

IPC Issue Brief 25
September 2007

The 2007 US Farm Bill: Implications for Developing Countries

BY TIM JOSLING, DANIEL A. SUMNER, ROBERT L. THOMPSON,
MARY CHAMBLISS, AND KARA LANEY

This paper was made possible by generous support from the UK Department for International Development.

IPC finds practical solutions that support the more open and equitable trade of food & agricultural products to meet the world's growing needs.

About the Authors: Tim Josling is a Senior Fellow at the Freeman Spogli Institute for International Studies at Stanford University. Daniel A. Sumner is the Director of the University of California Agricultural Issues Center and the Frank H. Buck Jr. Professor with the Department of Agricultural and Resource Economics, University of California, Davis. Robert L. Thompson is the Gardner Professor of Agricultural Policy at the University of Illinois at Urbana-Champaign. Mary Chambliss is an independent consultant on international food aid issues. Kara Laney is the Policy Associate at the International Food & Agricultural Trade Policy Council.

Edited by Charlotte Hebebrand

Layout by Amy Testa

© 2007 International Food & Agricultural Trade Policy Council

All rights reserved. No part of this publication may be reproduced by any means, either electronic or mechanical, without permission in writing from the publisher.

Membership of the International Food & Agricultural Trade Policy Council

Piet Bukman (Chairman), The Netherlands		Marcelo Regúnaga (Vice-Chairman), Argentina
Bernard Auxenfans, France	Carl Hausmann, United States	Michel Petit, France
Malcolm Bailey, New Zealand	Shannon Herzfeld, United States	Per Pinstrup-Andersen, Denmark
Joachim von Braun, United States	Jikun Huang, China	Henry Plumb, United Kingdom
David Blackwell, United States	Nicolas Imboden, Switzerland	Caspar Ridley, Switzerland
Csába Csáki, Hungary	Rob Johnson, United States	Eugenia Serova, Russia
Pedro de Camargo Neto, Brazil	Hans Jöhr, Switzerland	Hiroshi Shiraiwa, Japan
Luis de la Calle, Mexico	Timothy Josling, United Kingdom	Jiro Shiwaku, Japan
Leonard Condon, United States	Rolf Moehler, Belgium	James Starkey, United States
H.S. Dillon, Indonesia	Raul Montemayor, Philippines	Jerry Steiner, United States
Cal Dooley, United States	C. Joe O'Mara, United States	Robert L. Thompson, United States
Franz Fischler, Austria	Nestor Osorio, Colombia	Carlo Trojan, The Netherlands
Michael Gifford, Canada	Carlos Perez del Castillo, Uruguay	M. Ann Tutwiler, United States
Tim Groser, New Zealand	J.B. Penn, United States	Ajay Vashee, Zambia

INTRODUCTION*

The link between the considerable degree of support given to farming in OECD countries and the difficulties faced by developing country farmers has come into sharp focus in recent years.¹ There is no doubt that OECD farm programs have a significant impact on the structure of world markets, on the volume and direction of trade, and on world prices. A World Bank estimate puts these price impacts at between 10 and 50 percent, depending on the commodity (Table 1). Just as important are the implications on the trade policies of many OECD countries, which find it necessary to protect their farm sectors from foreign competition even while encouraging other countries to open up their own markets. Johnson (1950) raised this concern six decades ago, but the consequences of these policies have recently become clearer in the context of the Doha Round of negotiations in the World Trade Organization (WTO). The coincidence of a WTO negotiating round, in which agriculture plays a central role, and the debate over the 2007 Farm Bill gives an opportunity to bring US farm policy into line with both domestic and international objectives.

Table 1: Impact of OECD Policies on World Commodity Prices
(Percent price depression below long-term trend)

Commodity	Percent
Rice	33-50
Sugar	20-40
Dairy Products	20-40
Cotton	10-20
Peanuts	10-20

Source: World Bank, *Global Economic Prospects 2003*, Chapter 2

The US is a major producer and exporter of many agricultural commodities of interest to developing countries. The allocation of land to various crops in the US and the size of harvests will always have a considerable influence on world markets; therefore, US agricultural plantings and practices, as shaped by US farm bills, have effects in other countries. But two additional factors are in play in the current Farm Bill debate that increase the significance of the “foreign policy” element of US farm and food legislation. One is the debate over food aid. As the US is the major donor of food aid, a vital source of cereals for many poor countries, any change in policy in this area is potentially meaningful. The second is the growing demand for corn for ethanol that has added a new dimension to the link between US markets and the conditions faced by the developing world. The future direction of US agricultural policies thus is of even greater interest to many people well beyond US borders.

The present farm bill, the Farm Security and Rural Investment Act of 2002, is set to expire September 30, 2007, and the US Congress is currently drafting new legislation to guide agricultural policy through at least

* This paper follows a series of IPC Policy Focus briefs on the Farm Bill: *US Farm Policy and the White Commodities: Cotton, Rice, Sugar and Milk*; *US Food Aid Policy and the Farm Bill*; *Energy and the Farm Bill*; *US Farm Bill Subsidies and World Commodity Markets*; and *The Farm Bill, Doha, the Budget (and Ethanol!)*. These papers can be viewed at http://www.agritrade.org/Publications/farm_bill_briefs.html.

1. The OECD is the Organization for Economic Co-operation and Development. Its members are Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

2012. The House of Representatives passed its version of the bill, the Farm, Nutrition, and Bioenergy Act, on July 27, 2007, while the Senate will begin to consider its version in September. After the Senate completes action, the conference committee will attempt to reconcile the two bills. This may prove to be a lengthy process. It seems likely that the reconciled Farm Bill will be sent to the President for signature in late October at the earliest, and it could be several weeks later than that. Given that the Bush administration has signaled that the President would veto the current House bill, it is certainly possible that no legislation will be ready this year.

Developing countries have much to gain from a change in the direction of US farm policy. As most of the poor in developing countries live in rural areas, and depend on agriculture for their livelihoods, these countries need domestic and international market opportunities for their agricultural products if they hope to reduce poverty. Many countries, especially those that rely heavily on farm exports, have been demanding the end to export subsidies and further reductions in domestic support payments in the developed world. For some, the consequences of these practices are particularly acute. The impact of US policies on agricultural producers in small island economies (such as the sugar exporters in the Caribbean) is often critical. Cotton producers in West Africa similarly have much to gain by a reduction in the subsidies that go to US cotton farmers (Alston, Sumner and Brunke, 2007).

Besides commodity programs, several other farm bill features affect agriculture outside the US. While the US food aid elements will be a modest part of the entire 2007 Farm Bill, they will provide programs which affect the poorest and often most needy people in the world. However, US food aid policies have been criticized for their effects on developing country markets. In the last several years, there has been considerable debate about the benefits of food aid delivered in cash rather than in kind. Cash food aid can provide not only more timely delivery, often of more acceptable commodities, but can also promote economic development when such purchases are made in developing country markets.

Energy policy has traditionally been separate from farm legislation. The 2002 Farm Bill was the first to include a separate energy title to deal with demand and prices for energy on the farm as well as the supply of bioenergy. In 2007, the Farm Bill will have a number of provisions in the energy title. Furthermore, the projected demand for ethanol is anticipated to keep the price of corn and a number of other commodities at historically high levels for the life of the next farm bill. This, too, has implications for developing countries, benefiting those who produce corn, soybeans, and other crops that can be used for energy production.

This brief will outline the impact of current US agricultural policies, including food aid and biofuels policies, on developing countries. The outlook for reform of these policies in the 2007 Farm Bill will be discussed, in the light of the passage of the House version that continues the status quo for the main commodity programs. Hope for a US farm bill more consistent with trade and development aims rests in the Senate. The implications of a lack of change for the WTO talks and the possibility of WTO challenges to US programs are assessed. The brief concludes by suggesting that US farm policy reform should take into account its impact on developing countries and more effectively influence the wider international commercial and political objectives of the US.

CURRENT US FARM SUPPORT POLICIES

In sharp contrast to the generally low levels of tariffs and direct support for the manufacturing and service sectors of the economy, the US remains highly protective of certain parts of agriculture. Subsidies for grain crops and cotton were introduced as a response to the Great Depression. Almost seventy-five years later these commodity supports are still in place, even though the characteristics of US agriculture have changed dramatically over the course of three generations. The shape of those policies no longer reflects the needs of agriculture as a whole or the role of agriculture in the economy. Only about one percent of the labor force works on farms today compared with more than 20 percent when the commodity programs were first implemented.

One reflection of the disconnect between commodity subsidies and agricultural reality is the distribution of support among crops. Grains, oilseeds, and cotton are heavily subsidized, while hay and specialty crops receive little if any direct subsidy.² Among minor field crops, sugar stands out as having both price supports and substantial border protection: domestic sugar production is supported by a tariff that discourages sugar imports above designated quotas. The domestic dairy market is protected by border measures, as well as by a payment program, but meat producers receive little in the way of direct subsidies, although they benefit indirectly from subsidized grain production.

The current farm bill is divided into “titles” indicating its broad scope. Three titles are of particular relevance to developing countries. Commodity support programs are specified in Title I and include provisions for the major “program crops” such as corn, wheat, soybeans, cotton, and rice, as well as for sugar and dairy products. Title III deals with trade issues, including food aid. Title IX concerns the provision of energy from farm products.³ The discussion below reflects this categorization.

Commodity Support Programs

Support for such commodities as corn, barley, oats, sorghum, wheat, soybeans, cotton, and rice is provided in the current (2002) farm bill by three programs: the marketing loan program, the counter-cyclical payment program, and direct payments.

- The marketing loan program operates as a price support, paying the producer the difference between the loan rate, established in the farm bill for each program crop, and the loan repayment rate, which varies along with the crop’s market price each week according to rules set forth in the farm bill. Farmers may benefit from the program in one of two ways. They can receive gains from taking out a loan at the loan rate and repaying the loan at the lower loan repayment rate. These are referred to as marketing loan gains. The other option for farmers occurs when the price of the commodity drops below the established loan rate. Under these circumstances, farmers can sell the crop at the lower price and collect the difference between that price and the established loan rate from the government. These are called loan deficiency payments. Both types of payments are available on all production and are essentially a part of the returns per unit of production.
- Counter-cyclical program payments are based upon a farm’s historical production of a program crop. The size of the payment is equal to the difference between the target price established in the farm bill and the national average market price for that crop. Producers are not required to plant the program crop on the land eligible for payment, since the program is based on historical, rather than current, production practices. However, payments are not allowed and eligible acreage may be lost if fruits, tree nuts, vegetable, melons, or wild rice is planted on this land.

2. Specialty crops refer to fruits, vegetables, floriculture crops, tree nuts, nursery crops, and greenhouse crops. About one quarter of US cash receipts come from specialty crops. Corn, wheat, soybeans, cotton, and rice only comprise 21 percent of cash receipts, but they collected 93 percent of commodity program payments (\$43.5 billion) over the period 2002-2005.

3. The title numbers here refer to the 2007 House Farm Bill.

- Direct payments are based on historical production of program crops. The parameters for acres historically in production and historic yields are set by the farm bill. The farm bill also establishes a flat rate per unit of base production for each eligible crop. Payments equal the product of historical acreage times historical yield times the flat rate. Direct payments are made regardless of the current use of the land, but planting restrictions apply.

The level of support given by these programs varies with the state of the world market. Nonetheless, producers of the main program crops receive a considerable part of their gross revenue from government. Over the period 2000-2004, this proportion was as high as 34 percent for corn, 48 percent for wheat, 28 percent for soybeans, and 52 percent for rice (Table 2) – compared with an overall proportion for all crops and livestock of up to 24 percent.

Table 2: US Producer Support, 2000-2004
(Percentage Gross Revenue Provided by Government Support)

Commodity	Percent
Sugar	53-62
Milk	38-56
Rice	18-52
Sorghum	30-47
Wheat	22-48
Barley	20-42
Corn	13-34
Soybeans	14-28
Wool and Lamb	5-26
Pork, beef and broilers	4-5
<i>Overall</i>	<i>15-24</i>

Source: OECD PSE database

The main farm bill provision for sugar is a price support program, but this is mostly inoperative because import barriers (not fixed in the farm bill) keep the US price of sugar above the government-set price support. Nevertheless, the support is considerable. The OECD calculated a sugar Producer Support Estimate of about 55 percent in 2004, meaning that the US price was less than half the world price of sugar.⁴ The current over-quota tariff of about 16 cents per pound (slightly higher for refined sugar and slightly lower for raw cane sugar) is enough to keep out imports above the amount allowed under a zero tariff quota that is allocated to traditional sources of US imports. Under its obligations to the World Trade Organization, the US is required to maintain an import access quantity of 1.6 million tons, which is allocated to about 40 individual countries (Beghin, 2007). Since the US market price is typically in the range of 22 cents per pound (with the price support set at 21.5 cents), the tariff is high enough to keep additional sugar out of the US market unless the world price plus transport costs were to fall below 6 cents per pound.

US dairy policy is complex compared to programs for other commodities. The policy includes payments to producers when prices fall below a farm bill trigger; a price support program implemented by government purchase of manufactured dairy products; a tariff rate quota that limits imports; a small export subsidy to move surpluses of dairy products on to world markets; and marketing orders that feature

4. Producer Support Estimate (PSE): an indicator of the annual monetary value of gross transfers from consumers and taxpayers to support agricultural producers, measured at farm gate level, arising from policy measures which support agriculture, regardless of their nature, objectives, or impacts on farm production or income.

geographically-based price discrimination and pooling schemes. The result is a substantial level of protection for the dairy sector. The OECD calculates a US Producer Support Estimate of about 40 percent for dairy, a relatively high figure compared to the recent past reflecting relatively low milk prices in 2004. The main current support for dairy products derives from the import barriers and the marketing orders.

Import restrictions restrain competition in the domestic market for fruits and vegetables and for processed foods. However, exports of these products usually receive no subsidies. Specialty crops have not been included in the main commodity support programs, and no direct payments, loan provisions, or counter-cyclical payments exist for these crops. However, prices of specialty crops are enhanced somewhat because the planting restrictions on acres receiving commodity program payments reduce the area devoted to specialty crops. Of course, like other parts of agriculture, specialty crops also benefit from federal research and promotion programs, pest and disease management, and food safety efforts.

IMPACT ON DEVELOPING COUNTRIES

US farm programs significantly influence the ability of developing countries to develop their own agricultural industries and compete internationally. As the programs currently operate, US farm subsidies undermine the comparative advantage of developing countries' production of several commodities and disrupt their domestic markets.

Commodity Program Crops

Title I programs depress world market prices most when they stimulate domestic production in crops where US production represents a significant share of the relevant market. There are three ways that these supports encourage production. First, payments linked to specific crops give farmers an impetus to cultivate these commodities over others by guaranteeing and smoothing revenue. Second, payments based on levels of production provide an incentive to produce, regardless of market conditions. Third, with regard to counter-cyclical payments and direct payments, farmers may wish to maintain or build their acreage of these crops, in anticipation of program acre updates in a new farm bill, as was done in 2002.

The most heavily subsidized crops are also among the most important agricultural exports of the US. Exports account for more than half the production of wheat, cotton, and rice, while the US share of world exports is above 40 percent for corn, soybeans, and cotton (Table 3). In fact, the US exports began increasing in the 1960s in part as a means to reduce government stockpiles caused by subsidy-induced overproduction. US exports of corn, soybeans, wheat, cotton, and rice comprise a substantial portion of world trade in these commodities.

Table 3: US Share of World Production and Trade for Selected Commodities, Yearly Average, 2002-2005

Commodity	US Exports: Share of US Production	US Share of World Production	US Share of World Exports
Corn	18%	40%	61%
Soybeans	35%	38%	44%
Wheat	50%	9%	25%
Cotton	70%	20%	40%
Rice	52%	2%	13%

Source: Schnepf and Womach, Congressional Research Service.

Therefore, there should be little surprise that Title I programs for corn, soybeans, wheat, rice, and cotton tend to depress world market prices. Economic analysis suggests that US subsidies push down world corn prices by 9 to 10 percent, world wheat prices by 6 to 8 percent, and world rice prices by 4 to 6 percent (Sumner, 2005). For cotton, the price depression effect is estimated to be between 10 and 15 percent (Sumner, 2003 and Sumner, 2006).

The harmful effects of US commodity programs on world prices was at the center of the case brought to the WTO by Brazil against US cotton subsidies in 2002. This case highlighted the impact of US cotton subsidies on US production and on prices and production in other countries, especially developing countries. The WTO found that the magnitude of US subsidies and the importance of the US in the global market meant that US cotton subsidies suppressed the world price of cotton. In 2005, the WTO instructed the US to modify its cotton programs.

Brazil was not the only country arguing that US programs hurt their own interests. Four cotton producing countries in West Africa - Benin, Mali, Burkina Faso, and Chad - had made a separate appeal to the US and the EU to reduce cotton subsidies. For many producers in these countries, cotton is their sole source of cash income. While they face other constraints, such as poor infrastructure and lack of agricultural inputs, the financial health of these cotton farmers has also been hurt by the effect of US subsidies on the international price of cotton. Alston, Sumner and Brunke (2007) trace what the actual impact of removing US subsidies would be for a typical farm family in West Africa. They show that the gains from higher cotton prices, in the range of \$100 per year for a typical farm family, are enough to feed a child for a year or provide schooling and health care to several of the families' children. Thus, US subsidies can matter on the ground in places where a few extra dollars matters most.

With few exceptions, developing countries are not in a position to compete against subsidies from the US. They do not have the financial resources to stimulate domestic production by mirroring US farm subsidies or the capacity to successfully challenge the US in the WTO. Yet, US commodity programs are doubly destructive – first, by causing the subsidized US farmers to control a larger portion of the market than they would if the subsidies were removed, and second, by depressing market prices. US commodity programs thus negate the comparative advantage in agricultural production possessed by many developing countries.

As discussed, US sugar policy is mostly conducted through quotas and tariffs. By protecting US sugar producers from the world market, these policies stimulate domestic production, even though they cause almost \$900 million a year in net losses to the US economy (Beghin, 2003). While the US is not a large exporter of sugar, its market access restrictions depress world prices by more than 13 percent (Beghin, 2003). In addition to the price depression, these border barriers to the US market are extremely detrimental to developing countries, as sugar is a commodity in which many have a comparative advantage.

The major international implications of dairy programs, as with sugar, derive from the direct import trade barriers that protect the US industry from competition. Such protection tends to depress world market prices for dairy products, especially higher fat products. In addition, the subsidies tend to stimulate exports of dairy products, but the impacts on other countries are small because the US plays a relatively small role in export markets.

Specialty Crops

The planting restrictions faced by those receiving benefits under the main Title I programs tend to limit the production of specialty crops. This raises prices in the US and in world markets where US exports are important. Other producers of these crops will also benefit indirectly. While the Market Access Program provides export promotion assistance, the spending on the program is quite low relative to the number and magnitude of commodity exports eligible. There is little evidence that the promotion programs actually stimulate exports significantly. US policies for specialty crops, on the whole, have minor impacts on international market opportunities of developing countries.

Although not a farm bill issue, market access for specialty crop imports into the US is a growing concern for developing countries. Sanitary and phytosanitary (SPS) regulations legitimately limit imports, but are also prone to abuse as non-tariff trade barriers. There is concern among exporting countries that the US may opt to heighten its pest and disease inspection requirements beyond scientifically justified levels. Because of their limited resources and small market share, developing countries may be hard pressed to meet these standards. Such countries could also find it difficult to persuade the US to change its regulations and their application through diplomatic representation or even through litigation at the WTO.

Food Aid

The US is the world's major donor of international food aid, usually providing 50 percent or more of all food aid. In fiscal year 2006, US food aid totaled over 3 million metric tons, equivalent to \$2.2 billion. All of US food aid is legally required to be supplied in-kind, that is, in US commodities; indeed, the 2002 Farm Bill established a minimum donation level of 2.5 million metric tons. This sets the US apart from all other donors, who provide assistance in the form of cash.⁵ One of the main reasons that the US has not transitioned to cash food aid is the conviction that the political support of the US agricultural sector is based on the use of US commodities in these programs. Domestically, international food aid programs have traditionally benefited from strong bipartisan political backing, due in large part to support from agricultural groups (both commodity and processing), maritime interests (75 percent of food aid is required to be shipped on US flag vessels), and the private voluntary organizations (PVOs) who receive and distribute US food aid in recipient countries. Many of the PVOs receive much of their income from the monetization of food aid, that is, the giving of commodities to PVOs to sell in the countries in which they are working. The revenue from these sales is then used to fund development projects in these countries.

As US food aid is provided in-kind, concern has been expressed that this assistance serves as a dumping vehicle for surplus US commodities, which harms domestic markets in recipient countries by causing disincentives, dependency, and displacement. Since food aid first began, critics have feared that it would create a disincentive to local agricultural development. While earlier evidence suggested a short-term disincentive effect, the long-term effect has been less clear, and more recent studies find disincentive effects to be quite small and only temporary. The possibility of dependency by governments on food aid has also been raised as an issue; however, the unpredictable nature of food aid lessens this likelihood.

Displacement refers to the fact that food aid may displace commercial markets, at the local, regional, or international level. This is particularly an issue with monetization. The concern is that the selling of donated US food aid displaces sales of local farmers and drives down local market prices, thereby turning low-income country markets into yet another clearing mechanism for surplus US commodities.

Energy

The demand for renewable energy derived from agricultural feedstocks has skyrocketed in the past few years, due to rising concerns about energy costs, national security, and the environment. In the US, corn serves as the primary feedstock for ethanol, while biodiesel is frequently processed from soybeans.

Most incentive programs for biofuels are authorized by legislation other than the farm bill. Under the Energy Policy Act of 2005, the US instituted a federal mandate for the use of biofuels in the transportation sector. It also required a \$1.00 tax credit for every gallon of biodiesel blended with petroleum diesel. This was modeled after a 51-cent per gallon credit already in place for ethanol. To protect its domestic market, US trade policy offsets this credit with a 54-cent per gallon tariff on imported fuel ethanol.

Such bioenergy support has an enormous effect on agricultural commodity markets. The introduction of the federal mandate, high import tariffs on ethanol, the tax incentives, and rising oil prices have caused biofuel production to soar. This has particularly been the case for ethanol, since it easily integrates with the US's gasoline-based transportation sector. In 2002, 2.1 billion gallons of ethanol were produced; by 2006 production doubled to 4.86 billion gallons. With more and more biofuel processing plants coming online, ethanol

5. Canada is the only other significant donor that still provides food aid in-kind; however, it has recently stated that it will provide half of its food aid in cash and plans to increase this percentage over time.

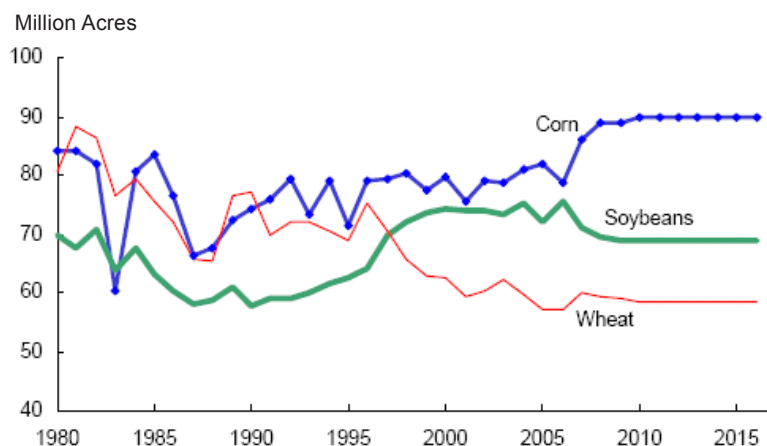
production capacity in the US is estimated to reach 11.4 billion gallons by 2008-2009.⁶

The growing ethanol industry has created a burgeoning market for corn as biofuel feedstock. The preference for corn is due in part to the ease of converting its starch into fuel and to the favorable growing environment of the Midwest.

Even though the corn supply has expanded in recent years (almost 11 billion bushels were produced in 2006/2007), the unprecedented investment in ethanol processing plants is creating scarcity in the market. The competition among feed users, ethanol processors, and exporters has driven the price of corn up from less than \$2.00/bushel at the end of 2005 to more than \$3.50/bushel in April 2007 (USDA, 2007). Moreover, the projected demand for ethanol is anticipated to keep the price of corn near this level for the life of the next farm bill (USDA NASS, 2007).

To take advantage of this corn price boom, many farmers planted corn at the expense of other crops in the spring of 2007. This has created supply scarcity, causing almost all program crop prices to rise. With the decrease in soybean acres in favor of corn, as shown in the figure, the price of soybeans is expected to jump from \$5.90/bushel in 2006 to more than \$7.00/bushel in 2007 (USDA, 2007). Moreover, the price of soybeans is projected to stay at \$6.75 or higher for the next ten years. The demand for wheat and barley as substitute feed grains for corn has also grown, placing upward pressure on the prices of these commodities. Indeed, USDA's projections through 2016 find the prices of major field crops to be above their 2006 levels for the majority of the time period (USDA, 2007).

Figure 1: Planted Area: Corn, Wheat, and Soybeans.



The new focus of US commodity crop programs on biofuels could have positive and negative effects on developing countries. On the one hand, higher prices for these commodities will benefit all producers for whom international prices are relevant. Additionally, US demand for biofuel feedstock could outstrip supply before new cellulosic technologies come on line in a few years time. The US has little arable land that is not already

6. In 2006, 20 percent of the US corn harvest was used for ethanol, compared to just 6 percent in 2000. One hundred ten ethanol plants are currently operating, with a total capacity of 5.4 billion gallons. The addition of 73 plants under construction plus the expansion of 8 already operational plants will bring total capacity to 11.4 billion gallons.

cultivated to bring into production, except that removed under environmental programs such as the Conservation Reserve Program. Thus, to meet its biofuel needs, it has diverted corn from exports to processing plants. As the volume of US exports shrinks, developing countries will have an opportunity to increase production to fill this gap. Under these circumstances, developing countries with production capacity for exporting grains and oilseeds, such as Argentina, South Africa, and Brazil, would be in a position to take advantage of a commodity shortage in the international marketplace. Other countries may be able to benefit from the shifts in production as well.

On the other hand, many developing countries are net food importers, and the poor in developing countries often spend 50 percent or more of their income on food. Higher food prices, caused by the biofuel boom, reduce real incomes available for other uses and may threaten food security. Of course, for those poor households that produce farm products, the net outcome may be that the benefit of higher commodity prices for the crops they sell outweighs the cost of higher prices for food that they buy. However, concerns have also been raised about ambitious biofuels production introducing an even greater degree of volatility to commodity prices by linking them to the energy market.

REFORM IN THE 2007 FARM BILL

One of the primary reasons that commodity programs have remained in place despite radical changes in US agriculture is that groups representing subsidized commodities have been effective in their campaign for program continuity. Commodity interest groups and farmer associations are experienced, well organized, and able to create tremendous political incentives for legislators to respond to their wishes during the reauthorization process of the farm bill. These groups are focused narrowly on the programs that benefit them most, whereas most other groups have much more diffuse policy agendas. Therefore, commodity interests have been successful in maintaining the status quo and even in increasing the funds devoted to Title I programs over the last few farm bills.

As noted above, farm bills address many more issues than just support to grain, cotton, and oilseed commodities, and the 2007 Farm Bill has attracted the attention of a diverse coalition of interest groups seeking reform. Environmentalists, free trade proponents, fiscal conservatives, specialty crop producers, and anti-hunger advocates have joined forces to push for government resources to be more evenly distributed across farm bill programs. Specialty crop farmers in particular have been more organized than in the past, seeking provisions in the farm bill that more closely mirror their contribution to agricultural GDP. As in 2002, the Bush administration encouraged Congress to update its approach to farm bill legislation. In 2007, the Administration developed detailed legislative proposals to assist Congress in this regard.

The goal of all these diverse interests is to develop an agricultural policy that is more appropriate for today's conditions. Farming is more diverse than it was in the 1930s, farmers are now far wealthier than the average American, few people in rural America depend on agriculture for their livelihoods, and the US exports over \$60 billion in agricultural products each year.

Hopes for reform have rested on the concurrence of the farm bill reauthorization with several other events influential in the framing of farm policy. First, continuing budget deficit pressure limits the funds available for farm bill spending. Budget pressures were important in the 1990s, but were largely absent in the development of the 2002 Act, when there was a temporary budget surplus. In 2007, budget issues are again central to the Farm Bill debate and many groups have argued for budgetary savings via reduced mandatory outlays on farm programs.

Second, the Doha Round of trade negotiations within the WTO was launched in 2001 with further liberalization of agricultural trade as a main element. The Round was mandated to specifically address the needs of developing countries. As many of these economies are dominated by agriculture, it was hoped that the Doha Round would continue the progress of the 1990s Uruguay Round, when the first disciplines on government assistance to agriculture were enacted. The US has the opportunity to lock in important domestic support and export subsidy reductions already undertaken by other countries (particularly the EU) through new WTO commitments, by passing a reform minded farm bill. Such obligations should be politically feasible because, with commodity prices high, there would be little impact on the policies of the US.

Third, WTO litigation and potential litigation provides pressure for the US to comply with its current WTO obligations under the Uruguay Round, both for cotton and more broadly. The challenge that Canada has launched on the consistency of US farm policies with existing obligations shows the continuing disagreement as to whether the US has been in compliance. As a major supporter of the constraints placed by the WTO rules on domestic support, the US could increase its influence over other countries in this regard by ensuring that its own programs are beyond question.

A final element is the explosion of biofuels demand that has created a scarcity of grain and oilseeds in the

market and therefore raised the prices of feedstock and substitute commodities. Due to the demand of the food, feed, and fuel markets, the prices of most commodities are projected to be well above the Title I price support levels for the life of the 2007 Farm Bill. Reformers argue that 2007, then, is an ideal time to redistribute farm bill funding and to remove the vestiges of 1930s farm programs that are likely to be mostly inoperative in the next few years.

High commodity prices do not, of course, remove the demand for commodity programs that will pay farmers if prices were to fall. Without the discipline of additional WTO commitments, there could be a recurrence of events similar to those that followed the passage of the 1996 Farm Bill. The 1996 legislation, which was also written during a time of high commodity prices, replaced some price-contingent payments with direct payments that were provided even when prices were high. However, when prices dropped in 1998 and stayed depressed for the next three years, commodity interest groups received ad hoc support payments. This “emergency” support was then regularized into the 2002 Farm Bill as counter-cyclical payments, despite the fact that it ran counter to the US’s attempts in 1996 to disentangle its agricultural sector from government market management. Having secured these counter-cyclical supports, commodity producers are naturally reluctant to part with them.

The pressures for reform have been building for several years, yet as the time to write the Farm Bill approached, the status quo voices began to assert their power with members of the agriculture committees, where legislation is written. These committees have close ties with commodity interests and strongly support the main commodity programs. Over 42 percent of crop subsidy payments in 2003-2005 went to the districts of the 46 members of the Agricultural Committee in the House of Representatives, which as a whole has 435 members (EWG, 2007). In the Senate, subsidized commodity interests also have political clout far exceeding their numbers, as almost every Senator represents some group of commodity producers. Those Senators that are elected from rural states where subsidized commodity interests are strong take the lead in advancing farm legislation. Traditionally, most members of Congress outside the agriculture committees have little knowledge of or interest in farm legislation, and thus little incentive to push for significant reforms. The impact of an organized reform campaign and the unusually high commodity prices on such members remains to be seen.

IMPLICATIONS OF LIKELY FARM BILL OUTCOMES

Based upon the strong representation of commodity interests on the House Agricultural Committee, it is not surprising that the House of Representatives passed a bill extremely similar to the 2002 Farm Bill. What would such a status quo policy, if it is translated into law, mean for developing countries?

The House-passed legislation contains relatively minor changes to Title I programs, with small adjustments to loan rates and target prices. The income eligibility limit to participate in the Title I programs is set at \$1 million in the House bill (but may be lowered further by the Senate); however, this limit will affect very few farmers, given the possibility to adjust their operations to meet the new requirements. Adjustments in payment limits included in the House bill are also unlikely to have significant policy or market impacts. Target prices and loan rates, that determine payments and loan benefits, are set to increase for some commodities. And, even though the WTO dispute settlement panel in the Brazil cotton case found that the planting restrictions for fruit and vegetables would likely cause direct payments to be considered trade-distorting subsidies, this provision remains in the House bill. For sugar, the price supports are set to increase by 3 percent and domestic production will be guaranteed 85 percent of the US market. Further, to assure that increased imports of sugar from Mexico will not disturb the sugar price support, a new government purchase program would direct excess sugar to ethanol production.⁷ Dairy support programs will also be extended with the price support rates specified for particular products rather than leaving discretion to USDA to adjust purchase prices to support the farm price of milk.

Under current market conditions, with high commodity prices and low stockpiles, USDA and other forecasters project that the marketing loan and counter-cyclical programs will be inactive throughout the life of the 2007 Farm Bill. Still, even under these circumstances, the signals from the US Congress are very negative for developing countries producing grain, cotton, and oilseed commodities. Legislators appear to remain unconcerned about the long term distortions that Title I programs cause in the international markets.

The House bill provides increases in the modest funding for specialty crops, but this support is generally for minimally trade-distorting programs of research, protection from invasive species, nutrition, and food safety. Specialty crop interest groups are also likely to get their request for more assistance with resolving trade disputes at the WTO and for more US representation in international standard-setting bodies. The devotion of additional resources to SPS and other standards issues may be useful for strengthening food safety but could also unduly limit specialty crop imports from developing countries to the US.

In its proposals to Congress, the Bush administration recommended the use of up to 25 percent of food aid funds under Public Law 480 Title II for local and regional purchases and distribution of emergency food in the event of a food security crisis.⁸ The House version of the Farm Bill includes no such language. In fact, it maintains the policy of monetization and continues the minimum assistance level of 2.5 million metric tons. Under the House bill, US food aid programs will continue to run the risk of creating disincentives, dependency, and displacement in local markets.

The House's 2007 Farm Bill includes biofuels support programs, including support for cellulosic ethanol, but as mentioned above, the largest incentives for these products are found outside the farm bill. Congress is currently working on reauthorizing the energy bill, which may include an increase in the federal mandate for biofuels. The tax credits for biodiesel and ethanol are set to end in 2008 and 2010 respectively, while the ethanol tariff will end

7. Under the North American Free Trade Agreement, the barriers to the trade of sugar between the US and Mexico will end in 2008.

8. Title II of Public Law 480, also referred to as PL 480, is the US government's primary food emergency response mechanism. It also provides food to support development activities often targeted at those suffering chronic hunger.

at the beginning of 2009. Should the mandates increase and the incentives for US biofuels expire, developing countries with a comparative advantage in biofuels production could have new export market opportunities. This would apply particularly to Brazil, but perhaps to some Central American and Caribbean countries as well.

Even if the tax credits and tariffs are extended, and the federal mandate for biofuels remains at its current level, the redirection of US commodities from exports to biofuels will create market opportunities for developing countries. Furthermore, net exporters should benefit from the higher prices caused by supply scarcity, although net food importers will be negatively impacted.

The final shape of the 2007 Farm Bill will have important consequences for the WTO Doha Round and the ability of the US to encourage other countries to open their agricultural sectors to competition. The Doha Round will most likely be put “on ice” for the next two years, in part because of the lack of agreement on agriculture. The US could have recaptured the initiative (and still could) with a bold offer of real cuts from current levels in trade-distorting domestic support. The current US offer is to reduce this level to \$22 billion, but the Chairman of the WTO Agriculture Committee has indicated that the offer would have to be around \$15 billion to allow for an agreement.⁹ The 2006 level of support for the US has been estimated at about \$11 billion, implying that no programs would be directly affected by an improved offer.¹⁰ Of course, in case commodity prices fall in the future, producers would have less access to support, but the US is well advised to take advantage of the flexibility afforded by the high prices to “bargain” domestic support cuts for market access abroad. This opportunity is in danger of being lost.

The other major impact of a farm bill based on the House version is that the US remains out of compliance with its WTO obligations for cotton and remains vulnerable to challenge on other programs and policies. Although such action may be beyond the reach of small developing countries, joining WTO members such as Canada and Brazil in potential challenges could be an attractive option for them. With much of US agriculture selling products at less than the full cost of production (as confirmed by those who argue that the supports are necessary to keep agriculture viable), the likelihood of such challenges will increase with a status quo farm bill.

From the legislation moving through Congress at present, it appears that US farm policy will continue to distort markets for products in which developing countries have a comparative advantage, such as cotton and sugar; depress world market prices in some commodities by encouraging overproduction through direct subsidies; and interfere with domestic markets in recipient countries of in-kind food aid donations.

9. WTO document, July 17, 2007.

10. A forthcoming report suggests that the level of trade-distorting subsidies is likely to remain below WTO limits for the next five years (Blandford and Josling, 2007). For more details on the extent to which the United States has been influenced in its policy by the WTO rules, see Josling (2007).

CONCLUSIONS

The version of the bill passed by the House of Representatives extends the main provisions of the 2002 Farm Bill with little modification, and in several instances, it increases support. Several of the changes from the 2002 Act are in the nutrition and conservation titles, and these would have little impact outside the US. Food aid policies are unlikely to alter significantly, and the expansion of biofuels, to the extent that it is promoted by the Farm Bill, will keep corn, other grain, and oilseed prices high. No major market opportunities will open up in the US for developing countries, with the possible exception of ethanol from sugarcane.

Perhaps most at risk, though hard to define, is the position of leadership that the US has maintained in international farm and food trade for the post-war period. The 2002 Farm Bill sent a message that the reforms of the 1996 Farm Bill were applicable only when prices were high. The 2007 Farm Bill could counter this message by moving away from trade-distorting programs (particularly the counter-cyclical payments and marketing loan provisions) toward those that are more production-neutral. With a status quo farm bill, the credibility of the US as it seeks to open up markets abroad will be further compromised.

Developing countries do not have a direct voice in shaping US farm policy; however, the domestic political process allows for the reflection of their interests in the outcome of legislation in the context of foreign policy. Now is an appropriate time for the US Congress to consider the longer-term consequences of farm legislation on global markets, on trading partners, and on the developing world. The cost to the subsidized parts of US agriculture will likely be minimal, but the rewards to the rest of agriculture, to the rest of the economy, and to US interests in foreign commercial policy would be substantial for generations to come.

REFERENCES

Alston, Julian M., Daniel A. Sumner, and Henrich Brunke. "Impacts of Reductions in US Cotton Subsidies on West African Cotton Producers." Oxfam America research paper. June 2007. Available at: www.oxfamamerica.org/farmbill. Last viewed August 27, 2007.

Beghin, John C. "U.S. Sugar Policy: Analysis and Options." The 2007 Farm Bill & Beyond: Working Papers. American Enterprise Institute, 2007. Available at: <http://www.aei.org/research/farmbill/publications/pageID.1476,projectID.28/default.asp>. Last viewed August 17, 2007.

Beghin, John C., Barbara El Osta, Jay R. Cherlow, and Samarendu Mohanty. "The Cost of the U.S. Sugar Program Revisited," *Contemporary Economic Policy* 21 (1) 2003. 106-116.

Blandford, David and Tim Josling. "US and EU Domestic Support Notifications, 2007-2012", paper presented to a workshop at the German Marshall Fund of the United States, Sept. 11, 2007.

Environmental Working Group. "Policy Analysis Database." EWG Farm Bill 2007. June 12, 2007. Available at: <http://farm.ewg.org/sites/farmbill2007/cdlist.php>. Last viewed August 27, 2007.

Johnson, D. Gale. *Trade and Agriculture: A Study of Inconsistent Policies*. New York: John Wiley and Son, 1950.

Josling, Tim. "The Impact of the WTO and Bilateral Trade Agreements on U.S. Farm Policy," in Bruce Gardner and Daniel A. Sumner (eds). *Agricultural Policy for the 2007 Farm Bill and Beyond*, American Enterprise Institute, Washington, DC, 2007

Schnepf, Randy and Jasper Womach. "Potential Challenges to U.S. Farm Subsidies in the WTO". Congressional Research Service. April 26, 2007. Available at: <http://www.cnire.org/NLE/CRSreports/07May/RL33697.pdf>. Last viewed August 17, 2007.

Sumner, Daniel A. "Boxed In: Conflicts between U.S. Farm Policies and WTO Obligations." Cato Institute. Washington, DC. December 5, 2005. Available at: <http://www.freetrade.org/pubs/pas/tpa-032.pdf>. Last viewed August 17, 2007.

Sumner, Daniel A. "Effects of U.S. Upland Cotton Subsidies on Upland Cotton Prices and Quantities," Presented to the WTO Cotton Panel, December 2006.

Sumner, Daniel A. "A Quantitative Simulation Analysis of the Impacts of U.S. Cotton Subsidies on Cotton Prices and Quantities," Presented to the WTO Cotton Panel, October 2003.

US Department of Agriculture. "USDA Agricultural Projections to 2016." February 2007. Available at: <http://www.ers.usda.gov/publications/oce071/oce20071.pdf>. Last viewed April 10, 2007.

US Department of Agriculture, Economic Research Service. "History of Agricultural Price-Support and Adjustment Programs, 1933-84". Agriculture Information Bulletin Number 485. Washington, DC. December 1984. Available at: <http://www.ers.usda.gov/publications/aib485/aib485.pdf>. Last viewed August 13, 2007.

US Department of Agriculture, National Agricultural Statistic Service. "Prospective Plantings". March 30, 2007. Available at: <http://www.usda.gov/nass/PUBS/TODAYRPT/pspl0307.pdf>. Last viewed April 10, 2007.

About IPC

The International Food & Agricultural Trade Policy Council (IPC) promotes a more open and equitable global food system by pursuing pragmatic trade and development policies in food and agriculture to meet the world's growing needs. IPC convenes influential policymakers, agribusiness executives, farm leaders, and academics from developed and developing countries to clarify complex issues, build consensus, and advocate policies to decision-makers.