### **BRAZIL: 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 - 4.11.

Table 2. Breakdown of PSE by Commodity and Other Transfers provides a breakdown of the total PSE into four categories reflecting the flexibility given to farmers regarding which commodity to produce within the various policy measures. These categories are: Single Commodity Transfers (SCT); Group Commodity Transfers (GCT); All Commodity Transfers (ACT); and Other Transfers to Producers (OTP). All data sets in Table 2 come from Tables 1 and 3.1 - 3.12 where definitions are included.

**Tables 3.1** – **3.12 Producer Single Commodity Transfers** contain producer SCT by commodity, which are calculated for Brazil for the following commodities: wheat, maize, rice, soybeans, sugar cane, cotton, coffee, milk, beef and veal, pig meat, and poultry. (Tables 3.1 - 3.11). In addition, SCT for "other commodities" is also calculated (Table 3.12), which covers transfers *to single commodities other than MPS commodities*. All data sets in the calculation of producer SCT by commodity come from Tables 1 and 4.1-4.11 where definitions are included.

**Tables 4.1** – **4.11** contain **Market Price Support** (MPS) and **Consumer Single Commodity Transfers** (consumer SCT) by commodity, calculated for the same set of commodities as **Tables 3.1** to **3.11**. Definitions are provided only for basic data sets from which all the other data sets in this table are derived.

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

## TABLE 1: BRAZIL: Total Support Estimate

## **Definitions:**

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

*I.1. Of which share of MPS commodities (%):* Share of commodities for which MPS is explicitly calculated (in Tables 4.1-4-11) 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 4.1-4.11.

**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) / (I.1) x 100].

A.2. Payments based on output

Preferential interest subsidy on marketing loans (since 1995):

### Period of implementation: 1995 - ongoing

Transfer arising from reduced interest rate on marketing loans for primary agricultural commodities; calculated as the difference between the SELIC rate<sup>1</sup> and the preferential loan rate in a given year. Subject to zooning programme since 2008. [3, 5, 6]

Use of labels: Production limits: NO; Variable payment rates: YES; Input constraints: NO, but YES since 2008.

Payments included in SCTs for wheat, maize, rice, soybeans, sugar cane, cotton, coffee, milk, beef and veal, pig meat, poultry and "other commodities".

Deficiency payments within the PEPRO programme (Prêmio Equalizador Pago ao Produtor) (since 2006).

1

SELIC rate is the reference rate for short-term government securities, and is commonly accepted as an average rate on loans between commercial banks (SELIC - Special System for Settlement and Custody (*Sistema Especial de Liquidação e de Custódia*).

Period of implementation: 2006 - ongoing

Payments to producers equal to the difference between market price and the minimum price defined by the government. [4, 6]

Use of labels: Production limits: NO; Variable payment rates: YES; Input constraints: NO. Payments included in SCTs for maize, soybeans, coffee, cotton, and "other commodities".

Compensation of coffee storage costs.

Period of implementation: 2004 - 2007

Payments per tonne of coffee to compensate producers for the costs of storing. [4, 6]

Use of labels: Production limits: NO; Variable payment rates: NO; Input constraints: NO. Payment included in SCT for coffee.

### B. Payments based on input use

B.1. Payments based on variable input use

Preferential interest subsidy on working capital loans

Period of implementation: 1995-ongoing.

Implicit transfer from reduced interest rate on working capital loans (credito de custeio) provided through the National System of Rural Credit (SNCR)<sup>2</sup>, including under the Programme for Strengthening of Family Agriculture (PRONAF)<sup>3</sup>; calculated as the difference between the SELIC rate and the working capital loan rate (corresponding to various credit lines for working capital), in a given year. Subject to zooning programme since 2008. [3, 5, 6].

Use of labels: Production limits: NO; Variable payment rates: YES; Input constraints: NO but YES since 2008.

Payments included in SCTs for wheat, maize, rice, soybeans, sugar cane, cotton, coffee, milk, beef and veal, pig meat, poultry and "other commodities".

Insurance subsidy under the government insurance programme PROAGRO (Seguro da Agricultural Familiar)

<sup>&</sup>lt;sup>2</sup> The National System of Rural Credit (SNCR – *Sistema Nacional de Crédito Rural*) incorporates 298 federal, state and co-operative banks providing government-supported credit to agriculture. The system is controlled, co-ordinated and supervised by the Central Bank of Brazil.

<sup>&</sup>lt;sup>3</sup> PRONAF – Programa Nacional de Fortalecimento da Agricultura Familiar.

Period of implementation: 1995-ongoing

Guarantee for the rural credit financial obligations of small and medium producers after the occurrence of a natural disaster or a pest. Subject to zooning programme since 2006. [4, 6]

Use of labels: Production limits: NO; Variable payment rates: YES; Input constraints: NO but YES since 2006.

Payment included in ACT.

Insurance subsidy under the Rural Insurance Premium programme (Subvenção ao Prêmio do Seguro Rural)

Period of implementation: 2005-ongoing

Subsidies to insurance premiums of comertial commodities. Subject to zooning programme since 2006. [4, 6]

Use of labels: Production limits: NO; Variable payment rates: YES because it is an insurance subsidy; Input constraints: NO but YES since 2006;

Payments included in SCTs for wheat, maize, rice, soybeans, sugar cane, cotton, coffee, milk, beef and veal, pig meat, poultry and "other commodities".

#### Sugar cane subsidy

Period of implementation: 1998-2013

Compensation of variable input costs to sugar cane growers in the North East region. [6]

Use of labels: Production limits: NO; Variable payment rates: NO; Input constraints: NO;

Payment included in SCT for sugar cane.

Budgetary allocations for in-kind input grants to family agriculture.

Period of implementation: 2005-2011

In kind variable inputs support to small producers [4]

Use of labels: Production limits: NO; Variable payment rates: NO; Input constraints: NO.

Payment included in ACT.

### B.2. Payments based on fixed capital formation

Preferential interest subsidy on investment credit (credito de investimento): General programme

Period of implementation: 1998-ongoing

Interest rate subsidies provided through the National System of Rural Credit (SNCR) under the general investment credit lines; this is an implicit transfer, calculated as the difference between the SELIC rate and the weighted average annual interest rate on various investment credit lines, in a given year. [3, 4, 6]

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

Payment included in ACT.

#### Preferential interest subsidy on investment credit (crédito de investimento): PRONAF

Period of implementation: 1995-ongoing

Interest rate subsidies provided through the National System of Rural Credit (SNCR) under PRONAF programme; this is an implicit transfer, calculated as the difference between the SELIC rate and the weighted average annual interest rate on various PRONAF investment credit lines in a given year. Subject to zooning programme since 2008. [3, 4, 6]

Use of labels: Production limits: NO; Variable payment rates: YES; Input constraints: NO but YES since 2008.

Payment included in ACT.

Preferential interest subsidy on investment credit: Land Bank programmes:

Period of implementation: 1995-on-going

Subsidies to interest rates for credit, subject to zooning programme since 2008. They include:

a) implicit transfers from reduced interest rate on loans provided for land acquisition under the National Land Credit Programme (*Programa Nacional de Crédito Fundiário*) (since 2000); calculated as the difference between the annual SELIC rate and the annual interest rate set under the National Land Credit Programme, and multiplied by the estimated outstanding credit in a given year. [4]

b) implicit transfers from reduced interest rate on loans provided to Land Reform settlers for construction of basic infrastructure on settled lands (*Concessão de Crédito-Instalação aos Assentados*) from the Land Fund (*Fundo da Terra*) (since 2000): these loans are provided for both production (electricity networks, irrigation, cleaning, crop drying and storage, roads for transporting harvested crop, etc.) and community needs (construction of rural schools, health care points, local community centres, public telephone lines, etc); it is assumed that only 50% of total loan allocations under this facility are production-related and only this part is considered in the calculation of implicit transfer, which is calculated as the difference between the annual SELIC rate and the annual preferential interest rate on such credit, and multiplied by the estimated outstanding credit in a given year. [4]

c) implicit transfers from reduced interest rate on investment loans (*crédito de investimento*) provided through the National System of Rural Credit (SNCR) under PROCERA programme; calculated as the difference between the annual SELIC rate and annual preferential interest rate on PROCERA

investment credit, and multiplied by estimated outstanding PROCERA investment credit in a given year. [4]

d) implicit transfer from reduced interest rate on loans provided to family agriculture for production and community infrastructure and services (*Apoio a Projetos Municipais de Infra-Estrutura e Serviços em Agricultura Familiar*); these loans are provided for both agricultural production and community development (e.g. housing construction); it is assumed that only 50% of total loan allocations under this facility are production-related and only this part is considered in the calculation of interest gain; the implicit transfer is calculated as the difference between the annual SELIC rate and the annual preferential interest rate on such credit, multiplied by the estimated outstanding credit in a given year. [4]

Since 2006: Only Banco de Terra and PROCERA: implicit transfers from reduced interest rate on loans provided for land acquisition calculated as the difference between the annual SELIC rate and the annual interest rate set under the Banco de Terra and PROCERA in a given year. [3,4].

Use of labels: Production limits: NO; Variable payment rates: YES; Input constraints: NO but YES since 2008;

Payment included in ACT.

Debt rescheduling: Rural Debt Securitisation and PESA schemes

Period of implementation: 1995-ongoing

Support through debt rescheduling programmes, subject to zooning programme since 2008. They include:

a) implicit transfer from reduced interest and "good payer" rebates on loans restructured under the *Rural Debt Securitisation* scheme; calculated as the difference between the monthly SELIC rate and the monthly preferential rate (3% p.a.) for repayment of the restructured loan, multiplied by estimated outstanding monthly debt; the annual value is then aggregated for the period between January and December; and the value of "good payer" rebate, which is equal to 25% of the annual repayment of the principal debt covered by the Rural Debt Securitisation scheme. [5]

b) implicit transfer from the interest rate discount on loans restructured under the *Financial Assets Rehabilitation Programme (PESA)*; calculated by multiplying the interest rate discount by the estimated outstanding annual PESA debt; the discount was set at 2% p.a. between 1999 and 2001, and 5% p.a. from 2002 onwards. **[5]** 

Use of labels: Production limits: NO; Variable payment rates: YES; Input constraints: NO but YES since 2008;

Payment included in ACT.

Debt rescheduling: PROCERA and PRONAF loans

Period of implementation: 2002 -ongoing

Implicit transfer from interest rate discount and "good payer" rebates on restructured loans provided under the PRONAF, PROCERA<sup>4</sup>, and PROGER<sup>5</sup> programmes. Subject to zooning programme since 2008. [5]

Use of labels: Production limits: NO; Variable payment rates: YES; Input constraints: NO but YES since 2008.

Payment included in ACT.

B.3. Payments based on on-farm services

Budgetary allocations for rural extension services (since 1995).

Period of implementation: 1995 -ongoing

Expenditure on rural extension services estimated as 50% of expenditures notified in the Green Box under (iv) extension and advisory services. In recent years, expenditures for the acquisition of equipments by municipalities for services in rural areas were excluded. The other 50% is included in GSSE H2b [4]

Use of labels: Production limits: NO; Variable payment rates: NO; Input constraints: NO;

Payment included in ACT.

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

Insurance subsidy under the Crop Guarantee programme (Garantia-Safra)

Period of implementation: 2003 -ongoing

Indemnities provide to farmers in the north-east region when they suffer losses due to drought or excess rain. Subject to zooning programme since 2006. [4]

Use of labels: Production limits: NO; Variable payment rates: YES; Input constraints: NO but YES since 2008.

Payment included in GCT for arable crops.

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

<sup>&</sup>lt;sup>4</sup> PROCERA - Special Credit Programme for Agrarian Reform (*Programa Especial de Crédito para a Reforma Agrária*).

<sup>&</sup>lt;sup>5</sup> PROGER Rural – Programme of Rural Employment and Income Generation (*Programa de Geração de Emprego e Renda Rural*).

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

#### F. Payments based on non-commodity criteria

F.1. Payments based on long-term resource retirement

- F.2. Payments based on specific non-commodity output
- F.3. Payments based on other non-commodity criteria

### G. Miscellaneous payments

### **III.2 Percentage PSE** [100 x (III.1) / ((I) + (Sum of A2 to G))]

**III.3 Producer NPC:** For all agricultural commodities the producer NPC is estimated as a weighted average of the producer NPC calculated for the individual MPS commodities and shown in Table 4. For each commodity Producer NPC = [domestic price received by producers (at the farm gate) + unit payments based on output] / border price (also at the farm gate).

**III.4 Producer NAC** [1 / (100 - (III.2)) x 100]

**IV. General Services Support Estimate (GSSE):** total budgetary expenditure to support general services provided to agriculture [Sum of H to M].

### H. Agricultural Knowledge and Innovation System

H.1. Agricultural Knowledge Generation

Research and technological innovation:

Period of implementation: 1995-ongoing

Budgetary allocations for agricultural research including general research, environmental projects and commodity-specific research. ASTI estimations, updated since 2014 using inflation rates [19]

## H.2. Agricultural Knowledge Transfer

H2.a. education

Agricultural education:

Period of implementation: 1995-ongoing

Budgetary allocations for agricultural education and extension services. Expenditures notified to WTO in the Green Box under (iii) training services. Budgetary allocation to agricultural schools is estimated from 2010, using inflation rate, as the expenditure is no longer available from the national budget [4, 6]

H2.b. extension services Budgetary allocations for rural extension services:

Period of implementation: 1995-ongoing.

General extension services estimated as 50% of expenditures notified to WTO in the Green Box under (iv) extension and advisory services. In recent years, expenditures for the acquisition of equipments by municipalities for services in rural areas were excluded. The other 50% is included in PSE B3 [4]

## I. Inspection and Control

I.1. Agricultural product safety and inspection

Inspection, grading, and standardisation:

Period of implementation: 1995-ongoing.

Budgetary allocations for related services. Expenditures notified to WTO in the Green Box under (v) inspection services [4, 6]

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

Pest and disease control:

Period of implementation: 1995-ongoing.

Budgetary allocations for control and prevention of crop and animal diseases, animal product safety, sanitary control and education, and related miscellaneous activities. Expenditures notified to WTO in the Green Box under (ii) pest and disease control **[4, 6]** 

I.3. Input control

### J. Development and maintenance of Infrastructure

J.1. Hydrological Infrastructure

Irrigation, electrification, rural housing:

Period of implementation: 1995-ongoing.

Budgetary allocations for construction and maintenance of rural electricity networks, water supply and road networks, irrigation, dams and drainage systems, development of port facilities and storage systems, and miscellaneous infrastructure works. Expenditures notified to WTO in the Green Box under (vii) infrastructural services - Support for irrigation programs [4, 6]

J.2. Storage, marketing and other physical infrastructure

Market supply, storage and silage systems for agricultural products

Period of implementation: 2008-ongoing. Before 2008 this line was aggregated under J1)

Budgetary allocations for infrastructural projects in rural areas. Expenditures notified to WTO in the Green Box under (vii) infrastructural services - Support for infrastructure projects in rural areas [4, 6]

## J.3. Institutional infrastructure

J.4. Farm restructuring

Land reform and settlement:

Period of implementation: 1995-ongoing.

Implementation of the agrarian reform – public funds allocated to the National Institute of Colonisation and Agrarian Reform  $(INCRA)^6$  for acquisition of lands for agrarian reform; development of basic infrastructure on lands involved in agrarian reform; maintenance of rural cadastre; land demarcation and titling; information system for the agrarian reform; juridical support; and related miscellaneous activities. Expenditures notified to WTO in the Green Box under (viii) Agrarian organization [4, 6]

## K. Marketing and promotion

K.1. Collective schemes for processing and marketing

K.2. Promotion of agricultural products

Marketing and Promotion:

Period of implementation: 1997-ongoing.

Budgetary allocations for promotion of Brazilian agro-food products, organisation of fairs and exhibitions, information campaigns, and related miscellaneous activities. Expenditures notified to WTO in the Green Box under (vi) marketing and promotion services [4, 6]

## L. Cost of Public stockholding

Public stockholding::

Period of implementation: 1995-ongoing.

Budgetary allocations to the National Food Supply Company (CONAB) to cover the cost of depreciation and disposal of public stock of agricultural products purchased under the Federal Government Purchase Programme (*Aquisição do Governo Federal*). Expenditures notified to WTO in the Green Box under 2) Public stockholding **[4, 6]** 

### M. Miscellaneous

**V.1 Consumer Support Estimate (CSE):** Associated with agricultural production, i.e. for the quantities of commodities domestically produced, excluding the quantities used on-farm as feed -- excess feed cost. [Sum of N to Q; when negative, the amounts represent an implicit tax on consumers].

<sup>6</sup> 

INCRA - Instituto Nacional de Colonização e Reforma Agrária.

*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 4.11.

**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 4.11.

## P. Transfers to consumers from taxpayers

*P.1. Commodity specific transfers to consumers:* Sum of commodity specific transfers from taxpayers to consumers (farm gate level) from Tables 4.1-4.11, including:

*Market Milk*. Between 8 July 2000 and 22 February 2009, the Government imposed an 11 cents per litre levy on the retail sale of drinking milk, known as the Dairy Adjustment Levy (DAL). The levy was established to fund an adjustment package for the dairy industry as it moved through deregulation. This levy no longer exists and should not be included for any calculations after 2008-09.

*P.2. Non-commodity specific transfers to consumers:* Sum of non-commodity specific transfers from taxpayers to consumers, including:

**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 and 4.2).

**V.2 Percentage CSE** [100 x (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 (also at the farm gate).

V.4 Consumer NAC [(1 / (100 -(V.2)) x 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. BRAZIL: Breakdown of PSE by commodity specificity and other transfers

All data sets in Table 2 to come from Tables 1 and 3.1 to 3.12 where definitions are included.

## **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 3.1-3.12].

*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 SCT (Table 2), or for a specific commodity (Table 3.1 to 3.12).

SCT = 100\* SCT / (Value of production<sub>COM</sub> + A.2<sub>COM</sub> + B<sub>COM</sub> + C<sub>COM</sub> + D<sub>COM</sub>)

Share in Total PSE (%): SCT<sub>SHARE</sub> = 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 =  $B_{GROUP} + C_{GROUP} + D_{GROUP}$ ].

Share in Total PSE (%): GCT<sub>SHARE</sub> = 100\* GCT / PSE

*Transfers to specific groups of commodities:* the GCT indicator is calculated for Australia for the following groups of commodities: All crops, fruits and vegetables, all livestock, and ruminants.

**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 =  $C_{ALL} + B_{ALL} + D_{ALL}$ ].

Share in Total PSE (%): ACT<sub>SHARE</sub> = 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<sub>SHARE</sub> = 100\* OTP / PSE

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

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

### TABLE 3. BRAZIL: Producer Single Commodity Transfers (by commodity)

Tables 3.1 to 3.12, provide information on Producer Single Commodity Transfers (PSCT) for the following commodities: wheat, maize, rice, soybeans, sugar cane, cotton, coffee, milk, beef, pig meat, poultry and "other commodities". All data sets in the calculation SCT by commodity come from Tables 1 and 4.1 - 4.11 where definitions are included.

### **Definitions:**

**I. Level of production:** Data from respective commodity Tables 4.1 – 4.11 (Market Price Support tables)

**II. Value of production (at farm gate):** Data for respective commodity Tables 4.1 – 4.11 (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 Table 4]

A2. Payments based on output

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

**B.** Payments based on input use, single commodity [B.1<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  $(B.1_{COM})$  provided to respective single commodity [Data from Table 1].

#### B2. Based on Fixed capital formation

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

#### B3. Based on on-farm services

Payments based on on-farm services ( $B.3_{COM}$ ) 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 ( $C_{COM}$ ) 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 ( $D_{COM}$ ) 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. BRAZIL: Market Price Support and Consumer Single Commodity Transfers**

Tables 4.1 to 4.11, contain calculation of the Market Price Support (MPS) and Consumer Single Commodity Transfers (consumer SCT) for the following commodities: wheat, maize, rice, soybeans, sugar cane, cotton, coffee, milk, beef, pig meat, poultry and "other commodities". The data sets used in calculation of the MPS and consumer SCT by commodity are described below. Values for "other commodities" are derived using information on total Market Price Support and Value of Production, and individual commodity data.

## **Definitions:**

### WHEAT

## I. Level of production

Total domestic production.

Source: Brazilian Institute of Geography and Statistics (IBGE). Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA).

## **II.** Producer prices (at farm gate)

Annual average of monthly prices received by producers (all qualities) (36040).

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). Institute of Agricultural Economics Research (IEA), agricultural wholesale prices data bank. Centre for Advances Studies on Applied Economics Centro de estudos avancados em economia aplicada (CEPEA).

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

## **IV. Trade status**

For the period 1995-2017: net imported (NI).

Source: Brazilian Institute of Geography and Statistics (IBGE). Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## V. Market price differential at the farm gate

Due to domestic and border price-related policies in place, MPD is calculated based on the price gap for the period 1995-2017: difference between the Producer price (at farm gate) and the Reference price (at farm gate). Negative MPD set to 0 as there were no export barriers (export bans, export tariffs) and no other market price policy taxing producers.

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

F.o.b. export unit values of Argentinean Trigo Pan.

Margin: Since wheat is an imported commodity, no domestic transport costs and handling adjustment are used as we are assuming that internal domestic transport cost and handling costs offset each other.

Sources: International Grains Council (IGC).

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

Total domestic consumption (total production, plus import, minus export, plus change in stocks).

Source: Brazilian Institute of Geography and Statistics (IBGE). Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## VIII. Consumption prices (at farm gate)

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

Source: not applicable.

## IX. Value of consumption (at farm gate) [(VII)\*(VIII)]

Level of consumption (VII) multiplied by consumption prices (VIII).

Source: Brazilian Institute of Geography and Statistics (IBGE). Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

### MAIZE

## I. Level of production

Total domestic production.

Source: Brazilian Institute of Geography and Statistics (IBGE). Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA).

### **II.** Producer prices (at farm gate)

Annual average of monthly prices received by producers (all qualities) (35273).

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). Institute of Agricultural Economics Research (IEA), agricultural wholesale prices data bank. Getulio Vargas Foundation (FGV) database.

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

### **IV. Trade status**

For the period 1995-2004: net imported (NI). 2005-17 net exported.

Source: Brazilian Institute of Geography and Statistics (IBGE). Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## V. Market price differential at the farm gate

Due to domestic and border price-related policies in place, MPD is calculated based on the price gap for the period 1995-2017: difference between the Producer price (at farm gate) and the Reference price (at

farm gate). Negative MPD set to 0 as there were no export barriers (export bans, export tariffs) and no other market price policy taxing producers.

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

1995-2004: F.o.b. export unit values of Argentinean Rosario maize. From 2005, unit value of exports of maize other than seeds from Brazilian trade statistics (NMC 1005.90.90 - milho, exceto em grao)

Margin: 1995-2004 since maize was an imported commodity, no domestic transport costs and handling adjustment are used as we are assuming that internal domestic transport cost and handling offset each other.

Sources: MDIC-ALICE data base, Ministry of Industrial Development and Trade. International Grains Council (IGC).

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

Total domestic consumption (total production, plus import, minus export, plus change in stocks).

Source: Brazilian Institute of Geography and Statistics (IBGE). Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## VIII. Consumption prices (at farm gate)

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

Source: not applicable.

## IX. Value of consumption (at farm gate) [(VII)\*(VIII)]

Level of consumption (VII) multiplied by consumption prices (VIII).

Source: Brazilian Institute of Geography and Statistics (IBGE). Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## RICE

## I. Level of production

Total domestic production in paddy rice equivalent

Source: Brazilian Institute of Geography and Statistics (IBGE), Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

# **II.** Producer prices (at farm gate)

Annual average of monthly prices of paddy rice received by producers (all qualities) (33211).

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). Institute of Agricultural Economics Research (IEA), agricultural wholesale prices data bank. Getulio Vargas Foundation (FGV) database.

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

### **IV. Trade status**

For the period 1995-2017: net imported (NI).

Source: Brazilian Institute of Geography and Statistics (IBGE), Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## V. Market price differential at the farm gate

Due to domestic and border price-related policies in place, MPD is calculated based on the price gap for the period 1995-2017: difference between the Producer price (at farm gate) and the Reference price (at farm gate). Negative MPD set to 0 as there were no export barriers (export bans, export tariffs) and no other market price policy taxing producers.

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

Average Brazilian import unit values of rice in husk, paddy or rough (NCM 1006.10.92).

Margin: Since rice is an imported commodity, no domestic transport costs and handling adjustment are used as we are assuming that internal domestic transport cost and handling offset each other.

Sources: MDIC-ALICE data base, Ministry of Industrial Development and Trade.

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

Total domestic consumption (total production, plus import, minus export, plus change in stocks).

Source: Brazilian Institute of Geography and Statistics (IBGE). Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## VIII. Consumption prices (at farm gate)

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

Source: not applicable.

## IX. Value of consumption (at farm gate) [(VII)\*(VIII)]

Level of consumption (VII) multiplied by consumption prices (VIII).

Source: Brazilian Institute of Geography and Statistics (IBGE). Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## SOYBEAN

## I. Level of production

Total domestic production.

Source: Brazilian Institute of Geography and Statistics (IBGE), Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

### **II.** Producer prices (at farm gate)

Annual average of monthly prices received by producers (all qualities) (35699).

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). Institute of Agricultural Economics Research (IEA), agricultural wholesale prices data bank. Getulio Vargas Foundation (FGV) database.

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

### **IV. Trade status**

For the period 1995-2017: net exported (NE).

Source: Brazilian Institute of Geography and Statistics (IBGE), Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

#### V. Market price differential at the farm gate

Due to domestic and border price-related policies in place, MPD is calculated based on the price gap for the period 1995-2017: difference between the Producer price (at farm gate) and the Reference price (at farm gate). Negative MPD set to 0 as there were no export barriers (export bans, export tariffs) and no other market price policy taxing producers.

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

Average unit values of Brazilian exports of soybeans, whether or not broken (1201.00.90 or 1210.99.00) net of handling and transportation costs.

The margin is calculated as the difference between the wholesale price (annual average of soybeans daily wholesale prices in Parana published by CEPEA) minus the producer price above.

Sources: Getulio Vargas Foundation (FGV) database. MDIC-ALICE data base, Ministry of Industrial Development and Trade. Institute of Agricultural Economics Research (IEA), agricultural wholesale prices data bank

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

Total domestic consumption (total production, plus import, minus export, plus change in stocks).

Source: Brazilian Institute of Geography and Statistics (IBGE). Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

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

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

Source: not applicable.

## IX. Value of consumption (at farm gate) [(VII)\*(VIII)]

Level of consumption (VII) multiplied by consumption prices (VIII).

Source: Brazilian Institute of Geography and Statistics (IBGE). Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

### SUGAR CANE

## I. Level of production

Total domestic production in sugar cane equivalent.

Source: Brazilian Institute of Geography and Statistics (IBGE), Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA).

### **II.** Producer prices (at farm gate)

Annual average of monthly prices of sugar cane received by producers (all qualities) (33548).

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). Institute of Agricultural Economics Research (IEA), agricultural wholesale prices data bank.

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

#### **IV. Trade status**

For the period 1995-2017: net exported (NE).

Source: Brazilian Institute of Geography and Statistics (IBGE), Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA).

### V. Market price differential at the farm gate

Due to domestic and border price-related policies in place, MPD is calculated based on the price gap for the period 1995-2017: difference between the Producer price (at farm gate) and the Reference price (at farm gate). Since 2000, negative MPD set to 0 as there were no export barriers (export bans, export tariffs) and no other market price policy taxing producers.

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

Average unit values of Brazilian exports of cane sugar, refined, not containing added flavouring or coloured (NCM 1701.99.00) net of processing, handling and transportation costs, converted into sugar cane equivalent.

The margin is calculated as the difference between the wholesale price (Annual average of monthly wholesale prices of cristal sugar in Sao Paolo, published by CEPEA, converted in sugar cane equivalent using a coefficient of 0.0941) minus the producer price.

Sources: ESALQ/BM&F database of agricultural wholesale prices and transportation tariffs. MDIC-ALICE data base, Ministry of Industrial Development and Trade.

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

Total domestic consumption (total production, plus import, minus export, plus change in stocks), of white sugar and ethanol converted into sugar cane equivalent

Source: Brazilian Institute of Geography and Statistics (IBGE). Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## VIII. Consumption prices (at farm gate)

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

Source: not applicable.

## IX. Value of consumption (at farm gate) [(VII)\*(VIII)]

Level of consumption (VII) multiplied by consumption prices (VIII).

Source: Brazilian Institute of Geography and Statistics (IBGE). Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## COTON

## I. Level of production

Total domestic production in lint equivalent.

Source: Brazilian Institute of Geography and Statistics (IBGE), Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA).

## II. Producer prices (at farm gate)

Annual average of monthly prices received by producers (all qualities) for cotton in bolls, divided by annual conversion factor into lint equivalent price.

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). Institute of Agricultural Economics Research (IEA), agricultural wholesale prices data bank. Getulio Vargas Foundation (FGV) database.

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

#### **IV. Trade status**

For the period 1995-2000: net imported (NE). 2001-17: net exported (NE).

Source: Brazilian Institute of Geography and Statistics (IBGE), Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA).

#### V. Market price differential at the farm gate

Due to domestic and border price-related policies in place, MPD is calculated based on the price gap for the period 1995-2017: difference between the Producer price (at farm gate) and the Reference price (at farm gate).Negative MPD set to 0 as there were no export barriers (export bans, export tariffs) and no other market price policy taxing producers.

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

1995-2000: Average unit values of Brazilian imports of cotton, not carded nor combed (NCM 5201.00.10, 5201.00.20, and 5201.00.90), net of ginning, handling and transportation costs. 2001-17: Average unit values of Brazilian export of cotton, not carded nor combed (NCM 5201.00.10, 5201.00.20, and 5201.00.90), net of ginning, handling and transportation costs.

The margin is calculated as the difference between the wholesale price (Annual average of monthly wholesale prices of cotton in lint type 41.1 in Sao Paolo, published by CEPEA, converted in bolls equivalent price using the ratio of bolls-lint production minus the producer price.

Sources: ESALQ/BM&F database of agricultural wholesale prices and transportation tariffs. MDIC-ALICE data base, Ministry of Industrial Development and Trade.

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

Total domestic consumption in lint equivalent (total production, plus import, minus export, plus change in stocks).

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). National Food Supply Company (CONAB).

## VIII. Consumption prices (at farm gate)

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

Source: not applicable.

### IX. Value of consumption (at farm gate) [(VII)\*(VIII)]

Level of consumption (VII) multiplied by consumption prices (VIII).

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). National Food Supply Company (CONAB).

### COFFEE

### I. Level of production

Total domestic production in green bean equivalent.

Source: USDA – Economics and Statistics System: The Foreign Agricultural Service's Production, Supply and Distribution - PS&D.

## II. Producer prices (at farm gate)

Annual average of monthly prices received by producers (all qualities) for dry coffee cherries, divided by 0.5 for conversion into green bean equivalent price (33361)

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). Institute of Agricultural Economics Research (IEA), agricultural wholesale prices data bank.

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

## **IV. Trade status**

For the period 1995-2017: net exported (NE).

Source: USDA – Economics and Statistics System: The Foreign Agricultural Service's Production, Supply and Distribution - PS&D.

### V. Market price differential at the farm gate

Due to domestic and border price-related policies in place, MPD is calculated based on the price gap for the period 1995-2017: difference between the Producer price (at farm gate) and the Reference price (at farm gate). MPD set to 0 as there were no export barriers (export bans, export tariffs) and no other market price policy taxing or supporting producers.

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

Weighted average of ICO indicator prices for Brazilian Natural Arabica and Robusta coffee, with weights representing the shares of Arabica and Robusta coffee in total Brazilian coffee production. This weighted average price is net of cleaning, handling and transportation costs.

The margin is calculated as the difference between the wholesale price (Annual average of monthly wholesale prices of Arabica and Robusta coffee in Sao Paolo, published by CEPEA, converted in green equivalent using the coefficient 0.5) minus the producer price.

Sources: International Coffee Organisation (ICO). USDA – Economics and Statistics System: The Foreign Agricultural Service's Production, Supply and Distribution - PS&D. ESALQ/BM&F database of agricultural wholesale prices and transportation tariffs.

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

Total domestic consumption in green bean equivalent (total production, plus import, minus export, plus change in stocks)

Source: USDA – Economics and Statistics System: The Foreign Agricultural Service's Production, Supply and Distribution - PS&D.

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

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

Source: not applicable.

## IX. Value of consumption (at farm gate) [(VII)\*(VIII)]

Level of consumption (VII) multiplied by consumption prices (VIII).

Source: USDA – Economics and Statistics System: The Foreign Agricultural Service's Production, Supply and Distribution - PS&D.

## MILK

## I. Level of production

Total production of milk from dairy cows.

Source: Brazilian Institute of Geography and Statistics (IBGE), Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## **II.** Producer prices (at farm gate)

Annual average of monthly prices received by producers for cow milk (40269).

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). Institute of Agricultural Economics Research (IEA), agricultural wholesale prices data bank.

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

### **IV. Trade status**

For the period 1995-2017: net exported (NE).

Source: Brazilian Institute of Geography and Statistics (IBGE), Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

### V. Market price differential at the farm gate

Due to domestic and border price-related policies in place, MPD is calculated based on the price gap for the period 1995-2017: difference between the Producer price (at farm gate) and the Reference price (at farm gate). Negative MPD set to 0 as there were no export barriers (export bans, export tariffs) and no other market price policy taxing or supporting producers.

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

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

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

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

values of butter and skimmed milk powder respectively. The reference price of milk at farm gate  $(P_r)$  is the implicit milk border price net of processing costs (C):

$$P_r = P_b - C$$

Margins: Average dairy processing margin (processing margin of butter & SMP from one tonne of raw milk) in major dairy exporters: Australia, European Union, United States and New Zealand.

Sources: UN COMTRADE database. OECD PSE/CSE database.

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

Total domestic use of cow milk in milk equivalent (total production, plus import, minus export, plus change in stocks).

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## VIII. Consumption prices (at farm gate)

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

Source: not applicable.

### IX. Value of consumption (at farm gate) [(VII)\*(VIII)]

Level of consumption (VII) multiplied by consumption prices (VIII).

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

### BEEF

### I. Level of production

Gross indigenous production in carcass weight.

Source: Brazilian Institute of Geography and Statistics (IBGE), Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

### **II.** Producer prices (at farm gate)

Annual average of monthly prices received by producers for all categories of adult bovine animals for slaughter, carcass weight. Since 2011, annual average of monthly prices of live beef (boi gordo) at producer level, averaged over several markets (ES, GO, MG, MS, MT, SP, TO) from CONAB, in carcass equivalent

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). National Food Supply Company (CONAB). Institute of Agricultural Economics Research (IEA), agricultural wholesale prices data bank;

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

### **IV. Trade status**

For the period 1995-2017: net exported (NE).

Source: Brazilian Institute of Geography and Statistics (IBGE), Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

### V. Market price differential at the farm gate

Due to domestic and border price-related policies in place, MPD is calculated based on the price gap for the period 1995-2017: difference between the Producer price (at farm gate) and the Reference price (at farm gate). Negative MPD set to 0 as there were no export barriers (export bans, export tariffs) and no other market price policy taxing or supporting producers.

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

Average unit values of Brazilian exports of meat of bovine animals, boneless, fresh and chilled (NCM 0201.30.00) and frozen (NCM 0202.30.00), converted into carcass equivalent price and net of processing, handling and transportation costs.

The margin is calculated as the difference between the wholesale price (annual average of monthly prices of 3 types of refrigerated beef meat cuts: front with bones (38%), middle (14%), back with bones (48%), in carcass weight equivalent, published by IEA) minus the producer price above

Source: Institute of Agricultural Economics Research (IEA), agricultural wholesale prices data bank. MDIC-ALICE data base, Ministry of Industrial Development and Trade .

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

Total domestic use (total production, plus import, minus export, plus change in stocks), carcass weight.

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## VIII. Consumption prices (at farm gate)

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

Source: not applicable.

### IX. Value of consumption (at farm gate) [(VII)\*(VIII)]

Level of consumption (VII) multiplied by consumption prices (VIII).

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## PIGMEAT

## I. Level of production

Gross indigenous production in carcass weight.

Source: Brazilian Institute of Geography and Statistics (IBGE), Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

# II. Producer prices (at farm gate)

Annual average of monthly prices received by producers for all pigs for slaughter, divided by 0.7 for conversion into carcass equivalent price. Since 2011, producer price for live pigs in Sao Paolo from CONAB converted into carcass equivalent price.

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). National Food Supply Company (CONAB). Institute of Agricultural Economics Research (IEA), agricultural wholesale prices data bank;

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

### **IV. Trade status**

For the period 1995-2017: net exported (NE).

Source: Brazilian Institute of Geography and Statistics (IBGE), Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

#### V. Market price differential at the farm gate

Due to domestic and border price-related policies in place, MPD is calculated based on the price gap for the period 1995-2017: difference between the Producer price (at farm gate) and the Reference price (at farm gate). Negative MPD set to 0 as there were no export barriers (export bans, export tariffs) and no other market price policy taxing or supporting producers.

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

Average unit values of Brazilian exports of meat of swine, frozen (NCM 0203.29.00), converted into carcass equivalent price and net of processing, handling and transportation costs.

The margin is calculated as the difference between the wholesale price (annual average of monthly prices of pig meat (half carcasses) in carcass weight, published by IEA) minus the producer price above.

Source: Institute of Agricultural Economics Research (IEA), agricultural wholesale prices data bank. MDIC-ALICE data base, Ministry of Industrial Development and Trade.

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

Total domestic use (total production, plus import, minus export, plus change in stocks), carcass weight.

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## VIII. Consumption prices (at farm gate)

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

Source: not applicable.

## IX. Value of consumption (at farm gate) [(VII)\*(VIII)]

Level of consumption (VII) multiplied by consumption prices (VIII).

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## POULTRY

## I. Level of production

Gross indigenous production in carcass weight.

Source: Brazilian Institute of Geography and Statistics (IBGE), Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## **II.** Producer prices (at farm gate)

Annual average of monthly prices received by producers for live chickens, divided by 0.77 for conversion into carcass equivalent price.

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). National Food Supply Company (CONAB). Institute of Agricultural Economics Research (IEA), agricultural wholesale prices data bank;

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

### **IV. Trade status**

For the period 1995-2017: net exported (NE).

Source: Brazilian Institute of Geography and Statistics (IBGE), Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## V. Market price differential at the farm gate

Due to domestic and border price-related policies in place, MPD is calculated based on the price gap for the period 1995-2017: difference between the Producer price (at farm gate) and the Reference price (at farm gate). Negative MPD set to 0 as there were no export barriers (export bans, export tariffs) and no other market price policy taxing or supporting producers.

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

Average unit values of Brazilian exports of meat of chickens and roosters, not cut in pieces, frozen (NCM 0207.12.00), net of processing, handling and transportation costs.

The margin is calculated as the difference between the wholesale price (annual average of monthly prices of refrigerated chicken published by IEA [11]) minus the producer price above.

Source: Institute of Agricultural Economics Research (IEA), agricultural wholesale prices data bank. MDIC-ALICE data base, Ministry of Industrial Development and Trade .

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

Total domestic use (total production, plus import, minus export, plus change in stocks), carcass weight.

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.

## VIII. Consumption prices (at farm gate)

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

Source: not applicable.

## IX. Value of consumption (at farm gate) [(VII)\*(VIII)]

Level of consumption (VII) multiplied by consumption prices (VIII).

Source: Information directly provided by the Brazilian Ministry of Agriculture and Food (MAPA). OECD Aglink data base.