

## KAZAKHSTAN: 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 Estimate (PSE) and Consumer Support Estimate (CSE), each policy measure is classified according to implementation criteria, which include: the *transfer basis* of support (output, input, area/animal numbers/receipts/income, and non-commodity criteria); whether support is based on *current or non-current basis*; whether *production is required or not* to receive payment. Each policy measure is also assigned several “labels” indicating additional implementation criteria. “MPS commodities”, which vary across countries, are those for which the 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 Table 1 and Tables 3.1 – 3.14 where definitions are included.

**Tables 3.1 – 3.14 Producer Single Commodity Transfers** contain producer the SCT by commodity, which are calculated for Kazakhstan for the following commodities: wheat, maize, barley, rice, sunflower, milk, beef and veal, sheep meat, pig meat, poultry meat, eggs, cotton, and potatoes (Tables 3.1 – 3.13) provided that the value of production of that commodity exceeds 1% of the total value of production. In addition, the SCT for “non-MPS commodities” is also calculated (Table 3.14), which covers transfers *to single commodities other than MPS commodities*. All data sets in the calculation of producer the SCT by commodity come from Tables 1 and 4.1 – 4.12 where definitions are included.

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

All values are expressed in nominal units of local currency, Kazakh *tenge*.

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*).

For a comprehensive overview of Kazakhstan's agricultural sector and agricultural policies see *Review of Agricultural Policies: Kazakhstan*, OECD, Paris, 2013 and a country chapter on Kazakhstan in the annual report *Agricultural Policy Monitoring and Evaluation 2017: OECD Countries and Selected Emerging Economies* OECD, Paris, 2017 (forthcoming).

Acronyms of KazAgroHolding agencies:

ACC	Agrarian Credit Corporation
FCC	Food Contract Corporation
FFSA	Fund for Financial Support of Agriculture
KAF	KazAgroFinance
KAP	KazAgroProduct

**TABLE 1. KAZAKHSTAN: Agricultural Support Estimates / Total Transfers**

**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.

*I.1. Of which share of MPS commodities (%):* Share of commodities for which MPS is explicitly calculated (in Tables 4.1-4.13) 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 4.1-4.13.

**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 output**

*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 according to their share in the total value of agricultural production [( $\Sigma$ MPS for MPS commodities listed in the rows bellow) / (I.1) x 100].

*A.2. Payments based on output*

*Per tonne payments for oilseeds*

*Ad hoc* payment provided for oilseeds delivered for processing in 2010.  
Production limits: NO; Variable payment rates: NO; Input constraints: NO  
Payments are included in the commodity the SCTs for sunflower.

*Per tonne payments for sugar beet*

*Ad hoc* payment provided for sugar beet delivered for processing in 2010.  
Production limits: NO; Variable payment rates: NO; Input constraints: NO  
Payments are included in the commodity the SCT for “non-MPS commodities”.

*Per tonne payments for individual livestock products*

Payments per tonne of marketed livestock products. Product coverage: milk, beef and veal, pig meat, sheep meat, poultry meat, eggs and other products (fine wool, horse meat, fermented horse milk and fermented camel milk). Payments for milk and beef also include payments provided at sub-national level (as of 2006). The amount of payment is established on the basis of the estimated cost of compound feed required for production of livestock products (limited to 45% of that cost) and other costs.  
Production limits: NO; Variable payment rates: NO; Input constraints: NO  
Payments are included in the commodity the SCT for milk, beef and veal, pig meat, sheep meat, poultry meat, eggs and “non-MPS commodities”.

## ***B. Payments based on input use***

### ***B.1. Based on variable input use***

#### *Seed subsidy: crops -- Elite seed subsidy*

Compensation of 40% of costs to produce or purchase seeds based on the rates set per tonne, provided that selling price does not exceed market price level. Eligible recipients: producers of super elite and elite seeds, and seed buyers.

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

Payments are included in the in the GCT for all crops.

#### *Seed subsidy: crops -- Production cost subsidy for original seeds*

Partial compensation of production costs to produce original seeds based on the rates set per tonne. Eligible recipients: producers of original seeds. Provided from 2003 to 2011.

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

Payments are included in the in the GCT for all crops.

#### *Seed subsidy: crops -- Subsidy for maintenance of mother stock plantations of perennial fruit crops*

Compensation of 100% of costs of establishing and maintaining mother stock plantations of perennial fruit crops. Eligible recipients: growers of mother stock plantations of perennial fruits. Provided from 2006 to 2014.

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

Payments are included in the in the GCT for all crops.

#### *Seed subsidy: crops -- Subsidy for young plants*

Compensation of 40% of costs to grow young plants, with selling price of young plants subjected to upper limits. Payment rate is set per young plant. Eligible recipients: growers of young plants of fruits, berries and vine.

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

Payments are included in the in the GCT for all crops.

#### *Seed subsidy: crops – sub-national budgets*

Aggregated allocations from sub-national budgets, combining payments for support of seed reproduction, support for development of seed production and subsidies to agricultural producers for purchased seeds.

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

Payments are included in the in the GCT for all crops.

#### *Fuel subsidy – national budget*

Partial *ad hoc* compensation of the cost of purchased fuel in 2006 provided from the national budget.

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

Payments are included in the in the ACT.

#### *Fuel subsidy - sub-national budgets*

Partial compensation of the cost of purchased fuel provided from sub-national budgets.

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

Payments are included in the in the ACT.

#### *Implicit diesel subsidy*

Implicit subsidy arising from the limits set on prices for diesel fuel sold to agricultural producers during the sowing and harvesting periods. The total amount of subsidy is calculated as the difference between the average diesel price per tonne charged to non-agricultural buyers and the average price charged to

agricultural producers, multiplied by the amount of diesel fuel sold at regulated prices to agricultural producers.

Production limits: NO; Variable payment rates: NO; Input constraints: NO  
Payments are included in the in the ACT.

*Mineral fertilizer and chemicals subsidy – national budget*

Partial compensation of the cost of purchased fertiliser and chemicals provided from the national budget.  
Production limits: NO; Variable payment rates: NO; Input constraints: NO  
Payments are included in the in the GCT for all crops.

*Mineral fertiliser and chemicals subsidy - sub-national budgets*

Partial compensation of the cost of purchased fertiliser and chemicals provided from sub-national budgets.  
Production limits: NO; Variable payment rates: NO; Input constraints: NO  
Payments are included in the in the GCT for all crops.

*Compensation of interest on sowing and harvesting loans – national budget*

Budgetary subsidy of interest on sowing and harvesting loans provided from the national budget from 2000 to 2002.  
Production limits: NO; Variable payment rates: YES; Input constraints: NO  
Payments are included in the in the GCT for all crops.

*Compensation of interest on sowing and harvesting loans - sub-national budgets*

Budgetary subsidy of interest on sowing and harvesting loans provided from sub-national budgets from 2002 to 2004.  
Production limits: NO; Variable payment rates: YES; Input constraints: NO  
Payments are included in the in the GCT for all crops.

*Implicit transfers arising from short-term credit at fixed preferential rates provided by KazAgroHolding credit agencies within the credit lines sub-listed below [(1) to (10)].*

The amount of transfers for each credit line below [(1) to (10)] is calculated as the difference between the annual market interest rate and annual preferential fixed interest rate for a given credit line, multiplied by the total amount of outstanding credit for that credit line at the beginning of the year. The amount of outstanding credit for each year is estimated based on the data provided directly by KazAgroHolding credit agencies [6]. Market interest rate is the average interest rate on credit issued by commercial banks with the maturity period from 3 months to 1 year published by the Central Bank of Kazakhstan [3].

*(1) Sowing and harvesting loans from ACC, FCC and sub-national budgets*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the GCT for all crops.

*(2) FCC Multi-year loans for sowing and harvesting*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the GCT for all crops.

*(3) FFSA Credit for individual farmers for field works "Engizhai"*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the GCT for all crops.

*(4) FFSA Other loans based on funds from local governments*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the ACT.

*(5) FFSA Micro-credit for PROON Project*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the ACT.

*(6) KAF Short-term loans*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the ACT.

*(7) ACC Pledge-free financing programme "Zhedel-Nesie"*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the GCT for all crops.

*(8) FFSA Credit to micro-credit organisations for cotton producers*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the SCTs for cotton.

*(9) ACC Credit to farmer co-operatives for processing, storage, transportation and input supplies -- input supplies for cotton*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the SCTs for cotton.

*(10) ACC Commercial loans - purchase of inputs*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the ACT.

*Subsidy for crop protection chemicals*

Production limits: NO; Variable payment rates: NO; Input constraints: NO.  
Payments are included in the GCT for all crops.

*Subsidy for vegetables produced in greenhouses*

Production limits: NO; Variable payment rates: NO; Input constraints: NO.  
Payments are included in the GCT for greenhouse vegetables.

*Ad hoc feed subsidy to poultry farms from State Reserve Fund (2014)*

Production limits: NO; Variable payment rates: NO; Input constraints: NO.  
Payments are included in the SCT for poultry.

*2010 ad hoc drought measure*

Compensation of feed cost for keeping livestock through winter 2010/11.  
Production limits: NO; Variable payment rates: NO; Input constraints: NO.  
Payments are included in the GCT for all livestock.

*B.2 Based on fixed capital formation*

*Seed subsidy: subsidy for establishment of perennial fruit plantations and vineyards*

Compensation of costs of establishment of perennial fruit plantations and vineyards. Provided from 2005 to 2014.

Production limits: NO; Variable payment rates: NO; Input constraints: NO.  
Payments are included in the GCT for all fruits and vegetables.

*Support for establishment and maintenance of perennial fruit plantations and vineyards - national budget subventions to sub-national budgets*

Compensation of costs of establishment and maintenance of perennial fruit plantations and vineyards, financed from the national budget in the form of subventions to sub-national budgets

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

Payments are included in the GCT for all fruits and vegetables.

*Support for establishment and maintenance of perennial fruit plantations and vineyards – sub-national budgets*

Compensation of up to 40% costs of establishment and maintenance of perennial fruit plantations and vineyards, financed from sub-national budgets

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

Payments are included in the GCT for all fruits and vegetables.

*FCC direct investment in horticulture projects*

Direct investments by the Food Contract Corporation in projects related to horticultural production.

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

Payments are included in the SCTs for all fruit and vegetables.

*Pedigree livestock programme - Support for purchase of pedigree livestock - national budget subventions to sub-national budgets*

Budgetary financing provided until 2014 for the following items: (a) compensation of up to 50% of the cost of purchased pedigree livestock and cost of semen of pedigree bulls; eligible recipients: livestock producers and pedigree livestock breeding farms; (b) compensation of up to 50% of the cost of purchased day-old chicks; eligible recipients: poultry producers; (c) 100% compensation of the cost of purchased pedigree poultry; eligible recipients: poultry breeding farms; (d) 100% compensation of the cost of purchased pedigree horses, and the costs of keeping and training pedigree horses; eligible recipients: horse breeders; (e) 100% compensation to the National Centre for Pedigree Livestock of the cost of purchased pedigree bulls, imported semen and costs of keeping pedigree bulls; (f) 100% compensation of the cost of laboratory equipment and of agricultural equipment purchased by the National Centre for Pedigree Livestock.

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

Payments are included in the SCTs for all livestock.

*Pedigree livestock programme -Support for purchase of pedigree livestock - sub-national budgets*

Compensation of cost of purchased pedigree livestock, semen of pedigree bulls and costs of keeping pedigree animals, financed from sub-national budgets.

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

Payments are included in the SCTs for all livestock.

*Support for purchase of pedigree livestock - subvention from the State Reserve Fund to sub-national budgets*

*Ad hoc* allocation from the State Reserve Fund in 2008.

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

Payments are included in the SCTs for all livestock.

*Pedigree livestock programme - Subsidy for pedigree animals*

Compensation of cost of purchased pedigree livestock, semen of pedigree bulls and costs of keeping pedigree animals (milk cattle, beef cattle, pigs, sheep, poultry for meat and egg production and other livestock).

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

Payments are included in the SCTs for beef and veal, milk, sheep meat and poultry meat and eggs.

*Pedigree livestock programme - Per head subsidies for keeping pedigree bulls - Beef and veal*

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

Payments are included in the SCT for beef and veal.

*Investments in construction of industrial milk and meat production facilities*

One-off allocation from the national budget in 2007

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

Payments are included in the SCTs for milk and beef.

*KAP direct investment – construction of feedlots*

Direct investments by the KazAgroProduct in the projects related to beef production, including construction of a “KazBeef” feedlot for 5 000 head of cattle; construction of a beef farm for up to 1 000 head of Angus cattle; and construction of a beef farm for up to 1 000 head of Hereford cattle.

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

Payments are included in the SCTs for beef.

*KAP direct investment – other investments*

Direct investments by the KazAgroProduct in other projects in the meat sector.

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

Payments are included in the GCTs for all livestock.

*Support for setting up small and medium agribusiness, including family farms*

Grants for setting-up private agricultural and agribusiness entities (up to 1996).

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

Payments are included in the ACT.

*Support for adoption of new technologies*

Grants for adoption of new agricultural production technologies (up to 1996).

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

Payments are included in the ACT.

*Implicit transfers arising from long-term credit provided at fixed preferential rates within the credit lines (1) to (41) sub-listed below.*

The amount of transfers for each credit line [(1) to (41)] is calculated as the difference between the annual market interest rate and annual preferential interest rate fixed for a particular credit line, multiplied by the amount of outstanding credit for that credit line at the beginning of a given year. The amount of outstanding credit for each year is estimated based on data provided directly by KazAgroHolding credit agencies [6]. Market interest rate is the average interest rate on credit issued by commercial banks with the maturity period from 1 to 5 years or over 5 years, depending on the conditions set for a particular credit line, published by the Central Bank of Kazakhstan [3].

*(1) ACC Credit provided through Credit Associations – Crops production*

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

Payments are included in the GCT for all crops.

*(2) ACC Credit provided through Credit Associations – Livestock production*

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

Payments are included in the GCT for all livestock.

*(3) ACC Commercial loans – Crop production*

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

Payments are included in the GCT for all crops.



*(4) ACC Commercial loans – Livestock production*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the GCT for all livestock.

*(5) ACC Credit for acquisition of pedigree beef and milk cattle - “Sybaga programme”*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the SCTs for milk and beef.

*(6) ACC Credit based on funds from local governments – Crop production*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the GCT for all crops.

*(7) ACC Credit based on funds from local governments – Livestock production*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the GCT for all livestock.

*(8) ACC Credit for investment projects – Feedlot construction*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the SCTs for beef.

*(9) ACC Credit for investment projects – Livestock reproduction farms*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the GCT for all livestock.

*(10) ACC Credit to Credit Associations for purchase of animals for reproduction*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the SCTs for sheep.

*(11) ACC Credit to farmer co-operatives for processing, storage, transportation and input supplies -- breeding of pedigree animals*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the GCTs for all livestock.

*(12) ACC Credits to cooperatives for acquisition of horses*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the GCTs for all livestock.

*(13) ACC Credits for building pasture water supply infrastructure*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the GCTs for all livestock.

*(14) Commercial banks' credits to agri-food borrowers (via ACC)*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the GCTs for all livestock.

*(15) Interest subsidy: machinery leasing – actual budgetary spending – (2001-13)*

Budgetary interest subsidies on leasing of machinery and special equipment for agriculture provided by KazAgroFinance

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the ACT.

*(16) Interest subsidy: all leasing items - actual budgetary spending – (starting from 2014)*  
Budgetary interest subsidies on leasing of machinery and special equipment for agriculture provided by KazAgroFinance

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the ACT.

*(17) KAF Leasing of agricultural machinery and special equipment*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the ACT.

*(18) KAF Credit for purchase of pedigree cattle*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the SCTs for beef.

*(19) KAF Credit for investment projects - Livestock reproduction farms*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the GCT for all livestock.

*(20) KAF Credit for investment projects - Milk complexes*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the SCTs for milk.

*(21) KAF Credit for investment projects - Poultry complexes*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the SCTs for poultry.

*(22) KAF Credit for investment projects - Pig complexes*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the SCTs for pig meat.

*(23) KAF Credit for investment projects - Greenhouses*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the SCTs for all fruit and vegetables.

*(24) KAF Credit for investment projects - Drip irrigation*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the GCT for all crops.

*(25) KAF Credit for investment projects - Feedlots*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the GCT for all crops.

*(26) FFSA Rural micro-credit to individual borrowers – Crop production*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the GCT for all crops.

*(27) FFSA Rural micro-credit to individual borrowers – Livestock production*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the GCT for all livestock.

*(28) FFSA Credit to micro-credit organisations – Livestock production*

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

Payments are included in the GCT for all livestock.

*(29) FFSA Credit for development of livestock production*

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

Payments are included in the GCT for all livestock.

*(30) FFSA Credit to micro-credit organisations for on-lending to individual borrowers – Livestock Production*

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

Payments are included in the GCT for all livestock.

*(31) FFSA Micro-credit for construction of greenhouses*

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

Payments are included in the SCTs for all fruit and vegetables.

*(32) FFSA Credit for purchase of breeding stock and feeds - "Mal Azhyk" Programme*

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

Payments are included in the GCT for all livestock.

*(33) FFSA - Leasing of greenhouses*

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

Payments are included in the SCTs for all fruit and vegetables.

*(34) FFSA Micro-credit for small producers and rural borrowers – Islamic Development Bank Development (IDD) programme*

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

Payments are included in the ACT.

*(35) FFSA Micro-credit for drip irrigation*

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

Payments are included in the ACT.

*(36) FFSA Credit for establishing milk collection points*

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

Payments are included in the ACT.

*(37) FFSA Credit for enlargement of milk farms*

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

Payments are included in the ACT.

*(38) FFSA Other loans - Crop production*

Loans provided to crop farms within Programmes *Road map of employment 2020, Road map of business and Development of mono-cities* (Aktobe and Almaty)

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

Payments are included in the ACT.

*(39) FFSA Other loans - Livestock production*

Loans provided to livestock farms within Programmes *Road map of employment 2020, Road map of business and Development of mono-cities* (Aktobe and Almaty)

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

Payments are included in the ACT.

*(40) FFSA Loans for apple orchards development*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the ACT.

*(41) Preferential loans allocated through commercial banks*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the ACT.

*(42) KAP Financing investment project*

Production limits: NO; Variable payment rates: YES; Input constraints: NO.  
Payments are included in the ACT.

*Interest subsidies on investment loans to agriculture – Business Roadmap 2020 Programme*

Budgetary interest subsidies on loans provided within the national programme Business Roadmap 2020 for agricultural projects. The amount of subsidies is estimated as a portion of the total amount of interest subsidies provided within this Programme, with the portion corresponding to the share of credit provided for agricultural projects in total amount of credit allocated in a given year within this Programme.

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

Payments are included in the ACT.

*2006 Write-off of overdue credit to agricultural enterprises liquidated as of 1 January 2006 (Government Resolution N763 of 14.08.2006)*

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

Payments are included in the ACT.

*2009 Write-off of overdue credit to agricultural enterprises liquidated as of 1 January 2009 (Government Resolution N1457 of 28.09.2009)*

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

Payments are included in the ACT.

*2010 Write-off of overdue credit to agricultural enterprises liquidated as of 1 January 2010 (Government Resolution N865 of 01.08.2010)*

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

Payments are included in the ACT.

*2013-2015 Write-off of overdue debts, so called Programme of financial rehabilitation of farms* foresees substantial interest concessions, with repayment schemes of overdue loans prolonged for up to nine years. The interest rate on restructured loans is subsidised to final borrowers by the government, effectively bringing debt service costs to up to 7% and 1% per annum for loans in KZT and USD, respectively. The programme also writes off fines and penalties on overdue loans.

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

Payments are included in the ACT.

*Agribusiness 2020 Programme Direct investment subsidies to livestock farms national and local budgets*

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

Payments are included in the ACT.

*Agribusiness 2020 Programme Direct investment subsidies to crop farms national and local budgets*

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

Payments are included in the ACT.

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

#### *Subsidy for transportation of irrigation water - national budget*

Payments to suppliers of water for agricultural irrigation; transfers from the national budget

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

Payments are included in the GCT for all crops.

#### *Subsidy for transportation of irrigation water - sub-national budgets*

Payments to suppliers of water for agricultural irrigation; transfers from sub-national budgets

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

Payments are included in the GCT for all crops.

#### *Cotton quality expertise subsidy - national budget*

Compensation of 100% of costs related to cotton quality expertise; eligibility: domestic cotton growers

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

Payments are included in the SCTs for cotton.

#### *Cotton quality expertise subsidy – sub-national budgets*

Coverage of costs services on laboratory analysis and seed quality certification provided to cotton growers; transfers from sub-national budgets

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

Payments are included in the SCTs for cotton.

#### *Pedigree livestock programme - Subsidy for artificial insemination services*

Compensation of cost of purchased pedigree livestock, semen of pedigree bulls and costs of keeping pedigree animals (beef cattle, milk cattle, sheep and poultry).

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

Payments are included in the GCT for all livestock.

#### *Implicit transfers arising from long-term credit provided at fixed preferential rates within the credit lines (1) to (2) sub-listed below.*

The amount of transfers for a particular year and for each credit line [(1) and (2) below] is calculated as the difference between the annual market interest rate and annual preferential interest rate fixed for a particular credit line, multiplied by the amount of outstanding credit within that credit line at the beginning of a given year. Market interest rate is the average interest rate on credit issued by the commercial banks with the maturity from 1 to 5 years or over 5 years, depending on the conditions set for a particular credit line, published by the Central Bank of Kazakhstan. The amount of outstanding credit for each year is estimated based on data provided directly by KazAgroHolding credit agencies

##### *(1) ACC Credit through farmer co-operatives – Production services*

Credit provided by the Agrarian Credit Corporation to farmer co-operatives providing for processing, storage, transportation and input supply services

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

Payments are included in the GCT for grains.

##### *(2) KAF Credit for setting-up machinery service stations and their operation*

Credit provided by the KazAgroFinance agency for setting-up machinery service stations and their operation; one-off loan in 2005

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

Payments are included in the ACT.

### ***C. Payments based on current area planted/animal numbers/receipts/income – production required***

#### *Per hectare subsidies*

Payments per hectare planted with “priority crops” approved by the government, with the list of such crops determined for each region. The payment is differentiated by crop, and for some, further varies depending on cultivation technology. Producers applying drip irrigation, and, in the case of grain, complying with “scientific” requirements, are eligible for higher payment rates. The same payment rates for each crop are set across the country. This payment is provided for crops and crop groups from (1) to (9) sub-listed below:

#### *(1) Per hectare subsidies – individual crops*

Crop coverage: rice; sugar beet with traditional technology; sugar beet with advanced technology; cotton with traditional technology; cotton with advanced technology; potatoes; and grapes

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

Payment eligibility: Area

Payments are included in the SCTs for rice, cotton, potatoes and “non-MPS commodities”

#### *(2) Per hectare subsidies – Grains cultivated with traditional technologies*

Crop coverage: grains cultivated with traditional technologies; grains cultivated with advanced technologies

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

Payment eligibility: Area

Payments are included in the GCT for grains.

#### *(2) Per hectare subsidies – Grains cultivated with advanced technologies*

Crop coverage: grains cultivated with traditional technologies; grains cultivated with advanced technologies

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

Payment eligibility: Area

Payments are included in the GCT for grains.

#### *(4) Per hectare subsidies – Oilseeds*

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

Payment eligibility: Area

Payments are included in the GCT for oilseeds.

#### *(5) Per hectare subsidies – Vegetables and melons cultivated with traditional technology*

Crop coverage: vegetables and melons cultivated with traditional technologies; vegetables and melons cultivated with advanced technologies

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

Payment eligibility: Area

Payments are included in the GCT for all fruit and vegetables.

#### *(6) Per hectare subsidies – Vegetables and melons cultivated with advanced technology*

Crop coverage: vegetables and melons cultivated with traditional technologies; vegetables and melons cultivated with advanced technologies

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

Payment eligibility: Area

#### *(7) Per hectare subsidies – Fruit and berries*

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

Payment eligibility: Area

Payments are included in the GCT for all fruit and vegetables.

*(8) Per hectare subsidies -- Feed crops*

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

Payment eligibility: Area

Payments are included in the GCT for feed crops.

*(9) Per hectare subsidies – Other crops*

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

Payment eligibility: Area

Payments are included in the GCT for other crops.

*Per head subsidies -- Silage and Fodder subsidies*

Partial compensation (up to 50%) of cost of silage and roughage feeds for milk and beef cattle, pigs, sheep, poultry and other livestock production provided in 2014-16.

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

Payment eligibility: Animal

Payments are included in the GCT for all livestock.

*Per head subsidies -- Keeping pedigree bulls - Milk and beef cattle*

Partial compensation (up to 60-70%) of cost of keeping pedigree bulls for milk and beef cattle provided.

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

Payment eligibility: Animal

Payments are included in the GCT for all livestock.

*Per head subsidies -- Artificial insemination services -- Milk and beef cattle*

Partial compensation (up to 100%) of cost of artificial insemination services for milk and beef cattle provided.

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

Payment eligibility: Animal

Payments are included in the GCT for all livestock.

*Per head subsidies for young cattle for feedlots*

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

Payment eligibility: Animal

Payments are included in the SCT for beef.

*Compensation of loss from animal culling due to epizootics – national budget*

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

Payment eligibility: Animal

Payments are included in the GCT for all livestock.

*Compensation of loss from animal culling due to epizootics – sub-national budgets*

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

Payment eligibility: Animal

Payments are included in the GCT for all livestock.

*Compensation of crop insurance indemnities*

Compensation to insurers of 50% of the value of indemnities paid out and of the cost of services related to mandatory crop insurance scheme

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

Payment eligibility: Area

Payments are included in the GCT for other crops.

*Write-off of tax arrears to state farms producing elite seeds and pedigree livestock (arrears as of 1 January 2000) - Seed farms*

Write-off implemented in 2003 and 2005

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

Payment eligibility: Area

Payments are included in the GCT for all crops.

*Write-off of tax arrears to farms producing elite seeds and pedigree livestock (arrears as of 1 January 2000) - Pedigree farms*

Write-off implemented in 2003, 2005 and 2006.

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

Payment eligibility: Area

Payments are included in the GCT for all livestock.

***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***

*F.1. Long-term resource retirement*

*F.2. Specific non-commodity output*

*F.3. Other non-commodity criteria*

***G. Miscellaneous payments***

*Support for sheep breeding (1995-1997)*

Non-specified budgetary disbursements for support of sheep breeders in 1995-1997.

*Miscellaneous payments to producers from sub-national budgets*

Non-specified budgetary disbursements to producers from sub-national budgets.

**III.2 Percentage PSE**  $[100 \times (\text{III.1}) / ((\text{I}) + (\text{Sum of A2 to G}))]$

**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 Tables 4.1 – 4.14. 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**  $[1 / (100 - (\text{III.2})) \times 100]$

**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***

### ***H.1 Agricultural knowledge generation***

*Academy of Agricultural Sciences of Kazakhstan*

Financing of the Academy of Agricultural Sciences of Kazakhstan (series up to 1997)

*Ad hoc transfer to the Academy of Agricultural Sciences of Kazakhstan in 1995*

Ad hoc transfer to the Academy of Agricultural Sciences of Kazakhstan in 1995

*Applied research in agro-industrial complex – financing through the Ministry of Agriculture*

Public financing of applied agricultural research from the budget of the Ministry of Agriculture

*Financing of applied agricultural research - sub-national budgets*

Financing of applied agricultural research from sub-national budgets

*Transfers for capitalisation of KazAgroInnovation*

Public financing of institutions functioning under the umbrella of *KazAgroInnovation*, including 23 research institutions with 26 branches across the country, 14 experimental stations, ten extension centres, and six innovation and analytical centres.

*State awards in the field of agricultural research*

*Construction of National Reserve for genetic resources of plants and animals*

*Preservation and rehabilitation of gene pool of rare and disappearing species of agricultural animals*

Public financing for the following items: (a) full compensation of the cost to purchase endangered species to form collection stock; (b) compensation of the cost of special and office equipment and special vehicles

*Research and methodology advice on identification of agrochemical soil quality*

Public financing for the following items: (a) agro-meteorological monitoring; (b) analysis and forecasting related to soil moisture reserve, probability of crop damage due to adverse weather conditions (frost, cold, snow, drought, pests and diseases), recommendations on the timing of planting, ripening, yield and harvest of spring crops; (c) provision of information on agro-meteorological conditions by regions; (d) space monitoring of crop development and assessment of yields.

*Construction of veterinary laboratory for GMO research*

*Financing of agricultural research – financing through the Ministry of Science*

Public financing of agricultural research from the budget of the Ministry of Science

*Information, analytical and methodology services*

*OECD Country cooperation programme*

*Development of professional standards*

Public financing of the preparation of professional standards for governmental agencies and organizations

### ***H.2. Agricultural knowledge transfer***

#### ***H.2.a. Education***

*Construction and reconstruction of agricultural education structures*

*Financing of agricultural education – financing through the Ministry of Education*

### ***H.2.a. Extension services***

*Information services for agricultural producers and agribusiness*

Financing of the following activities of the Ministry of Agriculture and its structures at the regional, city and rayon levels: (1) assistance to agricultural producers in identification and analysis of business problems; (2) development of recommendations to solve business problems; (3) provision of up-to-date information on issues related to production and processing, including information on new technologies and management systems; (4) assisting in improving the existing management systems; (5) support to producer organisations; (6) development and distribution of analytical information on current situation and trends in the agricultural sector.

*Programme "With Diploma to Rural Area" - national budget*

*Programme "With Diploma to Rural Area" - sub-national budgets*

*Development of consulting services conveying pedigree breeding*

*Extension services - sub-national budgets*

## ***I. Inspection and control***

### ***I.1. Agricultural product safety and inspection***

*Food safety assurance*

### ***I.2. Pest and disease inspection and control***

*Quality identification of seeds and planting material*

Financing of laboratory analysis and seed quality certification.

*Variety testing for agricultural crops*

*Veterinary monitoring, referencing, laboratory diagnostics and methodology development*

*Diagnostics of animal diseases*

Financing of serological, bacteriological, virological and parasitological tests of animals and birds

*Anti-epizootic measures – national budget*

Financing of anti-epizootic measures from the national budget.

*Anti-epizootic measures – sub-national budgets*

Financing of anti-epizootic measures from sub-national budgets.

*Construction, reconstruction and equipment of veterinary laboratories, biostorages and veterinary facilities – national budget*

Financing of the activities indicated above from the national budget.

*Construction and maintenance of veterinary laboratories, anti-epizootic expeditions – sub-national budgets*

Financing of the activities indicated above from sub-national budgets.

*Emergency measures against propagation of infectious animal diseases - Government Reserve Fund*

One-off transfer from the Government Reserve Fund to finance measures against propagation of the Crimean haemorrhagic fever (*febris haemorrhagica crimiana*) in South Kazakhstan region in 2009

*Liquidation of outbreaks of acute and chronic infectious animal diseases*

*Emergency measures related to animal disease outbreaks*

*Identification of agricultural animals – national budget subventions to sub-national budgets*

Subventions from the national budget to sub-national budgets for: (1) coverage of the cost of services to produce veterinary certificates for farm animals (sheep and goats, horses, camels, pigs); (2) payment for veterinary items, such as ear tags for livestock; (3) procurement of devices for livestock identification; (4) procurement of scanners for reading of individual animals numbers and printers for printing self-adhesive barcodes.

*Identification of agricultural animals - sub-national budgets*

Co-financing from sub-national budgets of the activities described in the previous item.

*Financing of local network of veterinary agencies*

*Combat against particularly dangerous plant pests – national budget*

Financing of activities by the national phyto-sanitary authorities and their subordinate structures, such as: (1) monitoring of the emergence, development and spread on of pests, diseases and weeds; (2) identification of centres of spread of particularly dangerous and harmful organisms; (3) chemical treatments to reduce the spread of particularly dangerous harmful organisms; (4) informing agricultural producers about the development and spread of particularly dangerous harmful organisms.

*Combat against plant pests - sub-national budgets*

Co-financing from sub-national budgets of the activities described in the previous item.

*Methodology advice on phytosanitary monitoring, diagnostics and prognosis*

*Laboratory analysis on identification of presence of quarantine pests and diseases*

*Identification, localisation and liquidation of quarantine pests and diseases*

*Purchase of insecticides to prevent the spread of locust (in 2008) - Government Reserve Fund*

One-off transfer from the Government Reserve Fund in 2008.

*Transfer for capitalisation of the State Phyto-Sanitary Enterprise*

One-off transfer to the State Phyto-Sanitary Enterprise in 2011.

*Expenditures to combat animal disease epidemics (in 2010 and 2011)*

### ***1.3. Input control***

*Preparation of documentation, machinery and components for machinery testing*

*State registration of agricultural equipment*

Coverage of the costs of services for registration and testing of purchased machinery and equipment.  
Eligibility: cotton producers in the South Kazakhstan oblast

*Damage control and treatment of toxic pesticides*

*Capital investments in public agencies providing agrochemical services*

***J. Development and maintenance of infrastructure***

***J.1. Hydrological infrastructure***

*State Programme for Water Resource Management 2014-2020 -- Water management projects*

*Programme for Development of Regions 2020 -- Water management projects*

*Water management projects not included in national programmes*

*Water management and land reclamation – national budget*

Financing for maintenance of the Zonal Hydrogeological and Amelioration Center, South Kazakhstan Hydrogeological and Amelioration Expedition, and Kyzylorda Hydrogeological and Amelioration Expedition. The financed activities also include agricultural inspections of irrigated lands, fixed hydrogeological observations of the groundwater levels and salt ratios, hydrological observations of flows of collector and drainage waters, soil and salt surveys, and laboratory tests.

*Water management and land reclamation - sub-national budgets*

Financing of the activities indicated above from sub-national budgets.

*Improvement of irrigation and drainage systems – national budget*

Financing of the activities indicated above from the national budget.

*Improvement of irrigation and drainage systems – sub-national budgets*

Financing of the activities indicated above from sub-national budgets.

*Emergency overhaul and restoration of inter-farm water channels, irrigation and drainage systems*

Financing of repairs of main water channels and collectors; repairs of water reservoirs, hydraulic power systems, and drainage wells

*Land reclamation: irrigation and drainage expeditions*

Expenditures related to the activity of the Hydrogeological and Ameliorative Expedition of the Committee on Water Resources to monitor the condition of irrigated lands

*State loan to implement the project on improvement of irrigation and drainage systems*

Kazakhstan's contribution in 2000-04 to the *Irrigation and Drainage Improvement* project implemented under the agreement with the International Bank for Reconstruction and Development to promote sustainable production on irrigated agricultural land; financed activities include: (1) rehabilitation of irrigation and drainage systems; (2) improvement of water management, operation and maintenance of water systems; (3) promotion of better agricultural practices and information services for farmers; (4) strengthening of irrigation and environmental agencies

*State loan to implement the project on improvement of water management and land reclamation*

Kazakhstan's contribution in 2002-07 to *Water Management and Land Reclamation* project implemented under the agreement with the Republic of Kazakhstan and the Asian Development Bank; financed activities include: (1) establishment of Water Users' Associations and Federations; (2) construction of vertical drainage wells; (3) improvement of the existing irrigation structures; (4) construction of water channels; and (5) monitoring of environmental conditions in the project area, monitoring and evaluation of economic, social, and health impacts and assessment of progress in integrated pest management

*Methodology advice on preservation of water systems*

*Agrometoclimatic and space monitoring of agricultural production*

*KazAgroFinance Public investment under Agribusiness 2020 Programme -- irrigation infrastructure*

### ***J.2. Storage, marketing and other physical infrastructure infrastructure***

*Construction of a wholesale market - Government Reserve Fund*

One-off transfer from the Government Reserve Fund in 2008

*Construction of the Exhibition and Fair Centre in Astana city*

Construction of exhibition and trade fair complex in Astana. No allocations have been made up to 2015.

*Implicit transfers arising from credit to food processors provided at fixed preferential rates* within credit lines (1) and (2) of the KazAgroHolding's credit agency KazAgroFinance (KAF):

The amount of transfers for each credit line is calculated as the difference between annual market interest rate and annual preferential fixed interest rate, multiplied by the amount of outstanding credit at the beginning of a given year for each credit line. The amount of outstanding credit is estimated on the basis of data provided by KazAgroHolding credit agencies [6]. Market interest rate is the average interest rate on credit issued by commercial banks with the maturity from 3 months to 1 year, or 1 to 5 years, or over 5 years, depending on the duration of loan set for a particular credit line, published by the Central Bank of Kazakhstan [3].

*(1) KAF Credit for investment projects - Grain market infrastructure*

*(2) KAF Credit for investment projects - Vegetable storages*

### ***J.3. Institutional infrastructure***

*Creation of the Centre for Technical Support to Microcredit Organisations*

Kazakhstan's contribution in 2002-07 to the implementation of the Memorandum on Cooperation between Kazakhstan's Fund for Financial Support to Agriculture and Warsaw Microfinance Centre ( Poland); one-off transfer in 2010

*Maintenance and overhaul of the state stations of artificial insemination - sub-national budgets*

Financing of the activities indicated above

*State loan to finance project on post-privatisation support of agriculture*

Kazakhstan's contribution in 1999-2012 to *Agricultural Post-Privatization Assistance Project* implemented under the agreement with the International Bank for Reconstruction and Development; in its current second phase financed activities include: (1) expansion of rural financial advisory services; (2) improvement of agricultural risk management; (3) development of rural financial products; and (4) promotion of sustainable rural micro-finance.

*Development of regulations and methodologies in the agro-industrial complex, water and forestry sectors*  
Development of guidelines, regulations, standards and practices for adaptation of the existing norms to international standards

*Improvement of business activity in the agro-industrial complex "aka E-Agriculture"*

Development of IT systems in the areas of veterinary and phyto-sanitary safety and technology policy; computerisation of government services; establishment of electronic information and a free-access consulting network for agricultural producers

*Establishment of the land cadaster database*

Financing the development of land cadaster database.

*Establishment and maintenance of topographic and geodesic database*

Financing the creation of topographic products and materials

*Transfer for capitalisation of the State Enterprise KazVodKhoz (Kazakhstan Water Facilities)*

Transfer of the funds from the state budget to KazVodKhoz for the emergency repair of 15 water infrastructure objects.

#### ***J.4. Farm restructuring***

#### ***K. Marketing and promotion***

##### ***K.1. Collective schemes for processing and marketing***

*Improvement of competitiveness of agricultural products*

Kazakhstan's contribution in 2004-12 to *Agricultural Competitiveness Project* implemented under the agreement with the International Bank for Reconstruction and Development; financed activities include: (1) development of agricultural marketing infrastructure (slaughter houses, storage facilities, etc.); (2) modernisation of private laboratories; (3) increasing attractiveness of agricultural products (development of new design for packaging, rebranding, etc.); (4) applied agricultural research (testing of new varieties, breeds, etc.); (5) extension and technology adoption

*Grain warehouse receipts: development of the system and coverage of guarantees*

Transfers to the state agency KazAgroGarant for setting up of the grain warehouse receipts system and transfers to a guarantee fund for grain warehouse receipts

*Cotton warehouse receipts: development of the system and coverage of guarantees*

Transfers to the state agency KazAgroGarant for setting up of the cotton warehouse receipts system and transfers to a guarantee fund for cotton warehouse receipts

*Creation of computerised information and marketing system of the Ministry of Agriculture*

*Development of computerised information systems in rural areas – national budget*

Financing of free consulting services provided by rural information and consultation services centres; organisation of free seminars and workshops at the extension centres; collection and provision of free information on agricultural prices available on the official website of the state agency KazAgroMarketing; production and distribution of free publications on current agricultural situation by KazAgroInnovation

*Development of computerised information systems in rural areas – sub-national budget*

Support for development of information services from sub-national budgets

*Implicit transfers arising from credit to food processors provided at fixed preferential rates within credit lines (1) and (2) of the KazAgroHolding's credit agency Agrarian Credit Corporation (ACC):*

The amount of transfers for each credit line is calculated as the difference between annual market interest rate and annual preferential fixed interest rate, multiplied by the amount of outstanding credit at the beginning of a given year for each credit line. The amount of outstanding credit is estimated on the basis of data provided by KazAgroHolding credit agencies [6]. Market interest rate is the average interest rate on credit issued by commercial banks with the maturity from 3 months to 1 year, or 1 to 5 years, or over 5 years, depending on the duration of loan set for a particular credit line, published by the Central Bank of Kazakhstan [3].

*(1) ACC Credit to farmer co-operatives – Food processing*

*(2) ACC Commercial loans – Food processing*

*Investments in construction of meat collection points*

Public financing of construction of meat collection points within the state Programme for development of the meat sector

*Public investment under Agribusiness 2020 Programme -- processing and storage facilities*

### ***K.2. Promotion of agricultural products***

*Subsidy to processing enterprises for adoption of quality control systems*

Compensation of 50% of the costs of adoption of modern quality control systems in the food processing.  
Eligibility: food processors

### ***L. Cost of public stockholding***

*Storage and relocation of grain from the state food grain reserve*

Budgetary financing of grain storage in the State Food Grain Reserve and for relocation of grain from the northern to the southern regions of Kazakhstan

*Transportation of feed grain - Government Reserve Fund*

One-off transfer from the Government Reserve Fund in 2010 for transportation of grain to regions affected by drought

### ***M. Miscellaneous***

*Post-privatisation support of agriculture*

Non-specified budgetary support for post-privatisation assistance

*FAO membership contributions*

*Miscellaneous allocations -- sub-national budgets*

Non-specified budgetary disbursements from sub-national budgets.

*Allocations for credit guarantees within Programme Agribusiness 2020*

*Transfer for capitalisation of KazAgro within the Joint Hungarian-Kazakh direct investment programme*

**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].

**N. 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  $[(N.1) / (I.1) \times 100]$ .

**N.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 Tables 4.1 to 4.13.

**O. 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  $[(O.1) / (I.1) \times 100]$ .

**O.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 Tables 4.1 to 4.13.

**P. Transfers to consumers from taxpayers**

**P.1. Commodity specific transfers to consumers**

*FCC investments in cotton processing facilities*

Direct investments by the state agency Food Contract Corporation in construction of cotton processing facilities

*FCC investments in cotton seed treatment facilities*

Direct investments by the state agency Food Contract Corporation in construction of cotton seed treatment facilities

*KAP investments in meat processing facilities*

Direct investments by the state agency KazAgroProduct in construction of cotton seed treatment facilities

*KAF Credit for investment projects - Meat processing*

Implicit transfers arising from credit to meat processors provided at fixed preferential rates within credit. The amount of transfers is calculated as the difference between annual market interest rate and annual preferential fixed interest rate, multiplied by the amount of outstanding credit at the beginning of a given year for each credit line. The amount of outstanding credit is estimated on the basis of data provided by KAF [6]. Market interest rate is the average interest rate on credit issued by commercial banks with the maturity from 3 months to 1 year, or 1 to 5 years, or over 5 years, depending on the duration of loan set for a particular credit line, published by the Central Bank of Kazakhstan [3].

*Ad hoc bread subsidy from State Reserve Fund (2014)*

Payments to milk and sugar plants to subsidise the cost of purchased primary agricultural products.

**P.2. Non-commodity specific transfers to consumers**

*Implicit transfers arising from credit to food processors provided at fixed preferential rates within credit lines (1) to (11) of KazAgroHolding credit agencies sub-listed below*

The amount of transfers for each credit line is calculated as the difference between annual market interest rate and annual preferential fixed interest rate, multiplied by the amount of outstanding credit at the



beginning of a given year for each credit line. The amount of outstanding credit is estimated on the basis of data provided by KazAgroHolding credit agencies [6]. Market interest rate is the average interest rate on credit issued by commercial banks with the maturity from 3 months to 1 year, or 1 to 5 years, or over 5 years, depending on the duration of loan set for a particular credit line, published by the Central Bank of Kazakhstan [3].

- (1) ACC commercial loans – Meat processing
- (2) ACC Credit for investment projects - Grain storages and elevators
- (3) ACC Credit for investment projects – Food processing
- (4) ACC Credit for investment projects - Meat collection points
- (5) ACC Credit to food processors
- (6) ACC commercial loans – Grain processing
- (7) ACC commercial loans – Oilseeds processing
- (8) ACC commercial loans – Processed grain products
- (9) KAF Credit for investment projects – Food processing
- (10) KAF Credit for investment projects - Deep processing of grain
- (11) KAF Leasing of machinery and special equipment - Food processing

*Leasing fee subsidy and interest subsidy on working capital credit to processors*

Budgetary disbursements for the following items: (1) leasing fee subsidies for machinery and equipment leased by food processors from commercial leasing companies; and (2) interest subsidies on loans taken by processors from commercial banks

*Interest subsidies on investment loans to processors – Business Roadmap 2020 Programme*

Budgetary interest subsidies on loans provided within the national programme Business Roadmap 2020 for projects related to food processing and marketing. The amount of subsidies is estimated as a portion of the total amount of interest subsidies provided within this Programme, with the portion corresponding to the share of credit for food processing and marketing in total amount of credit allocated in a given year within this Programme

*Public investment under Agribusiness 2020 Programme -- processing of products with high value added*

*Agribusiness 2020 Programme: direct investment in production of specific commodities, national and local budgets*

*Subsidies to the processors to compensate the VAT*

**Q. Excess Feed Cost:** Associated with market price support on quantities of domestically produced crops and used on-farm as feed as calculated (Sum of *Excess Feed Cost* in the MPS Tables 4.1, 4.2, and 4.3.).

**V.2 Percentage CSE**  $[100 \times (V.1) / ((II) + (P))]$

**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 (at the farm gate).

**V.4 Consumer NAC**  $[(1 / (100 - (V.2))) \times 100]$

**VI. Total Support Estimate**  $[(III.1) + (IV) + (P)]$  and  $[(R) + (S) - (T)]$

**R. Transfers from consumers**  $[(N) + (O)]$

**S. Transfers from taxpayers**  $[(III.1) - (N) + (IV) + (P)]$

**T. Budget revenues**  $[(O)]$

**TABLE 2. KAZAKHSTAN: Breakdown of PSE by commodity specificity and other transfers**

All data sets in Table 2 come from Tables 1 and 3.1 – 3.14.

**Definitions:**

**I. Producer Single Commodity Transfers (producer SCT):** the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm level, arising from policy measures directly 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 policies where payments are specified on a per-commodity basis [Sum of SCTs for individual commodities from Tables 3.1-3.14].

**Percentage producer 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 the SCT (Table 2), or for a specific commodity (Tables 3.1 to 3.14).

$$\%SCT = 100 * SCT / (\text{Value of production}_{COM} + A.2_{COM} + B_{COM} + C_{COM} + D_{COM})$$

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

**II. Group commodity transfers (GCT):** the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, arising from policy measures whose payments are made on the basis that one or more of a designated list of commodities is produced. That is, a producer may produce from a set of allowable commodities and receive a transfer that does not vary with respect to this decision [GCT = B<sub>GROUP</sub> + C<sub>GROUP</sub> + D<sub>GROUP</sub>].

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

**Transfers to specific groups of commodities:** the GCT involves gross transfers to the following groups of commodities: all crops, grains, other crops, all livestock, all except milk and meat.

**III. All commodity transfers (ACT):** the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers, measured at the farm gate level, arising from policy measures that place no restrictions on the commodity produced but require the recipient to produce some commodity of their choice [ACT = C<sub>ALL</sub> + B<sub>ALL</sub> + D<sub>ALL</sub>].

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

**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]

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

$$\text{V. Total PSE: } PSE = A + B + C + D + E + F + G = \text{the SCT} + \text{GCT} + \text{ACT} + \text{OTP}$$

$$\text{Percentage PSE: } \%PSE = 100 * PSE / (\text{Total Value of Production at farm gate} + A.2. + B + C + D + E + F + G)$$

**TABLE 3. KAZAKHSTAN: Producer Commodity Specific Transfers** (by commodity)

Tables 3.1 to 3.14 provide information on producer Single Commodity Transfers (producer the SCT) for the following commodities: wheat, rice, maize, barley, sunflower, potatoes, cotton, milk, beef, pig meat, poultry, eggs, and “non-MPS commodities”. All data sets in the calculation of SCTs by commodity come from Tables 1 and 4.1 – 4.13 where definitions are included.

**Definitions:**

**I. Level of production:** Data from respective commodity Tables 4.1 – 4.13 (Market Price Support tables)

**II. Value of production (at farm gate):** Data for respective commodity Tables 4.1 – 4.13 (Market Price Support tables)

**III. Producer Single Commodity Transfers:** Sum of transfers to respective single commodity in categories A, B, C and D.

**A. Support based on commodity output**

*A1. Market Price Support* [Data for respective commodity from Tables 4.1 – 4.13]

*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<sub>COM</sub> + B.2<sub>COM</sub> + B.3<sub>COM</sub>]

*B1. Based on variable input use*

Payments based on variable input use (B.1<sub>COM</sub>) provided to respective single commodity [Data from Table 1].

*B2. Based on fixed capital formation*

Payments based on fixed capital formation (B.2<sub>COM</sub>) provided to respective single commodity [Data from Table 1].

*B3. Based on on-farm services*

Payments based on on-farm services (B.3<sub>COM</sub>) provided to respective single commodity [Data from Table 1].

**C. Payments based on current A/An/R/I, production required, single commodity**

Payments based on current A/An/R/I (C<sub>COM</sub>) provided to respective single commodity [Data from Table 1].

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

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

**IV. Percentage producer SCT :** %SCT = 100\*(III) / ((II) + (A.2) + (B<sub>COM</sub>) + (C<sub>COM</sub>) + (D<sub>COM</sub>))

**TABLE 4. KAZAKHSTAN: Market Price Support and Consumer Single Commodity Transfers**

Tables 4.1 to 4.13, contain calculation of the Market Price Support (MPS) and Consumer Single Commodity Transfers (consumer SCT) for the following commodities: wheat, maize, barley, rice, sunflower, milk, beef and veal, sheep meat, pig meat, poultry meat, eggs, cotton, and potatoes, and “non-MPS commodities”. The data sets used in calculation of the MPS and consumer SCT by commodity are described below:

**Definitions<sup>1</sup>:**

**I. Level of production**

*Wheat, maize, barley, rice, sunflower, and potatoes:* Total domestic production. [2.1]

*Cotton:* Total production in cotton bolls equivalent [2.1]

*Milk:* Total production of milk from dairy cows, sheep and goats [2.1]

*Beef and veal, sheep meat, pig meat, and poultry meat:* Gross indigenous production in carcass weight [2.1]

*Eggs:* Total usable production of eggs in shell [2.1]

**II. Producer prices**

*Wheat, maize, barley, rice, sunflower, and potatoes:* Annual average prices received by producers. [2.2]

*Cotton:* Annual average prices received by cotton growers, converted from cotton lint equivalent into cotton bolls equivalent, assuming that 1 weight unit of cotton in bolls yields 0.30 weight units of cotton lint [2.3; 13]

*Milk:* Annual average prices received by producers for cow milk. [2.2]

*Beef and Veal:* Annual average prices received by producers for all categories of adult bovine animals for slaughter, converted from live weight equivalent into carcass weight equivalent, assuming that 1 unit of live weight corresponds to from 0.52 to 0.56 units of carcass weight, with specific coefficient varying each year within that range. [2.2]

*Sheep meat:* Annual average prices received by producers for all sheep and goats for slaughter, converted from live weight equivalent into carcass weight equivalent, assuming that 1 unit of live weight corresponds to from 0.45 to 0.56 units of carcass weight, with specific coefficient varying each year within that range. [2.2]

*Pig meat:* Annual average prices received by producers for all pigs for slaughter, converted from live weight equivalent into carcass weight equivalent, assuming that 1 unit of live weight corresponds to from 0.54 to 0.70 units of carcass weight, with specific coefficient varying each year within that range. [2.2]

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<sup>1</sup> Main sources of the data series used are indicated in square brackets.

**Poultry meat:** Annual average farm gate prices of chickens for slaughter, converted from live weight equivalent into carcass weight equivalent, assuming that 1 unit of live weight corresponds to from 0.53-0.79 units of carcass weight, with specific coefficient varying each year within that range. [2.2]

**Eggs:** Annual average farm gate prices of fresh eggs for consumption per 1 000 pieces, expressed in per tonne equivalent assuming a weight of one egg to be equal to 56 g.

### III. Value of production (at farm gate) [(I)\*(II)]

### IV. Level of consumption

**Wheat, maize, barley, rice, sunflower, and potatoes:** for 1995-2003 estimated as total production, plus net trade with no adjustment for change in stocks due to a lack of data [1]; from 2004 on, total domestic use estimated as total production, plus net trade, plus change in stocks [2.5]

**Milk:** Total domestic use estimated as total production, plus net trade, plus change in stocks of cow milk, in milk equivalent [2.5]

**Beef and veal, sheep meat, pig meat, and poultry meat:** consumption of each type of meat is estimated as a share of aggregate domestic use of meat (total production, plus net trade, plus change in stocks, in carcass weight), with the shares corresponding to the weights of each type of meat in total domestic meat production [2.5]

**Eggs:** Total domestic use estimated as total production, plus net trade, plus change in stocks [2.5]

### V. Consumption prices (at farm gate)

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

### VI. Value of consumption (at farm gate) [(IV)\*(V)]

### VII. Border prices

**Wheat:** for 1995-1999: unit values of Kazakhstan's exports of wheat and meslin (HS-Code 1001) to all destinations [UN Comtrade database]; from 2000 on: unit values of Kazakhstan's exports of spelt, common wheat and meslin (HS-Code 100190) to all destinations [11]

**Maize:** for 1995-1999: unit values of Kazakhstan's exports of maize (HS-Code 1005) to all destinations [UN Comtrade database]; from 2000 on: unit values of Kazakhstan's exports of maize, excluding maize for seeds (HS-Code 100590) to all destinations [11]

**Rice:** for 1995-1999: White Rice, Thai 100% B second grade, f.o.b. Bangkok (Wednesday) [7.2]; from 2000 on: Average of 5% and 25% broken Thailand and Vietnam rice [7.3]

**Barley:** for all period: unit values of Kazakhstan's exports of barley (HS-Code 1003) to all destinations [11]

**Sunflower:** for all period: unit values of Kazakhstan's imports of sunflower (HS-Code 1206) from all destinations [11]; for 2013-15: average f.o.b. unit value of Russian exports of sunflower seeds (NCM 120600) [8, Russian PSE country file] to which international freight rates for grains are added; for 2016: average f.o.b. unit value of Ukrainian exports of sunflower seeds (NCM 120600) [8, Ukrainian PSE country file] to which international freight rates for grains are added;

**Potatoes:** for all period: Russian average potato farm gate prices [8, Russian PSE country file].

**Cotton:** for all period: unit values of Kazakhstan's exports of cotton (HS-Code 5201) to all destinations, converted to cotton in bolls equivalent assuming that 1 weight unit of cotton in bolls yields 0.30 weight units of cotton lint [11]

**Milk:** for all period – border price for milk is constructed from border prices for butter and Skimmed Milk Powder (SMP), which are converted into raw milk equivalent by using the conversion coefficients based on the content of fat, protein and lactose in butter, SMP and raw milk (this method is explained in Annex 4.1 of the *PSE Manual* [www.oecd.org/agriculture/PSE](http://www.oecd.org/agriculture/PSE)). The border price of butter is the unit value of Kazakhstan's imports of butter (HS-Code 040510), the border price of SMP is the unit value of Kazakhstan's imports of SMP (NCM 0402) [11]

**Beef and Veal:** for all period: Brazil data are used on prices received by livestock producers for: (1) meat from male bovine adults in Araçatuba (San Paulo) to which international freight rates for chilled meat are added and (2) meat from dairy cows in Araçatuba (SP) to which international freight rates for frozen meat added. Price (1) and (2) are multiplied by the estimated shares of meat from male cattle and from cows in total meat slaughter in Kazakhstan (67% and 33% respectively) to obtain weighted average border price. [8, EU PSE country file]

**Pig meat:** for 1995-98: EU data are used on EU15 exports to extra EU15 for: (1) carcasses and half carcasses of swine fresh, chilled (HS6-Code 020311) and (2) half carcasses of swine, frozen (HS6-Code 020321); the border price corresponds to the unit value of EU exports for these two groups; from 1999 on: EU data are used on EU27 exports to extra EU27 for: (1) carcasses and half carcasses of swine fresh, chilled (HS6-Code 020311) and (2) half carcasses of swine, frozen (HS6-Code 020321); the border price corresponds to the unit value of EU exports for these two groups, [10]

**Sheep meat:** for all period: Australia's sheep meat price received by producers, to which estimated international transportation cost to Kazakhstan are added [8, Australian country file].

**Poultry meat:** for 1995-1999: unit values of Kazakhstan's imports of meat and edible offal of poultry (HS-Code 0207) from all destinations; from 2000 on: unit values of Kazakhstan's frozen whole chicken imports (HS-Code 020721) from all destinations [11]

**Eggs:** for all period: unit values of Kazakhstan's imports of birds' eggs, in shell, fresh, preserved or cooked imports (HS-Code 0407) to all destinations [11]

## VIII. Reference prices and marketing and transportation margins [2.4; 12]

Border prices listed in **Section VII** are adjusted for marketing and transportation margins to obtain reference prices, i.e. border price equivalents at the farm gate level. This is necessary in order to make border prices comparable with domestic producer prices, which are measured at the farm gate. Marketing margins represent the estimates for transportation, processing, and handling costs that are added to the price of a product between the farm gate and the border. For further details on the procedures for adjustment of border price to farm gate, see section 4.5.3 of [the PSE Manual](#).

For *all products except milk, pig meat, sheep meat and potatoes*, marketing and transportation margins estimates are based on the relevant published Kazakh data (e.g. on transportation costs) and the information received from interviews with processors and traders.

For *milk*, the processing margin is estimated as a simple average of the processing margins for butter and SMP of four major exporters (Australia, New Zealand, European Union and the United States), expressed in raw milk equivalent according to the same method that is used for border milk price.

For *pig meat*, *sheep meat* and *potatoes* for which prices received by producers of other countries is used as the border prices, no other margin adjustments are made except to add international transport costs to these prices.

#### **Main sources:**

- [1] *PSE questionnaire* prepared for the OECD by Ruslan Syzdykov from the Analytical Centre for Economic Policy in the Agricultural Sector (Kazakhstan)
- [2] Statistics Agency of the Republic of Kazakhstan; [www.stat.kz](http://www.stat.kz)
  - [2.1] *Agriculture, Forestry and Fishery Sectors of the Republic of Kazakhstan*, various years
  - [2.2] *Prices in the Agriculture, Forestry and Fishery Sectors of the Republic of Kazakhstan*, various years
  - [2.3] *Annual Average Prices for Agricultural and Processed Food Products in the Cities and District Centres of the Republic of Kazakhstan*.
  - [2.4] *Prices in the Construction, Goods Transport and Communications Sectors of the Republic of Kazakhstan*, various years
  - [2.5] *Supply and Utilisation Balances of Principal Raw Materials, Industrial Products and Consumer Goods of the Republic of Kazakhstan*, various years
- [3] Central Bank of the Republic of Kazakhstan, *Interest rates of banks on attracted deposits by duration terms and type of currency*, <http://www.nationalbank.kz/?docid=214&switch=english>
- [4] Ministry of Finance of the Republic of Kazakhstan, Information on execution of the national budget of the Republic of Kazakhstan
- [5] Ministry of Economic Development of the Republic of Kazakhstan, Information on execution of sub-national budgets
- [6] KazAgroHolding, Information on credit allocations within preferential credit programmes and lending terms.
- [7] UN Food and Agriculture Organisation (FAO)
  - [7.1] *FAOSTAT Database*; [www.faostat.fao.org/](http://www.faostat.fao.org/)
  - [7.2] *FAO world price series*, [www.fao.org/economic/est/prices?lang=en](http://www.fao.org/economic/est/prices?lang=en)
  - [7.3] *GIEWS Food Price data and Analysis Tool* [www.fao.org/giews/pricetool/](http://www.fao.org/giews/pricetool/)
- [8] OECD, *PSE/CSE Database*; [www.oecd.org/agriculture/PSE](http://www.oecd.org/agriculture/PSE)
- [9] USDA, Foreign Agricultural Service, *Production, Supply and Distribution Database (PS&D Database)* [www.fas.usda.gov/psdonline](http://www.fas.usda.gov/psdonline)
- [10] EUROSTAT, *COMEXT Database* <http://epp.eurostat.ec.europa.eu/newxtweb/>
- [11] UN, *Comtrade Database* [www.comtrade.un.org](http://www.comtrade.un.org)
- [12] Interviews with grain and meat traders.
- [13] Cotton Research Institute and Territorial Inspection of the South Kazakhstan Oblast.