# INDONESIA: ESTIMATES OF SUPPORT TO AGRICULTURE

Contact Persons: Jesus ANTON and Florence BOSSARD

Email: Jesus.Anton@oecd.org ; Florence.Bossard@oecd.org

Tel: (33-1) 85 55 44 33; (33-1) 45 24 95 19

Fax: (33-1) 44 30 61 19

## 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 – 4.16.

**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 – 3.16 where definitions are included.

**Tables 3.1 – 3.16 Producer Single Commodity Transfers** contain producer SCT by commodity, which are calculated for Indonesia for the following commodities: maize, rice, soybeans, palm oil, sugar, milk, beef and veal, pig meat, poultry, eggs, bananas, cassava, cocoa beans, coffee and rubber, (Tables 3.1-3.15). In addition, SCT for "other commodities" is also calculated (Table 3.16), 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 4.1-4.16 where definitions are included.

**Tables 4.1 – 4.16** 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 **3.16**. Definitions are provided only for basic data sets from which all the other data sets in this table are derived.

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

# TABLE 1. INDONESIA: 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. Source: Food and Agriculture Organization of the United Nations (FAO).

*I.1. Of which share of MPS commodities (%):* Share of commodities for which MPS is explicitly calculated (in Tables 4.1-4-16) 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 4.1-4.16.

**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].

While payment data refer to financial years as in the respective sources, the presentational convention adopted here is to identify a financial year by its first year only (for example, 2000 refers to financial year 2000-01).

*A. Support based on commodity output*

*A.1. Market Price Support (MPS):* 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 production (VP) by commodity group [for each commodity group: (ΣMPS for MPS commodities) / (ΣVP for MPS commodities) x VP for total group; the total MPS is then calculated as the sum of MPS by commodity group].For Indonesia, the commodity groups considered are: group 1 (crops), group 2 (livestock).

*A.2. Payments based on output*

*B. Payments based on input use*

*B.1. Based on variable input use*

*Fertiliser subsidies*

Period of implementation: 1990 ongoing

Subsidy paid to state-owned fertiliser manufacturers' to compensate them for selling certain fertiliser products to farmers at government determined Highest Retail Price (*Harga Eceran Tertinggi*, HET). Since 2008 it also includes budgetary expenditure on the Direct Fertiliser Aid (*Bantuan Langsung Pupuk*, BLP) programme, which distributes organic and NPK fertilisers at no cost to farmers who participate in field schools. Source: Ministry of Agriculture, Indonesia.

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

Payments are included in GCT for crops.

*Seed subsidies*

Period of implementation: 1990 ongoing

Subsidy paid to state-owned seed manufacturers to enable them to distribute seeds to farmers at subsidised prices. Since 2007 it also includes budgetary expenditure on the Direct Superior Seed Aid (*Bantuan Langsung Benih Unggul*, BLBU) programme, which distributes free certified seeds of non-hybrid paddy, hybrid paddy, hybrid maize, composite maize and soybeans to farmers who participate in field schools. Source: Ministry of Agriculture, Indonesia.

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

Payments are included in SCT for rice, maize, palm oil, sugar cane, soybean, rubber, banana, coffee.

*Direct in kind distribution of seed - rice, maize and soybeans*

Period of implementation: 2016 ongoing

Expenditure for direct in-kind support to targeted farmers participating in the special program to increase strategic food commodities (rice, maize, and soybean).

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

Payments are included in GCT for rice, maize, soybeans.


*Support to livestock*

Period of implementation: 1990 ongoing

Budgetary expenditure associated with the provision of livestock and artificial insemination (AI) services to farmers. Source: Ministry of Agriculture, Indonesia.

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

Payments are included in SCT for beef, pigmeat, poultry and milk.

*Cattle development program*

Period of implementation: 2015 ongoing

Budgetary expenditure to support reproduction management of cattle including: verification on reproduction status, artificial insemination (AI) services, and natural mating, provision of feed and necessary material, and maintaining productive female. Source: Ministry of Agriculture, Indonesia.

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

Payments are included in BF commodity.

*Interest rate concession*

Period of implementation: 1990 ongoing

Subsidy paid to ordinary commercial banks via the Bank of Indonesia to allow farmers to borrow from them at below market interest rates. There are currently four such credit subsidy programmes: Food Security and Energy Credit (*Kredit Ketahanan Pangan dan Energi*, KKP-E), Bio Energy Development and Plantation Revitalisation Credit (*Kredit Pengembangan Energi Nabati and Revitalisasi Perkebunan*, KPEN-RP),Cattle Breeding Credit (*Kredit Usaha Pembibitan* Sapi, KUPS), and People's Enterprise Credit (*Kredit Usaha Rakyat,* KUR*)*. 50% of amount spent on these programme has been allocated to category B1 (based on variable input use) and 50% to category B2 (based on fixed capital formation; see below). Source: Ministry of Agriculture, Indonesia.

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

Payments are included in ACT.

*Agribusiness Development in Rural Areas*

Period of implementation: 2008-15

PUAP (*Pengembangan Usaha Agribisnis Perdesaan*) provides a grant of IDR 100 million to the federated farmers' group in each village which uses this as seed money to establish a revolving credit facility among the member farmers. 50% of amount spent on this programme has been allocated to category B1 (based on variable input use) and 50% to category B2 (based on fixed capital formation; see below). Source: Ministry of Agriculture, Indonesia.

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

Payments are included in ACT.

*B.2 Based on fixed capital formation*

*Post harvest and processing facilities*

Period of implementation: 1990 ongoing

Payment paid to farmers' groups so they can purchase equipment such as tarpaulins, threshers, dryers and mini rice milling units to reduce post-harvest losses/increase yields. Source: Ministry of Agriculture, Indonesia.

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

Payments are included in SCT for rice, maize, soybeans, rubber, cassava, cocoa, bananas.

*Interest rate concession*

Period of implementation: 1990 ongoing

Subsidy paid to ordinary commercial banks via the Bank of Indonesia to allow farmers to borrow at below market interest rates. There are currently four such credit subsidy programmes: Food Security and Energy Credit (*Kredit Ketahanan Pangan dan Energi*, KKP-E), Bio Energy Development and Plantation Revitalisation Credit (*Kredit Pengembangan Energi Nabati and Revitalisasi Perkebunan*, KPEN-RP), Cattle Breeding Credit (*Kredit Usaha Pembibitan* Sapi, KUPS), and People's Enterprise Credit (*Kredit Usaha Rakyat,* KUR). 50% of amount spent on these programme has been allocated to category B2 (based on fixed capital formation) and 50% to category B1 (based on variable input use; see above). Source: Ministry of Agriculture, Indonesia.

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

Payments are included in ACT.

*Land conservation*

Period of implementation: 1990 ongoing

Payments to farmers for labour undertaken by them to prevent landslides (paid at a rate of IDR 20 000 per day) and the provision of trees. Source: Ministry of Agriculture, Indonesia.

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

Payments are included in ACT.

*Land expansion*

Period of implementation: 2015- 18

Payment to local agriculture services and related agencies for opening new land for paddy in targeted sites.

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

Payments are included in GCT for crops.

*Terrace farming*

Period of implementation: 1995-2010

Payments to farmers for work undertaken by them to maintain terraces thereby protecting agricultural production resources. Source: Ministry of Agriculture, Indonesia.

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

Payments are included in ACT.

*Farm irrigation, farm roads, etc.*

Period of implementation: 1990 ongoing

Includes payments to Water User Associations to rehabilitate on-farm irrigation systems through the Farm Level Irrigation Network (*Jaringan Irigasi Tingkat Usahatani*, JITUT) and the Village Irrigation

Network (*Jaringan Irigasi Desa*, JIDES) programmes, and payments to farmers' groups to build roads. Source: Ministry of Agriculture, Indonesia.

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

Payments are included in ACT.

*Agribusiness Development in Rural Areas*

Period of implementation: 2008-15

PUAP (*Pengembangan Usaha Agribisnis Perdesaan*) provides a grant of IDR 100 million to a federated farmers' group in each village which uses this as seed money to establish a revolving credit facility among the member farmers. 50% of amount spent on this programme has been allocated to category B2 (based on fixed capital formation; see below) and 50% to category B1 (based on variable input use; see above). Source: Ministry of Agriculture, Indonesia.

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

Payments are included in ACT.

*Estate crop development*

Period of implementation: 2018 ongoing

Post harvest or processing equipment along with agronomy practices guidance to farmers organized in a farmers' group, related to priority commodities, in particular sugarcane, rubber, coffee cocoa, coconut, but excluding palm oil. 50% of amount spent on this programme has been allocated to category B2 (based on fixed capital formation) and 50% to category B3 (*Based on use of on-farm services*).

Payments are included in GCT for crops.

*Land rehabilitation*

Period of implementation: 2015 -18

Budgetary expenditure to farmers' groups for improving land quality in targeted sites.

Payments are included in ACT.

*Land protection*

Period of implementation: 2017 -18

Budgetary expenditures to agricultural services in the regions for conducting activities related to protecting agricultural land from conversion to non-agricultural use.

Payments are included in ACT.

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

*Agricultural extension and advisory services*

Period of implementation: 1990 ongoing

Budgetary expenditure to provide on-farm extension services, such as field travel cost and remuneration for non-government extension specialists. Source: Ministry of Agriculture, Indonesia.

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

Payments are included in ACT.

*Pest and disease control*

Period of implementation: 1990 ongoing

Budgetary expenditure on on-farm pest and disease control programmes for livestock, horticulture and crops, mainly to cover expenses of pest and desease brigades in the field monitoring the intensity of pest and desease outbreak and conducting necessary measures. Source: Ministry of Agriculture, Indonesia.

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

Payments are included in ACT.

*Estate crop development*

Period of implementation: 2018 ongoing

Post harvest or processing equipment along with agronomy practices guidance to farmers organized in a farmers' group, related to priority commodities, in particular sugarcane, rubber, coffee cocoa, coconut, but excluding palm oil. 50% of amount spent on this programme has been allocated to category B2 (based on fixed capital formation) and 50% to category B3 (*Based on use of on-farm services*).

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

Payments are included in GCT for crops.

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

*Disaster payments for agriculture*

Period of implementation: 1990 ongoing

Compensation  payments for losses in agricultural production due to natural disasters. Source: Ministry of Agriculture, Indonesia.

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

Payments are included in ACT.

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

*[no payments under this heading]*


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

*[no payments under this heading]*

*F. Payments based on non-commodity criteria*

*[no payments under this heading]*


*G. Miscellaneous payments*

*[no payments under this heading]*


**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 Table4. 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*

*Agriculture research*

Period of implementation: 1990 ongoing

Public financing of agriculture-related research institutions. This includes operational agricultural research expenses implemented by MoA and other ministries/agencies. Source: Ministry of Agriculture, Indonesia.

*H.2. Agricultural knowledge transfer*

*H2.a. education*

*H.2.b. extension services*

*Training for farmers and extension workers*

Period of implementation: 1990 ongoing

Public financing of agricultural schools. Source: Ministry of Agriculture, Indonesia.

*Extension and advisory*

Period of implementation: 1990 ongoing

Public finance allocations to local governments to assist them provide extension services. Source: Ministry of Agriculture, Indonesia.


*I. Inspection and control*

*I.1. Agricultural product safety and inspection*

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

*Quarantine system*

Period of implementation: 1990 on going

Public finance allocations for health, safety, grading and standardisation, and inspection services relating to agricultural products. Source: Ministry of Agriculture, Indonesia.

*Pest and disease control*

Period of implementation: 2012 ongoing

Budgetary expenditure on pest and disease control programmes for livestock, horticulture and crops. Source: Ministry of Agriculture, Indonesia.


*J. Development and maintenance of infrastructure*

*J.1.Hydrological infrastructure*

*Irrigation central and sub-national*

Period of implementation: 1990 ongoing

Public finance allocations made to the Ministry of Public Works for the operation and maintenance, rehabilitation and expansion of irrigation networks under the responsibility of central government, and for distribution to local governments to assist with the rehabilitation of irrigation networks under their responsibility. Source: Ministry of Finance, Indonesia.

*Special Allocation Funds*

Period of implementation: 2005 ongoing

Public finance allocation made by the Ministry of Finance through the DAK (*Dana Alokasi Khusus*) mechanism to agricultural infrastructure projects undertaken by local governments. Source: Ministry of Agriculture, Indonesia.

### K. Marketing and promotion

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

*K.2.Promotion of agricultural products*

*Market information system and international promotion*

Period of implementation: 1990 ongoing

Public finance allocations to link producers with markets and to develop new markets. Source: Ministry of Agriculture, Indonesia.

### L. Cost of public stockholding

*Public stockholding for food security purposes*

Period of implementation: 2004 ongoing

Public finance allocations to BULOG to manage stocks for emergency and price stabilisation purposes. Source: World Trade Organization (WTO), Ministry of Agriculture, Indonesia.

### M. Miscellaneous

*Support to farmer groups and religious institutions*

Period of implementation: 1990-2015

Public finance allocations for human empowerment, including the Community Base of Self-reliant Institutions, Ministry of Agriculture, Indonesia.

**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].

*N. Transfers to producers from consumers (TPC):* 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 (VP) by commodity group [for each commodity group: (ΣTPC for MPS commodities) / (ΣVP for MPS commodities) x VP for total group; the total TPC is then calculated as the sum of TPC by commodity group. For the list of commodity groups, see Section A.1. Market Price Support (MPS) within this Table 1].

*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 4.16.

*O. Other transfers from consumers (OTC):* 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 (VP) by commodity group [for each commodity group: (ΣOTC for MPS commodities) / (ΣVP for MPS commodities) x VP for total group; the total OTC is then calculated as the sum of OTC by commodity group. For the list of commodity groups, see Section A.1. Market Price Support (MPS) within this Table 1].

*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 4.16.

### 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 to 4.16.

*Rice for the poor (RASKIN)* or *Rice for People's Welfare (RASTRA).*

Period of implementation: 1995 ongoing

Public finance allocations to *Badan Urusan Logistik,* (BULOG) to purchase and distribute subsidised rice to poor households. Source: Ministry of Agriculture, Indonesia.

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

*Fiscal stimulus*

Period of implementation: 2008 ongoing

Public finance allocations to pay the 10% value-added tax that should be paid by consumers (*Pajak Pertambahan Nilai Ditanggung Pemerintah*, PPN-DTP). Source: Ministry of Agriculture, Indonesia.

*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 for maize, rice, soybeans, and sugar (4.1, 4.2, 4.3, 4.5)).

**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) - (O) + (IV) + (Q)]

*T. Budget revenues* [(O)]

**TABLE 2. INDONESIA: BREAKDOWN OF PSE BY COMMODITY SPECIFICITY AND OTHER TRANSFERS**

All data sets in Table 2 come from Tables 1 and 3.1 to 3.16 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 - 3.16].

*Percentage producer SCT*: 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- 3.16).

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

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

**II. Group commodity transfers (GCT):** The annual monetary value of gross transfers from 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 (%):* $GCT_{SHARE} = 100 * GCT / PSE$

*Transfers to specific groups of commodities:* The GCT indicator is calculated for Indonesia for the following groups of commodities: all crops and group of rice, maize, soybeans.

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

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

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

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

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

# TABLE 3. INDONESIA : PRODUCER SINGLE COMMODITY TRANSFERS (BY COMMODITY)

Tables 3.1 to 3.16 provide information on Producer Single Commodity Transfers (PSCT) for the following commodities: maize, rice, soybeans, palm oil, sugar, milk, beef and veal, pig meat, poultry, eggs, bananas, cassava, cocoa beans, coffee, rubber and "other commodities". All data sets in the calculation SCT by commodity come from Tables 1 and 4.1 - 4.16 where definitions are included.

*Definitions:*

**I. Level of production:** Data from respective commodity Tables 4.1 - 4.16 (Market Price Support tables)

**II. Value of production (at farm gate):** Data from respective commodity Tables 4.1 - 4.16 (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 4.1-4.16]

*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* [$B1_{COM}+B2_{COM}+B3_{COM}$]

*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 ($D_{COM}$) provided to respective single commodity [Data from Table 1].

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

**TABLE 4. INDONESIA: MARKET PRICE SUPPORT AND CONSUMER SINGLE COMMODITY TRANSFERS**

Tables 4.1 to 4.16, contain calculation of the Market Price Support (MPS) and Consumer Single Commodity Transfers (consumer SCT) for the following commodities: maize, rice, soybeans, palm oil, sugar, milk, beef and veal, pig meat, poultry, eggs, bananas, cassava, cocoa beans, coffee, rubber 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:*

**1. Maize**

*I. Level of production*

Total production of maize, measured in dried, loose (without cob) terms (*Jagung Pipilan Kering).*

Source.  Statistics Indonesia (BPS), Statistical Yearbook, various editions.

*II. Producer prices (at farm gate)*

Average farm gate price of dried, loose maize.

Source: Statistics Indonesia (BPS).

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

*IV. Trade status*

The trade status is determined based on exports and imports data: 1990-2019: Net importer (NI).

Source: UN Comtrade database, United Nations.

*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 1990-2019: difference between the Producer price (at farm gate) and the Reference price (at farm gate). Calculated as Producer price (at farm gate) less Reference price (at farm gate).

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

C.i.f. import unit values of maize (HS 1005). Source: UN Comtrade database, United Nations.

*Port charges and transportation costs* (between Indonesia's border and domestic wholesale markets): were developed in consultation with Indonesian officials and expressed as a percentage of the border reference price: 5% for maize. This percentage has been converted into absolute value and added to the CIF price.

*Marketing margins*: it was assumed that the percentage margin remained at the same level over the whole period. Consequently, its equivalent in absolute terms varied depending on the level of farm gate price in a given year. For maize, the marketing margin is assumed to be 15% of the farm gate price. The absolute value of the margin in a given year was subtracted from the border reference price.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Total domestic use during the calendar year (total production, plus net trade, plus change in stocks), measured on the same type of product basis as production.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Implicit price corresponding to reference price plus the market price differential.

Source: See Reference prices (VI) and Market Price Differential (V).

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

Level of consumption times Consumption price (at farm gate).

Source: Calculated based on items IV and V.

## 2. Rice

### I. Level of production

Total production of rice, measured in dried, unhusked paddy terms (*Gabah Kering Giling*, GKG).

Source. Statistics Indonesia (*Badan Pusat Statistik*, BPS), Statistical Yearbook, various editions.

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

Average farm gate price of dried, unhusked paddy rice (GKG).

Source: Statistics Indonesia (BPS).

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

### IV. Trade status

The trade status is determined based on exports and imports data: for 1990-2019: Net importer (NI).

Source: UN Comtrade database, United Nations.

*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 1990-2019: difference between the Producer price (at farm gate) and the Reference price (at farm gate). Calculated as Producer price (at farm gate) less Reference price (at farm gate).

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

F.o.b. export unit value of Thai 15% broken from Bangkok plus transport cost from Thailand to Singapore (calculated by subtracting the unit F.o.b. price of rice exports from Thailand to Singapore from the unit C.i.f. price of rice imports by Singapore from Thailand).[1,2]

*Port charges and transportation costs* (between Indonesia's border and domestic wholesale markets): were developed in consultation with Indonesian officials and expressed as a percentage of the border reference price: 2% for rice.

*Marketing margins*: is calculated as the gap between the average wholesale price for medium quality rice (IR III) recorded at the Jakarta wholesale market (Pasar Induk Cipnang) converted into dried paddy rice (using a technical coefficient of 0.62) and the farmgate price for dried paddy rice. The gap has been expressed in percentage terms and is equal to 8.7% of the farmgate price**.** While it was assumed that the percentage margin remained at the same level over the whole period, its equivalent in absolute terms varied depending on the level of farm gate price in a given year. The absolute value of the margin in a given year was subtracted from the border reference price. [3]

Sources: [1] USDA, Rice Yearbook dataset, [2] UN Comtrade database, United Nations. [3] *Badan Urusan Logistik*, BULOG

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

Total domestic use during the calendar year (total production, plus net trade, plus change in stocks), measured on the same type of product basis as production.

Sources: Calculated by Ministry of Agriculture, Indonesia.

*VIII. Consumption prices (at farm gate)*

Implicit price corresponding to reference price plus the market price differential.

Source: See Reference prices (VI) and Market Price Differential (V).

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

Level of consumption times Consumption price (at farm gate).

Source: Calculated based on items IV and V.

**3. Soybeans**

*I. Level of production*

Total production of soybeans, measured in dried bean terms (*Biji Kering*).

Source. Statistics Indonesia (BPS), Statistical Yearbook, various editions.

*II. Producer prices (at farm gate)*

Average farm gate price of dried beans.

Source: Statistics Indonesia (BPS).

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

*IV. Trade status*

The trade status is determined based on exports and imports data: for 1990-2019: Net importer (NI).

Source: UN Comtrade database, United Nations.

*V. Market price differential at the farm gate*

Because of the difference between the domestic product, which is used for human consumption, and the imported product, which is used for animal feed and as tariffs represent the main policy applied, for the period 1990-2019, the MPD is estimated using Indonesia's simple average import MFN tariff on soybean (HS 1201).

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

Not applicable as the average Indonesian MFN tariff applicable to soybeans (HS 1201) is used to derive the Market Price Differential.

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

Total domestic use during the calendar year (total production, plus net trade, plus change in stocks), measured on the same type of product basis as production.

Sources: Calculated by Ministry of Agriculture, Indonesia.

*VIII. Consumption prices (at farm gate)*

Implicit price corresponding to reference price plus the market price differential.

Source: See Reference prices (VI) and Market Price Differential (V).

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

Level of consumption times Consumption price (at farm gate).

Source: Calculated based on items IV and V.

## 4. PALM OIL

### I. Level of production

Total production of crude palm oil

Source. Statistics Indonesia (BPS), Statistical Yearbook, various editions.

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

Average farm gate price of crude palm oil, obtained by dividing the average sale price of palm oil fruit by 0.2.

Source: Statistics Indonesia (BPS).

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

### IV. Trade status

The trade status is determined based on exports and imports data: for 1990-2019: Net exporter (NE).

Source: UN Comtrade database, United Nations.

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

1990-2019: due to border price-related policies in place, the MPD is derived from the average Indonesian export taxes on crude palm oil for the entire period covered.

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

Not applicable as the average Indonesian export taxes on crude palm oil is used to derive the Market Price Differential.

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

Total domestic use during the calendar year (total production, plus net trade, plus change in stocks), measured on the same type of product basis as production, crude palm oil.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Implicit price corresponding to reference price plus the market price differential.

Source: See Reference prices (VI) and Market Price Differential (V).

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

Level of consumption times Consumption price (at farm gate).

Source: Calculated based on items IV and V.

## 5. Sugar

### I. Level of production

Total production of sugar cane, measured in refined sugar terms (*Gula Hablur*).

Source. Statistics Indonesia (BPS), Statistical Yearbook, various editions.

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

Government determined minimum price (*Provenue*) paid by millers to farmers on a refined volume equivalent terms.

Source: Statistics Indonesia (BPS).

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

### IV. Trade status

The trade status is determined based on exports and imports data: for 1990-2019: Net importer (NI).

Source: UN Comtrade database, United Nations.

### 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 1990-2019: difference between the Producer price (at farm gate) and the Reference price (at farm gate). Calculated as Producer price (at farm gate) less Reference price (at farm gate).

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

C.i.f. import unit values of raw sugar, cane (HS 1701 11). Source: UN Comtrade database, United Nations.

*Port charges and transportation costs* (between Indonesia's border and domestic wholesale markets): were developed in consultation with Indonesian officials and expressed as a percentage of the border reference price: 3% for sugar cane. This percentage has been converted into absolute value and added to the CIF price.

*Marketing margins*: is estimated on the basis of price gaps between domestic wholesale and farm gate prices. The wholesale price is the average wholesale price for Indonesia recorded by BPS. The absolute value of the margin in a given year was subtracted from the border reference price.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Total domestic use during the calendar year (total production, plus net trade, plus change in stocks), measured on the same type of product basis as production.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Implicit price corresponding to reference price plus the market price differential.

Source: See Reference prices (VI) and Market Price Differential (V).

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

Level of consumption times Consumption price (at farm gate).

Source: Calculated based on items IV and V.

## 6. Milk

### I. Level of production

Total production of raw milk.

Source. Statistics Indonesia (BPS), Statistical Yearbook, various editions.

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

Average farm gate price of raw milk.

Source: Statistics Indonesia (BPS).

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

### IV. Trade status

The trade status is determined based on exports and imports data: for 1990-2019: Net importer (NI).

Source: UN Comtrade database, United Nations.

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

Calculated as Producer price (at farm gate) less Reference price (at farm gate).

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

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 (Pb) is calculated from the prices of those components:

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

*a* and *b* are milk fat contained in one ton of raw milk and butter respectively, *c* and *d* are non-fat-solids contained in one ton of milk and skimmed milk powder respectively, $P_{wb}$ and $P_{ws}$ are Indonesian unit import values of butter (HS 040500) and skimmed milk powder respectively (HS040210).. The reference price of milk at farm gate (*Pr*) is the implicit milk border price net of processing costs (*C*):

$$P_r = P_b - C$$

Source: UN Comtrade database, United Nations and OECD PSE/CSE database.

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

Total domestic use during the calendar year (total production, plus net trade, plus change in stocks), measured on the same type of product basis as production.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Implicit price corresponding to reference price plus the market price differential.

Source: See Reference prices (VI) and Market Price Differential (V).

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

Level of consumption times Consumption price (at farm gate).

Source: Calculated based on items IV and V.

## 7. Beef and veal

### I. Level of production

Total production of beef and veal, not including buffalo, in carcass weight equivalent.

Source. Statistics Indonesia (BPS), Statistical Yearbook, various editions.

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

Average farm gate price of all categories of bovine animals, not including buffalo, on a carcass weight equivalent terms, obtained by dividing the average sale price of live weight by 0.5.

Source: Provided by BPS.

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

### IV. Trade status

The trade status is determined based on exports and imports data: for 1990-2019: Net importer (NI).

Source: UN Comtrade database, United Nations.

### 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 1990-2019: difference between the Producer price (at farm gate) and the Reference price (at farm gate). Calculated as Producer price (at farm gate) less Reference price (at farm gate).

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

C.i.f. import unit values of bovine meat, fresh or chilled (HS 0201) from Australia. Source: UN Comtrade database, United Nations.

*Port charges and transportation costs* (between Indonesia's border and domestic wholesale markets): were developed in consultation with Indonesian officials and expressed as a percentage of the border reference price: 5% for beef and veal. This percentage has been converted into absolute value and added to the CIF price.

*Marketing margins*: is estimated on the basis of price gaps between domestic wholesale and farm gate prices. The wholesale price is the average wholesale price for Indonesia recorded by BPS. The absolute value of the margin in a given year was subtracted from the border reference price.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Total domestic use during the calendar year (total production, plus net trade, plus change in stocks), measured on the same type of product basis as production, carcass weight in the case of meat.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Implicit price corresponding to reference price plus the market price differential.

Source: See Reference prices (VI) and Market Price Differential (V).

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

Level of consumption times Consumption price (at farm gate).

Source: Calculated based on items IV and V.

## 8. Pig meat

### I. Level of production

Total production of pig meat, in carcass weight equivalent.

Source. Statistics Indonesia (BPS), Statistical Yearbook, various editions.

## II. Producer prices (at farm gate)

Average farm gate price of pigs for slaughter on a carcass weight equivalent terms, obtained by dividing the average sale price of live weight by 0.8.

Source: Provided by BPS.

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

## IV. Trade status

The trade status is determined based on exports and imports data: 1990-2004: net exporter (NE), since 2005, Net importer (NI).

Source: UN Comtrade database, United Nations.

## 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 1990-2019: difference between the Producer price (at farm gate) and the Reference price (at farm gate). Calculated as Producer price (at farm gate) less Reference price (at farm gate).

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

C.i.f. import unit values of meat of swine, fresh, chilled or frozen (HS 0203) imported into Singapore. Source: UN Comtrade database, United Nations.

*Port charges and transportation costs* (between Indonesia's border and domestic wholesale markets): were developed in consultation with Indonesian officials and expressed as a percentage of the border reference price: 5% for pig meat. This percentage has been converted into absolute value and added to the CIF price.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Total domestic use during the calendar year (total production, plus net trade, plus change in stocks), measured on the same type of product basis as production, carcass weight in the case of meat.

Sources: Calculated by Ministry of Agriculture, Indonesia.

## VIII. Consumption prices (at farm gate)

Implicit price corresponding to reference price plus the market price differential.

Source: See Reference prices (VI) and Market Price Differential (V).

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

Level of consumption times Consumption price (at farm gate).

Source: Calculated based on items IV and V.

## 9. Poultry meat

### I. Level of production

Total production of poultry, including broiler, layer and native chickens, in carcass weight equivalent.

Source. Statistics Indonesia (BPS), Statistical Yearbook, various editions.

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

Average farm gate price of poultry for slaughter on a carcass weight equivalent terms, obtained by dividing the average sale price of live weight by 0.72.

Source: Provided by BPS.

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

### IV. Trade status

The trade status is determined based on exports and imports data: 1990-2019: Net importer (NI).

Source: UN Comtrade database, United Nations.

### 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 1990-2019: difference between the Producer price (at farm gate) and the Reference price (at farm gate). Calculated as Producer price (at farm gate) less Reference price (at farm gate).

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

C.i.f. import unit values of meat and edible offal of poultry, fresh, chilled or frozen (HS 0207) imported into Japan. Source: UN Comtrade database, United Nations.

*Port charges and transportation costs* (between Indonesia's border and domestic wholesale markets): were developed in consultation with Indonesian officials and expressed as a percentage of the border reference price: 5% for poultry. This percentage has been converted into absolute value and added to the CIF price.

*Marketing margins*: it was assumed that the percentage margin remained at the same level over the whole period. Consequently, its equivalent in absolute terms varied depending on the level of farm gate price in a given year. For poultry the marketing margin is assumed to be 20% of the farm gate price respectively. The wholesale price is the average wholesale price for Indonesia recorded by BPS. The absolute value of the margin in a given year was subtracted from the border reference price.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Total domestic use during the calendar year (total production, plus net trade, plus change in stocks), measured on the same type of product basis as production, carcass weight in the case of meat.

Sources: Calculated by Ministry of Agriculture, Indonesia.

## VIII. Consumption prices (at farm gate)

Implicit price corresponding to reference price plus the market price differential.

Source: See Reference prices (VI) and Market Price Differential (V).

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

Level of consumption times Consumption price (at farm gate).

Source: Calculated based on items IV and V.

## 10. Eggs

## I. Level of production

Total production of eggs in the shell, both layer and native chickens.

Source. Statistics Indonesia (BPS), Statistical Yearbook, various editions.

## II. Producer prices (at farm gate)

Average farm gate price of hen eggs.

Source: Provided by BPS.

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

## IV. Trade status

The trade status is determined based on exports and imports data: for 1990-2019: Net importer (NI).

Source: UN Comtrade database, United Nations.

## V. Market price differential at the farm gate

Calculated as Producer price (at farm gate) less Reference price (at farm gate).

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

C.i.f. import unit values of hen eggs in shell imported into Singapore. Source: FAOSTAT database.

*Port charges and transportation costs* (between Indonesia's border and domestic wholesale markets): were developed in consultation with Indonesian officials and expressed as a percentage of the border reference price: 5% for eggs. This percentage has been converted into absolute value and added to the CIF price.

*Marketing margins*: is estimated on the basis of price gaps between domestic wholesale and farm gate prices. The wholesale price is the average wholesale price for Indonesia recorded by BPS. The absolute value of the margin in a given year was subtracted from the border reference price.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Total domestic use during the calendar year (total production, plus net trade, plus change in stocks), measured on the same type of product basis as production, carcass weight in the case of meat.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Implicit price corresponding to reference price plus the market price differential.

Source: See Reference prices (VI) and Market Price Differential (V).

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

Level of consumption times Consumption price (at farm gate).

Source: Calculated based on items IV and V.

## 11. Bananas

### I. Level of production

Total production of bananas (*Pisang Dengan Tandan*).

Source. Statistics Indonesia (BPS), Statistical Yearbook, various editions.

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

Average farm gate price of fresh bananas, calculated on a tonnage basis by multiplying the average price paid per bunch by 400 (i.e. assumes the average bunch weighs 2.5kg).

Source: Provided by BPS.

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

### IV. Trade status

The trade status is determined based on exports and imports data: for 1990-2019: Net exporter (NE).

Source: 1990-2019: UN Comtrade database, United Nations.

### 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 1995-2019: difference between the Producer price (at farm gate) and the Reference price (at farm gate). MPD has been set to 0 for the whole period 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)

C.i.f. import unit values, bananas, fresh (HS 0803 00) imported into Singapore. Source: UN Comtrade database, United Nations.

*Port charges and transportation costs* (between Indonesia's border and domestic wholesale markets): were developed in consultation with Indonesian officials and expressed as a percentage of the border reference price: 3% for bananas. This percentage has been converted into absolute value and added to the CIF price.

*Marketing margins*: it was assumed that the percentage margin remained at the same level over the whole period. Consequently, its equivalent in absolute terms varied depending on the level of farm gate price in a given year. For bananas the marketing margin is assumed to be 64% of the farm gate price. The absolute value of the margin in a given year was subtracted from the border reference price, then this value was multiplied by a quality coefficient of 0.9 to reflect the quality difference between bananas produced and exported (based on interviews with traders).

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Total domestic use during the calendar year (total production, plus net trade, plus change in stocks), measured on the same type of product basis as production.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Implicit price corresponding to reference price plus the market price differential.

Source: See Reference prices (VI) and Market Price Differential (V).

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

Level of consumption times Consumption price (at farm gate).

Source: Calculated based on items IV and V.

## 12. Cassava

### I. Level of production

Total production of cassava, measured in fresh tuber, unskinned and wet terms (*Umbi Basah*).

Source. Statistics Indonesia (BPS), Statistical Yearbook, various editions.

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

Average farm gate price of fresh cassava.

Source: Provided by BPS

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

## IV. Trade status

The trade status is determined based on exports and imports data: for 1990-2019: Net exporter (NE).

Source: UN Comtrade database, United Nations.

## 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 1990-2019: difference between the Producer price (at farm gate) and the Reference price (at farm gate). MPD has been set to 0 for the whole period 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)

F.o.b. export unit values, manioc (cassava) (HS 0714 10). Source: UN Comtrade database, United Nations.

*Port charges and transportation costs* (between Indonesia's border and domestic wholesale markets): were developed in consultation with Indonesian officials and expressed as a percentage of the border reference price: 3% for cassava. This percentage has been converted into absolute value and substracted from the F.o.b price.

*Marketing margins*: is estimated on the basis of price gaps between domestic wholesale and farm gate prices. The wholesale price is the average wholesale price for Indonesia recorded by BPS. The absolute value of the margin in a given year was subtracted from the border reference price.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Total domestic use during the calendar year (total production, plus net trade, plus change in stocks), measured on the same type of product basis as production.

Sources: Calculated by Ministry of Agriculture, Indonesia.

## VIII. Consumption prices (at farm gate)

Implicit price corresponding to reference price plus the market price differential.

Source: See Reference prices (VI) and Market Price Differential (V).

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

Level of consumption times Consumption price (at farm gate).

Source: Calculated based on items IV and V.

## 13. Cocoa beans

## I. Level of production

Total production of cocoa beans, measured in dried bean terms (*Biji Kering*).

Source. Statistics Indonesia (BPS), Statistical Yearbook, various editions.

## II. Producer prices (at farm gate)

Average farm gate price of dried cocoa beans.

Source: Provided by BPS

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

## IV. Trade status

The trade status is determined based on exports and imports data: for 1990-2013: Net exporter (NE); 2014-2019: Net importer (NI).

Source: UN Comtrade database, United Nations.

## 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 1990-2019: difference between the Producer price (at farm gate) and the Reference price (at farm gate). MPD has been set to 0 for the period 1990 -2013 as there were no export barriers (export bans, export tariffs) and no other market price policy taxing or supporting producers. Negative MPD has been set to 0 for the period 2014-19 as there were no export barriers 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, cocoa beans, fresh (HS 1801 00). Source: UN Comtrade database, United Nations.

*Port charges and transportation costs* (between Indonesia's border and domestic wholesale markets): were developed in consultation with Indonesian officials and expressed as a percentage of the border reference price: 5% for cocoa beans. This percentage has been converted into absolute value and substracted from F.o.b price.

*Marketing margins*: is estimated on the basis of price gaps between domestic wholesale and farm gate prices. The wholesale price is the average wholesale price for Indonesia recorded by BPS. The absolute value of the margin in a given year was subtracted from the border reference price.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Total domestic use during the calendar year (total production, plus net trade, plus change in stocks), measured on the same type of product basis as production.

Sources: Calculated by Ministry of Agriculture, Indonesia.

## VIII. Consumption prices (at farm gate)

Implicit price corresponding to reference price plus the market price differential.

Source: See Reference prices (VI) and Market Price Differential (V).

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

Level of consumption times Consumption price (at farm gate).

Source: Calculated based on items IV and V.

## 14. Coffee

### I. Level of production

Total production of coffee beans, measured in dried bean terms (*Kopi Berasan*). Source. Statistics Indonesia (BPS), Statistical Yearbook, various editions.

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

Average farm gate price of dried coffee beans.

Source: Provided by BPS

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

### IV. Trade status

The trade status is determined based on exports and imports data: for 1990-2019: Net exporter (NE).

Source: UN Comtrade database, United Nations.

### 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 1990-2019: difference between the Producer price (at farm gate) and the Reference price (at farm gate). MPD has been set to 0 for the whole period 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)

F.o.b. export unit values, coffee beans, not roasted, not decaffeinated (HS 0901 11). Source: UN Comtrade database, United Nations.

*Port charges and transportation costs* (between Indonesia's border and domestic wholesale markets): were developed in consultation with Indonesian officials and expressed as a percentage of the border reference price: 5% for coffee beans. This percentage has been converted into absolute value and substracted from the F.o.b price.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Total domestic use during the calendar year (total production, plus net trade, plus change in stocks), measured on the same type of product basis as production.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Implicit price corresponding to reference price plus the market price differential.

Source: See Reference prices (VI) and Market Price Differential (V).

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

Level of consumption times Consumption price (at farm gate).

Source: Calculated based on items IV and V.

## 15. Rubber

### I. Level of production

Total production of natural rubber, measured in dried sheet terms (*Karet Kering*).

Source. Statistics Indonesia (BPS), Statistical Yearbook, various editions.

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

Average farm gate price of dried sheet rubber, obtained by dividing the average sale price of natural slab rubber (*Karet Getah Tebal*) by 0.5.

Source: Provided by BPS.

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

### IV. Trade status

The trade status is determined based on exports and imports data: for 1990-2019: Net exporter (NE).

Source: UN Comtrade database, United Nations.

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

Calculated as Producer price (at farm gate) less Reference price (at farm gate).

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

F.o.b. export unit values, natural rubber (HS 4001). Source: UN Comtrade database, United Nations.

*Port charges and transportation costs* (between Indonesia's border and domestic wholesale markets): were developed in consultation with Indonesian officials and expressed as a percentage of the border reference price: 5% for rubber. This percentage has been converted into absolute value and substracted from the F.o.b price.

Sources: Calculated by Ministry of Agriculture, Indonesia.

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

Total domestic use during the calendar year (total production, plus net trade, plus change in stocks), measured on the same type of product basis as production.

Sources: Calculated by Ministry of Agriculture, Indonesia.

## VIII. Consumption prices (at farm gate)

Implicit price corresponding to reference price plus the market price differential.

Source: See Reference prices (VI) and Market Price Differential (V).

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

Level of consumption times Consumption price (at farm gate).

Source: Calculated based on items IV and V.