

## UNITED STATES: ESTIMATES OF SUPPORT TO AGRICULTURE

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### DEFINITIONS AND SOURCES

**Table 1. Agricultural Support Estimates / Total Transfers** (Tab labelled “TOTAL” in USA\_PSE\_YEAR.xls) 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 – 4.17 (Tabs labelled “2-letter-commodity-code MPS” in USA\_PSE\_YEAR.xls).

**Table 2. Breakdown of PSE by Commodity and Other Transfers** (Tab labelled “SCT GCT” in USA\_PSE\_YEAR.xls) 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 (Tab labelled “TOTAL” in USA\_PSE\_YEAR.xls) and 3.1 – 3.14 (Tabs labelled “2-letter-commodity-code SCT” in USA\_PSE\_YEAR.xls) where definitions are included.

**Tables 3.1 – 3.17 Producer Single Commodity Transfers** (Tabs labelled “2-letter-commodity-code SCT” in USA\_PSE\_YEAR.xls) contain producer SCT by commodity, which are calculated for the United States for the following commodities: wheat (WT), barley (BA), maize (MA), sorghum (SO), rice (RI), soybeans (SB), refined sugar (RS), milk (MK), beef and veal (BF), pig meat (PK), poultry meat (PT), sheep meat (SH), eggs (EG), wool (WL), alfalfa (AF) and cotton (CT) (Tables 3.1-3.16) provided that the value of production of that commodity exceeds 1% of the total value of production. In addition, SCT for “non MPS commodities” (XE) is also calculated (Table 3.17), 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 (Tab labelled “TOTAL” in USA\_PSE\_YEAR.xls) and 4.1-4.17 (Tabs labelled “2-letter-commodity-code MPS” in USA\_PSE\_YEAR.xls) where definitions are included.

**Tables 4.1 – 4.17** (Tabs labelled “2-letter-commodity-code MPS” in USA\_PSE\_YEAR.xls) 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 3.17** (see paragraph above). 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*).

**Conversion factors:** The US data are supplied in imperial measurements – pounds (lbs), hundred weight (cwt), bushels (bu), etc. and are converted by the OECD Secretariat into their metric equivalents. The following conversion factors have been employed in the estimates of support to agriculture:

One hectare equals 2.4710 *acres*.

One *pound* is equal to 0.0004536 tonne.

One *metric tonne* is equal to:

45.9296 *bu* for barley

68.8944 *bu* for oats

36.7437 *bu* for wheat and soybeans

39.3679 *bu* for maize and sorghum

1.1023 *short tons* for raw sugar

22.046 *cwt* for rice

2204.6 *lbs* for milk

Eggs: divide '000 *dozen* by 1412.4 to convert it to '000 tonnes.

Raw sugar: multiply raw sugar by 0.935 to convert it to *refined* sugar.

**Fiscal year:** 1 October Year N-1 to 30 September Year N is attributed to calendar year N (for example, 1 October 2014-30 September 2015 is attributed to calendar year 2015).

**Crop years:** Vary according to commodities -- crop year ending 31st May for wheat, 31st July for rice, 31st August for maize and sorghum, and 30th September for soybeans – but the N-1-to-N crop year is attributed to calendar year N-1 for all crops (for example 2014-15 crop year is attributed to calendar year 2014).

**Marketing years:** Vary according to commodities but the N-1-to-N marketing year is attributed to calendar year N-1 for grains and to calendar year N for poultry and eggs (for example, 2014-15 marketing year is attributed to calendar year 2014 for grains and to calendar year 2015 for poultry and eggs). For cattle, sheep, turkeys and dairy products marketing years are equal to calendar year.

**TABLE 1. UNITED STATES: 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.

*I.1. Of which share of MPS commodities (%):* Share of commodities for which MPS is explicitly calculated (in Tables 4.1-4.17) 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 4.1-4.17.

**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. The national aggregate MPS is estimated based on the MPS of individual commodities listed in Tables 4.1-4.17, by extrapolating the sum of the MPS calculated for the 17 commodities following the ratio of the value of the production of these 17 commodities divided by the total value of agricultural production  $[(\sum \text{MPS for MPS commodities listed in the rows below}) / (I.1) \times 100]$ .

***A.2. Payments based on output***

*Commodity Loan forfeit:* Price support associated with the *commodity loan rate* (payment per tonne at which the Commodity Credit Corporation (CCC) will provide a loan to farmers, using the harvested loan crops as collateral for the loan. If producers want, the Government will take the crop under loan as repayment of the loan principal plus interest. When the domestic market price is below the loan rate, farmers may realise a gain by forfeiting the crop used as collateral. The gain is the difference between the announced loan rate and the domestic market price, multiplied by the quantity of each specific commodity forfeited at the loan rate on a crop year basis. The commodity list has changed over time. Up to 1995 included: wheat, maize, sorghum and rice; and from 1995 included: wheat, maize, rice, sorghum, barley, flaxseed, oats, sugar, oilseeds, cotton, tobacco, peanuts, and wool; and from 2002 also dry peas, lentils and small chickpeas. Up to 1995 the payments were subject to production limits. Payments are subject to mandatory input constraints, payment limitations apply, rates are variable depending on the difference between market price and set loan rate.

*Loan deficiency payments:* Available to producers who are eligible to receive price support loans but who agree to forgo the loan. The payment is the difference between the loan rate and the domestic market price, multiplied by the quantity of each specific commodity for which the loan deficiency payment is requested or otherwise eligible for on a crop year basis. Payments are subject to: production and payment limits; mandatory input constraints; and rates are variable.

*Marketing loan gains:* Marketing loan provisions allow contract crop producers to repay price support loans at the lower of the announced loan rate or the prevailing world market price, represented by the "daily posted county prices" (PCP, which is generally the market price less transportation costs between the market and the county). If a marketing loan is taken up, all of the interest otherwise owed is forgiven. The gain is the difference between the announced loan rate and the PCP, multiplied by the quantity of each specific commodity for which the loan was requested on a crop year basis. Up to 1995 the payments were subject to production limits. Payments are subject to mandatory input constraints, limited and rates variable.

*Certificate exchange gains:* Net gain to producers due to settlement of commodity loans at a rate lower than the original per-unit loan rate, where certificates are used for the repayment. Payments are subject to mandatory input constraints, rates are variable and there are no production or payment limits.

*Commodity loan interest subsidy:* Interest gain on CCC commodity loans, calculated on a crop year basis, is the difference between the market and the CCC interest rates multiplied by loan outstanding for each crop placed under loan net of growers' assessment for sugar and oilseeds. It also includes the additional estimated interest gain when commodities are forfeited to settle the loan, or when the loan is paid back under a marketing loan arrangement, or with genetic certificates, in which cases loans are interest free. For sugar the loan interest gain is 60% for cane growers, with the remaining 40% plus 100% of the gain for beet attributed to processors and included under *P. Transfers to consumers from taxpayers* in the CSE. Up to 1995 the payments were subject to production limits. Payments are subject to mandatory input constraints and rates are variable.

*Storage payments:* Payments encouraging producers to store wheat, maize and sorghum (up to 1995), cotton (from 1996) and peanuts (from 2002) while prices are low, and sell later when prices are higher. Under the Farmer-Owned Reserve Program cereal producers may extend a regular 9-month loan beyond its regular term and receive storage payments per tonne of cereal under the loan for the extended period (on a crop year basis). Up to 1995 the payments were subject to production limits. Payments are subject to mandatory input constraints and rates are variable.

*Ad hoc market loss payments:* Payments per tonne authorized by emergency legislation in 1998-2001 to compensate for market losses due to low prices.

- *Oilseeds:* Payments were based on 1997 or 1998, and on 1999 for new producers. Payment rates are *ex post* and variable. Payments are subject to input constraints (conservation compliance) and there are no commodity production and payment limits.
- *Dairy:* MILC Program payment per tonne of milk on quantities marketed. Payment rates are *ex post* and variable. Payments are subject to input constraints (conservation compliance) and limited to certain level of commodity production.
- *Wool and mohair:* Cash payments to compensate producers of wool and mohair. Payment rates are *ex ante* and fixed. Payments are subject to input constraints (conservation compliance), there are no commodity production and payment limits, and rates are variable.

*Sugar payments in kind (2000-01):* A share (60%) of the expenditure on the Payment-in-kind Diversion Program attributed to sugar beet and sugarcane farmers to assist them deal with low prices caused by excess of sugar on the domestic market. The remaining 40% are attributed to processors and are included under *P. Transfers to consumers from taxpayers* in the CSE. Payment rates are *ex ante* and fixed.

Payments are not subject to input constraints, there are no commodity production and payment limits, and rates are fixed.

*Wool and Mohair payments (1999-2000):* Cash payments to compensate producers of wool and mohair. Payment rates are *ex ante* and fixed. Payments are subject to input constraints (conservation compliance), there are no commodity production and payment limits, and rates are variable.

*Trade Adjustment Assistance Program (TAA):* The TAA provides output payments and technical assistance to eligible farmers if increased imports are found to contribute to a price decline of at least 20% in the current marketing year compared to a historical period. The TAA covers farmers, ranchers, fish farmers and fishermen competing with imported aquaculture products. The technical assistance part is included in category *B.3 On-farm Services*. Payment rates are variable and there are not commodity production and payment limits. Payments are not subject to input constraints. Operated in 2004 for small amounts given to blueberries, lychee nuts, concord grapes, olives and potatoes.

*Hard white wheat incentive payments (2003-05):*

*Cottonseed disaster payments:* Payments to producers and first handlers to compensate for losses due to natural disasters. The payment rate is calculated by dividing the total available programme funds by the total eligible payment quantity of cottonseed. Eligible applicants may not receive more than the national average price of cottonseed as determined by CCC, or USD98 per ton, multiplied by the applicant's total eligible payment quantity (ton basis). The total payment quantity of cottonseed (ton-basis) will be: (1) the average weight of cotton lint (ton-basis) for which payment is requested by all applicants; (2) multiplied by the Olympic average of estimated pounds of cottonseed per pound of ginned cotton lint, as determined by CCC for the five years preceding the 2005 crop. Payments are subject to production and payment limits, there are not input constraints and rates are variable.

*Dairy indemnities:* Payments per producing cow per day to dairy farmers for the period during which the milk was considered contaminated and had to be removed from commercial markets. Payment rates are fixed, not subject to input constraints and there are no commodity production and payment limits.

*Dairy Economic Loss Assistance Payment Program (DELAP) (2009):* Provides a one-time payment to assist dairy producers offset economic losses due low milk prices and high production costs in 2009. An amount of USD 290 million was provided to dairy operations that produced milk in the United States and commercially marketed the milk between February and July 2009. Eligible producers must have annual average adjusted nonfarm income of no more than USD 500 000 and they should comply with USDA provisions for highly erodible land and wetlands. Payment rates are fixed.

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

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

*Farm operating & emergency assistance loans:* Farm operating loans provide direct and guaranteed loans to owner-operators of family-sized farms unable to obtain credit elsewhere. A share of program funds is dedicated to loans for beginning farmers and ranchers, youth, and socially disadvantaged farmers. Boll weevil eradication loans are also available to eliminate the cotton boll weevil pest from infested areas, but there has not been any loan activity in recent years. Emergency loans are also available to help producers recover from production and physical losses due to drought, flooding, other natural disasters, or quarantine. The total subsidy reported is the interest rate differential for the fiscal year multiplied by loan obligations for that year, for each category of loan. The interest rate differential takes account of preferential government borrowing costs for direct loans, as well as interest rate buy down and anticipated

losses for guaranteed loans. Payments are subject to input constraints and there are no production limits. Payment rates are variable, there are no commodity production and payment limits.

*Energy subsidies:* Value of Federal and State exemptions or reductions in excise and sales taxes on diesel fuel for farmers relative to the standard rate taxes on fuel. Payments are not subject to input constraints or to production and payment limits. Payment rates are fixed. [Data used are problematic and are being revised.]

*Irrigation support:* Irrigators are obligated to pay a share of the long-term debt for construction of reclamation projects from which they benefit, but pay no interest on that debt. The Government cost of financing the debt is considered support and is calculated using a “debt financing method.” A long-term interest rate (30-year Treasury bond) is applied to the outstanding unpaid balance of capital investment by the Government to obtain the support level. Payments are not subject to input constraints or to production limits and payment. Payment rates are fixed.

*Grazing subsidies:* Budget expenditure for livestock grazing on public range land in 16 Western States operated by the Forest Service and Bureau of Land Management, net of fees paid by livestock producers. Payments are subject to mandatory input constraints; there are limits on animal units per acre and rates are fixed.

*Feed assistance:* Public expenditure for compensating livestock producers for feed crop disasters and pasture damaged by drought (Emergency Feed Assistance Program, Forage Assistance Program, Livestock Assistance Program, Disaster Reserve Assistance Program, American Indian Livestock feed, Pasture recovery program and Flood compensation program). Payments are subject to voluntary input constraints, there are no production and payment limits, and rates are fixed.

*Conservation Security Program (CSP)* (from 2004): A voluntary programme that provides payments to producers for adopting or maintaining a wide range of farm practices that address one or more resources of concern, such as soil, water or wildlife habitat. It provides equitable access to benefits to all producers, regardless of size of operation, crops produced, or geographic location. In contrast to other conservation programs, CSP is focused on operations that already have addressed environmental problems, while keeping the land in production. All agricultural land (cropland and grazing land) is eligible: i) cropland must have been cropped in 4 of the 6 years prior to 2002; ii) lands enrolled in the Conservation Reserve Program, Wetlands Reserve Program and Grassland Reserve Program are not eligible; iii) forestland that is an incidental part of agricultural operation may be included; iv) animal waste storage or treatment facilities are not eligible. The program provides three tiers of participation that differ in contract length and total payments according to the amount of treatment and the portion of the agricultural operation being offered: i) Tier I: the farmer is obliged to address soil and water quality on at least part of the farm. Contracts are for 5 years; ii) Tier II: the farmer must address the above issues on the entire farm and agree to treat an additional significant local resource concern. Contracts are for 5-10 years and can be renewed; iii) Tier III: the farmer must fully address all natural resource concerns on the entire farm. Contracts are for 5-10 years and can be renewed. CSP contract payments include one or more of the following components subject to the described limits: i) an annual per acre stewardship component for the benchmark conservation treatment; ii) an annual existing practice component for maintaining existing conservation practices, calculated as 25% of the stewardship payment to offset the cost of maintaining pre-existing or new conservation practices; iii) one-time new practice component for additional practices on the watershed specific list. This is a cost-share payment with rates varying between 50% to 60% of the cost and are limited to a USD10 000 cumulative total of the contract; and iv) an annual enhancement component for exceptional conservation effort and additional conservation practices that provide increased resource benefits beyond minimum requirements. Payment limits are: USD 20 000 for Tier I; USD 35 000 for Tier II; and USD 45 000 for Tier III. The farmer must be in compliance with highly erodible and wetland

compliance provisions. There is no limitation in the number of acres a landowner can offer. Half of the payments are included in category *B.2 Fixed capital formation*. The technical assistance part is included in category *B.3 On-farm services*. Payments are not subject to current commodity production and payment limits nor to voluntary input constraints. Rates are fixed.

The *Conservation Stewardship Program (a new CSP)*, first implemented in 2009, replaced the Conservation Security Program (CSP). Rather than the three-tier payment system of the CSP, payments for new CSP contracts are based on meeting or exceeding a stewardship threshold. Payments are based on the actual costs of installing conservation measures, income forgone by producer and the value of the expected environmental benefits. There is no limitation in the number of acres a landowner can offer. Half of the payments are included in category *B.2 Fixed capital formation*. The technical assistance part is included in category *B.3 On-farm services*. Payments are not subject to current commodity production and payment limits nor to voluntary input constraints. Rates are fixed.

*Durum Wheat Quality Program (DWQP)* (from 2009): Payments to compensate producers of durum wheat for up to 50% of the actual cost per acre of fungicide applied to control Fusarium head blight. Average adjustment gross income provisions of the 2008 Farm Act are not applicable; DWQP payments are not subject to a payment limitation and rates are fixed.

*Reimbursement Transportation Cost Payment for Geographically Disadvantaged Farmers and Ranchers (RTCP)*:

#### *B.2. Based on fixed capital formation*

*Environmental Quality Incentive Program (EQIP)*: Created in 1996, this programme includes the Agricultural Conservation Program (ACP), the Farmland Protection Program (FPP) and the Colorado River Basin Salinity Control Program (CRSCP). It provides cost-share payments and technical assistance to producers for animal waste facilities and implementing farm practices for reducing soil, water, and related natural resources problems, including grazing land, wetland, and wildlife habitat. At least half of the funds are targeted to livestock production practices. Cost-sharing may pay up to 75% of the costs of certain water conservation practices (e.g. irrigation water management). The cost share rates for limited resource producers and beginning farmers and ranchers may be up to 90%. Only the share of expenditure for cost-share payments is included under this category, the share for technical assistance is included under *B.3. Payments based on on-farm services*. Payments are subject to voluntary input constraints, there are current production and payment limits, and rates are variable. In addition to providing additional separate funding, EQIP combines the functions of the former Agricultural Conservation Program (ACP), Great Plains Conservation Program (GPCP), Colorado River Basin Salinity Control Program (CRSCP) and the Ground and Surface Water Program (GSWP).

*Agricultural Water Enhancement Program (AWEP)*: A voluntary conservation initiative, created under the 2008 Farm Bill, that provides financial and technical assistance to agricultural producers to implement agricultural water enhancement activities on agricultural land for the purposes of conserving surface and ground water and improving water quality. As part of the EQIP, AWEP operates through program contracts with producers to plan and implement conservation practices in project areas established through partnership agreements. Payments are subject to voluntary input constraints, there are current production and payment limits, and rates are variable.

*Chesapeake Bay Watershed Initiative*: Authorised in the 2008 Farm Bill, this programme provides financial and technical assistance to eligible agricultural producers to help control erosion and nutrient loading in order to restore, preserve and protect the Chesapeake Bay. Producers that are engaged in livestock or crop production on eligible land may apply for the initiative. Eligible land includes cropland,

hay land, pasture, and other farmland as determined by the Secretary of Agriculture. Payments are subject to voluntary input constraints, there are current production and payment limits, and rates are variable.

*Voluntary Public Access Incentive Program:*

*Regional Conservation Partnership Program:*

*Great Plains Conservation Program (GPCP) (up to 1995):* Cost-share contracts for 3 to 10 years and technical assistance which helped producers in the 10 Great Plains States implement long term conservation measures. The technical assistance component was included in category *B.3. On-farm services*. Payments were subject to voluntary input constraints, there were current production and payment limits, and rates were variable. This program is no longer reported as a separate program but incorporated within the Environmental Quality Incentive Program (EQIP).

*Agricultural Management Assistance Program (AMA) (up to 2008):* It provided cost-share and incentive payments to agricultural producers to voluntarily address issues such as water management, water quality, and erosion control by incorporating conservation practices into their farming operations. Producers could construct or improve water management structures or irrigation structures; plant trees for windbreaks or improve water quality; and mitigate risk through production diversification or resource conservation practices, including soil erosion control, integrated pest management, or transition to organic farming. The Federal cost-share rate was 75% of the cost of an eligible practice, based on the percent of actual cost, or percent of actual cost with not-to-exceed limits, or flat rates. A conservation plan was required for the area covered in the application and became the basis for developing the AMA contract. NRCS worked with the landowner to develop a conservation plan. Landowners had to agree to maintain cost-shared practices for the life of the practice. Contracts were three to ten years in length. The total AMA payments would not exceed USD 50 000 per participant for any fiscal year. The annual authorised funding was USD 20 million through the fiscal year 2007. AMA was limited to producers in 15 states where participation in the Federal Crop Insurance Program historically had been low. The share for technical assistance was included in category *B.3 On-farm services*. Payments were subject to voluntary input constraints, there were current production and payment limits, and rates were variable. This program is no longer reported as a separate program but incorporated within the XXX Program.

*Emergency Conservation Program (ECP):* Provides cost-share and technical assistance payments to enable farmers to perform emergency conservation measures to restore farmland damaged by natural disasters. It excludes payments for technical assistance which are included in category *B.3. On-farm services*. Payments are not subject to current commodity production limits. Payments are subject to voluntary input constraints, there are current production and payment limits, and rates are variable.

*Agricultural Conservation Program (ACP) (up to 2002):* This program provided cost-share and incentive payments to producers to carry out farming practices reducing soil erosion, improving water conservation and quality, enhancing forest resources, and treating other natural resource problems. Only the share of expenditure for cost-share payments were included under this category, the share for technical assistance was included under *B.3. Payments based on on-farm services*. Payments were subject to input constraints, but there were no production limits. Payments were subject to voluntary input constraints, there were current production and payment limits, and rates were variable. This program is no longer operating.

*Colorado River Basin Salinity Control Program (CRBSCP) (up to 1996):* This program provided cost-share payments and technical assistance to producers to improve water quality for downstream users. The technical assistance part was included in category *B.3. On-farm services*. Payments were subject to voluntary input constraints, there were current production and payment limits, and rates were variable. This

program is no longer reported as a separate program but incorporated within the Environmental Quality Incentive Program (EQIP).

*Klamath Basin (up to 2006):* Former technical assistance and incentive payments to farmers for water-conservation projects to conserve and restore biodiversity of the 10.5 million-acre Klamath Basin in Southern Oregon and Northern California. It excluded payments for technical assistance which were included in category *B.3. On-farm services*. Payments were subject to voluntary input constraints, there were current production and payment limits, and rates were variable. This program is no longer reported as a separate program but incorporated within the EQIP Program.

*Ground and Surface Water Program (GSWP) (up to 2006):* The GSWP portion of the EQIP was a voluntary program that provided technical assistance and cost-share payments to farmers (through contracts of up to 10 years) to carry out eligible water conservation activities to improve groundwater and surface water conservation in their agricultural operations. Activities could include improving irrigation systems, enhancing irrigation efficiencies, converting to the production of less water intensive agricultural commodities, converting to dryland farming, improving the storage of water through such measures as water banking and groundwater recharge, and mitigating the effects of drought. Activities eligible should be limited to conservation practices that resulted in a net savings of groundwater or surface water resources in the agricultural operation of the producer. To be eligible, farmers had to, inter alia, have irrigated eligible land two out of the last five years and develop an EQIP plan of operations. The total amount of cost-share and technical assistance payments paid to an individual was limited to an aggregate of \$450 000 for all contracts entered into during FY2002-07. It excluded payments for technical assistance which were included in category *B.3. On-farm services*. Payments were subject to voluntary input constraints, there were current production and payment limits, and rates were variable. This program is no longer reported as a separate program but incorporated within the Environmental Quality Incentive Program (EQIP).

*Farmland Protection Program (FPP):* Payments by State, tribe or local government agencies for the purchase of conservation plans and easements to protect topsoil by limiting conversion to non-agricultural uses (i.e. urban development). Conservation plans must be carried out over the 30 years or more of the easement term. Only the share of expenditure for cost-share payments is included under this category, the share for technical assistance is included under *B.3. Payments based on on-farm services*. Payments are subject to voluntary input constraints, there are current production and payment limits, and rates are variable.

*Farm and Ranch Lands Protection Program (FRPP):* New name for the previous Farmland Protection Program above

*Grassland Reserve Program (GRP):* Voluntary programme to help landowners and operators restore and protect grassland, including rangeland, pastureland, shrubland, and certain other lands, while maintaining the areas as grazing lands. GRP is authorized by the Food Security Act of 1985, as amended by the 2002 Farm Bill. It provides for up to USD 254 million in program funding through 2007. There is no national maximum limitation on the amount of land that may be enrolled by a participant for the program. However, there is a minimum requirement established in law. Offers for enrolment must contain at least 40 contiguous acres, unless special circumstances exist to accept a lesser amount. Enrolment options are: 30-year and permanent easements; 10-year, 15-year, 20-year, or 30-year rental agreements; and cost-share restoration agreements which may be used in conjunction with any easement or rental agreement. Not more than 60% of funds can be used for 30-year contracts or 30-year permanent easements; not more than 40% are available for 10-, 15-, and 20-year contracts. For contracts, annual rental payments equal 75% of grazing value. Permanent easements are to be purchased at market value, less grazing value, while 30-year easements are to be purchased at 30% of market value, less grazing value.

Cost sharing is up to 75% of restoration costs on restored grassland, and up to 90% on virgin grassland. All enrolment options permit: common grazing practices that maintain the viability of the grassland; haying, mowing, or harvesting for seed production, subject to certain restrictions during the nesting season, as determined by NRCS; and fire rehabilitation and the construction of fire breaks and fences. GRP contracts and easements prohibit the production of crops (other than hay), fruit trees, and vineyards that require breaking the soil surface and other activities that would disturb the surface of the land, except for appropriate land management activities included in a grassland resource management plan. The technical assistance part is included in category *B.3 On-farm services*. Payments are subject to input constraints, but there are no production limits. Payments are subject to voluntary input constraints, there are current production and payment limits, and rates are variable.

*Conservation Security Program (CSP)*: See category B.1 above. Half of the payments are included in this category.

*Conservation Stewardship Program (CSP)*: See category B.1 above. Half of the payments are included in this category.

Add new environmental 2014 Farm Bill programs, and in data base

*Farm ownership loans*: Provides direct and guaranteed farm ownership loans to individuals unable to obtain credit elsewhere. A share of program funds is dedicated to loans for beginning farmers and ranchers, youth, and socially disadvantaged farmers. Indian tribes and tribal corporations are eligible for Indian land acquisition loans, but there has not been any loan activity in recent years. The total subsidy reported is the interest rate differential for the fiscal year multiplied by loan obligations for that year, for each category of loan. The interest rate differential takes account of preferential government borrowing costs for direct loans, as well as interest rate buy down and anticipated losses for guaranteed loans. Payments are subject to current commodity production and payment limits, and to mandatory input constraints. Rates are variable.

*Value Added Agricultural Producer Grants*:

*Value Added Agricultural Product Marketing*:

*Livestock Indemnity Program*: Payments to compensate producers for livestock losses due to natural disasters. For the 2005 hurricanes, payments were calculated by multiplying the national payment rate established for each livestock kind/type/weight range by the number of applicable eligible livestock. Separate payment rates were established for livestock owners and contract growers. Payments are not subject to input constraints, but there are current production and payment limits. Rates are fixed.

*Farm Storage Facility Loan Program*:

*Grassroots Source Water Protection Program (GSWPP)*:

*Apple Loans Program account*:

*Emergency Assistance for Livestock, Honeybees, and Farm-Raised Fish*:

*Renewable Energy Program*:

*Conservation loans*:

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

*Extension service Federal funds (I-E11):* Budget expenditure of the Extension Service and on Outreach for Socially Disadvantaged Farms under the Farm Service Agency and the Natural Resource Conservation Service. Payments under the Natural Resource Conservation Service are subject to input constraints. All payments in this category are subject to production and payment limits, there are no input constraints and rates are variable.

#### *Agricultural cooperative service Federal funds (I-E84):*

*Conservation Technical Assistance (CTA):* CTA is a voluntary program that provides technical assistance to farmers for planning and implementing soil and water conservation and water quality practices. Farmers adopting practices under USDA conservation programs and other producers who request aid in adopting approved USDA practices are eligible for technical assistance. Technical assistance may include the inventory and evaluation of soil, water, animal, plant, air, and other resources. The program, which has been in place since 1936, is available nationwide.

*Great Plains Conservation Program (GPCP):* see category *B.2 Fixed capital formation* above. Only the technical assistance component is included in this category.

*Environmental Quality Incentive Program (EQIP):* See Category *B.2 Fixed capital formation* above. Only the technical assistance component is included in this category.

*Colorado River Basin Salinity Control Program:* See Category *B.2 Fixed capital formation* above. Only the technical assistance component is included in this category. Payments are subject to input constraints (conservation compliance).

*Klamath Basin:* See Category *B.2 Fixed capital formation* above. Only the technical assistance component is included in this category.

*Ground and Surface Water Program (GSWP):* See Category *B.2 Fixed capital formation* above. Only the technical assistance component is included in this category.

*Farmland Protection Program (FPP):* See Category *B.2 Fixed capital formation* above. Only the technical assistance component is included in this category.

*Grassland Reserve Program (GRP):* See Category *B.2 Fixed capital formation* above. Only the technical assistance component is included in this category.

*Conservation Security Program (CSP):* See category *B.1 Variable input use* above. Only the technical assistance part is included in this category.

*Conservation Stewardship Program (CSP):* See category *B.1 Variable input use* above. Only the technical assistance part is included in this category.

*Agricultural Management Assistance Program (AMA):* See Category *B.2 Fixed capital formation* above. Only the technical assistance component is included in this category.

*Agricultural Conservation Program (ACP):* See Category *B.2 Fixed capital formation* above. Only the technical assistance component is included in this category.

*Emergency Conservation Program (ECP):* See Category B.2 Fixed capital formation above. Only the technical assistance component is included in this category.

*Agricultural Water Enhancement Program (AWEP):* See Category B.2 Fixed capital formation above. Only the technical assistance component is included in this category.

*Chesapeake Bay Watershed Initiative:* See Category B.2 Fixed capital formation above. Only the technical assistance component is included in this category.

*Grassroots Source Water Protection Program (GSWPP):* See Category B.2 Fixed capital formation above. Only the technical assistance component is included in this category.

*Conservation Reserve Program (CRP):* See Category F.1 Long-term resource retirement below. Only the technical assistance component is included in this category.

*Voluntary Public Access Incentive Program (VPAIP):* See Category B.2 Fixed capital formation above. Only the technical assistance component is included in this category.

*Agricultural Conservation Easement Program:*

*Regional Conservation Partnership Program:* See Category B.2 Fixed capital formation above. Only the technical assistance component is included in this category.

*Animal & plant health inspection service (I-E69):* budget expenditure of the Animal and Plant Health Inspection Service and on pesticide and disease control under the Environmental Protection Agency. Payments are not subject to current production and payment limits, there are no input constraints and rates are fixed.

*Pesticides 68-200-0-1-304 (until 1995):*

*Safe food 68-0107-0-1-304 (from 1996):*

*Safe food 68-0108-0-1-304 (from 1996):*

*State technical assistance:* half of the estimates of State expenditure on agriculture is considered as being essentially for financing on-farm services, especially extension and technical assistance for environmental protection (the other half is considered as being used to support State general services to agriculture and included in GSSE under M. Miscellaneous). Payments are not subject to current production and payment limits, there are not input constraints and rates are fixed.

*Appropriate Technology Transfer for Rural Areas:*

*Outreach and assistance for socially disadvantaged farmers and rangers program:* The programme, which is operated by the Co-operative State Research, Education and Extension Service (CSREES), provides grants to support a wide range of outreach and assistance activities, including farm management and marketing to eligible socially disadvantaged groups.

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

*Deficiency payments:* (up to 1995) Per hectare payments made to producers of "contract crops" (wheat, feed grains, upland cotton, and rice), defined as the national payment rate for each specific crop times the producer's payment base yield and multiplied by the producer's payment eligible base area. A

rate per tonne (calculated as the difference between the target price and the higher of the loan rate or market price) was used to obtain the per hectare rate. The base yields were fixed reflecting the simple average of programme yields for 1981-85. The base area was the average of the area planted for the 5 preceding crop years. Eligible producers were required to comply with acreage reduction and conservation provisions. These payments had current production and payment limits, were not subject to input constraints and rates were variable. Calculated on a crop year basis.

*Crop insurance* (individual commodities): Indemnity payment that eligible producers receive if their crop loss qualifies under the Federal Crop Insurance Program. Per unit indemnities are paid whenever the yield of each commodity insured is below the guaranteed yield level. The guaranteed yield level is selected by producers as 50, 65, or 75% of their average yield. The annual amount of the payment for a specific commodity is the indemnity paid by the USDA for the commodity, minus the premium the producer pays for the insurance coverage of the commodity. Commodity specific data is on a crop year basis. Eligible producers are required to comply with conservation provisions. There are no current production and payment limits, and rates are variable.

*Diversion payments (up to 1988)*: Payments under Acreage Reduction Program and Paid Land Diversion Program for land temporarily withdrawn from a specific crop production (excluding long-term land withdraw under Conservation Reserve Program). Eligible producers (wheat, feed grains, rice and upland cotton) were required to comply with conservation provisions. The programme was abandoned by the Farm for Freedom Act after the 1988 crop year. There were current production and payment limits, and rates were fixed.

*Lamb Meat Adjustment Assistance Program (LMAAP) (up to 2002)*: This was a 4-year program started in 1999 to help stabilize the lamb market. The program's four program years had various types of payments and eligibility requirements. Funds not used during one year were carried into the following years. Year 1 of LMAAP included payments for rams, sheep improvement and facility improvement. The maximum combined total payment to a sheep and lamb operation was USD\$ 5500. In Year 2, producers were eligible for payments of USD 3 for each feeder lamb and USD 5 for each slaughter lamb. Producers were eligible for a total payment of USD 8 for each marketed slaughter lamb. For Years 3 and 4, additional incentives payments of USD 18 per each ewe lamb purchased or retained for breeding purposes were available. There were no maximum payments or herd limits, but feeder lamb producers whose gross income for calendar year 2001 or 2002 exceeded USD 2.5 million were ineligible for payments. Payments were not subject to production and payment nor to input constraints and rates were fixed.

*Ewe Lamb Replacement and Retention Program (in 2004)*: Payments per ewe lamb. To be eligible for the payments, the lamb operation had to: have purchased or retained ewe lambs for breeding purposes between 1 August 2003 and 31 July 2004; have retained the qualifying ewe lambs in the herd for at least one complete offspring lambing season; and not have received funds under the Lamb Meat Adjustment assistance Program for the same ewe lamb. The total amount of payment was USD 18 million and the payment rate was USD 18 for each qualifying ewe lamb. Payments were not subject to production and payment nor to input constraints and rates were fixed.

*Hogs production assistance* (in 1990): Payment per hog under the Small Hog Operation Payment Program to producers who marketed less than 2 500 hogs during the second half of 1998. Payments were not subject to production and payment nor to input constraints and rates were fixed.

*Dairy disaster payments*: Payment per head to dairy producers. Payments are not subject to production and payment limits or to input constraints and rates are variable.

*Sugar beet disaster payments (in 2002 and 2005):* Payments to producers who suffered 2001- or 2004-crop year sugar beet production losses due to adverse weather conditions. To be eligible, producers must have had sustained at least 35% loss in sugar beet production. Payments were not subject to production and payment limits nor to input constraints and rates were variable.

*Tree assistance for pecans:*

*Average Crop Revenue Election (ACRE) programme (2009-2013):* An optional revenue-based countercyclical programme, based on state and farm revenue shortfalls, as an alternative to receiving countercyclical payments. Enrolled farmers received payments when revenue from programme crops (including peanuts) fell below levels determined from moving averages of past yields and market prices. Eligible producers were required to comply with conservation provisions. There were no current production nor payment limits, and rates were variable.

*Crop disaster payments (ad hoc) (up to 2009):* Under the Food Security Act of 1985, the Disaster Assistance Acts of 1988 and subsequently payments are provided to crop producers suffering from natural disasters when there were production yield losses of at least 30%. For "program crops" (wheat, feed grains, cotton, rice, oilseeds, tobacco, peanuts, sugar) the payment has been 65% of the target price (loan rate) for producers participating in the commodity programmes. Payments for the loss of cropland due to flooding were added for 2000. Eligible producers are required to comply with conservation provisions. Payments are not subject to production and payment limits and rates are fixed.

*Crop disaster payments (SURE) (from 2008 to 2011):* Supplemental Revenue Assistance Payments Program. A permanent whole-farm revenue disaster assistance programme for crop producers, created by the 2008 Farm Bill to formalise the previously *ad hoc* disaster measures. It provided assistance to eligible crop producers on farms in primary and contiguous "disaster counties", as designated by the Secretary of Agriculture, or for farms in other counties on which weather-related losses exceeded 50% of the normal revenue for all crops for the year concerned. Additionally, at least one crop on the farm must have had suffered a production loss (yield or quality) of 10% or more for the farm to qualify to receive a payment. It provided payments at 60% of the difference between a target level of revenue and the actual total farm revenue for the entire farm. The guarantee was based on 115% of the insurance protection purchased or 120% of the non-insured assistance programme coverage signed up for on the farm, but could not exceed 90% of the expected revenue for the farm. Eligible producers were required to comply with conservation provisions. Payments were not subject to production nor payment limits and rates were fixed.

*Lost Poultry Contract Assistance (LPCA):*

*Non-insured Crop Disaster Assistance Program:* Payments based on area and average historical yields to producers of crops not currently insurable under other programmes and with yield losses greater than 35% of the average yield for the area where the farm is located, and greater than 50% for the individual farm. The area loss requirement was eliminated in 2000. Eligible producers are required to comply with conservation provisions. Payments are not subject to production and payment limits or to input constraints and rates are fixed.

*Tree and vineyard disaster payment:* Payments to compensate producers for loss of trees and fruit vines due to natural disasters (1998 Tree Assistance Program). Payments are not subject to production and payment limits or to input constraints and rates are variable.

*Asparagus Revenue Market Loss Assistance Payment (ALAP) Program (from 2004 to 2007):* It provided payments to compensate producers from revenue losses resulting from imports during the 2004 through 2007 crop years. Half of the USD 15 million was disbursed for fresh market asparagus production, and the other half for processed market asparagus production. Payments were calculated by dividing the funds available for each marketing category (USD 7.5 million for each) by the total eligible quantity of crop production in 2003 for each marketing category submitted for payment. The payment rate for each marketing category could not exceed the actual rate of revenue loss, and there was a cap of USD 100 000 per producer, per marketing category (fresh and processed). Payments were subject to input constraints and rates were fixed.

*Biomass Crop Assistance Program (BCAP):*

*Income tax concessions:* Value of concessions to agriculture relatively to the standard income tax provisions. It includes deductions from taxable incomes from farming; farmers' marketing and purchasing co-operatives; and export transactions of agricultural commodities. Payments are not subject to production and payment or to input constraints and rates are fixed.

*Adjusted gross revenue insurance (AGR) (from 1999):* It is a whole farm-revenue protection insurance plan. It provides insurable revenue protection against losses due to natural disasters or market price fluctuations that occur during the insurance year. Covered farm revenue includes income from agricultural commodities, including incidental amounts of income from animals and animal products, and aquaculture reared in a controlled environment. However, no more than 35% of expected income may be obtained from livestock, animal or aquaculture products. If more than 50% of expected income is obtained from insurable commodities, other traditional Federal crop insurance must be purchased. Eligible producers must have liability not exceeding USD 9.5 million. AGR coverage is calculated by multiplying the approved adjusted gross revenue by the selected coverage level and payment rate percentage. Coverage levels and payment rate eligibility vary with the number of commodities produced. The period of insurance is the farmer's tax year. Eligible producers are required to comply with conservation provisions. Payment rates are variable. Payments are not subject to production and payments.

***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***

*Counter cyclical payments (from 2002 to 2010):* Former payment for wheat, feed grains, upland cotton, rice, oilseeds and peanuts. It was defined as the national payment rate for each specific crop times the producer's payment base yield and multiplied by 85% of the producer's payment eligible base area. Base area and yields could be those from the 1996 Farm Act or the 1998-2001 averages. For each commodity, the rate per tonne was the difference between the *target price* and the *trigger level*, which was the return per tonne (i.e. the higher of the market price or loan rate) plus the *Direct Payment* per tonne. Eligible producers were required to comply with conservation provisions. Payments were limited and rates variable.

*Direct payments for crops (from 2002 to 2014):* Replaced the Production Flexibility Contract Payments (PFC) payments provided under the 1996 Farm Act and covered the same crops plus oilseeds and peanuts. Payments were computed using the fixed rates for each specific crop times the producer's payment base yield and multiplied by 85% of the producer's payment eligible base area. Base yields were those previously used for PFC payments (1998-2001 average for oilseeds). Producers had the option to use the base areas as for PFC payments, or to update them to their average area planted during 1998-2001 for

each eligible crop. Payments were not tied to current or future production of specific crops, the level of production, or the price of the crop. Eligible producers were not confined to producing crops for which they were receiving payments, and could choose not to produce any crop. Eligible producers were required to comply with conservation provisions. Payments were limited and rates fixed.

*PFC payments (1996 Farm Bill):* Production Flexibility Contract Payments (from 1996 to 2002) were allotted to farmers based on acreage, as specified in the Federal Agricultural Improvement and Reform Act of 1996. The annual total amount was first determined for all contract crops combined (wheat, rice, feed grains, and upland cotton) and then allocated to specific crops based on percentage allocation factors established in the 1996 Act. Each participating producer of a contract crop received payments equal to the product of their production flexibility contract payment quantity and the national average production flexibility contract payment rate. The quantity of production eligible for production flexibility contract payments was calculated as the farm's program yield (per acre) multiplied by 85% of the farm's contract acreage. Eligible producers were required to comply with conservation and planting flexibility provisions. Some restrictions were placed on land use: land could not be put to a non-agricultural use; the land could be fallowed, converted from cropland to pasture or forest, or planted to any crop, except for fruits and vegetables unless it was used that way in the past. Payments were limited and rates fixed.

*Crop market loss assistance payments (1998-2001):* Total amount of "market loss assistance payment" added to the annual PFC payments. Eligible producers were required to comply with conservation provisions. Payments were limited and rates variable.

*Peanut quota buy out (from 2002 to 2005):* Payments to farmers to cover the loss associated with the removal of marketing quotas. Based on 2001 quota levels, the payment was made in 5 annual installments during the 2002-06, but quota owners could opt to take the total amount in a lump sum. Total cost of the measure was approximately USD 1.2 billion. Payments were not tied to current or future production or prices of peanuts or any other crop. The peanut price support program was also terminated. Payments were limited, rates fixed and were not subject to input constraints.

*Tobacco quota buy out (from 2005):* Payment, to be made in 10 installments over FY 2005-14, to eligible tobacco quota holders and farmers to cover the loss associated with the removal of marketing quotas. Transition payments will be based on the Basic Quota Levels determined for each farm. For quota holders, payments are based on ownership shares in the farm, while for producers payments are based on shares in the risk of producing quota tobacco on the farm during the years 2002-04. Payments, which are funded by a levy on tobacco manufacturers and importers, are limited to a maximum of USD 10.140 billion (with approximately USD540 million to cover Commodity Credit Corporation (CCC) losses on loan stocks and other eligible expenses). Payments are not based on current or future tobacco production or prices of tobacco or any other crop and there is no requirement to produce any commodity. The legislation also terminated the tobacco price and income support program at the end of the 2004 marketing season. Payments are limited, rates are fixed, and are not subject to input constraints.

*Dairy Termination Program (1986-88):* Payments made to milk producers agreeing to terminate production for at least a 5-year period. Payments were limited, rates fixed and were not subject to input constraints.

*Price Loss Coverage (PLC) Program (from 2014):* Payments are provided to producers with base acres of wheat, feed grains, rice, oilseeds, peanuts, and pulses (covered commodities) on a commodity-by-commodity basis when market prices fall below the reference price. The payment rate is the difference between the reference price and the annual national-average market price (or marketing assistance loan rate, if higher). For each covered commodity enrolled on the farm, the payment amount is the payment rate, times 85% of base acres of the commodity, times payment yield. Producers may also receive

payments on former cotton base acres (termed “generic base acres”) that are planted to a covered commodity. A one-time opportunity is offered to reallocate a farm’s base acres (except generic acres) based on 2009-12 plantings and to update the farm’s payment yields for covered commodities to their 2008-12 average yields. Producers may choose which of their covered commodities to enroll in PLC, but once the election is made, it remains in place for the life of the 2014 Farm Act. Payments will be reduced on an acre-by-acre basis for producers who plant fruits, vegetables, or wild rice on payment acres. Eligible producers are required to comply with conservation provisions. Payments are limited and rates variable.

*Agriculture Risk Coverage (ARC) Program (from 2014):* Producers may choose county-based or individual coverage for the covered commodities: wheat, feed grains, rice, oilseeds, peanuts, and pulses. In the county-based case, payments are provided to producers with base acres of covered commodities on a commodity-by-commodity basis when county crop revenue (actual average county yield times national farm price) drops below 86% of the county benchmark revenue (5-year Olympic average county yield times 5-year Olympic average of national price or the reference price - whichever is higher for each year), calculated separately for irrigated and non-irrigated crops. For each covered commodity enrolled on the farm, the county ARC payment amount is the difference between the per-acre guarantee (as calculated above) and actual per-acre revenue (but no greater than 10% of the commodity’s benchmark revenue), times 85% of base acres of the commodity. In the individual ARC case, payments are issued when the actual individual crop revenues, summed across all covered commodities on the farm, are less than the ARC individual guarantee. The farm’s individual ARC guarantee equals 86% of the farm’s individual benchmark guarantee, defined as the sum across all covered commodities, weighted by plantings, of each commodity’s average revenue - the ARC guarantee price (the 5-year Olympic average of national price or the reference price - whichever is higher for each year) times the 5-year Olympic average individual yield. The payment amount is the individual farm payment rate (the difference between the individual farm guarantee and actual individual farm revenue, but no greater than 10% of the farm’s benchmark revenue) times 65% of base acres for all covered commodities for the individual farm. Eligible producers are required to comply with conservation provisions. Payments are limited and rates variable.

*Cotton Transition Assistance Program (CTP) (from 2014):* CTP payments are made on 60% of former cotton base acreage during 2014 and on 36.5% of the base area in areas where the programme continues in 2015. Producers are not required to plant cotton or any other commodity, in order to be eligible for CTP payments. CTP is only authorised for the 2014 crop year, but extends for the 2015 crop year in counties where the new insurance product, the Stacked Income Protection Plan (STAX) is not yet available. Eligible producers are required to comply with conservation provisions. Payments are limited and rates fixed.

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

### ***F.1. Long term resource retirement***

*Conservation Reserve Program (CRP) – Technical assistance and financial assistance:* The CRP, which was established in the 1985 Farm Bill and amended in the 2002 Farm Bill, is a voluntary programme that provides annual rental, cost-share payments and technical assistance to producers for converting and retaining highly erodible and/or environmentally sensitive cropland in approved conservation uses for 10-15 years. Rental payments are based on the agricultural rental value of the land and cost-share support covers up to 50% of the farmer’s costs. The CRP is limited to a maximum of 392 000 000 acres. There are no current production and payment limits.

*Water Bank Program (WBP):* Annual payments and technical assistance to producers who agree not to drain, burn, fill, or otherwise destroy wetland and not to use it for agricultural purposes for 10 years. There are no current production and payment limits. Programme terminated.

*Wetland Reserve Program (WRP):* Annual cost-share payments or lump-sum payments and technical assistance to producers for implementing an approved wetland restoration and conservation plan and providing a permanent or long-term easement. Producers must retire crop acreage base. There are no current production and payment limits.

*F.2. A specific non-commodity output*

*F.3. Other non-commodity criteria*

*Wildlife Habitat Incentive Program (WHIP):* A voluntary programme that provides cost-share and technical assistance payments to landowners to apply an array of wildlife practices to develop habitat that will support for upland wildlife, wetlands wildlife, endangered species, fish, and other wildlife. In general, there are no limits on the number of acres that can be enrolled in the programme or the amount of payment. There are no current production and payment limits.

*Voluntary Public Access and Habitat Incentive Program (2008 Farm Act):* A voluntary programme that provides payments to encourage private landowners to provide public access for wildlife-dependent recreation, including hunting or fishing. Up to USD 50 million in mandatory funds will be provided during the FY2009-2012 period. Payments to be reduced by 25% if opening dates for migratory-bird hunting in state are not consistent for residents and non-residents.

**G. Miscellaneous**

**III.2 Percentage Producer Support Estimate (%PSE):**  $[(III.1) / ((I) + (\text{Sum of A2 to G})) \times 100]$ : PSE as a percentage of gross farm receipts. Percentage representing the share of the total PSE as part of the sum of value at farm gate of total production and of all payments to producers.

**III.3 Producer Nominal Protection Co-efficient (NPC):** Ratio of producer price to border price. 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 the various Tables 4.X. For each commodity  $\text{Producer NPC} = [\text{domestic price received by producers (at the farm gate)} + \text{unit payments based on output}] / \text{border price (also at the farm gate)}$ .

**III.4 Producer Nominal Assistance Co-efficient (NAC):**  $[1 / (100 - (III.2)) \times 100]$ : The ratio between the value of gross farm receipts (including support) and gross farm receipts valued at border prices (measured at farm gate).

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

**H. Agricultural knowledge and innovation system**

*H.1. Agricultural knowledge generation*

*Research Institutions:* USDA budget expenditure on Co-operative State Research Service, National Agricultural Statistic Service, Economic Research Service, Agricultural Research Service, and Office of International Co-operation and Development, and expenditure under the Tennessee Valley Authority and Bureau of the Census budgets.

*Conservation Operations (soil surveys, plant material centers):* USDA budget expenditure on Natural Resources Conservation Service for the preparation of conservation plans and establishment of measures to

conserve soil and water, as well as Miscellaneous Contributed Funds available for work under co-operative agreements for soil survey and resource conservation development activities.

*Biomass Research and Development Act (2002-07)*: Payments, funding by USDA the Departments of Energy, to promote research and development leading to the production of bio-based industrial products.

*Knowledge generation (research)*:

*Mixed research and extension*:

*H.2. Agricultural knowledge transfer*

*H.2.a. Education*

*Agricultural Resource Conservation and Demonstration Programs*: Financial assistance for individuals (including farmers) and areas to develop area-wide plans for resource conservation and development.

*Knowledge transfer (education & extension)*:

*H.2.b. Extension services*

*Research Institutions*: USDA budget expenditure for extension services by the National Agricultural Statistic Service and the National Sheep Industry Improvement Center.

*Snow surveys*: USDA budget expenditure for extension services by the Natural Resources Conservation Service for snow surveys.

*Agricultural Resource Conservation and Demonstration Program*: Information, education, and technical assistance to the public about natural resource management issues.

*Rural Clean Water Program (RCWP)*: Cost-share payments and technical assistance for carrying out approved plans in project areas to develop and test means of controlling agricultural non-point source water pollution in rural areas.

*Knowledge generation (education & extension)*:

*Mixed research and extension*:

***I. Inspection and control***

*I.1. Agricultural product safety and inspection*

USDA budget expenditure on Federal Grain Inspection Service, Food Safety and Inspection Service.

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

*I.3. Input control*

USDA budget expenditures on Animal Drugs and Feed, the Centre for Veterinary Medicine and pesticide registration.

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

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

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

USDA budget expenditure on Packers and Stockyard administration.

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

*Crop Insurance Corporation:* USDA budget expenditure on administrative and operating expenses of the Federal Crop Insurance Corporation.

### ***State Mediation Grants:***

*Rural technical & co-operation development grants:* Awarded under a competitive process by the USDA; these grants fund technical assistance centers that support the development of co-operative businesses.

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

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

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

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

*Marketing Services:* USDA budget expenditure on the Agricultural Marketing Service for assisting producers and handlers of agricultural commodities by providing marketing services, including market news service, inspection, grading and standardisation, market protection and promotion, wholesale market development, transportation services, and payments to States.

*Limitation on administrative expenses (transportation sub-total 00.05) 12-2800-0-1-352*

*Strengthening Markets, Income, and Supply:* USDA budget expenditure on the Agricultural Marketing Service for expanding outlets for non-basic commodities.

*Commodity Grading Programs (Miscellaneous Trust Funds):* USDA budget expenditure on the Agricultural Marketing Service under Miscellaneous Trust Funds for providing grading, examining, and certifying services for a wide variety of fresh and processed food commodities, including poultry, livestock, meat, dairy products, and fresh and processed fruits and vegetables.

### ***Market Access Program:***

### ***Technical Assistance for Specialty Crops:***

### ***Foreign Market Development Program:***

### ***Quality Samples Program:***

### ***L. Cost of Public stockholding***

USDA budget expenditure on the Commodity Credit Corporation Fund for financing the operational and maintenance costs of the Food Security Commodity Reserve (excluding the buying value of acquisitions) - "Processing, storage and transportation".

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

#### ***M.1. National expenditure:***

#### ***M.2. Sub-national expenditure:***

Half of total amount of the estimated State expenditure on agriculture as a proxy of the share of it used to support State general services to agriculture (specially, to support agricultural associations, fairs, and shows, agricultural schools and experiment stations, to promote improvement and control of livestock production and dairy products, to promote improved methods of storing, packing, labelling and marketing of farm products, and regulatory activities such as inspection and licensing), for which the Secretariat does not have enough information to allocate it to the previous categories of payments. (The other half is included in PSE under *B.3. Payments based on use of on-farm services* "State technical assistance").

**V.1 Consumer Support Estimate (CSE):** Consumer support associated with agricultural production, i.e. for the quantities of commodities domestically produced, excluding the quantities used on-farm as feed -- excess feed cost. The annual monetary value of gross transfers from (to) consumers of agricultural commodities, measured at the farm gate level, arising from policy measures that support agriculture, regardless of their nature, objectives or impacts on consumption of farm products. [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 4.17.

***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 17.

### ***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 (Table 4.1-4.17). The descriptions of policies providing commodity specific transfers are provided below:

***Sugar loan interest subsidy (processor share):*** Processor share (40%) of total interest gain on Commodity Credit Corporation (CCC) commodity loan for cane plus 100% of the gain for beet, net of 40% of the total production levy paid by sugar processors to the CCC. (The remaining 60% of the cane total interest gain was in the PSE under *A.2. Payments based on output*; and 60% of total production levy

paid by the cane and beet growers was included in Table 4 under MPS until the sugar production levy was terminated).

*Sugar loan forfeit subsidy (processor share):* Processor share (40%) of total loan rate gain on CCC sugar loan for cane and beet (the remaining 60% of the total loan rate gain is in the PSE under A.2. *Payments based on output.*

*Sugar Payments in Kind (processor share) (2000-01):* Share (40%) of the expenditure on the Payment-in-kind Diversion Program attributed to sugar processors, the remaining 60% is attributed to farmers and included in the PSE under A.2. *Payments based on output.*

*Sugar production levy (processor share) (-):* Program terminated.

*Upland Cotton User Marketing Certificates (Step 2 payments):* These payments were available to domestic users and exporters subject to price conditions in the U.S. and Northern Europe. Provisions were repealed on Aug 1, 2006. Only payments to domestic users are included.

*Extra Long Staple (ELS) Cotton Competitiveness Program:* The ELS Program provides payments to domestic users on documented purchases of raw cotton and to exporters on documented sales for shipment of raw cotton, at a payment rate equal to the difference between the U.S. price and the foreign price during the fourth week of the period. Effective beginning 16 January 2009, the foreign price considered in determining payment eligibility and payment rates are Giza 86, Giza 88 and Israel.

*Upland Cotton Economic Adjustment Assistance (2008 Farm Act):* Monthly payments equal to 4 cents/lb during FY2008-FY2012 (and 3 cents/lb thereafter) to domestic users of upland cotton (regardless of origin) for all documented use during the previous month. Payments can be used only for acquisition, construction, installation, modernization, development, conversion, or expansion of land, plant, buildings, equipment, facilities or machinery.

*Bioenergy Program (payments to processors) (from 2003 to 2006):* Payments to bioenergy (ethanol and biodiesel) producers to increase purchases of eligible commodities and convert that commodity into increased commercial fuel grade ethanol and biodiesel production. Eligible commodities include: barley, maize, grain sorghum, oats, rice, wheat, soybeans, sunflower seed, canola, crambe, rapeseed, safflower, sesame seed, flaxseed, mustard seed, and cellulosic crops (switchgrass and short rotation trees) grown on farms, for the purpose of producing ethanol and/or biodiesel or any other commodity or commodity by-product as determined and announced by CCC used in ethanol and biodiesel production. Eligible producers are paid up to USD150 million each FY. Payments to each producer are capped at 5% of available funding (up to USD7.5 million) each FY. Producers with total annual production of: (a) less than 65 million gallons are reimbursed 1 feedstock unit for every 2.5 used for increased production; (b) 65 million gallons or more are reimbursed 1 feedstock unit for every 3.5 used for increased production. In addition, biodiesel producers are reimbursed for base production at 50% the rate of increased production. The program is funded at up to USD 150 million each FY for FYs 2003 through 2006.

*Special Milk Program 12-3502-0-1-605 (1986-1993):*

*P.2. Non-commodity specific transfers to consumers:* Sum of non-commodity specific transfers from taxpayers to consumers (farm gate level). The descriptions of policies inducing non-commodity specific transfers are provided below:

*Tax relief on vegetable ethanol*

*Supplemental Nutrition Assistance Program (SNAP) (previous Food Stamp Program):* The farm-gate value of the budget expenditure on SNAP (in 2011 the farm value per dollar of retail food expenditure of food stamp households was 15.5% of the total SNAP budgetary expenditure).

*Nutrition Assistance for Puerto Rico 12-3550-0-1-605 (1986-1993)*

*State Child Nutrition Programs 12-3539-0-1-605:* USDA budget expenditure on domestic food assistance, including School Lunch and Breakfast Programs, Child and Adult Care Feeding Program, Summer Feeding and Special Milk Programs. Calculated on a budget year basis.

*WIC Nutrition Programs 12-3510-0-1-605:* USDA budget expenditure on the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC). Calculated on a budget year basis.

*Commodity Assistance Program 12-3507-0-1-605:* USDA budget expenditure on domestic food assistance, including Commodity Supplemental Food Program, Nutrition Program for the Elderly, Emergency Food Assistance, Temporary Assistance and Donation Program for Selected Groups. Calculated on a budget year basis.

*Donation Program for Selected Groups 12-3503-0-1-605:*

*Commodity Supplemental Food Program 12-3512-0-1-605 (1990-1994):*

*Temporary assistance 12-3513-0-1-351 (1993):*

*Emergency Food Assistance Program. (I-E39) 12-3635-0-1-351 (1986-1994):*

*Energy Assistance payments (Bioenergy Program for Advanced Biofuels) (from 2011):* The programme provides payments to producers to support and expand production of advanced biofuels refined from sources other than maize kernel starch. Additional incentive payments may be made to certain producers who have increased their biofuel output over the previous year's production. To be eligible for the programme, an applicant must produce and sell an advanced biofuel.

*Alternative Agricultural Research & Commercialization Corporation Revolving Fund (2010)*

**Q. Excess Feed Cost:** Associated with market price support on quantities domestically produced and used on-farm as feed as calculated in Table 4.1, 4.2, 4.3 and 4.4. [Sum of excess feed costs in the MPS tables (Table 4) for feed crops.]

**V.2 Percentage CSE:**  $[(V.1) / ((II) + (P)) \times 100]$  CSE as a share of consumption expenditure (measured at farm gate) net of taxpayer transfers to consumers.

**V.3 Consumer NPC:**  $[II/(II-N-O)]$  Consumer Nominal Protection Coefficient (consumer NPC): The ratio between the average price paid by consumers (at farm gate) and the border price (measured at farm gate). 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 4. 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:**  $[1-(V.2) / (100+(V.2))]$  Consumer Nominal Assistance Coefficient (consumer NAC): The ratio between the value of consumption expenditure on agricultural commodities (at farm gate) and that valued at border prices (measured at farm gate).

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

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

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

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

**Table 2. UNITED STATES: Breakdown of PSE by Commodity Specificity and Other Transfers**

All data sets in Table 2 come from Tables 1 and 3.1 to 3.17 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 3.1-3.17].

**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 3.17).

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

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

**II. Group commodity transfers (GCT):** the annual monetary value of gross transfers from policies whose payments are made on the basis that one or more of a designated list of commodities is produced. That is, a producer can choose among a set of allowable commodities to produce and receive a payment that does not vary with respect to this decision. [GCT = B<sub>GROUP</sub> + C<sub>GROUP</sub> + D<sub>GROUP</sub>]

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

**Transfers to specific groups of commodities:** the GCT indicator is calculated for the United States for the following groups of commodities:

There are five different commodity groups, based on the policies in place over the period starting in 1986:

- **All Crops.** This primarily includes payments for environmental conservation and protection purposes. Examples of programmes in this group include the *Conservation Security Program* and *Crop Disaster Payments Program*.
- **All Livestock:** It includes payments under the *Livestock Indemnity Program*
- **Ruminants:** This includes support to producers of cattle, dairy and sheep under the *Feed Assistance Program* and the *Grassland Reserve Program*.
- **Non-ruminants:** None
- **Non-insured Crops:** It includes payments under the *Non-insured Crop disaster Assistance Program*.
- **Tree and vineyard:** It includes payments under the *Tree and Vineyard Disaster Payments Program*.

- **Biomass Crop Assistance Program (BCAP):** It includes payments under the Biomass crop assistance program.

**III. All commodity transfers (ACT):** the annual monetary value of gross transfers from policies that place no restrictions on the commodity produced but require the recipient to produce some commodity of their choice.  $[ACT = C_{ALL} + B_{ALL} + D_{ALL}]$

**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:**  $\%PSE = 100 * PSE / \text{value of agricultural production} + A.2. + B + C + D + E + F + G)$

**TABLE 3. UNITED STATES : Producer Single Commodity Transfers (by commodity)**

Tables 3.1 to 3.17 provide information on Producer Single Commodity Transfers (PSCT) for the following commodities: wheat (WT), barley (BA), maize (MA), sorghum (SO), rice (RI), soybeans (SB), refined sugar (RS), milk (MK), beef and veal (BF), pig meat (PK), poultry meat (PT), sheep meat (SH), eggs (EG), wool (WL), alfalfa (AF) and cotton (CT). The final table 3.17 provides data for Non MPS commodities (XE). All data sets in the calculation SCT by commodity come from Tables 4.1 to 4.17 where definitions are included.

***Definitions:***

**I. Level of production:** Data from Tables 4.1 to 4.17 (Market price support table)

**II. Value of production (at farm gate):** Data from Tables 4.1 to 4.17 (Market price support table)

**III. Producer Single commodity transfers:** Sum of transfers to specific commodity in categories A, B, C and D.

***A. Support based on commodity outputs***

*A1. Market Price Support* [Data from Tables 4.1 to 4.17 (Market price support table)]

*A2. Payments based on output:* Data from Table 1 [“TOTAL” tab in the xls file] – see the policies providing payments based on output (A.2) to the specific PSE commodity, in the definitions (column B) and in “Single commodity” (column V) in Table 1.

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

*B1. Variable input use*

Data from Table 1 [“TOTAL” tab in the xls file] – see the policies providing payments based on variable input use (B.1) to the specific PSE commodity, in the definitions (column B) and in “Single commodity” (column V) in Table 1.

*B2. Fixed capital formation*

Data from Table 1 [“TOTAL” tab in the xls file] – see the policies providing payments based on fixed capital formation (B.2) to the specific PSE commodity, in the definitions (column B) and in “Single commodity” (column V) in Table 1.

*B3. On-farm services*

Data from Table 1 [“TOTAL” tab in the xls file] – see the policies providing payments based on on-farm services (B.3) to the specific PSE commodity, in the definitions (column B) and in “Single commodity” (column V) in Table 1.

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

Data from Table 1 [“TOTAL” tab in the xls file] – see the policies providing payments based on current A/An/R/I, single commodity to the specific PSE commodity, in the definitions (column B) and in “Single commodity” (column V) in Table 1.

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

Data from Table 1 [“TOTAL” tab in the xls file] – see the policies providing payments based on non-current A/An/R/I, production required (D) to the specific PSE commodity, in the definitions (column B) and in “Single commodity” (column V) in Table 1.

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

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

Tables 4.1 to 4.17 contain calculation of the Market Price Support (MPS) and Consumer Single Commodity Transfers (consumer SCT) for the following commodities: for the following commodities: wheat (WT), barley (BA), maize (MA), sorghum (SO), rice (RI), soybeans (SB), refined sugar (RS), milk (MK), beef and veal (BF), pig meat (PK), poultry meat (PT), sheep meat (SH), eggs (EG), wool (WL), alfalfa (AF) and cotton (CT). The final table 4.17 provides data for Non MPS commodities (XE). The definition and sources for the data used to calculate MPS are detailed below.

**Definitions:**

**I. Level of production**

**Wheat:** Total production during the market year. Source: ERS's *Wheat Outlook: February 2016*, Table 1--Wheat: U.S. market year supply and disappearance, 2/11/2016, latest figure for "Production" (<http://www.ers.usda.gov/publications/whs-wheat-outlook/whs-16b.aspx>)

**Maize (Corn), Barley, Oats and Sorghum:** Total production during the market year (September to August). Source: ERS's *Feed Outlook: February 2016*, Table 1--Feed grains: U.S. quarterly supply and disappearance (million bushels), 2/11/2016, relevant commodity section, latest "Mkt yr" figure for "Production" (<http://www.ers.usda.gov/publications/fds-feed-outlook/fds-16b.aspx>)

**Rice:** Total production during the market year (August to July), rough equivalent. Source: ERS's *Rice Outlook: February 2016*, Table 1--U.S. rice supply and use 1/, latest figure for "Production" (<http://www.ers.usda.gov/publications/rcs-rice-outlook/rcs-16b.aspx>)

**Soybeans:** Total production during the market year (September to August). Source: ERS's *Oil Crops Outlook: February 2016*, Table 1--Soybeans: Annual U.S. supply and disappearance, latest figure for "Production" (<http://www.ers.usda.gov/publications/ocs-oil-crops-outlook/ocs-16b.aspx>)

**Sugar:** Total sugar cane and sugar beet production in raw sugar equivalent during the fiscal year (October to September). Source: ERS's *Sugar and Sweeteners Yearbook Tables*, Table 16--U.S. beet and cane sugar production, by fiscal year and share of total, latest "Fiscal Year 1/ (October/September)" forecast figure for "Beet and cane". (<http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx>) Total sugar cane and sugar beet production in raw sugar equivalent is multiplied by 0.935 to be expressed in refined sugar equivalent.

**Cotton:** Sum of Upland and ELS cotton production during the crop year (August to July). Sources: Upland cotton: ERS's *Cotton and Wool Yearbook*, Table 2--U.S. upland cotton supply and use, 1965/66-2015/16, latest figure for "Supply Production 2/". ELS cotton: *ERS' Cotton and Wool Yearbook*, Table 3--U.S. ELS cotton supply and use, 1965/66-2015/16, latest figure for "Supply Production 2/". (<http://www.ers.usda.gov/data-products/cotton,-wool,-and-textile-data/cotton-and-wool-yearbook.aspx>)

**Alfalfa hay:** Total production for the latest year. Source: ERS's Feed Grains Data base/Hay/Hay alfalfa (dry)/Production/Latest YEAR (<http://www.ers.usda.gov/data-products/feed-grains-database/feed-grains-custom-query.aspx>)

**Milk:** Total milk production during the calendar year. Source: ERS's *Dairy Data, Commercial disappearance of milk in all products (monthly)*, Tab "M.E. Milk-fat basis annual", latest figure for "Farm milk supply Production". (<http://ers.usda.gov/data-products/dairy-data.aspx>)

**Beef meat:** Commercial production during the calendar year. Source: ERS's Latest *World Agricultural Supply and Demand Estimates Report (WASDE)*, Tab "Page 31": U.S. Quarterly Animal Product Production, February annual estimate for "Beef". (<http://www.usda.gov/oce/commodity/wasde/>)

**Veal:** What is measured? Detailed source.

**Poultry:** Federally inspected production of broiler, turkey and mature chicken meat during the calendar year. Source: ERS's Latest *World Agricultural Supply and Demand Estimates Report (WASDE)*, Tab "Page 31": U.S. Quarterly Animal Product Production, February annual estimate for "Total Poultry 3". (<http://www.usda.gov/oce/commodity/wasde/>)

**Sheep meat:** Total production for the latest year. Source: personal communication from ERS sheep analyst because data not published.

**Pig meat:** Commercial production during the calendar year. Source: ERS's Latest *World Agricultural Supply and Demand Estimates Report (WASDE)*, Tab "Page 31": U.S. Quarterly Animal Product Production, February annual estimate for "Pork". (<http://www.usda.gov/oce/commodity/wasde/>)

**Wool:** Total scoured wool production during the calendar year. Source: ERS's *Cotton and Wool Yearbook*, Table 28--U.S. wool supply and use, 1976-2015. Up to 1999: sum of the latest figures labelled "Production Shorn wool" and "Production Pulled wool". From 2000 to 2006: latest figure for "Production Shorn wool" with an additional estimation of pulled wool at 0.2-0.3 million greasy lb. From 2007: latest figure for "Production Shorn wool". (<http://www.ers.usda.gov/data-products/cotton,-wool,-and-textile-data/cotton-and-wool-yearbook.aspx>)

**Eggs:** Total production of eggs in the shell during the calendar year. Source: ERS's Latest *World Agricultural Supply and Demand Estimates Report (WASDE)*, Tab "Page 31": U.S. Quarterly Animal Product Production, February annual estimate for "Egg". (<http://www.usda.gov/oce/commodity/wasde/>)

## II. Producer price

**Wheat:** U.S. season-average price based on monthly prices weighted by monthly marketings. For the most recent year of calculation, where a price-range in the data source is given, the mid-point value is used. Source: ERS's *Wheat Outlook: February 2016*, Table 1--Wheat: U.S. market year supply and disappearance, 2/11/2016, February figure for "Farm price" (<http://www.ers.usda.gov/publications/whs-wheat-outlook/whs-16b.aspx>)

**Maize (Corn), Barley, Oats and Sorghum:** Average price received by farmers based on monthly price weighted by monthly marketings. For the latest market year, quarterly prices are calculated by using the current monthly prices weighted by the monthly marketings for those months for the previous 5 years divided by the sum of marketings for those months. For the most recent year of calculation, where a price-range in the data source is given, the mid-point value is used. Source: ERS's *Feed Outlook: February 2016*, Table 1--Feed grains: U.S. quarterly supply and disappearance (million bushels), 2/11/2016, relevant commodity section, latest "Mkt yr" figure for "Farm Price 2/ (dollars per bushel)" (<http://www.ers.usda.gov/publications/fds-feed-outlook/fds-16b.aspx>)

**Rice:** Market year (August to July) weighted average. For the most recent year of calculation, where a price-range in the data source is given, the mid-point value is used. Source: ERS's *Rice Outlook: February 2016*, Table 1--U.S. rice supply and use 1/, latest figure for "Average farm price 5/" (<http://www.ers.usda.gov/publications/rcs-rice-outlook/rcs-16b.aspx>)

**Soybeans:** Average price received by farmers in the market year (September to August). For the most recent year of calculation, where a price-range in the data source is given, the mid-point value is used. Source: ERS's *Oil Crops Outlook: February 2016*, Table 8--Oilseed prices received by U.S. farmers, latest figure for "Soybeans" (<http://www.ers.usda.gov/publications/ocs-oil-crops-outlook/ocs-16b.aspx>)

**Sugar:** Contract price No. 14/16, duty fee paid New York. Average of nearest futures month for which an entire month of prices will be available. Source: ERS's *Sugar and Sweeteners Yearbook Tables*, Table 4--U.S. raw sugar price, duty fee paid, New York, monthly, quarterly, and by calendar and fiscal year 1/, latest "Calendar" figure. (<http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx>)

**Cotton:** Marketing-year average farm price for total US cotton. For the most recent year of calculation, where a price-range in the data source is given, the mid-point value is used. Source: ERS's *Cotton and Wool Yearbook*, Table 1--U.S. cotton supply and use, 1965/66-2015/16, figures for "Farm price 5/". (<http://www.ers.usda.gov/data-products/cotton,-wool,-and-textile-data/cotton-and-wool-yearbook.aspx>)

**Alfalfa hay:** All hay price and alfalfa hay prices are not available in time for the latest year. So the previous year's prices are carried forward. Source: ERS's Feed Grains Data base/Hay/Hay alfalfa (dry)/Prices received by farmers/Annual/Latest YEAR, if not available, carry over from previous year (<http://www.ers.usda.gov/data-products/feed-grains-database/feed-grains-custom-query.aspx>)

**Milk:** Simple averages of monthly all milk prices calculated by the Agricultural Marketing Service for use in class price formulas. Source: ERS's *Livestock, Dairy, and Poultry Outlook February*, "Dairy Forecasts", Line "Milk prices (dol./cwt) 2/ All milk". (<http://ers.usda.gov/publications/ldpm-livestock,-dairy,-and-poultry-outlook/ldp-m-260.aspx>)

**Beef:** Market price for steers 5-area, direct, total all grades. Source: ERS's Latest *World Agricultural Supply and Demand Estimates Report (WASDE)*, Tab "Page 31": U.S. Quarterly Prices for Animal Products, February annual estimate for "Steers 2/". (<http://www.usda.gov/oce/commodity/wasde/>)

**Veal prices:** Available price data is the price per carcass rather than veal meat prices. The packer-owned weighted average weekly carcass prices are averaged over the full calendar year; the producer price per cwt is then estimated using the median calf carcass weight. Sources: price source, carcass weight source

**Poultry:** Estimation by dividing the value of total poultry production by the annual total poultry production. Sources: production, ERS's Latest *World Agricultural Supply and Demand Estimates Report (WASDE)*, Tab "Page 31": U.S. Quarterly Animal Product Production, February annual estimate for "Total Poultry 3/". (<http://www.usda.gov/oce/commodity/wasde/>) Total value of production.

**Pig:** Annual market price, National Base, Live equivalent 51-52% lean. Source: ERS's Latest *World Agricultural Supply and Demand Estimates Report (WASDE)*, Tab "Page 31": U.S. Quarterly Prices for Animal Products, February annual estimate for "Barrows and gilts 3/". (<http://www.usda.gov/oce/commodity/wasde/>)

**Wool:** Annual weighted average of US farm price for shorn wool, greasy basis. Latest yearly data is not available in February so the previous year's price is carried over. Source: ERS's *Cotton and Wool Yearbook*, Table 33—Shorn wool prices: U.S. farm price, Australian offering prices, and graded territory

shorn wool prices, 1978-2014, latest figure for “U.S. farm price shorn wool, greasy basis 3/”. (<http://www.ers.usda.gov/data-products/cotton,-wool,-and-textile-data/cotton-and-wool-yearbook.aspx>)

**Eggs:** Calculated from the value of egg production divided by the total eggs production. Sources: Value of egg production from XXX. Total egg production from ERS’s *Latest World Agricultural Supply and Demand Estimates Report (WASDE)*, Tab “Page 31”: U.S. Quarterly Animal Product Production, February annual estimate for “Egg”. (<http://www.usda.gov/oce/commodity/wasde/>)

### III. Value of production

### IV. Level of consumption

**Wheat:** Total domestic use. Source: ERS’s *Wheat Outlook: February 2016*, Table 1--Wheat: U.S. market year supply and disappearance, 2/11/2016, latest figure for “Total domestic use” (<http://www.ers.usda.gov/publications/whs-wheat-outlook/whs-16b.aspx>)

**Maize (Corn), Barley, Oats and Sorghum:** The level of consumption is the sum of the columns labelled “Food, seed, and industrial use” and “Feed and residual use” during the market year (September to August). Source: ERS’s *Feed Outlook: February 2016*, Table 1--Feed grains: U.S. quarterly supply and disappearance (million bushels), 2/11/2016, relevant commodity section, latest “Mkt yr” figure for “Food, seed, and industrial use” and “Feed and residual use”. (<http://www.ers.usda.gov/publications/fds-feed-outlook/fds-16b.aspx>)

**Rice:** Total domestic use during the market year (August to July), projected rough equivalent. Source: ERS’s *Rice Outlook: February 2016*, Table 1--U.S. rice supply and use 1/, latest figure for “Total domestic use”. (<http://www.ers.usda.gov/publications/rcs-rice-outlook/rcs-16b.aspx>)

**Soybeans:** The level of consumption is the sum of the columns labelled “Crush” and “Seed and residual” providing forecasts for the annual use of US soybean during the market year (September to August). Source: ERS’s *Oil Crops Outlook: February 2016*, Table 1--Soybeans: Annual U.S. supply and disappearance, latest figure for “Crush” and “Seed and residual”. (<http://www.ers.usda.gov/publications/ocs-oil-crops-outlook/ocs-16b.aspx>)

**Sugar:** Total consumption of refined sugar in the US during the calendar year. Source: ERS’s *Sugar and Sweeteners Yearbook Tables*, Table 20a—U.S. sugar deliveries for human consumption by type of user, calendar year 1/; latest figure for “Total U.S.”. (<http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables>)

**Cotton:** Sum of Upland and ELS cotton mill use during the marketing year (August to July). Sources: for upland cotton, ERS’s *Cotton and Wool Yearbook*, Table 2-- U.S. upland cotton supply and use, 1965/66-2015/16, figures for “Mill use 3/”; for ELS cotton, ERS’s *Cotton and Wool Yearbook*, Table 3-- ELS cotton supply and use, 1965/66-2015/16, figures for “Mill use 3/” (<http://www.ers.usda.gov/data-products/cotton,-wool,-and-textile-data/cotton-and-wool-yearbook.aspx>)

**Alfalfa hay:** Total consumption for the latest year. Source: ERS, Feed Grains database and disappearance calculation from ERS feed grains analyst (Tom Capehart) because data not published.

**Milk:** Total consumption of liquid milk and dairy products in milk equivalents during the calendar year. Source: ERS’s *Dairy Data, Commercial disappearance of milk in all products (monthly)*, Tab “M.E. Milk-fat basis annual”, latest figure for “Domestic commercial disappearance”. (<http://ers.usda.gov/data-products/dairy-data.aspx>)

**Beef meat, pig meat and poultry:** Total consumption during the calendar year of all beef meat, all pork meat and poultry using carcass weight for red meats and certified ready-to-cook weight for poultry. Poultry is the sum of broilers, turkeys and mature chicken. Source: ERS's Latest *World Agricultural Supply and Demand Estimates Report (WASDE)*, Tab "Page 32": U.S. Meats Supply and Use, February annual "Total use" estimate for the relevant commodity. (<http://www.usda.gov/oce/commodity/wasde/>)

**Veal:** What is measured? Detailed source.

**Sheep meat:** Total consumption for the latest year. Source: personal communication from ERS sheep analyst because data not published.

**Wool:** Total US wool mill use estimate during the calendar year. Source: ERS's *Cotton and Wool Yearbook*, Table 28--U.S. wool supply and use, 1976-2015, latest figure for "Mill use 1/". (<http://www.ers.usda.gov/data-products/cotton,-wool,-and-textile-data/cotton-and-wool-yearbook.aspx>)

**Eggs:** Total consumption of eggs during the calendar year. Source: ERS's Latest *World Agricultural Supply and Demand Estimates Report (WASDE)*, Tab "Page 33": U.S. Egg Supply and Use, February annual estimate for "Disappearance Total". (<http://www.usda.gov/oce/commodity/wasde/>)

## VII. Reference prices

**Wheat, maize, barley, oats, sorghum, rice, soybeans, cotton, alfalfa hay, pig meat, poultry meat and eggs:** Implicit price derived by subtracting the average unit value of export subsidy for the specific commodity (total value of export subsidies for the crop year divided by total exports of the specific commodity) from the producer price. Because oats, sorghum, soybeans have not benefited from export subsidies, and because the export subsidy programs for the other commodities have been discontinued, these reference prices are equal to the farmgate producer prices.

**Sugar:** World raw sugar price, ICE Contract 11 nearby futures price for the calendar year plus estimated charges for transport and handling from Caribbean ports to New York. Sources: export price, ERS's *Sugar and Sweeteners Yearbook Tables*, Table 3b--World raw sugar price, ICE Contract 11 nearby futures price, monthly, quarterly, and by calendar and fiscal year 1/, latest "Calendar" figure (<http://www.ers.usda.gov/data-products/sugar-and-sweeteners-yearbook-tables.aspx>); transport charge estimate by OECD.

**Milk:** Average border prices for the calendar year of butter and SMP converted into a milk equivalent average border price using technical coefficients minus a processing margin. The border price of butter is the unit c.i.f. import value for the period 1986-1997 and the unit f.o.b. export value from 1998 (code HS040510). The border price of SMP is the unit f.o.b. export value (code HS040210). The processing margin is calculated as the difference between the domestic wholesale price (domestic wholesale prices of butter and SMP converted into milk equivalent price using technical coefficients) and the manufacturing milk price. The domestic wholesale prices are the "Grade AA" for butter and the "Nonfat dry milk, Central and East (Low heat)" for SMP. The manufacturing milk price is the price for manufacturing grade Class IV (butter-powder milk), 3.5% fat, Minnesota-Wisconsin. Sources: border price of butter, USDA FSA GATS Standard query/Data Source: FAS U.S. Trade/Product type: Exports/Product group: Harmonized (HS-6)/Partners: World Total/Products: 04-Dairy products/List selected chapters: 040510 – butter/Statistics value: Unit value (<http://apps.fas.usda.gov/GATS/default.aspx>); border price of SMP, USDA FSA GATS Standard query/Data Source: FAS U.S. Trade/Product type: Exports/Product group: Harmonized (HS-6)/Partners: World Total/Products: 04-Dairy products/List selected chapters: 040210 – Milk powder <1.5% Fat/Statistics value: Unit value (<http://apps.fas.usda.gov/GATS/default.aspx>); domestic wholesale price of butter, ERS's *Dairy Data*, U.S. Dairy situation at a glance (monthly), latest figure for "Butter, Grade AA".

(<http://www.ers.usda.gov/data-products/dairy-data.aspx>); domestic wholesale price of SMP, ERS's *Dairy Data*, U.S. Dairy situation at a glance (monthly), latest figure for "Nonfat dry milk, Central and East (Low heat)". (<http://www.ers.usda.gov/data-products/dairy-data.aspx>); manufacturing milk price, ERS's *Dairy Data*, U.S. Dairy situation at a glance (monthly), latest figure for "Class IV (butter-powder milk) 3.5% fat". (<http://www.ers.usda.gov/data-products/dairy-data.aspx>)

**Beef and veal:** Australian saleyard cow price minus by-product value, plus processing cost, plus transport cost. To calculate MPS, this beef meat reference price is compared to the US boneless beef price 90% chemical lean. The Australian saleyard cow price is for export quality cows of 400-520 kilograms live weight, average of the monthly average of fat stock prices in each major state market, weighted by the monthly production of beef in the respective states. Sources: Australian saleyard cow price, ABARES Agricultural commodity statistics 2015, Rural commodities meat – general, Table 128 Australian saleyard prices of livestock a, average of the monthly prices from January to September of the latest year ([http://www.agriculture.gov.au/abares/publications/display?url=http://143.188.17.20/anrdl/DAFFService/display.php?fid=pb\\_agcstd9abcc0022015\\_11a.xml](http://www.agriculture.gov.au/abares/publications/display?url=http://143.188.17.20/anrdl/DAFFService/display.php?fid=pb_agcstd9abcc0022015_11a.xml)); by-product value, processing and transport cost: OECD estimates; US boneless beef price: special request to USDA ERS beef meat expert to send the monthly data YEAR of "Wholesale price boneless Beef, 90% fresh" from which to calculate an annual average..

**Sheep meat and wool:** Implicit price derived by subtracting the OECD estimate of a tariff from the producer price. Sources: The producer price for sheep meat comes from the ERS sheep analyst because data not published. The producer price for wool is an annual weighted average of US farm price for shorn wool, greasy basis. Latest yearly data is not available in February so the previous year's price is carried over. ERS's *Cotton and Wool Yearbook*, Table 33—Shorn wool prices: U.S. farm price, Australian offering prices, and graded territory shorn wool prices, 1978-2014, latest figure for "U.S. farm price shorn wool, greasy basis 3/". (<http://www.ers.usda.gov/data-products/cotton,-wool,-and-textile-data/cotton-and-wool-yearbook.aspx>)

## **X. Budgetary transfers**

### **Price levies**

**Sugar:** Commodity loan interest subsidy (processor share 60%) for cane and (processor share 100%) for beet. Source: ERS estimate. (40% are paid by cane sugar processors and included in Table 1 under V.1.P transfers to consumers from taxpayers.)