PHILIPPINES: 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 market price support (MPS) is explicitly calculated in Tables 4.1-4.11. In addition, Table 4.13 provides MPS estimates for the group called "other commodities", it means those for which individual MPS estimates were not made due to very small share in total value of production (below 1%) or lack of data.

Table 2. Breakdown of PSE by Commodity and Other Transfers provides a breakdown of the total PSE into four categories reflecting the flexibility in production choices given to producer receiving support. 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 the Philippines for the following commodities: rice, maize, coconuts, bananas, sugarcane (centrifugal), mango, pineapple, beef and veal, pigmeat, poultry, and eggs (Tables 3.1-3.11) provided that the value of production of that commodity exceeds 1% of the total value of agricultural production. 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 4.1-4.12 where definitions are included.

Tables 4.1-4.12 contain **Market Price Support** (MPS) and **Consumer Single Commodity Transfers** (consumer SCT) by commodity, calculated for the same set of commodities as in **Tables 3.1 to 3.12.** 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 estimates, 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. THE PHILIPPINES: 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 $[(II.1) / (I.1) \times 100]$.

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 [(Σ MPS for MPS commodities listed in the rows below) / (I.1) x 100].

A.2. Payments based on output

B. Payments based on input use

B.1. Based on variable input use

Production Support Services (PSS) on the National Rice Programme (distribution of seeds and fertilisers) (since 2000): subsidy to farmers in the form of distribution of seeds and fertilisers until 2011. In 2011, with the introduction of Food Staples Self-Sufficiency programme, the seed subsidy was replaced with roll-over or conditional assistance schemes. In 2015, High Yielding Technology Adoption Program was introduced under which the Regional Offices of the DA distribute seeds to farmer groups along with fertilisers and soil ameliorants under a roll-over or conditional assistance schemes. Inputs have to be repaid after given time (share of input subsidies in the production support services for rice was provided by National Rice Programme, for other commodities it was assumed that the share of input subsidies in PSS are the same as in National Rice Programme) [2].

Use of labels: Production limits: NO; Variable payment rates: NO; Input constraints: NO. Payments are included in GCT for rice.

Production Support Services (PSS) on the National Maize Programme (since 2009, before that included in Rice Programme): subsidy to farmers in the form of distribution of seeds and fertilisers until 2011. In 2011 the seed subsidy was replaced with roll-over or conditional assistance schemes [2].

Use of labels: Production limits: NO; Variable payment rates: NO; Input constraints: NO. Payments are included in GCT for maize.

Production Support Services (PSS) on the National High Value Crop Program (since 2000): subsidy to farmers in the form of distribution of seeds, planting materials and fertilisers until 2011. In 2011 the seed subsidy was replaced with roll-over or conditional assistance schemes [2].

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

Production Support Services (PSS) on the National Livestock Program (since 2000: subsidy to farmers in the form of distribution of animals [2].

Use of labels: Production limits: NO; Variable payment rates: NO; Input constraints: NO. Payments are included in GCT for all livestock.

Production Support Services (PSS) on the National Organic Agriculture Program (since 2009): subsidy to farmers in the form of distribution of seeds, planting materials, fingerlings [2].

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

Philippine Coconut Authority Programmes (since 2000): subsidy paid to coconut producers under the two programmes: the Salt Fertilisation Program and the Accelerated Planting and Replanting Project. Under the both programmes farmers are provided with subsidised inputs [3].

Use of labels: Production limits: NO; Variable payment rates: NO; Input constraints: NO. Payments are included in GCT for coconuts.

B.2 Based on fixed capital formation

Credit facilitation, (since 2000): Budgetary expenditures on credit facilitation under the Agriculture Modernisation Credit and Financing Program [2].

Use of labels: Production limits: NO; Variable payment rates: NO; Input constraints: NO. Payments are included in GCT for all.

Postharvest facilities (dryers, warehouses, seed storage), (since 2000): budgetary expenditures for provision of postharvest facilities under the Food Staples Sufficiency Program (FSSP) to reduce the national average post-harvest losses and facilitate farmers' access to appropriate post-production systems [4].

Use of labels: Production limits: NO; Variable payment rates: NO; Input constraints: NO. Payments are included in GCT for crops

Provision of Agricultural Equipment and Facilities (since 2000): budgetary expenditures under National programs of Rice (since 2000), Maize (since 2009), High Value Crops (since 2000), Livestock (since 2000), Organic farming (since 2009) and other commodities (since 2014). The government covers 85% of the cost of farm machinery to the qualified farmer organisations while remaining 15% is paid by farmer groups [5].

Use of labels: Production limits: NO; Variable payment rates: NO; Input constraints: NO. Payments are included in GCT for rice, maize, crops, livestock.

Quedan Corportation (QuedanCor) (2009-10): budgetary expenditures to QuedanCor to support *quedan* credit and guarantee programmes [2].

Use of labels: Production limits: NO; Variable payment rates: NO; Input constraints: NO. Payments are included in GCT for sugar.

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

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

Philippine Crop Insurance Corporation, PCIC (since 2000): budgetary expenditures to PCIC to provide insurance services to farmers. Subsidised insurance programmes are: Agricultural Insurance Program for subsistence farmers registered in the Registry System for Basic Sectors in Agriculture (100% of insurance premium covered); Agricultural Insurance Program for subsistence farmers located in the Typhoon Haiyan affected areas; Agricultural Insurance Program for the agrarian reform beneficiaries; *Sikat-Saka* programme for small paddy rice farmers; WARA programme for rice farmers who plant in weather adverse areas (100% of insurance premium covered) [2].

Use of labels: Production limits: NO; Variable payment rates: NO; Input constraints: NO. Payments are included in GCT for crops.

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

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

F. Payments based on non-commodity criteria

- F.1. Long-term resource retirement
- F.2. Specific non-commodity output
- F.3. Other non-commodity criteria

G. Miscellaneous payments

National Dairy Authority, NDA (since 2000): Budgetary expenditures to finance the programmes implemented by NDA: Herd build-up; Dairy Business Enhancement; Milk Quality Assurance; and Milk Feeding Program [2].

National Tobacco Authority, NTA (since 2000): Budgetary expenditures to finance the programmes implemented by NTA: i) financial support to registered farmers; ii) assisting tobacco farmers in developing alternative farming systems; iii) providing scholarship for dependents of tobacco farmers; and iv) undertaking studies concerning technologies and methods to reduce the risk of dependence on or injury from tobacco product usage and exposure, as well as research into the development of alternative uses of tobacco [2].

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

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

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

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

H. Agricultural knowledge and innovation system

H.1. Agricultural knowledge generation

Research and development (since 2000): budgetary expenditures to several bureaus and institutions, including Bureau of Agricultural Research and Philippine Rice Research Institute to support different research and development programmes [6].

H.2. Agricultural knowledge transfer

H.2.a. education

Extension Support, Education and Training Services (since 2000): budgetary expenditures to extension support, education and training services component of the National Rice, Maize, High Value Crops, Livestock, Organic and other programmes [2].

Other Production Support Services (since 2000): budgetary expenditures under the National Rice Programme production support services on demo farms, extension and research and development [2].

H.2.b. extension services

Extension (Department of Agrarian Reform, DAR) (since 2000)): budgetary expenditures by DAR on extension services provided to the agrarian reform beneficiaries under Comprehensive Agrarian Reform Program (CARP) [7].

I. Inspection and control

I.1. Agricultural product safety and inspection

Regulatory services (since 2000): public finance allocations to strengthen regulatory and product quality standards development and enforcement [2].

I.2. Pest and disease inspection and control

I.3. Input control

J. Development and maintenance of infrastructure

J.1.Hydrological infrastructure

Irrigation Development (since 2000): public finance allocations to services involving the operation and maintenance of irrigation systems and the necessary rehabilitation, restoration and extension works to

maximise irrigation services and benefits to farmers; and to services focused on construction, installation and rehabilitation of small-scale irrigation projects/systems [2].

Irrigation, DAR CARP: public finance allocations by DAR to irrigation development targeted to agrarian reform beneficiaries [7].

J.2. Storage, marketing and other physical infrastructure

Farm-to-Market roads (since 2000): public finance allocations for building farm-to-market roads [2].

Farm-to-Market roads (up to 2010): public finance allocations for building farm-to-market roads. Financed by DAR, targeted to agrarian reform beneficiaries [7].

Bottom-up-budgeting (since 2014): public finance allocations for various programmes, mainly investments in farm-to-market roads [2].

J.3.Institutional infrastructure

J.4. Farm restructuring

K. Marketing and promotion

K.1.Collective schemes for processing and marketing

Market Development (since 2000): public finance allocations to establishing trading centres [2].

Philippine Coconut Authority (since 2000): public finance allocations to establish Coconut Agro Industrial Hubs [3].

Sugar Regulatory Administration (up to 2006): public finance allocations to Sugar Regulatory Authority for collective processing and marketing of sugar [2].

K.2. Promotion of agricultural products

L. Cost of public stockholding

National Food Authority (NFA) (since 2001): public finance allocations to public stockholding. The NFA is responsible for maintaining the stock, which is accumulated through direct purchases of paddy rice from farmers at the government-set support price. Paddy rice is stored, then milled and then milled rice is sold in the market when commercial prices rise [2].

M. Miscellaneous

Agrarian Justice Delivery (since 2000): public finance allocations to the Adjudication of Cases and Agrarian Legal Assistance for agrarian reform beneficiaries [7].

Other special projects (since 2000): public finance allocation to various projects under the Programme Beneficiaries Development Programme financed by DAR [7].

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: 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 commodity MPS tables.

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

T. Budget revenues [(O)]

Sources:

[1]. Philippine Statistics Authority, PSA, 2015.

[2]. DA (2015), Background Paper on Agricultural Policy Framework in Philippines During 1995-2015, prepared for the *OECD Review of Agricultural Policies in the Philippines*.

[3]. PCA (2012), P 838 497 M allotted to PCA's Planting/Replanting and Fertilisation Programs, www.pca.da.gov.ph/pr030112c.php.

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- [7]. Department of Agrarian Reform.

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

All data sets in Table 2 come from Tables 1 and 3.1-3.12 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_{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 involves the following groups of commodities: all crops; all grains; wheat, maize and soybean; wheat, maize, rice, soybean, cotton and rapeseed; all livestock.

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. PHILIPPINES: Producer Single Commodity Transfers (by commodity)

Tables 3.1 to 3.12, provide information on Producer Single Commodity Transfers (PSCT) for the following commodities: rice, maize, coconut, bananas, cane sugar, mango, pineapple, beef and veal, pig meat, poultry, eggs and "other commodities". All data sets in the calculation SCT by commodity come from Tables 1 and 4.1-4.12 where definitions are included.

Definitions:

I. Level of production: Data from respective commodity Tables 4.1-4.12 (Market Price Support tables)

II. Value of production (at farm gate): Data from respective commodity Tables 4.1-4.12 (Market Price Support tables)

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

A. Support based on commodity output

A1. Market Price Support [Data for respective commodity from Tables 4.1-4.12]

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. PHILIPPINES: Market Price Support and Consumer Support Estimate

Tables 4.1 to 4.12 contain calculations of the Market Price Support (MPS) and Consumer Single Commodity Transfers (consumer SCT) for the following commodities: rice, maize, coconut, bananas, cane sugar, mango, pineapple, beef and veal, pig meat, poultry, eggs and "other commodities". The data sets used in calculations of the MPS and consumer SCT by commodity are described below.

Note: For all below mentioned commodities relevant data have been collected and price gaps calculated. But, as for exported products such bananas, mango and pineapple no export subsidies and no other market price policy supporting or taxing producers have been identified, in line with the OECD methodology applied for other countries, the price gaps for these products have been set at zero.

Definitions:

I. Level of production [1]

Rice: Total production of rice, in milled weight, derived by multiplying production of paddy rice by a conversion rate of 0.654.

Maize: Total production of maize, shelled, taken out from cob, not milled.

Coconuts: Total production of fresh matured coconuts, husked.

Sugar: Total production of centrifugal sugar from cane.

Bananas: Total production of bananas, all varieties.

Mango: Total production of mangos, all varieties

Pineapple: Total production of pineapples, all varieties

Beef and veal: Total production of beef and veal, in meat equivalent.

Pig meat: Total production of pig meat, in meat equivalent.

Poultry: Total production of poultry, in meat equivalent.

Eggs: Total production of eggs in the shell.

II. Producer prices (at farm gate) [1]

Rice: Average farm gate prices of dried paddy rice (14% moisture), converted to regular milled rice at conversion factor of 0.654.

Maize: Average farm gate price of corn grain Yellow, matured.

Coconuts: Average farm gate price of matured nuts.

Sugar: Average price of centrifugal sugar.

Bananas: Average farm gate price of all varieties.

Mango: Average farm gate price of fresh mango, Carabao green.

Pineapple: Average farm gate price of pineapple, Hawaiian.

Beef and Veal: Average farm gate price of bovine animals for slaughter, live weight, converted into meat equivalent at coefficient of 0.5.

Pig meat: Average farm gate price of all pigs for slaughter, live weight, converted into meat equivalent at coefficient of 0.7.

Poultry: Average farm gate prices of live chicken, converted into meat equivalent at coefficient of 0.77.

Eggs: Average farm gate prices of eggs, converted from price per piece to price per kg using coefficient of 21 pieces of eggs in 1 kg.

III. Value of production (at farm gate) [(I)*(II)] [1, 5]

IV. Level of consumption (at farm gate) [1]

Rice, maize, coconuts, sugar, bananas, mango, pineapple, beef and veal, pig meat, poultry and eggs: total domestic use during the calendar year (total production, plus net trade; for rice and maize also changes in stocks).

V. Consumption prices (at farm gate)

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

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

VII. Reference prices

Rice: Milled rice export quotes, Viet Nam, 15% broken [2]. Transport costs estimated on the basis of transportation costs from Thailand to Singapore as a difference between Thailand f.o.b. price and Singapore c.i.f. price for rice.

Maize: C.i.f. import unit values of maize, without seeds (HS 100590) [1].

Coconuts: F.o.b. export unit values of crude coconut (copra) oil and fractions (HS 151311) [3]. Conversion coefficient of husked nut to oil 0.15 (from 1 kg of husked nut one can extract 0.15 kg of oil; weight adjustment based on 1.081 kg of crude CNO = 1.716 kg of copra = 7.192 kg of husked nuts) [4].

Sugar: F.o.b. export unit values of centrifugal (raw) sugar (HS 100111)[1].

Bananas: F.o.b. export unit values (HS 080300) [1].

Mango: F.o.b. export unit values of fresh mango (HS 080450) [1].

Pineapple: F.o.b. export unit values (HS 080430) [1].

Beef and veal, pig meat, poultry and eggs: As during the whole period the Philippines has been net importer of beef and veal, pig meat, poultry and eggs, the Philippines import MFN tariffs on beef and veal (HS 0202 Meat of bovine animals, frozen), pig meat (HS 020329 Frozen swine meat, not elsewhere specified), poultry (HS 020714 Frozen cuts and offal of chicken) and eggs (HS 040700- Birds' eggs, in shell) have been used as an estimation of the Market Price Differential.

VIII. Margins

Marketing margins: Margins between the farm gate and wholesale market were calculated as the absolute difference between the average wholesale price and the farm gate price provided by the PSA, ensuring that prices are expressed at the same processing level and at the same level of weight/quality equivalent. *Transportation costs from border to wholesale market* are assumed to range from 1% to 5% of the border reference price (estimates are based on such costs in Viet Nam).

Rice: border to wholesale: 2% of border price [1]. Marketing margin (farm gate - wholesale): actual difference between wholesale and farm gate price for milled rice.

Maize: border to wholesale: 2% of c.i.f. price [1]. Marketing margin (farm gate - wholesale): actual difference between wholesale and farm gate price for corn grain Yellow.

Coconuts: no border to wholesale margin was applied as most of the exports of coconut oil (see reference price above) are from facilities close to the port. Marketing margin was assumed to be 6.1% of farm gate price based on the analysis of the coconut value chain by Pabuayon, et al. (2009) [4].

Sugar: border to wholesale: 1% of border price. Marketing margin (farm gate - wholesale): actual difference between wholesale and farm gate price for centrifugal sugar.

Bananas: border to wholesale: 3% of border price. Marketing margin (farm gate - wholesale): was assumed 5% of farm gate price. Market Price Differential was set to zero as no export subsidies and no other market price policy supporting or taxing producers have been identified.

Mango: border to wholesale: 5% of border price. Marketing margin (farm gate - wholesale): actual difference between wholesale and farm gate price for mango, Carabao green variety. Market Price Differential was set to zero as no export subsidies and no other market price policy supporting or taxing producers have been identified.

Pineapple: border to wholesale: 5% of border price. Marketing margin (farm gate - wholesale): actual difference between wholesale and farm gate price for Hawaiian variety. Market Price Differential was set to zero as no export subsidies and no other market price policy supporting or taxing producers have been identified (see above).

Beef and veal, pig meat, poultry and eggs: no margins have been used; import tariff has been applied as a proxy for price gap (see above the definition of the reference price).

Sources:

- [1]. Philippine Statistics Authority, PSA, 2015.
- [2]. United States Department of Agriculture, USDA. Rice Yearbook, 2015 edition.
- [3]. UN (2016), UN Comtrade database.

[4]. Pabuayon, I.M, R.D. Cabahug, S.V.A. Castillo et al., (2009), "Key Actors, Prices and Value Shares in the Philippine Coconut Market Chains: Implications for Poverty Reduction", *Journal of ISSAAS*, Vol. 15, No. 1: 52-62, <u>http://issaas.org/journal/v15/01/journal-issaas-v15n1-pabuayon.pdf.</u>

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