

BULGARIA: ESTIMATES OF SUPPORT TO AGRICULTURE

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DEFINITION AND SOURCES

Country Total Support Estimate (TSE) and derived indicators in **Table 1** 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 Table 4.

Table 2 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 where definitions are included.

Producer Single Commodity Transfers (PSCT) by commodity in **Table 3** are calculated only for the commodities produced in the country within a common set of commodities (wheat, maize, barley, sunflower, potatoes, sugar, milk, beef and veal, pigmeat, poultrymeat, sheepmeat, and eggs), provided that the value of production of that commodity exceeds 1% of the total value of production in the country concerned. All data sets in the calculation of PSCT by commodity come from Tables 1 and 4 where definitions are included.

Market Price Support (MPS) and Consumer Single Commodity Transfer (CSCT) by commodity in **Table 4** are calculated for the following commodities: wheat, maize, barley, sunflower, potatoes, sugar, milk, beef and veal, pigmeat, poultrymeat, sheepmeat, and eggs. Definitions are provided only for basic data sets from which all the other data sets in this table are derived, following the formula indicated in each commodity table.

Definitions of the indicators, criteria of classification of programmes included, and methods of calculation can be seen in OECD, Methodology for the measurement of support and use in policy evaluation [<http://www.oecd.org/agr/policy>].

The description of budgetary measures in Table 1 covers the period 1995-2005.

Table 1. Bulgaria: 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].

1. Of which share of common commodities (%): share of commodities for which MPS is explicitly calculated (in Table 4) 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 $[(II.1) / (I.1) \times 100]$.

1. Of which MPS commodities: sum of the value of consumption (at farm gate prices) of the MPS commodities produced in the country as indicated in Table 4.

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

A1. 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 common commodities according to their share in the total value of agricultural production $[(\sum \text{MPS commodities}) / (I.1) \times 100]$.

A2. Payments based on output

Payments for extra and first grade cow milk (from 2001): fixed payment per litre of quality milk sold on the market without limit on production.

Transfers included in the Milk SCT.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Support for tobacco (from 2000): fixed price premium, payment per tonne and additional quality premium per tonne of tobacco sold on the market. Production is limited by quotas.

Transfers included in the Other Single Commodity SCT.

Production limits: Yes because of the quota; Variable payment rates: NO; Input constraints: NO.

B. Payments based on input use

B1. Variable input use

Subsidies for fertiliser and pesticides (1999-2005): budgetary expenditures on subsidies for fertilisers and pesticides used for crops.

Transfers included in the Crop GCT.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Subsidies for fertilisers for wheat, maize, barley, sunflower, rice and potatoes (from 2001): budgetary expenditures on payments per hectare of the above mentioned crops.

Transfers included in the Wheat, Maize, Barley, Sunflower, Rice and Other Single Commodity SCTs.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments for bio-chemicals (2000-01): budgetary expenditures on payments for bio-chemicals applied to crops.

Transfers included in the Crop GCT.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Short-term credit subsidies (2001): budgetary expenditures on interest concessions for short-term loans to buy farm inputs.

Transfers included in the ACT.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Fuel subsidies (1995, 2004): budgetary expenditures on fuel subsidies paid per hectare.

Transfers included in the ACT.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Credit subsidies for fuel (2000, 2002): budgetary expenditures on interest concessions for short-term loans to purchase fuel for wheat and barley production.

Transfers included in the Grain GCT.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Subsidies for irrigation (2000, 2002, 2004, 2005): budgetary expenditures.

Transfers included in the ACT.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Short term credit (2002-2003): budgetary expenditures on interest concessions for short-term loans to purchase inputs for wheat, barley, maize and sunflower production.

Transfers included in the Wheat, Barley, Maize and Sunflower SCTs.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Short term credit (1997, 2002): budgetary expenditures on interest concessions for short-term loans to purchase fertilisers, fuel and seeds.

Transfers included in the crop GCT.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Short term credit for wheat, maize, sunflower, potatoes (1998-2000, 2002, 2006 for wheat): budgetary expenditures on interest concessions for short-term loans to purchase inputs for above mentioned crops.

Transfers included in the Wheat, Maize, Sunflower and Other Single Commodity SCTs.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Subsidies for animal feed (1998, from 2003): budgetary expenditures on payments to cover part of the costs of feeding cattle, pigs and poultry.

Transfers included in the Livestock GCT.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Support for storage of bread wheat (1998, 2003-2004, 2006): payment per tonne of wheat stored.
Transfers included in the Wheat SCT.
Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Low-interest credit for wheat and maize (2000): budgetary expenditures on interest concessions for short-term loans to wheat and maize production.
Transfers included in the Wheat and Maize SCTs.
Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Rice seed subsidies (2000): budgetary expenditures on subsidies for rice seeds
Transfers included in the Other Single Commodity SCT.
Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Subsidies for tobacco seeds (2000, 2004-06): budgetary expenditures on subsidies for tobacco seeds
Transfers included in the Other Single Commodity SCT.
Production limits: NO; Variable payment rates: NO; Input constraints: NO.

B2. Fixed capital formation

Investment credits (from 1998): budgetary expenditures on interest concessions on investment loans.
Transfers included in the ACT.
Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Investment credits for agricultural machineries (2001-2002, 2004-05): budgetary expenditures on interest concessions on loans to purchase machineries for crop production.
Transfers included in the Crop GCT.
Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Investment credit for breeding animals (2001, 2006): budgetary expenditures on interest concessions on loans to purchase breeding animals.
Transfers included in the Livestock GCT.
Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Investment credits to permanent crops (2000-2002, 2004): budgetary expenditures on interest concessions on investment loans for other crops.
Transfers included in the Permanent Crop GCT.
Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Investment in agricultural holdings (from 2002): budgetary expenditures on capital grants under SAPARD programme, co-financed by the EU, identified for milk, livestock, crops, eggs and other commodities.
Transfers included in the Milk and Egg SCTs and in the Livestock, crop and Permanent crops GCTs and in the ACT (machineries).
Production limits: NO; Variable payment rates: NO; Input constraints: NO.

B3. On-farm services

Veterinary services, plant protection services, land productivity improvement, science (1991-97): budgetary expenditures for those services

Transfers included in the ACT.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments for obligatory slaughter of animals (2000-02): payments per head of animal (cattle, pig, poultry and sheep) slaughtered for disease eradication.

Transfers included in the Livestock GCT.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

C. Payments based on current area planted/animal numbers/receipts/income, production required

C1. Single commodity

Payments for crops (2001): per hectare payments for wheat, potatoes, sunflower seeds, maize, sugar beet, rice. Budgetary expenditures are identified for each commodity. Unlimited area.

Transfers included in the Wheat, Other single commodity, Sunflower, Maize, Sugar and Rice SCTs.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments per sow and per chicken (1997): payments per head.

Transfers included in the Pigmeat, and Poultry SCTs.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payments for livestock (2000-01, 2005-06): payments per head of cattle, pig, poultry and sheep. (limited number of animals).

Transfers included in the Milk, Beef, Pigmeat, Sheepmeat, Poultry and Egg SCTs.

Production limits: Yes because there is a limit on the number of animals receiving payments; Variable payment rates: NO; Input constraints: NO.

Payments for increasing number of sheep (1990): payment per sheep.

Transfers included in the Sheep SCT.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

C2. Specific group of commodities

Payments for increasing number of cattle (1990): payment per cow.

Transfers included in the Milk and Beef GCT.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Subsidies for crops (1997): (credit) subsidies to crop producers who accepted to sell a part of their output to the 'Fund Agricola' at a given price, but often the farmers didn't sell anything to the Fund.

Transfers included in the Crop GCT.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Subsidies for supporting farmers for spring seasonal work (2001-2002): per hectare payments for wheat, maize, sunflowers and potatoes planted to help farmers buy fertilizers, fuel and seeds.

Transfers included in the Crop GCT.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

C3. All commodities

D. Payments based on non-current area planted/animal numbers/receipts/income, production required

E. Payments based on non-current area planted/animal numbers/receipts/income, production not required

F. Payments based on non-commodity criteria

F1. long-term resource retirement

F2. a specific non-commodity output

F3. other non-commodity criteria

G. Miscellaneous payments

III.2 Percentage PSE $[(III.1) / ((I) + (\text{Sum of B to H})) \times 100]$

III.3 Producer NAC $[1 / (100 - (III.2)) \times 100]$

IV. General Services Support Estimate (GSSE): total budgetary expenditure to support general services provided to agriculture Sum of I to O.

H. Research and development

Research and development (from 2000): budgetary expenditures.

Credit subsidies for livestock breeding (1999, 2002): budgetary expenditures on interest concessions for short-term loans to breeding improvement organisations.

Transfers included in the Livestock GCT.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.

I. Agricultural schools

Agricultural schools (from 2003): budgetary expenditures.

J. Inspection services

Inspection services (from 1999): budgetary expenditures for preparation for joining the EU (animal identification, inspection laboratory, border control laboratories etc).

K. Infrastructure

Support for irrigation system (1986-1999, from 2002): budgetary expenditures.

Development and diversification of economic activities in rural areas (from 2002): budgetary expenditures under the SAPARD programme, co-financed by the EU.

L. Marketing and promotion

Marketing and promotion (from 2003): budgetary expenditures

Marketing and processing (from 2002): budgetary expenditures under the SAPARD programme, co-financed by the EU.

M. Public stockholding

N. Miscellaneous

Payments for removal of out date pesticides (from 2000): budgetary expenditures.

Payment for keeping record of tobacco production (2000-01): budgetary expenditures.

Payment for fighting hailstorms (2000-2002): budgetary expenditures.

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 costs* [(P) + (Q) + (R) + (S)]; when negative, the amounts represent an implicit tax on consumer].

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

1. Of which common commodities: sum of the values of transfers from consumers to producers associated with market price support on the common commodities produced in the country 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 common commodities according to their share in the total value of production [(P.1) / (I.1) x 100]

1. Of which common commodities: sum of the transfers to the budget associated with market price support on the quantities imported of the common commodities produced in the country as calculated in Table 4.

Q. Transfers to consumers from taxpayers

R. Excess Feed Cost: associated with market price support on quantities domestically produced and used on-farm as feed as calculated in Table 4.

V.2 Percentage CSE [(V.1) / ((II) - (Q)) x 100]

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]**

VI. Total Support Estimate [(III.1) + (IV) + (R)] and [(T) + (U) - (V)]

S. Transfers from consumers [(P)+(Q)]

T. Transfers from taxpayers [(III.1)-(P)+(IV)+(R)]

U. Budget revenues (Q)

Source:

Ministry of Agriculture.

Table 2. Bulgaria: 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 Table 3]

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 (Table 3).

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

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 involves the following groups of commodities:

- **All crops:** This includes any policy that is available to producers of any crop, such as subsidies for spring work in crops.
- **Grains:** This includes payments to grain producers such as specific credit subsidies for fuel.
- **Permanent crops:** This includes measures for permanent crops in general, such as SAPARD investment for permanent crop farms.
- **All livestock:** This group includes policies directed at producers of livestock, including credit subsidies and investments specific to livestock farms.
- **Milk and beef:** This includes payments per head of mixed breed cattle.

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. Bulgaria: Producer Commodity Specific Transfers by commodity

Tables 3.1 to 3.12, provide information on Producer Single Commodity Transfers (PSCT) for the following commodities: wheat, maize, barley, sunflower, potatoes, sugar, milk, beef and veal, pigmeat, poultrymeat, sheepmeat, eggs and other single commodities. All data sets in the calculation SCT by commodity come from Tables 1 and 4 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 (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 from Table 4]

A2. Payments based on output

Data from Table 1 – see the policies providing payments based on output (A.2) to the specific PSE commodity, in the definitions in Table 1.

B. Payments based on input use [B1+B2+B3]

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

Data from Table 1 – see the policies providing payments based on fixed capital formation (B.2) to the specific PSE commodity, in the definitions in Table 1.

B3. On-farm services

Data from Table 1 – see the policies providing payments based on on-farm services (B.3) to the specific PSE commodity, in the definitions in Table 1.

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

Data from Table 1 – see the policies providing payments based on current A/An/R/I, single commodity (C.1) to the specific PSE commodity, in the definitions in Table 1.

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

Data from Table 1 – see the policies providing payments based on non-current A/An/R/I, production required (D) to the specific PSE commodity, in the definitions in Table 1.

IV. Percentage SCT : %SCT =100*(III)/((II)+(A.2)+(B)+(C.1)+(D))

Table 4. Bulgaria: Market Price Support and Consumer Support Estimate by commodity

Definitions:

I. Level of production

Wheat, Maize, Barley, Sunflower, Sugar beet: Total production in calendar year. (1)

Milk: Cow, goat, sheep and buffalo milk production. (1)

Beef and Veal: Total production in carcass weight equivalent. (1)

Pigmeat: Total production in carcass weight equivalent. (1)

Poultry meat: Total production in carcass weight equivalent. (1)

Eggs: Total production of eggs expressed in thousand tonnes using the coefficient of 17.7 eggs per kg. (1)

II. Producer price

Producer prices at farm gate level: The domestic producer prices used were the weighted average producer prices to processing industries and prices registered on peasant market. (1)

IV. Level of consumption

Wheat, Maize, Barley, Sunflower, Sugar beet: Total domestic use defined as production plus imports minus exports minus net change in stocks. (2)

Beef and Veal, Pigmeat, Poultry meat: Total domestic use in carcass weight equivalent, defined as production plus imports minus exports minus net change in stocks. (2)

Eggs: Total domestic use of eggs expressed in thousand tonnes using the coefficient of 17.7 eggs per kg. (2)

VII. Reference prices

Wheat: EU export price of commercial quality wheat. (3)

Maize: EU import price. (3)

Barley: EU export price for feed barley. (3)

Sunflower: EU import price. (3)

Sugar beet: EU export price of white sugar. (3)

Milk: EU border prices of butter and SMP converted into a milk equivalent border price using technical coefficients minus a processing margin, calendar year. The border price of butter is the “Butter f.o.b. export price, 82% butterfat, N.E.” (3), the border price of SMP is “Non fat dry milk f.o.b export price, extra grade, Northern Europe” (3). The processing margin is the average of processing margins in Australia, European Union, New Zealand and the United States.

Beef and Veal: Hungarian unit export value for carcasses from 1986 to 1997, extra-EU unit export value for 1998 and 1999. This price is expressed in carcass weight and recalculated from the Hungarian carcass coefficient (0.56) using the Bulgarian carcass coefficient. (3)

Pigmeat: Hungarian unit export value for carcasses from 1986 to 1997, extra-EU unit export value for 1998 and 1999. This price is expressed in carcass weight and recalculated from the Hungarian carcass coefficient (0.79) using the Bulgarian carcass coefficient. (3)

Poultry: Extra-EU unit export value. (3)

Eggs: Extra-EU unit export value. (3)

Sources:

- (1) National Statistics Institute of Bulgaria.
- (2) FAOstat collection database.
- (3) OECD PSE/CSE databases for European Union and for Hungary.