). An initial amount was paid to farmers, according to area converted, to assist them with initial establishment costs. For a limited number of years (less than 5) farmers were receiving payments to help them with the transition and adaptation of their farming system.
Use of labels: Production and payment limits: NO; Variable payment rates: NO; Input constraints: NO. Included in GCT 10.

PC2 Fire damage Subsidy

1994-95, 2002-03: Compensation for losses with disaster fire damages. Direct payments to farmers provided to rebuild fences and to compensate for loss of natural grazing and livestock (20% allocated to B.2, 80% allocated to C.2).
Use of labels: Production and payment limits: NO; Variable payment rates: YES; Input constraints: NO. Included in GCT 10.

C.3. All commodities

PC3 Subsidies for Flood disaster

Payments to farmers compensating damages from floods. Direct payments to farmers are based on loss individually assessed.
Use of labels: Production limits: NO; Variable payment rates: YES; Input constraints: NO. Included in ACT.

PC4 Disaster Drought Aid

Aid to farmers and farmer cooperatives compensating damages from disaster drought. Direct payments to farmers are based on loss individually assessed.
Use of labels: Production and payment limits: NO; Variable payment rates: YES; Input constraints: NO. Included in ACT.

D. Payments based on current area planted/animal numbers/revenues/incomes – production required

E. Payments based on current area planted/animal numbers/revenues/incomes – production not required

F. Payments based on non-commodity criteria

F.1. Long-term resource retirement

F.2. Specific non-commodity output

F.3. Other non-commodity criteria

G. Miscellaneous payments

III.2 Percentage PSE

[100 x (III.1) / ((I) + (Sum of A2 to G))]

III.3 Producer NPC:

For all agricultural commodities the Producer NPC is estimated as a weighted average of the producer NPC calculated for the individual MPS commodities and shown in Table 4. For each commodity Producer NPC = [domestic price received by producers (at the farm gate) + unit payments based on output] / border price (also at the farm gate).

III.4 Producer NAC

[1 / (100 - (III.2)) x 100]

IV. General Services Support Estimate (GSSE)

Total budgetary expenditure to support general services provided to agriculture [Sum of H to N].

H. Agricultural knowledge and innovation system

H1. Agricultural knowledge generation

GSSEHA1 Research:

Financial contribution to the Agricultural Research Council. Research grants financing research promoting the sustainable use of natural resources in agriculture and to promote animal and crop production.

H2. Agricultural knowledge transfer

H2.a. Agricultural education

GSSEHBEDU1 Agricultural colleges

Financial contribution to Agricultural colleges

GSSEHBEDU2 National Student Financial Aid Scheme

Financial expenditures under the "National Student Financial Aid Scheme"

H2.b. Extension services

GSSEBEXT1 Agro-economic services:

Financing of services targeted to promote the optimal utilisation of production factors; information on the marketing and marketing policy of agricultural products; to provide information and advice on agricultural economic trends.

GSSEBEXT2 Extension & Training:

Financing activities of the National and Provincial Departments of Agriculture to develop, adapt and disseminate appropriate agricultural technology for farmers and other users of natural agricultural resources. Develop and implement support programmes as well as establish opportunities for developing of farmers and communities.

GSSEBEXT3 Development Aid

Extension services financed by the "Development Aid" programme.

I. Inspection services

I1. Agricultural products safety and inspection

GSSEA1 Veterinary services

Payments financing the Veterinary services (50% of expenditures).

GSSEA2 Phytosanitary services and quality control

Payments financing the Phytosanitary Services and Quality Control Services (50% of expenditure).

I2. Pest and disease inspection and control

GSSEB1 Veterinary services

Payments financing the Veterinary services (50% of expenditures).

GSSEB2 Phytosanitary services and quality control

Payments financing the Phytosanitary Services and Quality Control Services (50% of expenditure).

GSSEB3 Plant protection and health

Payments financing expenditures of the programme "Plant protection and health" (from 2010).

I3. Input control

J. Infrastructure

J1. Hydrological infrastructure

GSSEJA1 Building of water works

Payments financing construction and maintenance of approved water works to enable production to utilise land more effectively (1994 – 2007).

GSSEJA2 Boreholes:

Payments financing construction and maintenance of water holes for livestock and domestic purposes (50% of these payments allocated to PSE under category E1).

GSSEJA3 Rural Infrastructure Development – irrigation:

Expenditure within the framework of the Comprehensive Rural Development Programme through the programme Rural Infrastructure Development; 25% of these expenditures is estimated to cover investments into the building and maintenance of irrigation networks, related to agricultural production.

J2. Storage, marketing and other physical infrastructure

GSSEJB1 Resource conservation and environmental management:

Payments financing conservation and environmental services rendered by provincial agricultural departments and a limited level of input subsidy to farmers to control non-indigenous intruder vegetation and preserve crucial water bodies and sources (1994 – 2006).

GSSEJB2 Engineering services:

Payments financing services contributing to a sustainable use of natural resources in agriculture, including planning and developing of agricultural agro-industries (1994 – 2010).

GSSEJB3 Trade and marketing development

50% of payments from "Trade and Marketing Development" programme financed by DAFF.

GSSE JB4 Rural Infrastructure Development – other

Expenditure within the framework of the Comprehensive Rural Development Programme (DRDLR budget) through the programme Rural Infrastructure Development; 50% of these expenditures is estimated to cover investments into marketing and other physical infrastructure (roads).

J3. Institutional infrastructure

GSSEJC1 Land reform - land survey and mapping, cadastre services.

From 2003, expenditures financing the land survey and mapping, and cadastre services.

Development aid: To enhance development of previously disadvantaged communities and poverty alleviation through the provision of basic infrastructure and establishment of community based small and

medium agro-industries. Development aid included no direct payments to farmers, only support in the establishment of agricultural and community infrastructure.

J4. Farm restructuring

GSSEJD1 Soil conservation works

Payments financing essential soil conservation works to improve and protect the soil. Payments went towards financing of soil conservation works performed by the provincial departments or input subsidies to farmers for mainly prevention and management of soil erosion through construction of contours and drainage systems.

GSSEJD2 CASP – Infrastructure:

Expenditures to infrastructure from the Comprehensive Agricultural Support Programme, targeting the smallholder sector.

GSSEJD3 Land reform - capital grants - infrastructure

1994 – 2009: Expenditure from the land reform capital grants related to general infrastructure (the capital grants financing transfers of land to farmers are excluded and are part of the PSE B1).

K. Marketing and promotion

K1. Collective schemes for processing and marketing

GSSEKA1 Trade and marketing developments

Financial aid to marketing cooperatives in financial difficulty (due to drought or economical down turns) to conserve the marketing infrastructure in the rural economy in designated areas. Subsidised credits were supplied to cooperatives to remain in business in times when their members (the producers) are struggling. Payments were also made to assist in the establishment of small-scale farmer cooperatives in previously disadvantaged areas.

GSSEKA2 Rural Enterprise and Industrial Development

Expenditure within the framework of the Comprehensive Rural Development Programme through the programme Rural Enterprise and Industrial Development; 50% of these expenditures are estimated to cover investments creating enabling environment to processing and marketing activities related to agriculture and agro-food.

K2. Promotion of agricultural products

L. Public stockholding

M. Miscellaneous

V.1 Consumer Support Estimate (CSE)

Associated with agricultural production, i.e. for the quantities of commodities domestically produced, excluding the quantities used on-farm as feed -- excess feed cost. [Sum of O to R; when negative, the amounts represent an implicit tax on consumers].

O. Transfers to producers from consumers

Associated with market price support on all domestically produced commodities, estimated by increasing the transfers calculated for the MPS commodities according to their share in the total value of production [(O.1) / (I.1) x 100].

O.1. Of which MPS commodities

Sum of the values of transfers from consumers to producers associated with market price support for the MPS commodities as calculated in Table 4.

P. Other transfers from consumers:

Transfers to the budget associated with market price support on the quantities imported of domestically produced commodities, estimated by increasing the transfers calculated for the MPS commodities according to their share in the total value of production [(P.1) / (I.1) x 100].

P.1. Of which MPS commodities:

Sum of the transfers to the budget associated with market price support on the quantities imported of the MPS commodities as calculated in Table 4.

Q. Transfers to consumers from taxpayers

Q.1. Commodity specific transfers to consumers

Sum of commodity specific transfers from taxpayers to consumers (farm gate level) from commodity MPS tables (Table 4). The descriptions of policies providing commodity specific transfers are provided bellow:

Q.2. Non-commodity specific transfers to consumers

Sum of non-commodity specific transfers from taxpayers to consumers (farm gate level). The descriptions of policies inducing non-commodity specific transfers are provided bellow:

R. Excess Feed Cost

Associated with market price support on quantities domestically produced and used on-farm as feed as calculated in Table 4. [Sum of excess feed costs in the MPS tables (Table 4) for feed crops.]

V.2 Percentage CSE

[100 x (V.1) / ((II) + (Q))]

V.3 Consumer NPC

For all agricultural commodities the Consumer NPC is estimated as a weighted average of the consumer NPC calculated for the individual MPS commodities and shown in Table 2. For each commodity Consumer NPC = domestic price paid by consumers (at the farm gate)/ border price (also at the farm gate).).). **[The total CNPC is not in the Table 1 of the country template, but we will include it in the version for the public website]**

V.4 Consumer NAC

[(1 / (100 -(V.2)) x 100]

VI. Total Support Estimate

[(III.1) + (IV) + (Q)] and [(S) + (T) - (U)]

S. Transfers from consumers

[(O)+(P)]

T. Transfers from taxpayers

[(III.1)-(O)+(IV)+(Q)]

U. Budget revenues

[(P)]

Sources:

National Treasury, Republic of South Africa: 2018 Budget Estimates of National Expenditure – Agriculture, Forestry and Fisheries (Vote 24);

National Treasury, Republic of South Africa: 2018 Budget Estimates of National Expenditure – Rural Development and Land Reform (Vote 39).

TABLE 2. SOUTH AFRICA: Breakdown of PSE by commodity specificity and other transfers

All data sets in Table 2 come from Tables 1 and 3 where definitions are included.

Definitions:
I. Single commodity transfers (SCT): the annual monetary value of gross transfers from policies linked to the production of a single commodity such that the producer must produce the designated commodity in order to receive the payment. This includes broader policies where payments are specified on a per-commodity basis. SCT is also available by commodity. [Sum of commodity SCTs from Tables 3.1 – 3.14]

Percentage SCT: is the commodity SCT expressed as a share of gross farm receipts for the specific commodities (including support in the denominator). This indicator can be expressed for the total SCT (Table 2), or for a specific commodity (Tables 3.1 – 3.14).

$\%SCT = 100* SCT / (\text{value of production}_{COM} + A2_{COM} + B_{COM} + C1_{COM} + D_{COM})$

Share in Total PSE (%): $SCT_{SHARE} = 100* SCT / PSE$

II. Group commodity transfers (GCT): the annual monetary value of gross transfers from policies whose payments are made on the basis that one or more of a designated list of commodities is produced. That is, a producer can choose among a set of allowable commodities to produce and receive a payment that does not vary with respect to this decision. $[GCT = B_{GROUP} + C2 + D_{GROUP}]$

Share in Total PSE (%): $GCT_{SHARE} = 100* GCT / PSE$

Transfers to specific groups of commodities: The GCT involve to the following groups of commodities: beef and veal and sheep; horticulture.

III. All commodity transfers (ACT): the annual monetary value of gross transfers from policies that place no restrictions on the commodity produced but require the recipient to produce some commodity of their choice. $[ACT = C3 + B_{ALL} + D_{ALL}]$

Share in Total PSE (%): $ACT_{SHARE} = 100* ACT / PSE$

IV. Other Transfers to Producers (OTP): the annual monetary value of gross transfers made under policies that do not fall in the above three cases (SCT, GCT, ACT). That is, payments that do not require any commodity production at all. $[OTP = E + F + G]$

Share in Total PSE (%): $OTP_{SHARE} = 100* OTP / PSE$

V. Total PSE: $PSE = A+B+C+D+E+F+G = SCT + GCT + ACT + OTP$

Percentage PSE: $\%PSE = 100*PSE / \text{value of agr. production} + A.2. + B + C + D + E + F + G)$

TABLE 3. SOUTH AFRICA: Producer Commodity Specific Transfers by commodity

Tables 3.1 to 3.14, provide information on Producer Single Commodity Transfers (PSCT) for the following commodities: wheat, maize, sunflower, peanuts, sugar cane, grapes, oranges, apples, milk, beef and veal, pig meat, sheep meat, poultry, eggs and "other commodities". All data sets in the calculation SCT by commodity come from Tables 1 and 4.1 – 4.14, where definitions are included.

Definitions:

I. Level of production: Data from Table 4 (Market price support table)

II. Value of production (at farm gate): Data from Table 4.1 – 4.14 (Market price support table)

III. Producer Single commodity transfers: Sum of transfers to specific commodity in categories A, B, C1 and D.

A. Support based on commodity outputs

A1. Market Price Support [Data for respective commodity from Table 4]

A2. Payments based on output

Payments based on output (A.2) provided to respective single commodity [Data from Table 1]

B. Payments based on input use, single commodity [$B.1_{COM}$ + $B.2_{COM}$ + $B.3_{COM}$]

B1. Variable input use

Data from Table 1 – see the policies providing payments based on variable input use (B.1) to the specific PSE commodity, in the definitions in Table 1.

B2. Fixed capital formation

Payments based on fixed capital formation ($B.2_{COM}$) provided to respective single commodity [Data from Table 1].

B3. On-farm services

Payments based on on-farm services ($B.3_{COM}$) provided to respective single commodity [Data from Table 1].

C1. Payments based on current A/An/R/I, production required, single commodity"

Payments based on current A/An/R/I (C_{COM}) provided to respective single commodity [Data from Table 1].

D. Payments based on non-current A/An/R/I, production required

Payments based on non-current A/An/R/I, production required (D_{COM}) provided to respective single commodity [Data from Table 1].

IV. Percentage producer SCT : %SCT $=100*(III) / ((II) + (A.2) + (B_{COM}) + .(C_{COM}). + .(D_{COM}))$

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TABLE 4. SOUTH AFRICA: MARKET PRICE SUPPORT AND CONSUMER SINGLE COMMODITY TRANSFERS

Tables 4.1 to 4.14, contain calculation of the Market Price Support (MPS) and Consumer Single Commodity Transfers (consumer SCT) for the following commodities: wheat, maize, sunflower, peanuts, sugar cane, grapes, oranges, apples, milk, beef and veal, pig meat, sheep meat, poultry, eggs and "other commodities". The data sets used in calculation of the MPS and consumer SCT by commodity are described below. Values for "other commodities" are derived using information on total Market Price Support and Value of Production, and individual commodity data.

Note: for all below mentioned commodities relevant data have been collected and price gaps calculated. However, in line with the OECD methodology, in case when there are no policy measures creating a price gap (absence of tariff other non-tariff barriers) the price gap is estimated to be 0. This assumption was applied for eggs; and for maize from 2007.
In case of negative price gaps, when no export barriers (export bans, export tariffs) and no other market price policy taxing producers (i.e. justifying a negative price gap due to policies implemented) have been identified, the negative price gaps for these products have been set at zero. This assumption was applied (in specific years) for the following commodities: wheat, maize, oilseeds, milk, beef, pig meat, and poultry.
Also for commodities with important shares of exported production and no export subsidies applied the price gap is set at 0. This assumption was applied to apples, oranges and table grapes.

Definitions:

1. Wheat

I.   Level of production

Wheat: Total production at farm gate.

Source: *Abstract of Agricultural Statistics 2010*, Department for Agriculture, Forestry and Fisheries (DAFF). (Table 10)

II.   Producer prices (at farm gate)

Wheat: Average producer price at farm gate.

Source: *Abstract of Agricultural Statistics*, DAFF. (Table 10)

III.   Value of production (at farm gate)

[(I)*(II)]

IV. Trade status

Net imported (NI)

V. Market price differential at the farm gate

Price Gap; Negative MPD set to 0 as there no export barriers (export bans, export tariffs) and no other market price policy taxing producers.

VI.   Reference prices at the farm gate (including the definition of the margin)

Wheat: Import parity price of Wheat US No. 2 Hard Red Winter (HRW).

Source: SAGIS (South African Grain Information Service).

Margin: Transport costs to harbour.

VII.   Level of consumption (at farm gate)

Wheat: Total consumption at farm gate.

Source: *Abstract of Agricultural Statistics*, Department of Agriculture, Forestry and Fisheries (DAFF) (Table 11).

VIII. Consumption prices (at farm gate):

(II)-((IX.1)+(X.1))/(I)*1000+((IX.1)+(IX.2))/(IV)*1000

Implicit prices corresponding to reference prices plus the unit value of market transfers.

IX.   Value of consumption (at farm gate)

[(VII)*(VIII)]

2. Maize

I.   Level of production

Yellow Maize: Total production at farm gate. Source: SAGIS (South African Grain Information Service)

White Maize: Total production at farm gate. Source: SAGIS (South African Grain Information Service)

II.   Producer prices (at farm gate)

Yellow Maize: Average producer price at farm gate. Source: SAGIS (South African Grain Information Service)

White Maize: Average producer price at farm gate. Source: SAGIS (South African Grain Information Service)

III.   Value of production (at farm gate)

[(I)*(II)]

IV. Trade status

White maize: Net Exported (NI 1995, 2016)

Yellow maize: Net Exported (1994-2001); Net Imported (2002-2007); Net Exported (from 2008)

V. Market price differential at the farm gate

Price Gap; Negative MPD set to 0 as there no export barriers (export bans, export tariffs) and no other market price policy taxing producers. From 2007, MPD=0 as the import tariffs were set at 0.

VI.   Reference prices at the farm gate (including the definition of the margin)

Yellow Maize: Trade weighted price (based in Randfontein). Source: Agriculture Market and Trade (AMT).

White Maize: Trade weighted price (based in Randfontein). Source: AMT.

Margin: No domestic transport costs and handling adjustment as both the reference price and the domestic price are fixed at Randfontein.

VII.   Level of consumption (at farm gate)

Yellow Maize: Total consumption at farm gate. Source: South African Grain Information Service (SAGIS)

White Maize: Total consumption at farm gate. Source: SAGIS.

VIII. Consumption prices (at farm gate)

(II)-((IX.1)+(X.1))/(I)*1000+((IX.1)+(IX.2))/(IV)*1000

Implicit prices corresponding to reference prices plus the unit value of market transfers.

IX.   Value of consumption (at farm gate)

[(VII)*(VIII)]

3. Sunflower

I.   Level of production

Sunflower: Total production at farm gate. Sunflower seed.

Source: *Abstract of Agricultural Statistics,* DAFF. (Table 17)

II.   Producer prices (at farm gate)

Sunflower seed: Average producer price at farm gate.

Source: *Abstract of Agricultural Statistics*, DAFF. (Table 17)

III.   *Value of production (at farm gate)*

[(I)*(II)]

IV. Trade status

Net Imported (NI)

V. Market price differential at the farm gate

Price Gap; Negative MPD set to 0 as there no export barriers (export bans, export tariffs) and no other market price policy taxing producers.

VI.   *Reference prices at the farm gate (including the definition of the margin)*

Reference price: Price in Durban Harbour derived from import prices of sunflower oil and sunflower oilcakes. Source: Expert estimation (Davis Spies)

Margin: Transport costs to harbour.

VII.   *Level of consumption (at farm gate)*

Sunflower: Total consumption at farm gate.

Source: *Abstract of Agricultural Statistics*, DAFF (Table 18).

VIII. Consumption prices (at farm gate)

(II)-((IX.1)+(X.1))/(I)*1000+((IX.1)+(IX.2))/(IV)*1000

Implicit prices corresponding to reference prices plus the unit value of market transfers.

IX.   *Value of consumption (at farm gate)*

[(VII)*(VIII)]

4. Groundnuts

I.   *Level of production*

Groundnuts: Total production at farm gate. Groundnuts in shell (*Arachis hypogaea*).

Source: FAO database

II.   *Producer prices (at farm gate)*

Groundnuts: Average producer price at farm gate.

Source: Peanut South Africa.

III.   Value of production (at farm gate)

[(I)*(II)]

IV. Trade status

Net Exported (NE)

V. Market price differential at the farm gate

Price Gap; Negative MPD set to 0 as there no export barriers (export bans, export tariffs) and no other market price policy taxing producers.

VI.   Reference prices at the farm gate (including the definition of the margin)

Groundnuts: Export parity price. Source: AMT.

Margin: Transport costs to harbour.

VII.   Level of consumption (at farm gate)

Groundnuts: Total consumption at farm gate.

Source: *Abstract of Agricultural Statistics*, DAFF (Table 16).

VIII. Consumption prices (at farm gate)

(II)-((IX.1)+(X.1))/(I)*1000+((IX.1)+(IX.2))/(IV)*1000

Implicit prices corresponding to reference prices plus the unit value of market transfers.

IX.   Value of consumption (at farm gate)

[(VII)*(VIII)]

5. Sugar

I.   Level of production

Sugar-cane: Total production at farm gate.

Source: SASA (South African Sugar Association).

II.   Producer prices (at farm gate)

Sugar-cane: Average producer price at farm gate.

Source: SASA.

III.   Value of production (at farm gate)

[(I)*(II)]

IV. Trade status

Net Exported

V. Market price differential at the farm gate

Price Gap.

VI. Reference prices at the farm gate (including the definition of the margin)

Sugar: New York Exchange Commodity - Sugar #11.

Source: NYSE.

Margin: Calculated as the ratio between the raw sugar price ex-factory and the sugar price at farm value.

Source: Calculations based on data from South African Sugar Association (SASA).

VII. Level of consumption (at farm gate)

Sugar cane: Consumption of sugar provided by SASA. Consumption of sugar cane has been calculated using the coefficient established by SASA. The effectiveness of the milling process at extracting sugar from sugar cane is measured as the ratio of sugar extracted from RV (reusable value) delivered to the mill (sugar % RV).

Source: South African Sugar Association (SASA).

VIII. Consumption prices (at farm gate)

(II)-((IX.1)+(X.1))/(I)*1000+((IX.1)+(IX.2))/(IV)*1000

Implicit prices corresponding to reference prices plus the unit value of market transfers.

IX. Value of consumption (at farm gate)

[(VII)*(VIII)]

6. Grapes

I. Level of production

Grapes: Total production of table grapes.

Source: *Abstract of Agricultural Statistics,* DAFF.

II. Producer prices (at farm gate)

Grapes: Weighted average price between the export price and the local price. Over the period 1994 to 2003, the percentages of production exported are 85%.

Source: *Abstract of Agricultural Statistics*, DAFF. (Tables 36)

III.   Value of production (at farm gate)

[(I)*(II)]

IV. Trade status

Net Exported

V. Market price differential at the farm gate

MPD=0; an important share (85%) of production is exported and no export subsidies are applied.

VI.   Reference prices at the farm gate (including the definition of the margin)

Grapes: Marketing year (October to September). Export price.

Source: *Abstract of Agricultural Statistics*, DAFF (table 36).

Margin: Reference prices are given at farm gate. No transport costs but use of a quality adjustment factor based on the export price and the weighted average price.

Source: *Abstract of Agricultural Statistics*, DAFF (table 36).

VII.   Level of consumption (at farm gate)

Grapes: Figures refer to sales on domestic markets.

Source: *Abstract of Agricultural Statistics*, DAFF (Table 36).

VIII. Consumption prices (at farm gate)

(II)-((IX.1)+(X.1))/(I)*1000+((IX.1)+(IX.2))/(IV)*1000

Implicit prices corresponding to reference prices plus the unit value of market transfers.

IX.   Value of consumption (at farm gate)

 [(VII)*(VIII)]

7. Oranges

I.   Level of production

Oranges: Total production at farm gate. Oranges common, sweet orange (*Citrus sinensis*); bitter orange, used primarily in the preparation of marmalade, (*C. aurantium*).

Source: FAO database.

II. *Producer prices (at farm gate)*

Oranges: Weighted average price between the export price and the local price. Over the period 1994 to 2003, the percentages of production exported are 64%.

Source: *Abstract of Agricultural Statistics*, DAFF. (Tables 34)

III. *Value of production (at farm gate)*

[(I)*(II)]

IV. Trade status

Net Exported

V. Market price differential at the farm gate

MPD=0; an important share (64%) of production is exported and no export subsidies are applied.

VI. *Reference prices at the farm gate (including the definition of the margin)*

Oranges: Marketing year (February to January). Export price.

Source: *Abstract of Agricultural Statistics*, DAFF (table 51).

Margin: Reference prices are given at farm gate. No transport costs but use of a quality adjustment factor based on the export price and the weighted average price.

Source: *Abstract of Agricultural Statistics*, DAFF (table 51).

VII. *Level of consumption (at farm gate)*

Oranges: Total consumption at farm gate.

Source: *Abstract of Agricultural Statistics*, DAFF (Table 51).

VIII. Consumption prices (at farm gate)

(II)-((IX.1)+(X.1))/(I)*1000+((IX.1)+(IX.2))/(IV)*1000

Implicit prices corresponding to reference prices plus the unit value of market transfers.

IX. *Value of consumption (at farm gate)*

[(VII)*(VIII)]

8. Apples

I.   Level of production

Apples: Total production at farm gate.

Source: *Abstract of Agricultural Statistics*, DAFF

II.   Producer prices (at farm gate)

Apples: Weighted average price between the export price and the local price. Over the period 1994 to 2003, the percentages of production exported are 48%.

Source: *Abstract of Agricultural Statistics*, DAFF. (Tables 51)

III.   Value of production (at farm gate)

[(I)*(II)]

IV. Trade status

Net Exported

V. Market price differential at the farm gate

MPD=0; an important share (48%) of production is exported and no export subsidies are applied.

VI.   Reference prices at the farm gate (including the definition of the margin)

Apples: Marketing year (October to September). Export price.

Source: *Abstract of Agricultural Statistics*, DAFF (table 34).

Margin: Reference prices are given at farm gate. No transport costs but use of a quality adjustment factor based on the export price and the weighted average price.

Source: *Abstract of Agricultural Statistics*, DAFF (table 34).

VII.   Level of consumption (at farm gate)

Apples: Total consumption at farm gate.

Source: Abstract of Agricultural Statistics, DAFF. (Table 34)

VIII. Consumption prices (at farm gate)

(II)-((IX.1)+(X.1))/(I)*1000+((IX.1)+(IX.2))/(IV)*1000

Implicit prices corresponding to reference prices plus the unit value of market transfers.

IX. *Value of consumption (at farm gate)*

[(VII)*(VIII)]

9. Milk

I. *Level of production*

Milk: Total production at farm gate.

Source: SA Milk Producer Organization.

II. *Producer prices (at farm gate)*

Milk: Average producer price at farm gate.

Source: SA Milk Producer Organization.

III. *Value of production (at farm gate)*

[(I)*(II)]

IV. Trade status

Production, consumption almost balanced (very tiny NE/NI year to year fluctuations).

V. Market price differential at the farm gate

Price Gap; Negative MPD set to 0 as there no export barriers (export bans, export tariffs) and no other market price policy taxing producers.

VI. *Reference prices at the farm gate (including the definition of the margin)*

Milk: border price of milk is a calculated implicit value **[7, 8].** The calculation method is based on two assumptions. First, world markets for tradable dairy commodities are competitive, which allows the formation of a single price for each of the solid components of raw milk, milk fat and protein, used to make dairy products. Secondly, each type of dairy product contains a unique and fixed amount of each of those solid components of milk. Under this method, the implicit price of milk at the border (P_b) is calculated from the prices of those components:

$$P_b = \left(\frac{a}{b}\right)P_{wb} + \left(\frac{c}{d}\right)P_{ws} \text{ where:}$$

a and *b* are milk fat contained in one ton of raw milk and butter respectively, *c* and *d* are non-fat-solids contained in one ton of milk and skimmed milk powder respectively, P_{wb} and P_{ws} are South African unit import values of butter and skimmed milk powder respectively.

The reference price of milk at farm gate (P_r) is the implicit milk border price net of processing costs (*C*):

$$P_r = P_b - C$$

Source of entry data: Comtrade database; OECD PSE/CSE database.

Margin: average dairy processing margin (processing margin of butter & SMP from one tonne of raw milk) in major dairy exporters: Australia, European Union, United States and New Zealand (see above in the definition of the estimation of milk reference price using the common OECD methodology).

VII.   Level of consumption (at farm gate)

Milk: Total consumption at farm gate.

Source: Milk Producer Organization (MPO).

VIII. Consumption prices (at farm gate)

(II)-((IX.1)+(X.1))/(I)*1000+((IX.1)+(IX.2))/(IV)*1000

Implicit prices corresponding to reference prices plus the unit value of market transfers.

IX.   Value of consumption (at farm gate)

[(VII)*(VIII)]

10. Beef and Veal

I.   Level of production

Beef: Production RSA origin of beef and veal at farm gate.

Source: *Abstract of Agricultural Statistics*, DAFF (Table 60).

II.   Producer prices (at farm gate)

Beef: Average producer price at farm gate. Class A, B & AB.

Source: Agriculture Market and Trade (AMT).

III.   Value of production (at farm gate)

[(I)*(II)]

IV. Trade status

Net Importer (NI)

V. Market price differential at the farm gate

Price Gap; Negative MPD set to 0 as there no export barriers (export bans, export tariffs) and no other market price policy taxing producers.

VI.   Reference prices at the farm gate (including the definition of the margin)

Beef: Price based on the Australian export price landed USA and adjusted with shipping costs to South Africa (Durban).

Source: OECD Aglink database.

Margin: No processing margin applied. Based on the assumption that the processing costs are equal to the value of by-products.

VII.   Level of consumption (at farm gate)

Beef: Total consumption at farm gate.

Source: *Abstract of Agricultural Statistics*, DAFF. (Table 60)

VIII. Consumption prices (at farm gate)

(II)-((IX.1)+(X.1))/(I)*1000+((IX.1)+(IX.2))/(IV)*1000

Implicit prices corresponding to reference prices plus the unit value of market transfers.

IX.   Value of consumption (at farm gate)

[(VII)*(VIII)]

11. Pigmeat

I.   Level of production

Pig meat: Total production in carcass weight equivalent at farm gate.

Source: FAO database.

II.   Producer prices (at farm gate)

Pig meat: Average producer price at farm gate.

Source: Agriculture Market and Trade (AMT).

III.   Value of production (at farm gate)

[(I)*(II)]

IV. Trade status

Net Importer (NI)

V. Market price differential at the farm gate

Price Gap; Negative MPD set to 0 as there no export barriers (export bans, export tariffs) and no other market price policy taxing producers.

VI.   Reference prices at the farm gate (including the definition of the margin)

Pig meat: Price based on the Brazilian export price and the shipping costs to South Africa (Durban).

Source: OECD PSE/CSE database (see Brazilian documentation for the source).

Margin: Estimation of the margin is based on the Brazilian margin estimated as being 20% of the border price.

VII.   *Level of consumption (at farm gate)*

*Pig meat***:** Total consumption at farm gate.

Source: *Abstract of Agricultural Statistics*, NDAFF. (Table 62)

VIII. *Consumption prices (at farm gate)*

(II)-((IX.1)+(X.1))/(I)*1000+((IX.1)+(IX.2))/(IV)*1000

Implicit prices corresponding to reference prices plus the unit value of market transfers.

IX.   *Value of consumption (at farm gate)*

[(VII)*(VIII)]

12. Sheepmeat

I.   *Level of production*

Sheep meat: Total production of mutton and lamb in carcass weight equivalent at farm gate.

Source: FAO database.

II.   *Producer prices (at farm gate)*

Sheep meat: Average producer price at farm gate.

Source: Agriculture Market and Trade (AMT).

III.   *Value of production (at farm gate)*

[(I)*(II)]

IV. Trade status

Net Importer (NI)

V. Market price differential at the farm gate

Price Gap; Negative MPD set to 0 as there no export barriers (export bans, export tariffs) and no other market price policy taxing producers.

VI.   *Reference prices at the farm gate (including the definition of the margin)*

Sheep meat: Price based on the Australian lamb export price and the shipping costs to South Africa (Durban).

Source: OECD Aglink database.

Margin: No processing margin applied. Based on the assumption that the processing costs are equal to the value of by-products.

VII.   Level of consumption (at farm gate)

Sheep meat: Total consumption at farm gate.

Source: *Abstract of Agricultural Statistics,* DAFF. (Table 64)

VIII. Consumption prices (at farm gate)

(II)-((IX.1)+(X.1))/(I)*1000+((IX.1)+(IX.2))/(IV)*1000

Implicit prices corresponding to reference prices plus the unit value of market transfers.

IX.   Value of consumption (at farm gate)

[(VII)*(VIII)]

13. Poultry

I.   Level of production

Poultry meat: Total production in carcass weight equivalent at farm gate. Production of chicken meat, duck meat, goose meat, turkey meat, meat of pigeon and other birds, fresh, chilled or frozen.

Source: FAO database.

II.   Producer prices (at farm gate)

Poultry meat: Wholesale price calculated as a weighted price between frozen and fresh chicken on a 70/30 percent basis with frozen chicken contributing the larger part.

Source: Calculation based on data from Department of Agriculture, Forestry and Fisheries (DAFF).

III.   Value of production (at farm gate)

[(I)*(II)]

IV. Trade status

Net Importer (NI)

V. Market price differential at the farm gate

Price Gap; Negative MPD set to 0 as there no export barriers (export bans, export tariffs) and no other market price policy taxing producers.

VI. Reference prices at the farm gate (including the definition of the margin)

Poultry meat: C.i.f. price. For years 1994 and 1995, figures have been estimated using the growth rate of the USA reference price. Source: USDA.

Margin: No processing margin applied, as the producer's price is defined at the wholesale level and the reference price also corresponds to a wholesale level.

VII. Level of consumption (at farm gate)

Poultry meat: Total consumption at farm gate.

Source: *Abstract of Agricultural Statistics*, DAFF (Table 69, consumption of white meat).

VIII. Consumption prices (at farm gate)

(II)-((IX.1)+(X.1))/(I)*1000+((IX.1)+(IX.2))/(IV)*1000

Implicit prices corresponding to reference prices plus the unit value of market transfers.

IX. Value of consumption (at farm gate)

[(VII)*(VIII)]

14. Eggs

I. Level of production

Eggs: Hen eggs production at farm gate.

Source: FAO database.

II. Producer prices

Eggs: Hen eggs. Source: FAO database.

III. Value of production (at farm gate)

[(I)*(II)]

IV. Trade status

Net Exporter (NE)

V. Market price differential at the farm gate

Price Gap; MPD=0 – zero tariffs applied and no other import barriers applied..

VI. Reference prices at the farm gate (including the definition of the margin)

Eggs: The MPP estimate is set to 0 the reference price at farm gate implicitly equals the domestic price at farm gate.

Margin: No margins applied.

VII.   *Level of consumption*

Eggs: Total consumption at farm gate.

Source: *Abstract of Agricultural Statistics*, DAFF (Table 69).

VIII. *Consumption prices (at farm gate)*

(II)-((IX.1)+(X.1))/(I)*1000+((IX.1)+(IX.2))/(IV)*1000

Implicit prices corresponding to reference prices plus the unit value of market transfers.

IX. *Value of consumption (at farm gate)*

 [(VII)*(VIII)]