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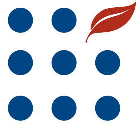

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Recent Agricultural Policy Reforms in North America

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Abstract

The United States, Mexico, and Canada have each made significant changes to their agricultural policies over the past several years. In the area of income supports, each country has instituted a countercyclical program that provides additional assistance to producers during downturns in commodity prices, and each continues to decouple key support programs from production decisions. In other areas, the reforms of the three countries have different points of emphasis. The United States has expanded spending on conservation activities, especially on lands in production; it has made important changes to peanut and tobacco programs; and it has implemented a new program that assists producers who are adversely affected by competition with imports. Mexico's new efforts to strengthen the competitiveness of its agricultural sector include energy discounts for producers, and a revamped approach to agricultural finance. And Canada's comprehensive evaluation of its farm programs is leading to new efforts concerning the environment, food safety and food quality, science, and the renewal of the agricultural sector.

Keywords: Canada, Mexico, agricultural policy, 2002 Farm Act, Agricultural Policy Framework, Agri-food Armor, National Agreement for the Countryside.

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Introduction

Over the past several years, the three largest agricultural producers of the northern half of the Western Hemisphere—the United States, Mexico, and Canada—have revised their agricultural policies (table 1). In the United States, the Farm Security and Rural Investment Act of 2002 (2002 Farm Act) was signed into law, providing the legal framework for U.S. farm programs through 2007 crops. In Mexico, the government responded to heightened concerns about the 2002 Farm Act, the North American Free Trade Agreement (NAFTA), and the general state of Mexican agriculture by issuing two outlines of intended policy actions, one in 2002 and another in 2003. And in Canada, the government is engaged in a comprehensive effort to reshape its agricultural policy within the context of the Agricultural Policy Framework (APF).

Mexico's agricultural policy changes reflect a continuing effort to implement agricultural supports similar to those found in the developed economies, while still addressing the needs and wants of smaller producers who are less commercially oriented. Meanwhile, Canada's new income stabilization and disaster protection program for producers—the Canadian Agricultural Income Stabilization (CAIS) program—has emerged as the centerpiece of that country's agricultural reform efforts, with complementary initiatives being planned for the environment, science and innovation, food safety and quality, and the renewal of the agricultural sector.

During the 3 years immediately prior to these reforms (1999-2001), the United States, Mexico, and Canada provided different levels of government support to their agricultural producers (fig. 1). When such support is measured by the Producer Support Estimate (PSE), as calculated by the Organisation for Economic Co-operation and Development (OECD), the United States is estimated to have given the highest level of support (23 percent of the value of national agricultural production), followed by Mexico (21 percent) and then Canada (18 percent).[1]

[1]PSE data generally pertain to marketing years, so aggregate measures may encompass a variety of marketing years that do not precisely match.

The United States and Canada provide a much larger portion of their agricultural support in the form of budgetary payments to producers than does Mexico. During 1999-2001, such payments accounted for 64 percent of the U.S. PSE and 54 percent of the Canadian PSE, compared with just 34 percent for Mexico. Relative to the value of national agricultural production, budgetary expenditures on farm payments during 1999-2001 equaled 15 percent in the United States, 10 percent in Canada, and 7 percent in Mexico.

With the implementation of new agricultural policies in the three countries, the relative difference between Mexico's budgetary payments and those of Canada and the United States may narrow over the next several years. So far, Mexico's new agricultural policies have been accompanied by a modest real increase in spending, while actual U.S. outlays associated with the 2002 Farm Act during its first 2 years of operation (fiscal years 2002-03) were well below some projections made prior to the legislation's enactment. The U.S. development is linked to smaller-than-expected expenditures on certain price-sensitive commodity programs, due to relatively favorable prices for

Table 1—The North American countries have made substantial changes to their agricultural policies

	United States	Mexico	Canada
Key initiative(s)	2002 Farm Act	Agri-food Armor and National Agreement for the Countryside	Agricultural Policy Framework (APF)
Description	Legal framework for U.S. farm programs through 2007 crops.	Separate but overlapping outlines of intended agricultural policies.	Comprehensive effort to reshape Canada's agricultural policies.
Status	Signed into law, May 2002.	Many elements were previously planned; others are being implemented in a piecemeal fashion.	All Provinces have signed on for the APF to take effect, but some elements are still being planned.
Income support	Triad of programs—direct payments, countercyclical payments, and marketing loans—provides income support for wheat, feed grains, upland cotton, rice, peanuts, and oilseeds. New countercyclical program replaces ad hoc emergency assistance. Marketing loans extended to certain pulses, mohair, wool, and honey. Extensive planting flexibility is maintained.	PROCAMPO continues to provide direct payments on a simple per hectare basis, while the Subprogram of Direct Supports to Target Income provides countercyclical assistance to grain and oilseed producers. Marketing supports geared for commercial producers continue under the guise of the Program of Direct Supports to the Producer through Marketable Surpluses.	The new Canadian Agricultural Income Stabilization (CAIS) program integrates income stabilization and disaster protection. It replaces an earlier subsidized savings program for producers, as well as a previous ad hoc program of emergency assistance.
Conservation	Almost all programs are expanded; greater emphasis placed on land in production. Conservation Security Program is created. Land retirement through the Conservation Reserve Program remains the primary conservation program.	Support program for cattle producers (PROGAN) aims to improve quality of pasture lands. Secretariat of the Environment and Natural Resources (SEMARNAT), which is separate from the agricultural secretariat, operates other conservation programs.	APF intends to finance voluntary farm environmental plans.
Rural development	Funding provided for planning and coordination between rural areas and officials, addressing backlog of applications for water and wastewater programs, and several new programs.	Emergency spending and credit allocations bolster ongoing efforts to reduce rural poverty. Alianza Contigo continues efforts to boost agricultural productivity. Opportunities Program (separate from the agricultural secretariat) combats poverty through supports for health, education, nutrition, and income.	APF plans to offer producers a broad range of services (training, consulting, marketing information, and networking). Science and innovation efforts require further planning.
Agricultural credit	Rules of Farm Service Agency are relaxed to expand eligibility and streamline program delivery.	FIRA implements new services and financial strategies. Financiera Rural replaces BANRURAL.	No programs noted, beyond those in CAIS.
Nutrition	Food Stamp and commodity distribution programs are reauthorized. Food stamp eligibility reinstated for certain legal immigrants.	Rural development efforts include nutritional initiatives; strong focus on the less fortunate and marginalized communities.	Nutrition falls within the jurisdiction of Health Canada, a cabinet ministry separate from Agriculture and Agri-Food Canada.
International trade	All trade programs reauthorized. New programs concern international food aid for education, trade barriers, and online help. Separate from the 2002 Farm Act, the Trade Adjustment Assistance Program for Farmers was created.	Policies promise more vigorous enforcement of trade-remedy laws and request consultation regarding NAFTA's provisions for corn and beans.	Key element of Canada's agricultural strategy is improving market access, even though trade is not explicitly one of the APF's pillars. Importance of exports motivates emphasis on food safety and quality.

some crops. For 2003, budgetary expenditures on farm payments in Canada and the United States equaled 11 percent of the value of production, compared with 8 percent in Mexico.

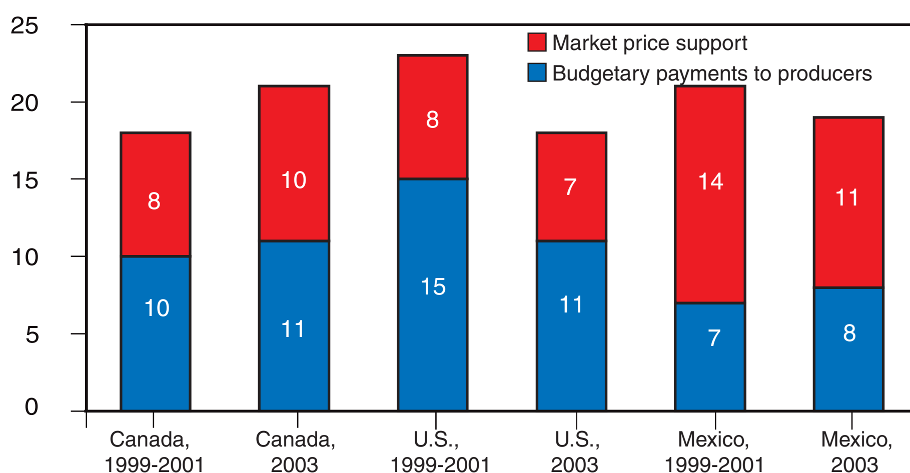
The three countries also differ in the administration of budgetary payments to producers. In 2003, Mexico based 77 percent of its payments on either input use or a long-term entitlement, while Canada and the United States distributed farm payments across a wider array of program formats (fig. 2). These patterns are likely to persist over the next several years, as the three countries have left the previous formats of their agricultural programs mostly intact. For instance, Canada is expected to continue devoting a much larger proportion of its farm payments to programs based on overall farm income than Mexico and the United States, since the CAIS program replaces an earlier subsidized savings plan for producers.

In the case of Mexico, the different orientation of its agricultural programs reflects the profound structural differences that distinguish its agricultural sector from that of Canada and the United States. About 20 percent of Mexico's economically active population (EAP) is engaged in agriculture, compared with just 2 percent in both Canada and the United States (table 2). But the ratio of agricultural gross domestic product to agricultural EAP is roughly $3,000 per person in Mexico, compared with $49,000 in Canada and $40,000 in the United States. Although Mexico's GDP figures may understate the size of the Mexican agricultural sector due to subsistence production and informal activities that are not tallied in official statistics, the productivity gap is nonetheless real, and Mexico's farm programs include

Figure 1

Canada, Mexico, and the United States gave their agricultural producers different levels of support in recent years

Percent of value of national agricultural production plus budgetary payments to producers



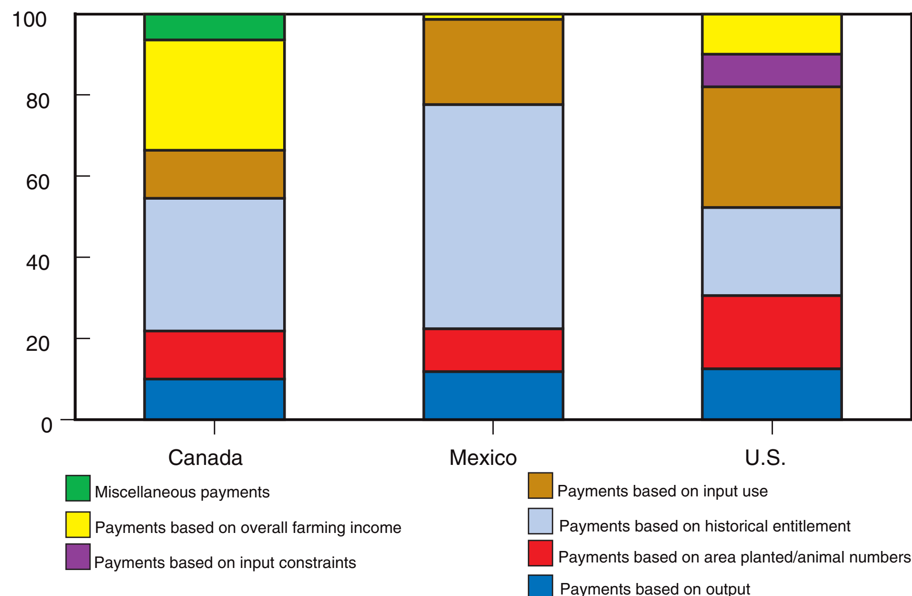
Note: The Producer Support Estimate (PSE) indicates the value of the gross transfers to agricultural producers from government policies. The PSE comprises support from consumers and taxpayers in the form of market price support and budgetary payments to producers. The percentages in this table are based on the average level of support during 1999-2001 and the level of support in 2003.

Source: OECD, 2004.

Figure 2

The administration of farm payments differs greatly across North America

Percent of total budgetary payments to producers



Data are for 2003.
Source: OECD, 2004.

Table 2—Mexican agriculture employs a larger share of the economically active population but generates less income per worker, compared with Canada and the United States[1]

Item	Unit of measure	Canada	Mexico	U.S.
Total population	Millions[2]	31.5	103.5	294.0
Economically active population (EAP) in agriculture	Millions[2]	0.4	8.5	2.8
Total EAP	Millions[2]	17.0	43.1	150.0
Agricultural EAP (share of total)	Percent	2.1	19.7	1.9
Agricultural gross domestic product (GDP)	U.S. dollars (billions)	17.6	22.8	113.9
Total GDP	U.S. dollars (billions)	812.2	622.9	11,004.0
Agricultural output (share of total)	Percent	2.2	3.7	1.0
Ratio of agricultural GDP to agricultural EAP	U.S. dollars per person	48,557	2,692	39,993

[1]All statistics are for 2003.
[2]Estimated.

For the GDP data, agriculture is broadly defined to include agriculture, forestry, fishing, and hunting. Canadian GDP data are converted first from 1997 to 2003 prices and then to U.S. dollars. Mexican GDP data are converted to U.S. dollars on a quarterly basis.

Sources: Food and Agriculture Organization of the United Nations (population); U.S. Department of Commerce, Bureau of Economic Analysis (U.S. GDP); Instituto Nacional de Estadística, Geografía, e Informática (Mexican GDP); Statistics Canada, August 2004 (price indexes) and September 2004 (Canadian GDP); and USDA/ERS (exchange rates).

initiatives oriented toward rural development and the amelioration of rural poverty.

Despite these many differences, the agricultural reforms of all three countries share one striking similarity. Each country has created a countercyclical program that provides additional assistance to producers during a downturn in commodity prices. The United States has institutionalized the emergency assistance given to producers in the late 1990s and early 2000s, Canada has done the same by incorporating disaster assistance within the CAIS, and Mexico has formulated the Subprogram of Direct Supports to Target Income, which resembles the U.S. marketing loan program.

These modifications continue a trend in which the three countries implement some income supports that are similar in their broadest features. In the mid-1990s, the three countries moved "toward policies that provide farmers with lower levels of support while simultaneously "decoupling" this support from production decisions" (Link and Zahniser, 1999: p. 18). The recent reforms do not fully reverse the earlier ones, as key supports in each country continue to be decoupled. Even with respect to the U.S. countercyclical program, payments are tied to historical production, and payment levels depend on commodity prices.

The U.S. Farm Security and Rural Investment Act of 2002[2]

The 2002 Farm Act is an exercise in both continuity and change in U.S. farm policy. The Act, which was signed on May 13, 2002, extends many of the market-oriented reforms of its predecessor, the Federal Agriculture Improvement and Reform Act of 1996 (1996 Farm Act). Like the 1996 Farm Act, the 2002 Farm Act contains many supports that are designed not to distort international trade, and it retains the extensive planting flexibility that the 1996 Farm Act offered U.S. farmers. At the same time, the 2002 Farm Act introduced countercyclical payments to provide a farm income safety net.

[2]Section authored by Ed Young. More extensive information about U.S. agricultural programs is available in the Farm and Commodity Policy Briefing Room of the ERS website at www.ers.usda.gov/briefing/farmpolicy

The U.S. Government also operates farm programs whose legislative authorization is separate from the 2002 Farm Act. Foremost among these is the subsidization of crop insurance, most recently extended by the Agricultural and Risk Protection Act of 2000. These subsidies, as implemented by USDA's Risk Management Agency (RMA), reduce the costs to farmers of crop yield and crop revenue insurance and thus encourage insurance participation (USDA/RMA, 2003). For the 2003 crop year, the net indemnities associated with the crop insurance program, which are calculated as the sum of indemnities and premium subsidies less total premiums, totaled about $1.9 billion, as of October 4, 2004 (USDA/RMA, 2004). Another farm program with separate authorization is the Trade Adjustment Assistance for Farmers program, which is described later in this section.

Projected spending. The Commodity Credit Corporation (CCC) serves as the funding conduit for most commodity programs, conservation programs, and trade programs related to agriculture.[3] Under the 2002 Farm Act, the CCC is expected to have net outlays of about $104 billion during FYs 2002-07. This number is the sum of actual net outlays during FYs 2002-04 and projected net outlays for FYs 2005-07, according to the President's Budget for FY 2005 (fig. 3). In May 2002, the Congressional Budget Office (CBO) projected that the CCC's net outlays would have totaled about $122 billion during FYs 2002-07, had the provisions of the 1996 Farm Act simply been extended (Young, 2003). Care must be taken, however, in the comparison of these projections. The projection of May 2002 was based on the assumption of lower commodity prices (and thus higher net outlays). In addition, ad hoc emergency assistance, including Market Loss Assistance payments, was not included in the May 2002 projection, since such assistance was not part of the 2002 Farm Act.

[3]The crop insurance and Trade Adjustment Assistance for Farmers programs are not funded through the CCC.

The 2002 Farm Act also covers a wide range of programs in the areas of nutrition, rural development, research, forestry, and energy. Outlays in these areas are projected to equal about $343 billion[4] over FYs 2002-07, compared with a baseline of $338 billion had the 1996 Farm Act been extended. Nutrition programs, including food stamp assistance for low-income Americans, account for a majority of this amount, with projected outlays of $318 billion.

[4]This amount is based on the projection made by the CBO in May 2002 and does not reflect actual expenditures during FYs 2002-03.

Under the 2002 Farm Act, spending on trade-distorting domestic support programs, such as marketing loans, is expected to fall within the allowable

levels established by the Uruguay Round Agreement on Agriculture of the World Trade Organization (WTO). For the United States, the current ceiling on this type of spending is $19.1 billion per year, as indicated by the aggregate measure of support.[5] To ensure that this obligation is met, the 2002 Farm Act includes a "circuitbreaker" that requires the U.S. Secretary of Agriculture, "to the maximum extent practicable, to adjust domestic commodity program expenditures to avoid exceeding allowable" WTO domestic support ceilings.

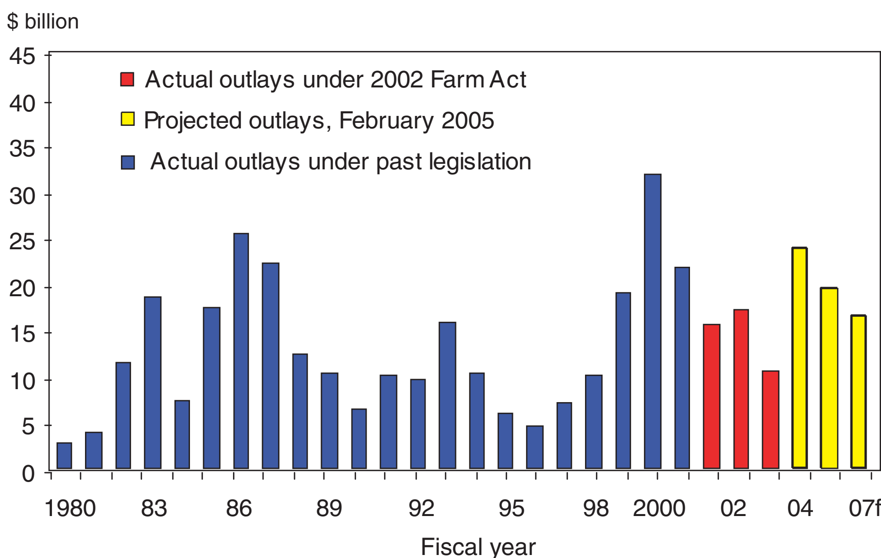
[5]The aggregate measure of support (AMS) indicates the monetary value of the extent of government support to an economic sector. The AMS, as defined in the WTO's Uruguay Round Agreement on Agriculture, includes not only budgetary outlays but also revenue transfers from consumers to producers as a result of policies that distort market prices.

Commodity programs. The 2002 Farm Act provides income support for wheat, feed grains, upland cotton, rice, peanuts, and oilseeds through three programs: direct payments, countercyclical payments, and marketing loans. The Act eliminates the peanut marketing quota system, which constrained production for domestic edible consumption, so peanuts are now treated similarly to other program crops. To the extent possible, the sugar program will operate at no cost to the Federal Government. A new dairy countercyclical payment is also introduced. Support for tobacco is handled by separate legislation, with tobacco price support ending after the 2004 crop year and a buyout of tobacco quota funded by assessments on domestic manufacturers of tobacco products and importers of foreign tobacco.

Direct payments. Direct payments to farmers under the 2002 Farm Act are similar to the production flexibility contract (PFC) payments of the 1996 Farm Act. However, the 2002 Act expands the commodity coverage to include soybeans, other oilseeds, and peanuts. Payment rates are fixed for each crop and based on historical acreage and yields (table 3). Although direct payment

Figure 3

Net outlays of the Commodity Credit Corporation, fiscal years 1980-2007[1]



[1]The Commodity Credit Corporation is a federally owned and operated corporation within USDA. It was created to stabilize, support, and protect farm income and prices through loans, purchases, payments, and other operations. All money transactions for agricultural prices and income support and related programs are handled through the CCC.
f = forecast

Source: USDA, CCC Budget, February 2005.

Table 3—Direct payment rates, target prices, and marketing assistance loan rates under 2002 Farm Act for fiscal years 2004-07

Commodity	Unit	Direct payment rates	Target prices in countercyclical program	Effective target price	Marketing assistance loan rates[1]
		Dollars			
Wheat	Bushel	0.52	3.92	3.40	2.75
Corn	Bushel	0.28	2.63	2.35	1.95
Grain sorghum	Bushel	0.35	2.57	2.22	1.95
Barley	Bushel	0.25	2.24	1.99	1.85
Oats	Bushel	0.02	1.44	1.42	1.33
Upland cotton	Pound	0.07	0.72	0.66	0.52
Rice	Hundredweight	2.35	10.50	8.15	6.50
Soybeans	Bushel	0.44	5.80	5.36	5.00
Other oilseeds[2]	Pound	0.01	0.10	0.09	0.09
Peanuts	Ton	36.00	495.00	459.00	355.00
Graded wool	Pound	n.a.	n.a.	n.a.	1.00
Nongraded wool	Pound	n.a.	n.a.	n.a.	0.40
Mohair	Pound	n.a.	n.a.	n.a.	4.20
Honey	Pound	n.a.	n.a.	n.a.	0.60
Small chickpeas	Hundredweight	n.a.	n.a.	n.a.	7.43
Lentils	Hundredweight	n.a.	n.a.	n.a.	11.72
Dry peas	Hundredweight	n.a.	n.a.	n.a.	6.22

n.a. = not applicable.

[1]Nonrecourse loans are available for extra-long staple cotton, but the repayment rate is set at the loan rate plus interest.

[2]Sunflower seed, canola, rapeseed, safflower, mustard seed, and flaxseed.

Source: USDA, Economic Research Service.

rates are higher than PFC payment rates for 2001 and 2002, they are lower than the average PFC rates under the 1996 Act.

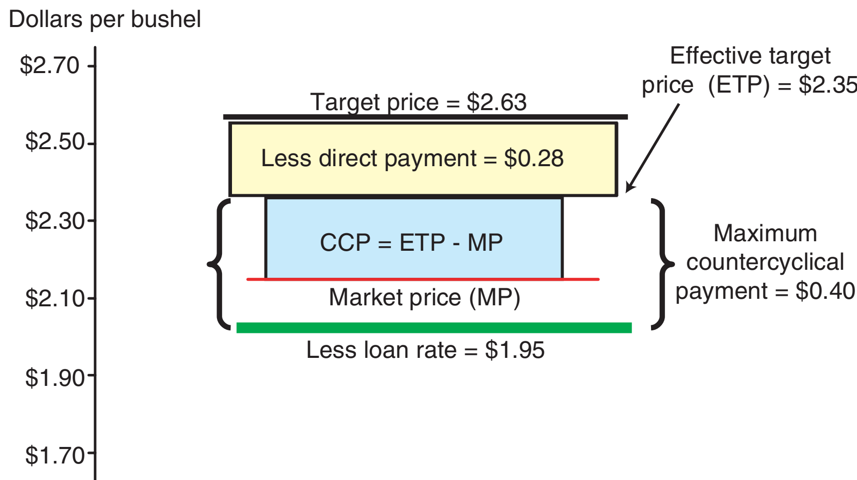
Countercyclical payments. The 2002 Farm Act creates a new program of countercyclical payments (CCP) that provides benefits whenever the market price of the covered commodity falls short of its effective target price (target price minus direct payment rate) (table 3). The maximum CCP is the difference between the effective target price and the marketing loan rate. Payments are limited to 85 percent of base acres for all covered crops and are based on historical area and yields.

For example, in crop year 2005/06, the target price for corn is $2.63 per bushel, the direct payment rate is $0.28 per bushel, and the marketing loan rate is $1.95 per bushel (fig. 4). Should the season average price turn out to be $2.20 per bushel (which would be above the loan rate), the CCP rate would equal $0.15.

Should the season average price reach $2.35 or higher, the payment rate would equal zero. The maximum CCP rate of $0.40 per bushel would be attained if the market price equaled the loan rate of $1.95 or less. Since both direct payments and CCPs are based on historical areas and yields, producers receiving payments for corn could be producing another crop.

Figure 4

Calculation of countercyclical payment (CCP) rate for corn example



Marketing assistance loan program. The 2002 Farm Act continues the commodity loan program with marketing loan provisions, while extending it to several commodities that either had never been eligible under previous farm legislation (small chickpeas, lentils, and dry peas) or had been eligible for commodity loans without marketing loan provisions prior to the 1996 Farm Act (mohair, wool, and honey). Commodity loans, also known as marketing assistance loans, allow producers of designated crops to receive a loan from the government by pledging production as collateral. Loan rates are commodity specific and measured per unit of production (table 3). After harvest, a farmer may obtain a loan for all or part of the new commodity production.

Farmers may settle commodity loans in one of three ways:

- Repay the loan at the loan rate plus interest costs (the CCC's cost of borrowing from the U.S. Treasury plus 1 percentage point),
- Repay the loan at a lower loan repayment rate, if applicable, or
- Forfeit the crop pledged as loan collateral to the CCC at loan maturity.

When market prices are below the loan rate, farmers are allowed to repay commodity loans at a loan repayment rate that is lower than the loan rate (except for extra-long staple cotton). Alternatively, farmers can take loan program benefits directly as loan deficiency payments (LDP). The LDP option allows the producer to receive the benefits of the marketing loan program without having to take out and subsequently repay a commodity loan. The LDP rate is the amount by which the loan rate exceeds the loan repayment rate and thus is equivalent to the marketing loan gain that could alternatively be obtained for crops under loan.

Peanuts. The 2002 Farm Act substantially revamped the peanut program. Under previous legislation, the peanut program was a two-tiered, price support program based on marketing quotas and nonrecourse loans. Production for domestic edible consumption was constrained by an annually established marketing quota. The marketing of nonquota (additional) peanut

production was permitted only for export or domestic crushing, and nonquota production was eligible for a lower loan rate.

Under the 2002 Farm Act, the peanut marketing quota system is eliminated. Peanuts are now treated similarly to other program crops, such as grains and cotton, with direct payments and countercyclical payments. Producers with a history of peanut production during 1998-2001 are eligible for these programs. Also, a single marketing assistance loan program for all peanut production replaces the two-tier price support program. Farmers no longer have to own or rent peanut quota rights to produce for domestic edible consumption. Owners of peanut quota under prior legislation will receive compensation payments for the loss of quota asset value.

Sugar. The three main elements of U.S. sugar policy are the tariff-rate quota (TRQ) system, the domestic marketing allotment program, and the price support loan program. The 2002 Farm Act requires USDA, to the maximum extent possible, to operate the sugar program at no cost to the government. Thus, USDA controls domestic supply through the TRQ and the domestic marketing allotment to avoid acquiring loan collateral under the price support loan program. Unlike most commodity programs, sugar loans are made to processors and not to producers. To qualify for loans, sugarcane and sugar beet processors must agree to make a minimum payment to producers.

The marketing allotment authority is suspended if USDA estimates that sugar imports for domestic human consumption will exceed 1.532 million short tons, raw value, and that the imports would lead to a reduction in the overall allotment quantity. Allotment authority is suspended until USDA restricts, eliminates, or reduces imports. The trigger import amount equals the U.S. sugar minimum access commitment under the WTO, plus the maximum annual duty-free access provided to Mexico in FYs 2001-07 under NAFTA.

Tobacco. Since 1938, U.S. tobacco production has been subject to marketing quotas and price supports. At the end of the 2004 crop year, the Fair and Equitable Tobacco Reform Act of 2004 ends the U.S. marketing quota and price support program. Under the Act, producers are no longer bound by restrictions on growing locations or the quantity grown, and they will not receive price support for the tobacco they sell. Mandatory inspections of imported tobacco will cease, although inspections will continue for some domestic types. As part of the quota buyout accompanying the termination of the tobacco programs, stocks of tobacco currently held by grower-owned cooperatives will be sold in a manner that does not destabilize tobacco markets.

Elimination of the tobacco programs will have significant effects on the U.S. tobacco industry. Production will likely shift to areas where producers can achieve more economically viable scales of operation. Leaf prices will likely fall, as production costs decline due to the elimination of costs associated with acquiring quota. Production is expected to increase as U.S. leaf becomes more competitive in the domestic and world markets.

Conservation programs. The 2002 Farm Act continues efforts to retire environmentally sensitive land, while placing greater emphasis on the conservation of land in production and environmentally friendly practices on livestock operations. Total conservation spending is projected to be higher under the 2002 Farm Act than under previous legislation, with expansion of the Conservation Reserve Program (CRP), the establishment of the Conservation Security Program (CSP), and expansion of the Environmental Quality Incentives Program (EQIP).

Under the CRP, which is continued by the 2002 legislation, farmland owners submit bids to retire highly erodible and other environmentally sensitive cropland from production for 10-15 years. Farmers receive a cost-share payment to establish a permanent cover crop, as well as annual rental payments for retiring land and maintaining specified conservation practices. The 2002 Farm Act increases the maximum CRP area to 39.2 million acres, up from 36.4 million under the 1996 Act.

The CSP in the 2002 Farm Act focuses on land-based practices but specifically excludes livestock waste-handling facilities. Under the CSP, producers develop and submit conservation plans to USDA that include practices that fall within one of three tiers or levels of participation. Higher tiers offer larger payments but require greater conservation measures.

The 2002 Farm Act also expands EQIP, which provides technical assistance, cost sharing, and incentive payments to assist livestock and crop producers with conservation and environmental improvements on working lands. Cost sharing (up to 75 percent) or incentive payments can be provided for a wide range of practices, including nutrient management, livestock waste handling, conservation tillage, terraces, and filter strips.

Trade Adjustment Assistance for Farmers. Separate from the 2002 Farm Act, the United States has implemented a new program to assist producers of raw commodities who have been adversely affected by competition from imports. Authorized by the Trade Act of 2002, the Trade Adjustment Assistance for Farmers program provides technical assistance and cash benefits up to $10,000 per year to eligible farmers, ranchers, fish farmers, and fishermen. To become eligible, a group of producers must submit a petition to USDA's Foreign Agricultural Service (FAS), and producer prices during the most recent marketing year must be demonstrated to have been not more than 80 percent of the national average price during the previous 5 marketing years. In addition, FAS must certify that increased imports of like or competitive products "contributed importantly" to the decline in prices.

Under an approved petition, each individual applicant must meet other eligibility requirements. An applicant's net income for the crop year must be less than his or her net income for a prior comparison year. Additionally, applicants must receive technical training from USDA's Cooperative State Research, Education, and Extension Service (CSREES) within a specified period, they must document production and net income, and they must meet adjusted gross income requirements. Program outlays in FY 2004 reached about $13 million, out of the appropriated limit of $90 million, mostly due to applicants not meeting the net income requirement.

Mexico's Agri-food Armor and the National Agreement for the Countryside[6]

[6]Section authored by Steven Zahniser.

The passage of the 2002 Farm Act and the approaching end of NAFTA's 9-year transition to tariff elimination for most aspects of U.S.-Mexico agricultural trade helped to fuel intense public discourse in 2002 and early 2003 about Mexico's policies for agriculture and rural development. In response, the Mexican Government issued two major documents about the future direction of these policies in a span of just 6 months.

In November 2002, the government unveiled a long-awaited package of agricultural programs and policies, formally entitled "Actions of Agri-food and Fishing Policy for the Strengthening of the Sector." Commonly referred to as Agri-food Armor (Blindaje Agroalimentario), this package was a combination of new programs and administrative actions, proposals for new laws and regulations, and modifications or extensions of existing programs.

The release of Agri-food Armor, however, did not satisfy all participants in the agricultural policy debate, so the Mexican Government took the unusual step of inviting producer groups and other rural organizations to participate in a formal dialogue on this subject. Following nearly 4 months of public hearings and negotiations, the government and many of the participating organizations signed the National Agreement for the Countryside for the Development of Rural Society and Sovereignty and Food Security (Acuerdo Nacional para el Campo por el Desarrollo de la Sociedad Rural y la Soberanía y Seguridad Alimentaria) in April 2003.[7]

[7]Some people use the words "National Agreement on Agriculture" to refer to the Acuerdo Nacional para el Campo. See, for instance, the initial report of USDA/FAS on the agreement (Anderson et al., 2003).

While this 282-point document reiterated many aspects of Agri-food Armor, it also contained important new elements, including a plan to allocate more than 18.8 billion pesos (U.S. $1.7 billion) in government funds to a variety of emergency activities (table 4).[8] Most of these resources were directed to development lending and not farm supports. Indeed, only 105 of the National Agreement's 244 substantive points pertain to Mexico's agricultural ministry, the Secretariat of Agriculture, Livestock, Rural Development, Fishing, and Food (SAGARPA—Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca, y Alimentación) (SAGARPA and Cámara de Diputados, Comisión Especial para el Campo, 2004).

[8]Since the emergency activities were unveiled in 2003, the average exchange rate for that year (10.847 pesos per U.S. dollar) is used to calculate their approximate U.S. value. Budget figures for 2004 are converted using the average exchange rate for 2004 (11.300 pesos per U.S. dollar).

Neither Agri-food Armor nor the National Agreement established a completely new agricultural policy for Mexico, although both documents have served to accentuate and adjust the evolving course of this policy. While the National Agreement has the force of a political agreement between Mexico's federal government and certain representatives of civil society, Agri-food Armor tends to be viewed as a policy framework that was not formally implemented. Nevertheless, elements of both documents can be found in Mexico's current agricultural policy.

Law of Sustainable Rural Development. Legal authorization for the Mexican Government's activities in agriculture and rural development stems in large part from the Law of Sustainable Rural Development, which took effect in December 2001. Among other things, this law empowered a commission involving all the cabinet secretaries responsible for rural development to craft

Table 4—Most of the National Agreement's emergency package was directed to development lending

Item	2003 allocation Amount	Approximate U.S. value
	Pesos (billions)	*U.S. dollars (millions)*
Reassigned resources	2.80	258
Program of Direct Support for the Countryside (PROCAMPO)	0.65	60
Support of the Elderly	0.50	46
Health services	0.40	37
Rural conciliation	0.30	28
National Fund to Support Social Enterprises (FONAES)	0.30	28
Rural housing	0.26	24
Temporary Employment Program (operated by SAGARPA)	0.15	14
Support of Commercial Organization	0.14	13
Women's Program in the Agricultural Sector (PROMUSAG)	0.10	9
Cost reductions	5.02	463
Debt reduction and forgiveness	3.00	277
Diesel fuel sold at "stimulus" prices	1.40	129
Tax changes	0.50	46
Debits to the Federal Commission of Electricity (CFE)	0.12	11
Additional credits and guarantees to development banks	11.00	1,014
Total	18.82	1,735

Exchange rate = 10.847 pesos per U.S. dollar (annual average for 2003).

Sources: SAGARPA (April 2003) and USDA/ERS (2005).

a coordinated plan for their activities during the remainder of the current presidential administration. The outcome of this exercise was the Special Concurrent Program for Sustainable Rural Development for 2002-06 (PEC—Programa Especial Concurrente), which incorporates almost all of SAGARPA's major programs. For 2004, the Mexican Congress allocated a budget of 120.4 billion pesos (U.S. $10.7 billion) to the PEC. This amount is roughly equivalent to 15 percent of Mexico's agricultural gross domestic product (both crops and livestock). SAGARPA's budget for 2004 was 42.4 billion pesos (U.S. $3.8 billion).

Within this framework, SAGARPA has exhibited great continuity with respect to its three core programs: a program of broadly available direct supports called the Program of Direct Supports for the Countryside (PROCAMPO—Programa de Apoyos Directos para el Campo); a set of marketing supports geared primarily for commercially oriented producers; and a cluster of activities devoted to the technological advancement of production agriculture, operated under the banner of the Alliance with You (Alianza Contigo). All three programs have roots that predate the current administration, and both Agri-food Armor and the National Agreement are consistent with their continuation. As a result, SAGARPA's modified budget for 2004 was not all that different from its 2003 budget (both original and modified) in terms of composition and nominal spending levels (table 5).

Income support. The Mexican Government provides income support to its agricultural producers through two main programs: PROCAMPO and the Program of Direct Supports to the Producer through Marketable Surpluses for Productive Reconversion, Integration of Agri-food Chains, and Attention

Table 5—The 2004 budget for Mexico's agricultural secretariat was broadly similar to the 2003 budget

Item	2003 (original)			2003 (modified)			2004 (modified)		
	Amount	Approximate U.S. value	Share of total	Amount	Approximate U.S. value	Share of total	Amount	Approximate U.S. value	Share of total
	Pesos (billions)	*U.S. dollars (billions)*	*Percent*	*Pesos (billions)*	*U.S. dollars (billions)*	*Percent*	*Pesos (billions)*	*U.S. dollars (billions)*	*Percent*
Total	41.783	3.852	100	40.294	3.715	100	42.354	3.748	100
Program of Direct Supports for the Countryside (PROCAMPO)	14.191	1.308	34	13.111	1.209	33	13.015	1.152	31
Marketing Supports/Direct Payments to the Producer through Marketable Surpluses	6.406	0.591	15	5.920	0.546	15	5.079	0.449	12
Alliance with You (Alianza Contigo)	6.250	0.576	15	6.555	0.604	16	7.496	0.663	18
Program to Stimulate Livestock Productivity (PROGAN)	1.500	0.138	4	1.000	0.092	2	1.425	0.126	3
Other programs	9.130	0.842	22	7.939	0.732	20	11.171	0.989	26
Operating funds of secretariat	4.306	0.397	10	5.768	0.532	14	4.169	0.369	10

Exchange rate = 10.847 pesos per U.S. dollar for 2003; 11.300 pesos per U.S. dollar for 2004.

Sources: SAGARPA, Oficialia Mayor, Direccíon General de Eficiencia Financiera y Rendicíon de Cuentas, Presupuesto 2003 and Presupuesto 2004; and USDA/ERS (2005).

to Critical Factors. Both Agri-food Armor and the National Agreement contemplated significant modifications to these supports, some of which are reflected in the current format of these programs. Despite these changes, Mexico is continuing to provide a mix of broadly available and targeted income supports, which has been its general approach over the past decade.

PROCAMPO is Mexico's largest farm program, accounting for nearly one-third of SAGARPA's 2004 budget. Initiated in 1994, PROCAMPO was originally conceived as a 15-year program that would provide transitional income support to Mexican agriculture as it underwent structural changes in response to market conditions and the phasing-out of trade barriers under NAFTA. Payments are made on a per hectare basis to any producer who cultivates a licit crop on eligible land or utilizes that land for livestock or forestry production or some ecological project. Eligible land is defined as having been cultivated with corn, sorghum, beans, wheat, barley, cotton, safflower, soybeans, or rice in any of the three agricultural cycles (fall-winter or spring-summer) prior to August 1993. For spring-summer 2004, payment rates equaled 1,120 pesos (U.S. $99) per hectare for producers with less than 5 hectares and 935 pesos (U.S. $83) per hectare for all others; for fall-winter 2004-05, the payment rate is 935 pesos per hectare for all producers (SAGARPA, 2004).

With the approaching end of PROCAMPO's designated lifespan, Mexican policymakers will need to decide whether to continue this program. Agri-food Armor had envisioned a major change to PROCAMPO in which program beneficiaries, organized on a regional basis, would be allowed to select between the existing format and a new program in which the level of support would ultimately depend on the region's average yield. However, this new program, slated to begin in 2004, has not been implemented to date. But the Mexican Government has instituted new rules that allow for the inclusion on an alternate roster (PROCAMPO Alterno) of lands that were mistakenly excluded from PROCAMPO. The National Agreement's emergency spending proposal contained 650 million pesos (U.S. $60 million) for this purpose.

The Program of Direct Supports to the Producer through Marketable Surpluses contains an important new subprogram called the Subprogram of Direct Supports to Target Income (Target Income Subprogram) that is arguably the most important of Mexico's new agricultural programs. For a period of 5 years, the Mexican Government intends to guarantee a target income (*ingreso objectivo*), expressed per ton, for producers of certain grains and oilseeds. So far, the government has defined target incomes for ten crops (table 6), and additional commodities may be included in the future. SAGARPA's modified budget for 2004 contained about 2.3 billion pesos (U.S. $204 million) for the subprogram, or roughly 5 percent of the secretariat's total budget.

Since the Target Income Subprogram has been in operation for more than a year, the target incomes should be clearly known by most commercially oriented grain and oilseed producers, well in advance of their future planting decisions. The amount of complementary income support is based on the estimated difference between the target income and the prevailing market price at harvest time, and support levels are announced around harvest time.

Table 6—Mexico has established its own countercyclical program

Crop	Target income, per metric ton		Crop	Target income, per metric ton	
	Pesos	*U.S. dollars*		*Pesos*	*U.S. dollars*
Corn	1,650	146	Cotton	*	*
Wheat	1,800	159	Rice	2,100	186
Sorghum	1,270	112	Soybeans	3,000	265
Safflower	3,300	292	Triticale	1,800	159
Canola	3,500	310	Feed wheat	1,525	135

* 64 U.S. cents per pound (U.S. $1,411 per metric ton) of cotton lint.
Exchange rate = 11.300 pesos per U.S. dollar (June 30, 2004).

Sources: SAGARPA (program information) and USDA/ERS (2005).

One interesting feature of the subprogram is that its intended beneficiaries do not include all Mexican producers of the ten eligible crops. Instead, the subprogram targets farmers with a marketable surplus, along with those producers who face marketing problems. This focus tends to exclude the country's subsistence farmers, who account for perhaps three-fourths of all Mexican producers.[9] Moreover, the level of complementary income support varies by State, in order to account for regional differences in transaction costs and market prices. Initially, the government did not specify support levels for every State for each eligible crop, but the program is becoming more comprehensive with time.

[9]This estimate is based on the proportion of producers with less than 5 hectares of land. SAGARPA's ASERCA indicates that such operations accounted for 77 percent of the producers enrolled in PROCAMPO for 2002.

Payments under the Target Income Subprogram are based on the actual amount of output that is produced and marketed, rather than some historical level of production. In this respect, the subprogram is akin to the U.S. marketing loan program. In its announcements of the complementary income supports, the Mexican Government carefully estimates the maximum volume of output that is to be covered. This action appears to acknowledge the possibility that funding may not be available to cover all eligible output. Despite this uncertainty, market-oriented producers are likely to perceive, in advance of planting, that the Target Income Subprogram raises the expected income of grain and oilseed production and to respond accordingly by attempting to increase output.

The Program of Direct Supports to the Producer through Marketable Surpluses also incorporates supports for price insurance, provision of collateral, and other items that were formerly operated under the Marketing Support and Regional Market Development Program. To some extent, the Target Income Subprogram appears to replace a major subprogram of direct payments within the previous program. Together, these activities make the Program of Direct Supports to the Producer through Marketable Surpluses as a whole SAGARPA's third largest program.

SAGARPA also operates a smaller support program for cattle producers, one that was mentioned by Agri-food Armor and implemented in 2003. The Program to Stimulate for Livestock Productivity (PROGAN) provides cattle producers with direct payments on a per animal basis, which vary by type of animal, as well as technical evaluations of their operations and additional supports to foster livestock identification. PROGAN also emphasizes

conservation. One of its stated objectives is to improve the quality of vegetation coverage in pasture lands, thereby reducing soil erosion. So far, about 164,000 production units have participated in PROGAN, which is slated to run from 2003 to 2006 (SAGARPA and Cámara de Diputados, 2004). SAGARPA's 2004 budget designated about 1.4 billion pesos (U.S. $126 million) for PROGAN, or about 3 percent of the secretariat's total budget.

Energy discounts. Both Agri-food Armor and the National Agreement included measures designed to facilitate the purchase of energy inputs. Under the Energy for the Countryside Program, the electrical rate for irrigation has been set at 0.32 pesos (2.8 U.S. cents) per kilowatt, benefiting nearly 75,000 agricultural operations as of August 2004. In addition, the government is working to provide about 7,000 producers with a preferential nocturnal rate (midnight to 8:00 a.m.) of 0.16 pesos (1.4 U.S. cents) per kilowatt (SAGARPA and Cámara de Diputados, 2004). These rate changes provide participating producers with a significant cost savings. The preferential rate for irrigation alone has saved producers about 600 million pesos (U.S. $53 million) so far in electricity costs.

Also as part of the Energy for the Countryside Program, the government's petroleum monopoly, Petróleos Mexicanos (PEMEX), is providing a price discount of about 30 percent for diesel fuel used for agricultural purposes. PEMEX is administering this discount through the provision of smart cards to agricultural producers. So far, over 430,000 such cards have been distributed (SAGARPA and Cámara de Diputados, 2004). The Mexican Government is spending about 1.09 billion pesos on this program.

Rural development. As was mentioned above, the PEC coordinates the activities of the Mexican Government in the area of rural development. While SAGARPA accounted for about one-third of the PEC's budget for 2004, the remainder is devoted to other cabinet ministries, such as the Secretariat of Social Development (SEDESOL) and the Secretariat of Public Education (SEP). The PEC incorporates a wide array of programs that address different aspects of rural poverty, including community development, agricultural education, capacity building, migrant workers, food, rural housing, rural women, education, and health. Roughly half of the resources devoted to rural poverty are designated to support proposals from priority groups (women, indigenous people, children, and the elderly) and persons in marginalized areas.

One of SAGARPA's major activities directly addresses the level of technological development in production agriculture. The Alianza Contigo is a cluster of programs that were formerly operated under the name Alianza para el Campo (Alliance for the Countryside). Over the last several years, the Mexican Government has simplified Alianza's administrative requirements and consolidated its activities into a smaller number of program areas (table 7). The largest program area is Support to Investment and Capitalization, accounting for 27 percent of Alianza's total budget for 2004. Specific examples of such support include public cost-sharing of agricultural mechanization and technical improvements to irrigation, as well as government payments to help marginal producers switch to more productive activities (Tabasco Secretaría de Desarrollo Agropecuario, Forestal, y Pesca, 2004). Support to Rural Investment Projects is the second largest program area, with

Table 7—In 2004, Alianza Contigo devoted about U.S. $1.3 billion to the development of production agriculture in Mexico

Item	Total budget		Share of total budget	Federal contribution		Federal share
	Pesos (millions)	*U.S. dollars (millions)*	*Percent*	*Pesos (millions)*	*U.S. dollars (millions)*	*Percent*
Total	14,562	1,289	100.0	7,735	685	53
Agriculture	5,110	452	35.1	1,965	174	38
Support to Investment and Capitalization	3,936	348	27.0	1,420	126	36
Strengthening of Product Systems	959	85	6.6	413	37	43
Research and Technology Transfer	215	19	1.5	132	12	61
Livestock	2,097	186	14.4	700	62	33
Livestock Development	1,987	176	13.6	644	57	32
Development of Integral Livestock Projects	110	10	0.8	55	5	51
Rural Development	5,471	484	37.6	3,855	341	70
Fund to Restructure and Stabilize the Coffee Sector	900	80	6.2	900	80	100
Support to Rural Investment Projects	2,754	244	18.9	1,744	154	63
Rural Capacity Building	1,049	93	7.2	695	61	66
Strengthening of Companies and Organization	768	68	5.3	516	46	67
Sanitation and Agri-Food Safety	883	78	6.1	250	22	28
Aquaculture and Fishing	940	83	6.5	940	83	100
Other programs	60	5	0.4	25	2	42

Exchange rate = 11.300 pesos per U.S. dollar for 2004.
Total Federal contribution does not precisely match figure in table 5 since the budget figures are from two different points in time.
Sources: SAGARPA, as cited by Statistical Annex to *Cuarto Informe del Gobierno* (Fox, 2004, p. 398); and USDA/ERS (2005).

19 percent of Alianza's 2004 budget. This program area also provides cost-sharing to producer groups and organizations, primarily for the purchase of capital goods.

The total cost of Alianza Contigo—about U.S. $1.3 billion in 2004—is shared roughly equally by Mexico's Federal and State Governments, although the shares of each vary considerably by program area (table 7). In 2004, SAGARPA's contribution to Alianza Contigo accounted for 18 percent of the secretariat's budget (see table 5).

Agricultural finance. The National Agreement for the Countryside committed Mexico's Federal Government to undertake a support program for producers with bad debts to the country's agricultural development bank and to promote the reentry of these persons into the development banking system. To achieve these objectives, the National Agreement's emergency spending proposal allocated 11 billion pesos (U.S. $1 billion) for additional loan credits and guarantees and another 3 billion pesos (U.S. $277 million) for the forgiveness of certain debts.

This infusion of resources takes place at a time when the Mexican Government is reworking its approach to agricultural finance. On June 30, 2003, the government dissolved its troubled agricultural development bank, Banco

Nacional de Crédito Rural (BANRURAL), and replaced it the next day with a new governmental institution, Financiera Rural. The primary mission of Financiera Rural is to make loans to agricultural producers and rural financial intermediaries, to facilitate capacity building among producers, and to foster the development of rural financial intermediaries.

Unlike BANRURAL, Financiera Rural is not a bank and does not offer savings accounts. Rather than disperse funds through its own network of offices, Financiera Rural does so through the branches of several affiliated banks, and it also operates programs to distribute credit through other entities and to facilitate contract agriculture. During its first 6 months of operations (July to December 2003), Financiera Rural lent 4,124 million pesos (U.S. $380 million) to some 23,000 customers. The assets of Financiera Rural totaled 18,346 million pesos (U.S. $1.6 billion) at the close of 2003.[10]

[10]For the close of 2003, an exchange rate of 11.236 pesos per U.S. dollar (December 2003) is used.

Simultaneous to these reforms, the Bank of Mexico's Funds Instituted in Relation with Agriculture (Fideicomisos Instituidos en Relación con la Agricultura—FIRA) is continuing its activities in agricultural finance. FIRA was created by the Mexican Government about 50 years ago in order to offer credits and guarantees to the agricultural, forestry, fisheries, and rural sectors. This second-tier, government-owned fund is managed by the Banco de México, Mexico's central bank.

Since 1999, FIRA has pursued a new business model that considers the financial needs of the entire food system, including some nonagricultural activities in rural areas. To accomplish this task, FIRA is developing new products, such as structured financial instruments and inventory financing, and it is fostering a wider distribution network for its funds that includes nonbank lending institutions called Limited-Purpose Financial Societies (SOFOLES—Sociedades Financieras de Objeto Limitado), financial leasing companies, and warehouse companies. FIRA also provides agribusiness consulting and sector-specialized information and analysis.

In 2003, FIRA lent 36,321 million pesos (U.S. $3.3 billion) for agricultural financing, benefiting nearly 771,000 producers. About 95 percent of these credits were channeled through commercial banks. That same year, FIRA also guaranteed nearly 15,559 million pesos (U.S. $1.4 billion) in credits, supporting the efforts of over half a million borrowers. At the close of 2003, the assets of FIRA's four constituent funds totaled about 109,305 million pesos (U.S. $9.7 billion) (FIRA, 2004).

International trade policy. Both Agri-food Armor and the National Agreement called for the vigorous use of trade remedies such as antidumping and countervailing duties to protect Mexican agriculture from *prácticas desleales*, a term meaning "illegal" or "disloyal" practices. As part of Agri-food Armor, the Executive Branch proposed a legal reform to expedite the government's response to unfair trading practices and announced its intension to strengthen interagency coordination in this area. In the National Agreement, the government promised to create an office of commercial investigations with the participation of *campesino* and producer organizations in order to monitor agricultural imports for instances of dumping, and it seemed to indicate that it would consider a dumping investigation with

respect to imports of dried beans. So far, the Mexican Government has not initiated an antidumping investigation regarding this product.

Perhaps the National Agreement's most controversial element was its call for the Mexican Government to begin immediate consultations with Canada and the United States about the establishment of "a permanent mechanism to administer the importation of white corn and beans." NAFTA's current provisions for corn and beans allow for tariff- and quota-free access for U.S. and Canadian product beginning on January 1, 2008. The Canadian and U.S. Governments have clearly indicated their unwillingness to reopen the NAFTA negotiations.

The National Agreement also contained several statements regarding *cupos de importación*, or import permits. In general, the government committed itself not to issue *cupos* beyond the quantities required by Mexico's international trade agreements, except in cases where there is an actual deficit between domestic supply and demand. For U.S. exports to Mexico, this would apply to corn, beans, and nonfat dry milk, the three products that are still subject (until 2008) to tariff-rate quotas under NAFTA.

In support of this commitment, the Mexican Congress required that white corn imported from the United States during 2004 be subject to the full over-quota tariff allowed by NAFTA, 72.4 percent (Anderson and Juarez, 2004). While this is a departure from Mexico's tendency over the past decade to apply a minor, over-quota tariff to white corn from the United States, the actual importance of this policy change may be negligible. U.S. white corn exports to Mexico have declined in recent years, due in part to marketing supports provided by the Mexican Government to domestic white corn producers in certain regions (Zahniser and Coyle, 2004).

The National Agreement also revealed Mexican interest in something akin to a common agricultural policy for North America. Specifically, the Mexican Government agreed to promote the formation of an Agreement of Cooperation in the Area of Rural Development with Canada and the United States, with the intention of reducing asymmetries among the three countries. Suggested elements included an investment fund for disadvantaged regions; the establishment of an equitable policy of prices, supports, and subsidies; and a trinational commission in the area of measurement, standards, and phytosanitary criteria. Although a formal agreement of this type has not been signed, the governments of Canada, Mexico, and the United States are engaged in numerous cooperative activities related to agriculture.

In the area of food safety and quality, Agri-food Armor emphasized several ongoing governmental activities that directly relate to international trade. For example, it noted the establishment of a quality certification program for agri-food products (Inspección de Calidad Agropecuaria). This voluntary program, which relies on inspectors trained and approved by SAGARPA's National Service of Agri-food Health, Safety, and Quality (SENASICA), is intended to minimize disputes among buyers and sellers and to ensure that the sales price reflects the quality of the product. The government is also engaged in other important initiatives related to trade, food safety, and quality that were not explicitly mentioned by Agri-food Armor. For instance, the government has established the quality certificate "México Calidad

Suprema" (Supreme Quality) to distinguish Mexican agricultural and food products of exceptional quality, and it is working with the Mexican private sector to promote fresh fruit and vegetable exports under the banner "MexBest."[11] These programs strengthen Mexico's already successful efforts to increase fruit and vegetable exports to the United States.

[11]For details, see MexBest's websites at www.infoaserca.gob.mx/mexbest and www.mexbest.com.mx

Through Agri-food Armor, the Mexican Government also reiterated its commitment to securing recognition from other countries of its disease-free zones and sanitary programs, with the goal of taking full advantage of Mexico's various trade agreements. With respect to the U.S. market, Mexico has made several inroads in this area over the past several years. In 2003, USDA's Animal and Plant Health Inspection Service (APHIS) added the Mexican States of Baja California, Baja California Sur, Chihuahua, and Sinaloa to its list of regions considered to be free of Classical Swine Fever, and in 2004, APHIS added the States of Campeche, Quintana Roo, and Yucatán to the list of regions considered to be free of Exotic Newcastle Disease. These recognitions could ultimately lead to more substantial pork and poultry exports from Mexico to the United States (USDA/APHIS, 2003; USDA/APHIS, January 2004). In 2005, APHIS implemented a rule that allows avocados from approved orchards and municipalities in the State of Michoacán to enter all 50 U.S. States except California, Florida, and Hawaii on a year-round basis. Starting in 2007, the rule will apply to all 50 States (USDA/APHIS, November 2004).

Canada's Agricultural Policy Framework[12]

In late 2003, Canada's Federal and Provincial governments began implementing a new structure for their country's agricultural policy, called the Agricultural Policy Framework (APF). The underlying principle of the APF, portions of which are still evolving, is to provide a much broader and more integrated, long-term approach to agricultural policy, one that focuses on the sector's ability to increase its profitability. Unlike Mexico's recent policy innovations, the APF is not explicitly cast as a reaction to U.S. agricultural policy or competition from U.S. producers. Instead, it represents an effort to position Canada's agricultural and agri-food sectors ahead of the global competition, wherever it exists, and to brand Canada as a world leader in food safety, innovation, and environmental protection. The keystone of the APF is a new income stabilization and disaster assistance program.

The APF's beginnings lie in the June 2001 annual meeting of Canada's Federal, Provincial, and Territorial agricultural ministers, held in Whitehorse, Yukon Territory. At this meeting, the ministers agreed in principle on an action plan with five elements: safety nets, food safety, science and innovation, the environment, and renewal. A year later, the ministers formalized the plan by signing the Agricultural Policy Framework Agreement. The APF contains the same five elements identified in Whitehorse, with slight changes in wording:

(1) Business risk management,

(2) Food safety and food quality,

(3) Science and innovation,

(4) Environment, and

(5) Renewal.

By the end of 2003, all of Canada's Provinces had signed agreements with their Federal Government to implement the APF. The implementation agreements govern the delivery of new programming under the APF's five elements, including the nature of each program, delivery mechanisms, and which level of government will administer them. In addition, the agreements list program costs and formalize such things as the management structures needed to oversee particular programs. A broad description of the five APF programs follows, along with a description of Canada's previous farm safety net.

Previous safety net. In late 1994, Canada's Federal and Provincial agricultural ministers implemented a new generation of farm safety net programs consisting of three components: (1) crop insurance; (2) a subsidized savings program for producers, called the Net Income Stabilization Account (NISA); and (3) various companion programs at the Provincial level. In the late 1990s, Canada added a fourth component to its safety net—emergency income supports—in order to offset a steep drop in commodity prices. These four components were in place at the time of the Whitehorse meeting

[12]Section authored by John Wainio.

in 2001 and generally formed the departure point for the APF's proposals in business risk management.

Crop insurance was the oldest part of Canada's farm safety net, with roots dating back to 1939. It offered protection against various production risks, including drought, flood, hail, frost, excessive moisture, and insects. Payments were triggered when a producer's yield fell a certain percentage below that farm's average historical yield due to any of the risks covered. Premiums were charged so that the program would be actuarially sound. Producers paid for 40 percent of the premium, while the two levels of government contributed a total of 60 percent. However, the distribution of the 60 percent between the Federal and Provincial governments varied considerably across Canada.

NISA—a national, voluntary, whole-farm program that was initiated in 1991—gave qualifying producers the opportunity to deposit up to 3 percent of their eligible net sales (ENS) annually into subsidized savings accounts. Participating producers received matching contributions from the Federal and Provincial governments, as well as a 3-percent interest bonus over and above the regular interest rates offered by their financial institutions. ENS were calculated by taking the gross sales of qualifying commodities minus the purchase of like commodities (for example, net sales of crops minus the cost of seed, or net sales of feeder cattle minus the cost of purchased calves). Generally, all primary agricultural products qualified for NISA, except those covered by supply management (dairy, poultry, and eggs).

The companion safety net programs operated by the Provincial governments were intended to complement crop insurance and NISA by addressing more local and regional concerns. Industry development funds and NISA enhancements are two examples of these programs. For instance, Alberta operated a Provincial crop insurance program with a revenue-insurance component that included a floor price to protect farmers from low market prices.

Like the United States, Canada provided emergency supports to producers in response to a sharp drop in commodity prices in the late 1990s. The Agriculture Income Disaster Assistance (AIDA) program was available in 1998 and 1999 and then replaced by the Canadian Farm Income Program (CFIP), which was funded through March 2003. Both programs covered all commodities, with payments based on a producer's gross margin—farm revenues minus operating expenses. Payments were made when the gross margin fell below 70 percent of the base level, but were limited to restoring income only to the 70-percent level.[13]

Several programs outside the safety net also helped Canadian producers to manage risks. Two separate cash advance programs (spring and fall) addressed annual cash flow challenges that were not specifically covered by crop insurance or NISA. The Federal Government guaranteed the repayment of cash advances that producer organizations made to their members. In the spring, producers who participated in crop insurance were eligible for up to C$50,000 (about U.S. $43,000) to finance their operating costs during planting, with the Federal Government paying the interest on the entire advance.[14] In the fall, producers were provided up to C$250,000 (U.S.

[13]In 1998, the base gross margin was equal to the average of the previous 3 years. Subsequently, it was changed to equal the 5-year Olympic average. In an Olympic average, the highest and lowest values are dropped prior to the calculation of the average.

[14]The average exchange rate for December 2004, C$1.157 per U.S. dollar, is used throughout this section.

$216,000) until storable crops could be marketed, with the first C$50,000 being interest-free.

Business risk management. Following the signing of the APF, a team of Federal and Provincial officials conducted a comprehensive review of Canada's farm safety net programs. They discovered that while many elements worked well and were popular with producers, there were gaps in coverage, questions about the equity and fairness of the programs in different parts of the country, and instances in which programs seemed to work against each other. They concluded that a comprehensive safety net policy was a key component to managing business risk and building a stronger, more profitable agriculture sector.

To address these concerns, the APF contains a whole-farm income stabilization and disaster protection program, the Canadian Agricultural Income Stabilization (CAIS) program. The CAIS is designed to replace both the NISA and the CFIP and contains the requirement that producers withdraw all funds and close their NISAs by March 31, 2009. In addition, the business risk management element contains a production insurance program that covers more commodities and offers more types of policies than the former crop insurance program.

With a total Federal budget of C$5.5 billion over 5 years, the CAIS represents the longest and most flexible financial commitment ever made to agriculture in Canada. Under the traditional government cost-sharing arrangement of 60 percent by the Federal Government and 40 percent by the Provinces, the total CAIS funding would be over $1.8 billion per year. The yearly average, however, is not fixed; rather, the CAIS is subject to a "rolling budget," as unused funds can roll over from year to year and money can be borrowed in one year from future year's budgets.

To participate in the CAIS program, producers select a level of protection for their operation and then secure this protection by making a refundable deposit into a CAIS account held at a participating financial institution. The minimum deposit is set at 14 percent of the farm's reference margin, a level that ensures that at least 70 percent of the producer's margin is covered in the event of a catastrophic loss (the producer margin in a given year dropping to zero).[15] The reference margin is based on a 5-year Olympic moving average of the difference between farm revenue and farm expenses.

A payment is triggered when the production margin (revenues minus expenses) in a given year falls below the reference margin.[16] In the event of a margin decline, the farmer would make a withdrawal from his or her CAIS account, triggering a government payment. In the absence of a margin decline, the account could be rolled over for coverage the following year or adjusted if the farmer wanted a different level of coverage.

The size of the government payment to an individual producer is based on the balance in the account and the size of the loss. In this way, the cost of providing a safety net under a producer's income is shared among the Federal and Provincial governments and the producer, with the government contribution increasing with the margin decline. Under the APF, the core

[15]Shortly after the CAIS came into operation, a revision was made for the 2003 and 2004 program years allowing producers to deposit only one-third of the total amount required to secure their desired protection level. Another revision makes government funds available for margin declines that fall below zero. In this event, the producer will receive C$0.60 in government contributions for each C$1 of the decline below zero, without the need for a matching contribution from producers.

[16]The calculation of the production margin in the CAIS differs from the methodology used to calculate the gross margin under NISA. Because fewer expenses are deducted in the CAIS production margin calculation, the producer is now ensured a higher margin and, as a result, will be provided with more protection when income drops.

funding formula is 60 percent by the Federal Government and 40 percent by the Provincial governments.

The CAIS program consists of two components: a stabilization feature to protect producers from small declines in their production margin (less than 30 percent) and a disaster assistance component to cover large declines (over 30 percent). When the production margin declines by more than 30 percent, the government provides C$4 in disaster assistance for each C$1 withdrawn from the account, until the production margin reaches 70 percent of its reference level. Payments are always made from the "bottom up" rather than from the "top down," thus ensuring the producer receives the greatest possible government benefit. If the decline in the production margin is greater than 15 percent but less than 30 percent, the producer will receive C$2.33 from the government for each C$1 withdrawn, until the combined amount of withdrawals and government payments restores the production margin to 85 percent of its reference level. For relatively small declines, (less than 15 percent), the producer will receive C$1 from the government for each C$1 withdrawn from the CAIS account, until the combined amount of withdrawals and government payments restores the production margin to its reference level.

As an example, consider a producer with a reference margin of C$100,000 who has selected the minimum amount of coverage, which requires a deposit of C$14,000 (14 percent of C$100,000) (table 8). Imagine that the producer experiences a margin drop of C$50,000, or 50 percent of the reference margin. Under the disaster assistance component, the producer can restore the production margin to 70 percent of its reference level by withdrawing C$4,000 from the CAIS account, with the government contributing the additional C$16,000 in disaster assistance. This latter amount is based on a ratio of 4 to 1.

Under the income assistance component, the producer will be able to restore the production margin to 85 percent of the reference level by withdrawing C$4,500 from the account, as the government will contribute an additional C$10,500, based on a ratio of 2.33 to 1. Finally, by withdrawing the remaining C$5,500 in the account, the producer will receive a matching C$5,500 contribution (at a 1-to-1 ratio) from the government. In total, the producer will receive C$32,000 from the government. This amount plus the C$14,000 withdrawn from the CAIS account equals C$46,000, bringing the production margin to 96 percent of its reference level.

Had the producer deposited another C$2,000 into the account, bringing the initial balance to C$16,000, 100 percent of the reference margin would have been covered, since the government would have provided another C$2,000 at the 1-to-1 contribution level. Based on the CAIS formula for government payments, the minimum deposit of 14 percent would fully cover income drops of up to 40 percent of the reference margin, while returning 70 percent of the reference margin if the margin fell to zero (expenses were greater than or equal to revenue) in the claim year.

For the Provincial companion programs, it was proposed that the Provinces be allowed to continue offering them if they wish, with Federal funding for these programs gradually shifted to the CAIS over the next 3 years. There

Table 8—The CAIS program is prepared to augment the withdrawals of its depositors should they experience a "rainy day"

Scenario Producer with a reference margin of C$100,000 has deposited C$14,000 into the CAIS account. Producer then falls short of the reference margin by 50 percent (C$50,000).

	Producer's objective	Target level for this producer	Amount needed	Ratio	Government contribution	Withdrawal from CAIS account	Balance in CAIS account
Disaster assistance	Restore production margin to 70 percent of reference level, subject to availability of funds in CAIS account	70,000 = 70 percent x 100,000	20,000 = 70,000 - 50,000	4:1	16,000	4,000	10,000
Income assistance	Restore production margin to 85 percent of reference level, subject to availability of funds in CAIS account	85,000 = 85 percent x 100,000	15,000 = 85,000 - 70,000	2.33:1	10,500	4,500	5,500
	Restore production margin to 100 percent of reference level, subject to availability of funds in CAIS account	100,000 = 100 percent x 100,000	15,000 = 100,000 - 85,000	1:1	5,500	5,500	0

Outcome Producer withdraws the entire C$14,000 from his or her CAIS account and receives an additional C$32,000 from the government. Had the producer deposited C$2,000 more into the account, he or she would have been able to cover the entire decline (C$50,000) in his or her production margin.

Source: Prepared by USDA's Economic Research Service using Canadian description of program.

was no language, however, precluding the Provinces from implementing their own income support programs after the 3-year period, even though questions have been raised about the equity and fairness of support across the country. The spring credit advance program was extended in 2003 for an additional 5 years, with the maximum advance remaining at C$50,000. It was also proposed that the fall cash advance programs be extended for 5 years and then integrated within the new business risk management approach. Regarding supply management, which according to the APF constitutes a risk management tool, the supply managed commodities will be covered under the disaster assistance component of the CAIS, but they will not be eligible for government funds under the income stabilization component.

Food safety and food quality. In the area of food safety and food quality, the APF aims to implement product tracing throughout the "agri-food continuum" (i.e., from farms through the processing and distribution sectors to the wholesale, retail, and food service sectors) and to adopt Hazard Analysis and Critical Control Point (HACCP) practices.[17] Under the Canadian Food Safety and Quality Program (CFSQP), the Federal Government will invest C$80 million (U.S. $69 million) over 4 years to educate producers about onfarm food safety systems and to help them implement these systems. The onfarm food safety systems were the product of the CFSQP's first component, which provided C$62 million (U.S. $54 million) to industry groups to develop systems specific to their commodities.

[17]HACCP is a science-based, preventative approach to food safety that is recognized worldwide. It addresses hazards by anticipating and preventing them at different points along the processing and marketing chain, rather than by inspecting the final product.

Science and innovation. Perhaps the most ambitious part of the APF is the development of science and innovation programs to increase the potential for growth and profitability in Canada's agriculture and agri-food sectors. The APF explicitly identifies science and innovation as the key to the industry's future, and the long-term success of the APF is tied to the government's ability to foster a supportive climate in Canada for scientific investment, technology transfer, and the commercialization of new products. Programs in this area are still very much in the planning stage, with studies, consultations, summits, and pilot projects yet to be carried out before an action plan is developed and put into place. For their part, some producer groups say that the government is diverting attention from the short-term problems that currently afflict the sector by promoting science and innovation as a "cure all."

Environment. The APF places a strong emphasis on minimizing the risks to farm income arising from potential environmental liabilities and lost markets due to consumer concerns.The goals of the environmental element center on increasing the use of beneficial fertilizer, chemical, land, and water management practices. Expected benefits include improvements in soil fertility and erosion, water health and conservation, cleaner air, and biodiversity protection.

One element of this program is Greencover Canada, a 5-year, C$110-million (U.S. $95 million) initiative to help producers improve grassland management, protect water quality, reduce greenhouse-gas emissions, and enhance biodiversity and wildlife habitat. The program also contains a land conversion component to pay producers to establish and maintain perennial cover—primarily long-lived species, such as forage, shrubs, and trees—on

environmentally sensitive land. Perennial short-term rotational crops, such as alfalfa, are not eligible.

Renewal. The renewal program recognizes that agriculture is knowledge-intensive and is intended to help farmers deal with the changing nature of agriculture. The Canadian Farm Business Advisory Services (CFBAS) is the cornerstone of the renewal program. Through the CFBAS, eligible producers—those with at least C$10,000 (U.S. $9,000) in annual gross farm sales and beginning producers—will have access to a range of services, including a free farm business assessment. This assessment will include consulting services to help producers develop a detailed business plan for the future.

Another aspect of the renewal component is the Specialized Business Planning Services, which will help fund producers wanting to explore options in other farm business areas, including diversification, marketing, human resources, expansion, risk management, and succession. To assist the development of these plans, producers will work with a consultant with expertise in a specific area. The renewal program also will include training for producers wanting to upgrade their skills and adopt innovative technologies. The original Whitehorse framework suggested that the renewal program would provide exit funds for producers wanting to leave agriculture, but it does not appear that this aspect of the framework will be implemented.

Epilogue. Originally devised in June 2001, the APF underwent an arduous development process before it finally became operational in late 2003. In the 3 years leading up to the Whitehorse meeting, the agricultural policy debate in Canada centered on emergency income support, prompting decisionmakers to conclude that Canadian policy had to move beyond crisis management. Their solution was a comprehensive approach to risk management that encourages farmers to improve the viability of their operations through change and innovation while promoting food safety and environmentally responsible farming.

During the 2 years following the Whitehorse meeting, many of the initial concepts associated with the APF were either modified or replaced. Initial indications were that the government would pursue a “carrot-and-stick” approach, with producers having to adopt both environmental and food safety programs in order to have access to government assistance. Such an approach is not part of the current APF, which instead relies on voluntary implementation.

Without a doubt, the business risk management program underwent the most adjustment. The initial proposal was to expand NISA to include a disaster coverage component and to broaden crop insurance. In the end, NISA was scrapped and the CAIS was developed. As recently as June 2004, amendments were being made to the CAIS to include coverage of negative margins, to increase the payment cap for individual farms from C$975,000 (U.S. $843,000) to C$3 million (U.S. $2.6 million), and to simplify deposit requirements for producers. With a 1-year review of the program scheduled to be completed soon, additional adjustments may be made in the near future.

Initial questions about whether the annual funding under the APF would be able to meet the future needs of the agricultural sector were answered in March 2005 when the Canadian Government announced an additional C$1 billion in immediate Federal assistance for cash-strapped Canadian farmers facing record-low farm incomes. At the same time, the Minister of Agriculture called on the Provinces to match the Federal money according to the traditional 60/40 shared Federal/Provincial basis. The C$1 billion of Federal monies will be delivered under yet a new ad hoc program, the Farm Income Payment Program, a need for which the CAIS was meant to eliminate. It is meant to supplement current Federal and Provincial agriculture programs that last year paid out a record C$4.9 billion to farmers. The program will provide assistance to all sectors but will be of greatest benefit to two of the most affected, cattle and other ruminants and grains and oilseeds. It follows on a series of program initiatives and investments in the agricultural sector since 2003 to producers hurt by drought, the impact of bovine spongiform encephalopathy (BSE), the Avian flu epidemic, and the decline in many commodity prices.

Although international trade is not one of the APF's five main elements, the framework does contain a strong international emphasis, along with government funding for trade promotion. With the export market taking about half of Canadian agricultural production, the enhancement of Canada's ability to compete internationally is seen as one of the main goals of the APF. The strategy is to make the "Canada Brand" known throughout the world in terms of quality, safety, and environmentally responsible practices. In addition to gaining recognition for Canadian products, the APF international component stresses improving market access, overcoming foreign technical barriers, and enhancing international development.

With its numerous goals and comprehensive approach, the APF represents a significant reorientation of Canadian agricultural policy. Only time will tell whether it enables Canadian producers to strengthen their businesses, increase prosperity, and meet the demands of consumers at home and abroad.

Conclusion

The United States, Mexico, and Canada have made important changes to their agricultural policies over the past several years. Heeding the experience of the late 1990s and early 2000s, when commodity prices sank to unusually low levels, all three countries have institutionalized income supports that provide additional assistance to producers when commodity prices (or net farm revenues, in the case of Canada) decline. The United States has introduced a program of countercyclical payments, similar to those in effect from 1974 to 1995; Mexico is providing countercyclical assistance through its Target Income Subprogram; and Canada has formulated a new subsidized savings plan that provides a safety net for the incomes of participating producers.

Each country also has made noteworthy reforms in other areas of agricultural policy. Canada has crafted new approaches to food safety and food quality, the environment, the role of science in agriculture, and the overall reinvigoration of the agricultural sector. Mexico has created a new program of energy discounts for its agricultural producers and is revamping its activities in agricultural finance. And the United States is proceeding with a comprehensive buy-out of tobacco quotas while expanding its efforts in conservation, placing greater emphasis on land continuing to be used for production rather than land retirement.

Despite these numerous changes, there is much continuity in each country's farm programs. Canada's main agricultural reform has been to replace one subsidized savings plan for producers with another, and the longstanding crop insurance program is likely to be revamped in the near future. Similarly, many of the U.S. commodity and conservation activities authorized by the 2002 Farm Act continue the reforms of the 1996 Farm Act, but the 2002 legislation also introduces a new countercyclical payment program. The new U.S. legislation retains the extensive planting flexibility that the previous legislation offered farmers, and key income supports are again designed to have a limited impact on production and trade. And in Mexico, the size and composition of SAGARPA's activities is similar to what prevailed prior to Agri-food Armor and the National Agreement for the Countryside.

In all three countries, fiscal resources have been sufficient in recent years to allow agricultural policy to proceed in a direction that is not altogether different from its previous course. This may not necessarily be the case in the future, as fiscal constraints could conceivably affect the size and content of agricultural policies in each country.

According to some congressional analysts, future U.S. spending on agricultural programs is already being evaluated within the context of competing priorities, such as permanent tax cuts and increased spending on national defense (Conley, 2004). The appropriations committees continue to legislate reductions in spending on 2002 Farm Act programs under their jurisdiction. These cuts—largely for conservation, research, and rural development programs—totaled $1.4 billion for FY 2005 and $650 million for FY 2004 (Jagger, 2005). Moreover, the Conservation Security Program, originally designed under the 2002 Farm Act to be available to all producers willing to

undertake conserving practices on working land, has been implemented so far only as a limited watershed program (Mercier, 2004), and its multiyear funding has been capped at $6 billion in FYs 2005-14.

As part of its effort to reign in aggregate government spending, Canada's Federal Government has committed itself to keep its expenditures on the APF beneath a total of $C5.5 billion (U.S. $4.8 billion) during 2004-08. Within this 5-year limit, the annual amount spent on the APF is allowed to vary from one year to the next. The sum of C$5.5 billion does not include the contributions of the Provincial governments under the 60-40 cost-sharing formula. One Provincial government—Saskatchewan—already has expressed doubts about whether it will be able to make its full contribution to the APF.

In Mexico, the government's traditionally tight fiscal situation is complicated by the annual nature of the budgetary process for agricultural spending. Unlike Canada and the United States, spending authority for most Mexican agricultural programs is granted on a year-to-year basis. Thus, SAGARPA must ensure that its total expenditures for a given year do not exceed its annual budgetary allocation. As was suggested in the discussion of the Target Income Subprogram, this feature of the Mexican budgetary process complicates efforts to implement multiyear, comprehensive farm programs whose rules and regulations are spelled out well in advance of any planting decisions.

While spending authority for Mexico's main income support program—PROCAMPO—is granted on an annual basis, the program's operational authority extends for 15 years (1994-2008). This means that SAGARPA faces the annual challenge of assuring that its expenditures on programs other than PROCAMPO do not exceed the difference between the secretariat's total budget allocation and its spending on PROCAMPO. As PROCAMPO approaches the end of its original lifespan in 2008, policymakers will need to decide whether to continue the program or to use its budgetary allocation for other purposes. Ultimately, this decision is likely to have a strong impact on the size and content of Mexico's agricultural programs.

A new multilateral agricultural agreement at the WTO could also affect the size and content of farm programs in North America. In August 2004, the General Council of the WTO adopted a framework for negotiating the rules covering the use of domestic and export support for agricultural production and the negotiation of commitments for improving market access for agricultural exports. The negotiating framework for domestic support features product-specific spending caps and endorses the concept in which countries with the highest levels of support make larger reductions in their programs. Until the WTO members actually agree upon a new agreement governing domestic support, however, we will not know the extent to which any new spending limits will accommodate the programs described in this report.

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