Table 1 – Mapping domestic subsidies from OECD PSE data into WTO "colors" and CGE model, by OECD label

	Output subsidy			Input subsidy	Capital subsidy		Household payment		Deficiency payment		Other
Behavior in CGE model	Fixed per unit of output		Variable per unit of output	Intermediate input subsidy, fixed per unit of input	Capital input subsidy, fixed per unit of capital input		Farm household income transfer, fixed		Price subsidy, endogenous, fixed producer price		Minimally distorting
WTO treatment	Amber	Blue	Blue	Amber	Amber	Green	Green	Amber	Amber	Blue	Green
Canada	B1,B2			C1, E1	E3			.58*G1			D1,E2,,.42*G1,H2
EU	B1, .81*B2	.19*B2	C2	C1(crops) E1(lvstk)	E1(crops)	E3	D2,F1, F2,G1				C1(lvstk), E2,F3,H1,H2
Japan	B1 (sugar)					E1,E3			B1(ex. Sugar)	B2	E2,E3,F2
Mexico	B1			C2,E1		E3	D1,G1,G2				C1,E2
U.S.	.27*B1 B2			.38 C1, .21*E1			.48*D2,.83*E3	.52*D2	Pt. B1		.07*E1,E2,F,.17*E3, .62 C1

Note: For U.S., 72 percent of E1 (fuel tax concessions) and G1 (income tax concessions) are excluded from the calculation of WTO color because these programs are not included in the U.S. notification to the WTO.
Source: USDA Economic Research Service.

Table 2 – Mapping 2000 domestic subsidies from OECD PSE data into WTO "colors" and CGE model, by program name

	Output subsidy			Input subsidy	Capital subsidy		Household payment		Deficiency payment		Other
Behavior in CGE model	Fixed per unit of output		Variable per unit of output	Intermediate input subsidy, fixed per unit of input	Capital input subsidy, fixed per unit of capital input		Farm household income transfer, fixed		Price subsidy, endogenous, fixed producer price		Minimally distorting
WTO treatment	Amber	Blue	Blue	Amber	Amber	Green	Green	Amber	Amber		Green
Canada	Price assurance and stabilization, advanced payments			Crop insurance subsidies, Fuel and freight assistance	Property tax exemptions			NISA			Provincial Assistance and Stabilization disaster payments, extension, disease control, Ag. Income Disaster Assistance, Provincial expenditures
EU	Production aid and subsidies to crops and livestock	Prod-uction aid for peas, beans	Compen-satory payments and related set-asides, livestock premiums	Production aid and payments per hectare for crops, production aid for livestock fodder, sileage	Interest subsidy for young farmers	Various farm improve-ment and moderni-zation programs	Transitional payments to Sweden; payments for set-asides and cessations, conservation; Income aid				Land mgmt, organic farming, Pest and disease control, conservation, farm improvement;,agrotourism;,sub-national payments
Japan	Per ton payment for beet sugar			Interest and insurance subsidies					Price stabilization for beef, eggs, horticulture	Price stabilization with supply controls for rice, soybeans, milk	Extension, pest and disease control, infrastructure, rice diversion/environmental payments
Mexico	Rice payments, per ton			Input subsidies, per hectare basis; fertilizer, irrigation and energy subsidies		WTO-exempt interest subsidies and grants	PROCAMPO, income tax concessions, rural employment wages				Disaster payments; Extension, pest and disease control
U.S.	On-farm storage, sugar PIK, commodity loan interest subsidies, crop and livestock emergency assistance			Crop insurance benefits			Production Flexibility Contracts, agricultural credit program	Market loss assistance	Loan deficiency payments, marketing loan gains, loan forfeiture benefit		Extension, EQIP, pest and disease control, conservation and wetlands protection, natural disaster payments

Note: For U.S., 72 percent of E1 (fuel tax concessions) and G1 (income tax concessions) are excluded from the calculation of WTO "color" because these programs are not included in the U.S. notification to the WTO.

Source: USDA Economic Research Service.

Table 3 – Modeling agricultural subsidies and farm program costs for U.S., EU and Japan

	Countries and sectors	Production effects	Farm program costs [1]
Output/input subsidies, fixed ad valorem rates (with fixed input-output coefficients)	U.S.: wheat, other grains, oilseeds, other crops, livestock, dairy, processed sugar EU: wheat, other grains, oilseeds, livestock, dairy, processed rice, processed sugar Japan: wheat, other grains, oilseeds, Livestock, dairy, processed sugar	Increase market returns by raising prices or lowering input costs, resulting in increases in output. Increased supply reduces market prices, offsetting some of the benefits of the subsidy.	Subsidy costs increase (decrease) when output increases (decreases)
Variable output subsidy	EU: wheat, other grains, oilseeds, other crops, livestock, dairy, processed rice, processed sugar	Increase market returns but per unit return declines as output increases, eliminating any marginal incentives to expand output. Land eligible for payments remains in production of grains and oilseeds.	Subsidy costs do not change with output or price changes.
Household income transfer payment	U.S. aggregate household EU aggregate household	Income transfers to household, with no links to production decisions or prices.	Subsidy costs do not change with output or price changes.
Price support (price support payment or export subsidy)	US: price support payments to rice, wheat, other grains, and oilseeds. Japan: price support payments to rice EU: export subsidies to wheat, other grain, meat, dairy, and processed sugar	Provide a guaranteed price floor for producers. When market prices fall below the floor, farmers are insulated from market price signals. When market prices rise above the floor, farmers perceive and respond to market prices. U.S. and Japan price support subsidies are paid to producers; EU export subsidies benefit consumers in the rest of the world.	Subsidy costs increase (decrease) when market prices fall below (rise above) the fixed, producer price.
Other, minimally distorting expenditures	US., EU, and Japan	May indirectly lower production costs and expand output, but assumed in this model to provide no price incentives to producers.	Program expenditures do not change with output or price changes.

1/ Farm program costs include domestic subsidies and the EU's export subsidy expenditures for the agricultural sectors. We do not include agricultural tariff revenue.
Source: Burfisher, Robinson, Thierfelder, "The Global Impacts of Farm Policy Reforms in OECD Countries," *AJAE*, August 2002.