From competition to national security:
Policy change and policy stability in the 2008 farm bill

A DISSERTATION
SUBMITTED TO THE FACULTY OF THE GRADUATE SCHOOL
OF THE UNIVERSITY OF MINNESOTA BY

Nadine Lehrer

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

Rachel Schurman, Dennis Becker, co-advisers

May 2008

Acknowledgements

I would like to thank my advisers Dennis Becker and Rachel Schurman for their guidance and support, and committee members Kristen Nelson, Paul Porter, and G. Edward Schuh for their invaluable assistance. I would also like to thank the many interview participants, informants, and colleagues who gave of their time and energy for this project. I thank as well Gretchen Boger, Kate Clancy, Mike Cochran, Amy Damon, Meagan Keefe, Edith Lehrer, and Zhao Ma for their help and willingness to read drafts at various stages of the process, the innumerable cheerleaders and collaborators I have met along the way, and of course friends and family for their enormous support of this undertaking in all its ups and downs.

Finally, the research described in this dissertation has been funded by a National Science Foundation (NSF) Graduate Research Fellowship, a United States Environmental Protection Agency (EPA) - Science to Achieve Results (STAR) Graduate Fellowship, a MacArthur Interdisciplinary Global Change, Sustainability, and Justice Fellowship, and a University of Minnesota Graduate Fellowship. Any opinions, findings, conclusions or recommendations expressed in this document are solely those of the author. The NSF, EPA, and other funders have not officially endorsed this document, and the views expressed herein may thus not necessarily reflect the views of NSF, EPA, or any other funder.

Abstract

In 2005, an observer of the 2008 farm bill debates might have thought that U.S. farm policy was on the brink of change. World Trade Organization (WTO) pressure to reduce domestic agricultural supports was making headline news. Agricultural groups were justifying their farm bill positions by citing trade concerns. But in 2006, WTO negotiations were suspended, and WTO as a major public driver of the farm bill debates stalled alongside them. Although still acknowledged by most stakeholders as relevant to domestic agricultural policy, WTO forces were no longer highlighted by interest groups or the press as a principal farm bill driver the way they had been previously.

Meanwhile, in 2006-08, an ethanol boom surfaced as a new driver of farm bill debates. Rising gas prices, political instability, and fossil fuel depletion caused many Americans to see U.S. reliance on imported petroleum as a vulnerability, and to advocate domestic fuel production as a policy goal. Ethanol was seen as the primary way to move America towards "energy independence." It was touted as an environmentally-friendly energy alternative and a source of economic revitalization for rural America.

This dissertation argues that ethanol became a prominent driver of farm policy in 2006-08, in part because it helped policymakers sidestep previous debates over farm bill reform. Alongside the decline in WTO pressure to reform commodity subsidies, growth in ethanol markets alleviated budgetary pressures by raising crop prices. Combined with a framing of biofuels that tapped into public support for the environment and for national security, this convergence dimmed the spotlight over alternate approaches to agricultural sustainability and renewable energy.

This dissertation draws on social movement and policy change theories, and incorporates discourse analysis into the study of farm policy. It seeks to understand how and why shifting contexts changed the tenor of 2008 farm bill debates, and what implications this had for farm policy and sustainable land use. Results suggest that while the focus on ethanol circumvented reform efforts that could have benefited the environment and rural communities, it also created some new possibilities for environmental and social sustainability in agriculture in the longer term.

Table of Contents

List of Tables

List of Figures

CHAPTER 1

Farm bills, interest groups, and policy change

Introduction

In 2005, an observer of the 2008 farm bill debates might have thought that farm policy was on the brink of significant changes. World Trade Organization (WTO) pressure to reduce U.S. agricultural supports was making headline news. Farm groups, worried about the loss of protection from reduced supports, were calling for an extension of the 2002 farm bill and sponsoring tours to Brazil to size up the competition. Other interest groups were looking to the WTO as an opportunity to promote their versions of farm policy change – be they for increased conservation, rural development, public health, free trade, or tax reduction. Journalists from the *New York Times* to the *Washington Post* to the *Wall Street Journal* were calling for farm bill reform as well, bringing agricultural policy debates well into the public sphere.

In 2007, however, an observer of these debates would have had a very different impression of prospects for the 2008 farm bill. While there were still calls for policy change coming out of the media and the White House, the House and Senate drafts of the 2008 farm bill looked very much like the 2002 farm bill. Talk of the WTO and Brazil declined in the press, and groups originally promoting a farm bill extension changed their positions. Groups still advocating reform downplayed the role of the WTO in their arguments. And biofuels, or renewable energy from plant materials, became the new focus of agricultural policy debates, the new sphere where public excitement in agriculture lay.

This dissertation argues that, among other situational and political forces, the shift from a focus on the WTO to a focus on biofuels changed the tenor of farm bill debates from reform-oriented to stability-oriented. It assuaged tensions over how agriculture – and the food system as a whole – should be oriented, by layering atop these tensions a broader blanket of consensus that came to support farm policy for the contributions it could make to renewable energy. This change was reflected in the media, in interest group positions, in the halls of Congress, and in the discourses used to talk about farm policy priorities. While by no means uncontested or free of conflict, the 2008 farm bill

was in the end crafted in a context of relative cooperation rather than amidst the tensions that had seemed to pit reform-oriented interest groups against stability-oriented interest groups in 2005.

This change is important because, while agricultural supports have helped many farmers stay in business through the boom-bust cycles of agriculture, built an extremely productive agricultural sector, provided surplus food to the poor and low-cost food to consumers in general, and set aside lands for conservation, they have also had significant environmental and social downsides. By providing payments primarily to farmers producing corn, wheat, soybeans, cotton, and rice, agricultural support policies have favored monoculture plantings of a certain few crops over others, increasing erosion, fertilizer- and pesticide-related pollution, and water use (Foltz *et al.* 1993, Killpack and Buchholz 2006).[1]

Agricultural supports have also reinforced inequalities domestically and internationally by channeling payments to wealthier farmers, consolidating U.S. agriculture onto fewer larger farms, and lowering the world price poor farmers in other countries receive for their goods (Offutt and Gundersen 2005). In addition, they have subsidized high-fat high-sugar foods over fruits and vegetables, created barriers to trade, and cost government significant sums of money (Cline 2005, Johns Hopkins School of Public Health 2007). Thus, alongside the benefits they have provided consumers, producers of supported commodity crops, livestock producers who feed corn and soybeans to animals, and agribusiness processors who add value to raw commodities, these policies have resulted in costs for the environment and for social equity (Oxfam America 2006, National Corn Growers Association 2007a). In general, commodity policies have contributed to a pattern of unsustainable agricultural land use, where the benefits of what is an extremely efficient food production system come at the expense of soil and water quality, diversified ecosystems, small farmer livelihoods, and conservation of fossil fuels.

[1] Agricultural subsidy payments also support peanuts, tobacco, sugar, wool, dairy, sorghum, and a few other products (Culver no date). However the bulk of the subsidy payments go to the five commodity crops listed in the text (Babcock 2007).

This dissertation begins with the premise that maintaining these agricultural supports, referred to in the dissertation as commodity supports or crop subsidy policies, is problematic. It suggests that by modifying them to encourage, or at least not discourage, more sustainable land uses, there could be substantial benefits for the environment and for rural communities, alongside the security for farmers and consumers they currently provide. Certainly, a continuation of current farm policy as is promises to perpetuate negative environmental, social, and economic impacts alongside the many benefits of farm policy. This dissertation thus asks how policy change to replace current commodity policies with a more environmentally- and socially-friendly farmer safety net might be achieved. It focuses in on a situation in 2005-08 where commodity policy reform seemed at first imminent and then later unlikely, providing a unique opportunity to examine how prospects for such policy change shifted over time. This in turn provides insight as to what such changes (or lack of changes) mean for future patterns of land use and food production, and how farm policy interest groups can approach the idea of future farm policy change.[2]

This dissertation's theoretical framework is based on two complementary but separate social science literatures, one on policy change and the other on social movements. The policy change literature provides this work with the concept of a *policy window*, or a temporary opportunity for policy reform created when a combination of situational factors and actions favorable to change converge at a particular moment in time. The opportunity for farm bill reform in 2005-06 under WTO pressures to reform commodity supports, and its subsequent return to a stability-oriented farm bill in 2006-08 under pressure to promote increased ethanol production, is understood here as the opening and closing of a policy window. Policy theory also provides a model for *post-positivist or deliberative policy analysis*, in which attention to situational factors and interest group activities is complemented by a focus on the role of language and discourse

[2] Many argue that the problem with farm policy is that it attempts to attain multiple policy goals with one policy instrument, in the end sacrificing effectiveness. While this dissertation accepts that the goals of farm policy are multiple, and works within that premise, an alternative route would have been to suggest that policymakers should split farm policy's multiple priorities into separate bills, rather than seek to incorporate environmental and social goals more effectively into its provisions. Thanks to G. Edward Schuh for this insight.

in shaping policy development. The policy windows and post-positivist policy literatures are thus held alongside the empirical case of the 2008 farm bill to examine both the causes and implications of a shift from reform-oriented to stability-oriented farm policy, as well as to explore the insights this case can provide to both areas of theory.

Social movement theory provides a complementary framework for understanding processes of change, or in this case, lack of change, in farm bill commodity policies. Social movement theory posits that in order for change to occur, political opportunities for change must exist, groups must have the resources to make use of these opportunities and must in turn frame their calls for change in a way that resonates with the public and with policymakers. This dissertation examines the particular combination of political opportunities, interest group positions, and framing strategies that characterized policy change efforts for the 2008 farm bill, and that propelled and then inhibited potential policy reform over the period of 2005 to 2008. It focuses less, however, on interest group resources than do traditional social movement studies, largely because the interest groups involved in farm bill politics are not typical social movements, and because in this case, interest group resources changed little over the period of study, even while political opportunities and framing strategies shifted more significantly.[3]

The rest of Chapter 1 provides a background and context from which to approach the shifts that took place in farm policy debates between 2005 and 2008. It fleshes out the argument that farm policy debates changed significantly between 2005 and 2008, ties this argument to the histories of change and of stability in farm bills over time, describes the range of interest group positions that mobilized around and contributed to the changing farm policy context, and sets up the research questions and methods for this dissertation. Chapter 2 brings policy change and social movement literatures to bear in more detail on these questions of farm policy change. Chapter 3 looks historically at

[3] Social movement theory focuses on social movements as groups brought together by a sense of common purpose, common identity, and sustained efforts to make change (Tarrow 1998 p.3). The groups described in this dissertation, on the other hand, are somewhat more institutionalized "interest groups" rather than such traditional social movements. Although the distinction between interest groups and social movements is not necessarily clear-cut, this dissertation seeks to draw from social movement theory in ways that help provide an understanding of interest group mobilizations around policy change without necessarily conflating these groups with social movements.

farm policy to distill factors that have made for change and for stability in previous farm bills. Chapter 4 focuses on the political context, interest group positions, and framing strategies that facilitated the opening of a policy window for change in 2005-06 under WTO pressures. Chapter 5 turns to the changes in political context, interest group positions, and framing strategies that subsequently closed the window for farm policy reform in 2006-08 in a moment of excitement over ethanol. And Chapter 6 examines the implications of this opening and closing policy window for sustainable land use and for future farm policy change.

Shifting prospects for farm policy reform, 2005-08

U.S. agriculture is a large-scale model characterized by high levels of technology, productivity, specialization, mechanization, and business integration, supported both by market forces and also by financial incentives embedded in the farm bill, the primary piece of agricultural legislation in the U.S. (Hayami and Ruttan 1970, Womach *et al*. 2007). These farm bill policy incentives, primarily subsidies for corn, soybeans, wheat, cotton, and rice, were originally developed in the wake of the 1930s farm crisis to bring farm incomes up to par with non-farm incomes, minimize the risks associated with variable crop yields and prices for agricultural goods, and ensure a stable (and ideally increasing) grain supply to the American public and for export (Talbot and Hadwiger 1968, Organization for Economic Cooperation and Development 1987, K.L. Robinson 1989, Knutson *et al*. 1990).

In the decades since the original 1933 farm bill, these commodity subsidies have also contributed to a shift in agriculture from smaller diversified farms to large-scale specialized production of supported commodities, often in monoculture.[4] While enormously efficient, this change has contributed to increased fertilizer and pesticide use, soil erosion, water pollution, wealth disparities among farmers, consumer health concerns, and trade disputes (Green Lands Blue Waters 2004, Offutt and Gundersen

[4] In this dissertation monoculture refers to a system in which one of a very limited number of possible crops is planted in large areas, or sometimes rotated in a bi-culture – for example corn one year, soybeans the next. In other words, monoculture refers to extremely specialized rather than diversified production (The University of Reading 2007).

2005, Killpack and Buchholz 2006, Hanrahan 2007, Johns Hopkins School of Public Health 2007). These costs of domestic agricultural supports are certainly multi-pronged, complex, and related to a multiplicity of factors both internal and external to farm policy. Nevertheless, they point to the host of unintended consequences that have followed in the wake of subsidies for corn, soybean, wheat, cotton, and rice. As such, many environmental, sustainable agriculture, and reform-oriented interest groups have come to agricultural policy debates seeking additions or fuller reforms to these commodity supports that would satisfy their interests, including a desire to mitigate some of these negative consequences. They have come to expect that farm and food policy should benefit not only certain farmers and supermarket shopper pocketbooks, but also non-commodity-crop farms, health needs, soil and water resources, and rural jobs and agricultural communities. Or at the very least, they should not subvert these goals to the narrower needs of crop productivity.

Examples of these calls for change included green payment plans proposed by many sustainable agriculture and environmental groups to support farmers for their environmental stewardship rather than for increasing crop production. They have included popular critiques of the extensive resources that go into mainstream agricultural production by the likes of journalist Michael Pollan and novelist Barbara Kingsolver, and a series of *Washington Post* and *New York Times* articles critical of the inequities inherent in farm subsidy payment distribution (Morgan 2005, Pollan 2006, Weisman and Barrionuevo 2006, Kingsolver 2007). And they have included farm bill reform legislation introduced by the likes of Senators Charles Grassley (R-IA) and Tom Harkin (D-IA) and Representative Ron Kind (D-WI) to increase federal support for conservation and nutrition and to cap subsidy payments to wealthy farmers (Grassley 2007, Herszenhorn 2007, Kind 2007). Whatever the strengths and weaknesses of these particular calls for farm bill reform, they together indicate burgeoning support for the idea of a more sustainable and equitable commodity policy.

But while additions to the farm bill have been made continuously over time, major reforms of farm policy have been few and far between. As will be discussed in Chapter 3, the few "change" farm bills of farm policy history include the 1933 farm bill,

which marked the origin of commodity policy; the 1973 farm bill, which made significant alterations to commodity support provisions; the 1985 farm bill, which melded supply control tools with conservation objectives; and the 1996 farm bill, which moved farm policy toward the reduction of commodity support provisions (Orden *et al*. 1999). Most other farm bills, however, like most government policies in general, have changed only slowly and incrementally (Dluhy 1981, Baumgartner and Jones 1993). Interest groups coming to the farm bill seeking more substantial commodity policy reform have thus faced a challenge.

The difficulty of pursuing reform efforts comes in part from interest groups that historically have benefited from commodity support programs, as well as from a system that externalizes and therefore undervalues the costs of environmental damage to soil, water, and other resources necessary for a sustainable agricultural system (Knutson *et al.* 1990, G.C. Daily 1997, Hesse 2005).[5] It comes too from the Jeffersonian ideology of "rural life as the bedrock of American values" used to support subsidies to corn, soybean, wheat, cotton and rice farmers. The cultural power of this idea makes critiques of subsidies, which are seen as helping farmers, sound anti-populist and anti-democratic, even though payments generally do not go to the smaller farmers conjured up by the Jeffersonian imagery (Knutson *et al*. 1990, Environmental Working Group 2006).

A unique opportunity for farm bill reformers to make significant changes to farm policy, however, presented itself in the lead up to the 2008 farm bill debates. First, World Trade Organization (WTO) negotiations in 2005-06 brought significant pressure to bear on the U.S. (and Europe and Japan) to reduce or eliminate their domestic agricultural subsidies to facilitate trade flows among nations. Second, a growing number of consumer and interest groups brought their concerns about the negative environmental and social consequences of commodity policy into the media – asking why, for instance, fruits and vegetables were more expensive than processed foods made from corn and soybeans, why pollution in the Gulf of Mexico was getting worse, and why many farming

[5] A sustainable agricultural system is defined in this dissertation as an agricultural system that replenishes natural resources (soil, water, carbon, wildlife habitat, etc.) even as it uses them for production. It is a system that can continue to provide economic, social, and environmental benefits into the future (Feenstra *et al.* 1997).

communities were suffering population loss even as demand for food was rising (Pollan 2006). This combination of a heightened internal focus on the negative consequences of commodity provisions and increased internal and external pressures to reform these provisions created an atmosphere in which a reconsideration of status quo farm policy became possible. As described above, multiple groups, individuals, newspaper articles, and politicians began calling for farm bill reform. Traditional farm bill interests stepped up their efforts to defend existing commodity policy.

But in 2006, before consideration of the 2008 farm bill actually began in Congress, this potential window of opportunity for reforming corn, soybean, wheat, cotton, and rice subsidies that had opened under WTO and consumer group pressures was closed by the stalling of WTO talks, the election of a Democratic majority to Congress less interested in eliminating barriers to trade, and an increased focus on biofuels production that raised grain prices and relieved impending budget pressures. Suddenly, what had looked like a historically unique opportunity for commodity policy reform turned into a more traditional incremental-policy-change atmosphere, and the balance of power returned to those groups more invested in a status quo farm policy. The 2008 farm bill became a piece of legislation that once again tweaked farm policy rather than reformed it.

What is particularly interesting is to look at *how and why* this farm bill context shifted from a potential reform bill to a status quo bill in the span of two years, and what this shift meant for land use incentives. This shift provides a particularly condensed case in which a policy context changed even as the historical time period and range of interest groups involved remained the same. This in turn facilitates an analysis of the kinds of factors that can make it sometimes more and sometimes less possible to change policy.

This dissertation will thus examine this shift from "reform bill" to "stability bill," analyze the factors that drove the opening and then closing of an opportunity for policy reform, and focus specifically on how popular and often nationalist framings of trade and energy issues by groups and in the public sphere influenced this shift in debates. It will also compare the lack of reform in the 2008 farm bill to previous change-oriented and stability-oriented farm bills, to further distill some of the factors that can drive or inhibit

policy change over time, and will analyze the implications of the 2008 farm bill for sustainable land use and future farm policy efforts.

If reforms to commodity policy could in fact modernize the farm bill to better serve a broader range of groups' food and agricultural needs, and if such reform is hard to come by, examining a situation in which reform *almost* happened (but didn't) can provide clues as to what the greatest obstacles to farm policy change are, the impacts they have had for current environmental and social concerns, and the ways in which sustainable agriculture and environmental groups among others can work towards potential farm policy reform in the future. On a theoretical level, examining this shift in policy change opportunity over the course of the 2008 farm bill debates can help refine scholars' and practitioners' broader understandings of how policy change takes place.

Farm bill History

Over time, farm bills have been characterized by an expansion of both the number of interest groups involved in debates and the number of policy issues incorporated into bills. At the same time, they have been characterized by a certain level of inertia and resistance to change. These forces, and the tensions among them, are discussed in the following sections.

Farm bill expansions over time

The first farm bill was passed in 1933 under President Roosevelt, and at the urging of farm groups calling for government support to balance out the booms and busts of agricultural production. Specifically, overproduction of commodity crops by farmers was keeping prices lower than costs of living, creating a situation where farmers were going out of business (Cochrane 2003). The 1933 farm bill created acreage reduction programs, where farmers were paid first to destroy crops and animals and later to simply keep part of their land out of production, in order to reduce excess supply and raise market prices. It also created price-support loans or "non-recourse" loans to be paid back if market prices were high and defaulted if prices were low (in which case the grain used

as collateral was forfeited to and stored by the government, to be fed back into the market when prices rose again) (K.L. Robinson 1989, Orden *et al*. 1999).

While such early farm policy was designed to moderate the effects of surpluses on prices by taking land out of production and by storing excess grain, farm policy since the 1950s has focused more on finding additional uses for excess supply (Flinchbaugh and Knutson 2004). Public Law 480, for example, passed in 1954, donated surplus commodity crops to foreign countries as food aid, and the food stamp and school lunch programs of the 1960s were similarly designed to feed surplus commodities to children and the poor (McGovern 1967, Talbot and Hadwiger 1968, K.L. Robinson 1989, Knutson *et al*. 1990, Ackerman *et al*. 1995, Orden *et al*. 1999).

The 1973 farm bill added to this trend, altering agricultural support mechanisms to promote increased exports. In 1972 a large sale of grain to the Soviet Union had combined with drought in the U.S. Midwest to create international supply shortages and raise food prices (Orden *et al*. 1999, Pollan 2006). An undervaluation of the dollar after many years of overvaluation further contributed to high crop and food prices and inflation (Schuh 1974). In order to lower prices, the 1973 farm bill called on farmers to increase production – to plant "fencerow to fencerow." It also established guaranteed target prices that would pay farmers a "direct payment" equal to the difference between market and target prices whenever market prices fell below target values. This created an incentive for farmers to sell their crops even if prices were low, since the direct payment would make up their lost income. And it moved farm policy from a system where excess grain was stored when prices were low to a system where it was exported. Since direct payments subsidized farmers without raising the value of the commodities on the world market, farmers could also export these surplus grains more competitively (K.L. Robinson 1989, Knutson *et al*. 1990, Orden *et al*. 1999, Philpott 2007, Pollan 2006).

The policy provisions of 1973, aimed at increasing production and using excess supply for exports and to feed the poor, had important implications for sustainability and farm policy. While they provided needed calories to lower-income consumers both domestically and internationally, they also reinforced incentives to in many cases expand production onto marginal lands, increasing soil erosion and water pollution, and

undermining the resource base upon which future agricultural production depended (Pfeffer 1992, Thurman 1995, Lubowski *et al.* 2006). Donated surplus crops also made it harder for poor farmers in other countries to compete, contributing to weaker farm economies even as they helped feed consumers. And domestic hunger programs, by using surplus commodity-based foods heavy in calories and light in nutritional value, did little to stem the rising incidence of obesity and diet-related illness among low-income consumers (Oxfam America 2006, Pollan 2006). While a boon to the food, fiber and fuel industries and a help for food insecure populations, these policies thus contributed to increased environmental degradation, domestic health problems, and farmer insecurity abroad.

Farm bills did, however, try to address some of these environmental and rural development concerns as they arose. The 1956 Soil Bank's Conservation Reserve Program (CRP), reinstituted again in 1985, paid farmers to keep erodible farmland out of production for 10-15 years and in grass or tree cover. The 1990 farm bill contained provisions for wetland reserves, sustainable agriculture, and water quality research, and the 1996 Environmental Quality Incentives Program (EQIP) and 2002 Conservation Security Program (CSP) supported farmers for conservation on working farmlands (Faeth *et al.* 1991, B.A. Johnson 2004a). These provisions were geared to mitigate some of the negative environmental impacts of modernized agriculture, but in the end did not address the tendency of corn, soybean, wheat, rice, and cotton subsidies to favor agricultural methods that fostered soil erosion, water pollution, and a loss of agricultural diversity in addition to efficiency. Similarly, rural development portions of the farm bill were formulated to address the need for housing and small business loans and grants, waste and water facilities, and access to broadband and internet in rural areas. But again these were piecemeal measures that did not address any baseline loss of community vitality implicated by an increasingly efficient, but increasingly consolidated, industrial model of agriculture (National Agricultural Law Center 1973, Cowan 2007).

Thus, while farm policy did expand over time to incorporate rural development and conservation, as well as trade and nutrition concerns, it did so in an additive rather

than a substitutive way. Thus, even through all the changes made to farm bills over time, commodity supports for corn, soybeans, wheat, rice, and cotton remained in place.

Farm bill inertia over time

Even with additions to conservation, rural development, trade, and nutrition, the heart of the farm bill remains in its commodity supports. This system of crop subsidies, which was intended as a temporary measure of emergency farm support for the Great Depression, remains powerful today due to the existence of a strong support base, successful issue expansion, and policy inertia.

The support base for commodity subsidies has been maintained through an alliance of industry and commodity lobbies with established political networks in Washington, D.C., as well as through strong public support for agriculture (K.L. Robinson 1989, Knutson *et al*. 1990). Opinion polls have shown that even in the 1980s when government spending on subsidies was high compared to previous years, 41% of rural dwellers and 51% of urban dwellers supported increased farm funding (U.S. News and World Report 1986, in Knutson *et al*. 1990).

The farm agenda has also undergone successful issue expansion, meaning that as legislation broadened to encompass more than just traditional commodity crop provisions, it garnered support from new sectors of society. In the 1960s and 1970s the farm establishment brought in the support of an anti-hunger lobby concerned with poverty and malnutrition by incorporating domestic food aid provisions such as food stamps and free school lunch programs into farm legislation (K.L. Robinson 1989, Knutson *et al*. 1990). More than half of the farm bill budget is now dedicated to food stamps and nutrition programs, creating a situation where even with a shrinking farming population, urban legislators vote for farm subsidies in exchange for rural legislators supporting food stamp programs. Crop subsidies keep the cost of emergency feeding programs low, and food aid provides a market for surplus commodities that helps keep prices up, thus pleasing both groups (Lubben, Funk, *et al*. 2006). In the 1980s and 1990s the farm lobby joined with environmental groups to promote an expanded Conservation Reserve Program and other conservation measures that, in taking land out of production,

stimulated higher farm prices while also reducing soil erosion, groundwater contamination, and loss of habitat (Orden *et al*. 1999).

While many of these provisions have mitigated some negative impacts of modernized, subsidized agriculture, this type of issue expansion has also been crucial in allowing the farm establishment to maintain a quorum of support for commodity crop supports, as the number of farmers declined from 21% of the U.S. population in the 1930s to 2% in the 1990s (K.L. Robinson 1989, Dimitri *et al*. 2005). The 2002 farm bill, for example, contains title provisions not only for commodity programs, but also for conservation, nutrition, rural development, forestry, energy, and animal welfare, among others – each with associated interest groups who support commodity programs in exchange for advancing their provisions of concern (United States Department of Agriculture 2002).[6]

Finally, inertia has played an important role in keeping farm policy stable. The promise of agricultural subsidies raised the land value of farm properties, benefiting landowners but creating hardship for new or renting farmers. In addition, farmers growing up with price supports have come to see them as necessary and given. As subsidies have become capitalized into land values, U.S. crops have become more expensive and less competitive internationally, creating a need for additional subsidies to "even the playing field" (Griswold *et al*. 2006, United States Department of Agriculture 2006a). Not surprisingly, most policy analysts concede that it is extremely difficult to undo existing entrenched legislation (Orden *et al*. 1999).

U.S. agricultural policy has thus come to support corn, soybean, wheat, rice, and cotton production in particular, and as such contributes to the environmental and social problems inherent in specialized, efficient, industrial agriculture. Whereas commodity policies were originally developed to support rural livelihoods and provide a safety net for both farmers and consumers, and while they have to some extent done so, they have also become institutionalized alongside pervasive agricultural overproduction and

[6] For those who argue that the farm bill is less effective because it integrates multiple policy goals, it is specifically these sorts of coalitions, where independent groups join together to protect their complementary (or not so complementary) interests, that stand in the way of change.

associated environmental, health, trade, and community impacts. As such, these complexities of the benefits and problems associated with commodity support programs have become the basis for struggles between groups over potential commodity reform in the 2008 farm bill.

Farm policy interest groups

Agricultural policy was once an arena in which a handful of agricultural and rural-state interest groups, legislators, and administrators crafted an economic support system for the Americans who farmed. It has now become an arena where groups ranging from environmentalists to consumers to anti-hunger groups to commodity interests fight over food stamp, conservation, international trade, and energy policies, in addition to the traditional economic supports for the small percentage of Americans who still farm (K.L. Robinson 1989, Browne 1995). The 2008 farm bill debates in particular attracted the attention of an extraordinarily wide range of interest groups. In these debates, the many groups that support commodity policies continued to argue for price supports as a necessary safety net for agriculture, while other groups argued for a farm policy that benefits a more diverse groups of farmers, natural resources, consumer health concerns, or rural community development.

Many of these reform-oriented groups argue that it is important to farm in a way that is not only efficient but that also protects the environment, communities, and human health and livelihoods. While proponents of the current agricultural system would agree, the two groups differ on how this should be done. They often define efficiency, environmental protection, and health risks differently, advocate a different balance among these factors, and suggest different strategies for how the balance should be pursued. Industry, for example, sees evolving technology as the primary way to correct for negative consequences of previous agricultural technologies. Pesticides and herbicides were formerly the answer to the risks of producing in monoculture. Now genetically modified (GM) crops have become the way to mitigate the health and environmental damage caused by overuse of these chemicals (Monsanto 2007). Many sustainable agriculture and environmental advocates, however, question the idea that new

technology is the best way to address the problems associated with previous technology. They argue that new technologies are as likely to create new problems as they are to fix previous ones. They advocate taking a more ecologically-based approach that promotes less resource-intensive solutions, such as increased use of biological control or natural predators to control pests, rather than genetic engineering to design pest-resistant crops (Friends of the Earth/Greenpeace 2006).

Of course interest groups' positions on farm policy are much more varied and nuanced than the "reform versus stability" dichotomy might suggest. All kinds of groups are looking to promote various kinds of changes to the farm bill that address *from their perspective* the economic, environmental, health, trade, and community needs, benefits, and impacts of modern agriculture, and that also continue to build their own bases of support (Richert 2007a). In order to get a better sense, then, of who was weighing in on the 2008 farm bill debates as they shifted from a WTO-influenced to a biofuels-influenced context, and of how their positions interacted with one another within this shifting context to create changing opportunities for reform and stability, the following sections describe the basic policy positions of several groups of farm bill interests.

The categorization of these groups that follows is by definition imperfect, as each interest group has its own individual goals, constituencies, and strategies that may or may not be in sync with other groups in its category. Many groups' priorities span two or more categories, and alliances among groups vary – in addition to expected coalitions, some groups find themselves aligned with presumed opponents on certain issues and butting heads with more philosophically-aligned groups on others. But however imperfect they may be, these categories do help organize the playing field of farm bill interest groups for analytical purposes. The descriptions below are designed to paint a picture of the groups and arguments surrounding the farm policy reforms suggested in 2005-06. This in turn provides a detailed understanding of who advocated for what reforms and why, and a sense of the benefits such reforms might have provided had the WTO- induced policy window stayed open. The positions described are based on a synthesis of interview data and document analysis. Further details and nuances of

groups' positions within and across categories, and as they shifted in 2006-08, will also be explored in future chapters.[7]

Commodity groups, farm organizations, trade associations, and industry

Commodity groups, farm organizations, trade associations, and agribusiness corporations are the more production-oriented, and historically the more involved, groups in farm bill debates. They typically take a position of pride in agricultural productivity and technology, seeing America as a breadbox "feeding the world." Each U.S. farmer, they argue, produces food for the equivalent of 129 people worldwide, and the U.S. as a whole provides close to 40% of the world's supply of corn and 68% of the world's corn exports. Average corn yields have risen from 18.6 bushels/acre in 1936 to 149 in 2006, with similarly rising yield trends for other crops (CampSilos 2005, National Corn Growers Association 2007a). Much of these increases in yield and productivity can be attributed to agricultural research and technological change – to the development of improved crop varieties through plant breeding, and increased use of chemical fertilizers, pesticides, and sophisticated machinery post-World War I (Cardwell 1982, Cochrane 2003, Fernandez-Cornejo 2004, Romanowski 2006). These trends have in turn been reinforced by farm bill policies that subsidize corn, soybeans, wheat, rice, and cotton, and that protect farmers in case of crop loss (Philpott 2006a).

Most commodity groups argue that U.S. agriculture and agricultural policy has been remarkably successful – that its incentives for productivity and research-based technological sophistication are what have made U.S. agriculture so prolific. Positions diverge, however, over what the role of farm policy should be in ensuring continued productivity. Grain-based commodity groups (***e.g.***, National Corn Growers Association, National Association of Wheat Growers) and general farm organizations (***e.g.***, American Farm Bureau Federation, National Farmers Union), represent farmers who typically receive commodity subsidies, and who argue that commodity supports should be maintained to provide a safety net for agriculture. Some of these groups suggest tweaks

[7] A list of group categories and groups interviewed within each category can be found in Table 1, p.28-29.

to support mechanisms or target prices, but generally they prefer to keep the system largely as is.[8]

Livestock-based commodity groups (*e.g.*, National Cattlemen's Beef Association, National Pork Producers Council), trade associations (*e.g.*, American Meat Institute, National Grain and Feed Association), and agribusiness corporations (*e.g.*, Cargill, Tyson), which represent industry or non-subsidized farm sectors, argue that commodity supports should be gradually diminished so as to reduce government interference with trade and market forces. They are often, however, not as aggressive in these positions as commodity crop groups are in defending their subsidies, choosing instead to remain on the sidelines of commodity policy. This might be in part because livestock and industry groups do benefit to some extent, even if indirectly, from cheaper, subsidized commodities, or in part because they see themselves as further removed from direct questions of subsidy policies.

In general, these production-oriented groups value economic productivity in agriculture above environmental and social concerns, although they certainly acknowledge that agriculture should protect the environment and rural communities. They differ from one another on the extent to which they support some iteration of status quo farm policy or would instead favor commodity policy reform to allow market forces to operate more freely.

Environmental groups

Environmental groups argue that agricultural productivity gains have come at the expense of the environment, and that the farm bill should do more to promote conservation. Economic and policy incentives for increasing productivity, they argue, have tended to favor monoculture and bi-culture systems over more diverse cropping patterns. Whereas in the 1940s a typical Iowa farm produced hay, oats, corn, soybeans, and pasture, with rotated idle lands, the typical Iowa farm today produces corn and

[8] Of course while these statements, as well as the paragraphs that follow, present official group positions, none of these interest groups are in any way monolithic entities. The Farm Bureau, for example, has long had Southern and Midwestern branches that often differ significantly on policy priorities (Kile 1948).

soybeans with little fallow (Green Lands Blue Waters 2004). With the advent of corn ethanol for fuel, it is now moving towards continuous corn (Hoskins 2007). This is true in most other regions of the country as well – the south, for example is dominated by cotton, rice, and peanut production (United States Department of Agriculture 2007e).

While producing only one crop often leads to a more uniform product and requires fewer pieces of machinery, less diverse skills and knowledge, and simpler systems for record-keeping, growing only one crop is risky in the same way that investing one's entire savings in one stock is risky. If a farmer plants only corn, and if the crop fails due to weather or pest problems, s/he could end up with no alternative remaining source of income (Hesse 2005). And the more corn planted, the more susceptible the crop becomes to pest and disease threats, as fields no longer attract the same diversity of insects as they had when planted with many different crops (Pennsylvania State University 2007).

In addition, environmental groups argue, when one kind of crop is planted year after year on the same ground, the nutrients needed to produce that crop are constantly removed from the soil (Killpack and Buchholz 2006). While farmers apply chemical fertilizers and pesticides to replenish soil nutrients and kill pests, those inputs not used quickly enough by a plant easily leach into nearby water bodies, contaminating groundwater, lakes, and rivers, polluting drinking water and increasing exposure to nitrate-toxicity in infants (Foltz *et al.* 1993, Environmental Working Group 1996, Killpack and Buchholz 2006). Pesticide use has been linked to health problems among agricultural workers and their families (Oregon Health and Sciences University 2007). Excess nitrogen and phosphorous from fertilizers feed aquatic plant life, causing algal blooms and large fish-kill zones where the Mississippi River drains into the Gulf of Mexico (Green Lands Blue Waters 2004, Minnesota Pollution Control Agency 2000). Finally, environmental groups argue that planting crops in monoculture or bi-culture leaves soil particularly vulnerable to erosion by wind or water, especially during the eight months of the year when soil is left bare (Green Lands Blue Waters 2004, United States Department of Agriculture Natural Resources Conservation Service 2003).

The largest early incorporation of environmental protection into the farm bill was the 1985 Conservation Reserve Program, which offered farmers 10-15 year payment contracts to set aside erosion-prone or marginally fertile lands and convert them from crop production to trees or grasses. These and other environmental provisions were incorporated into the farm bill in part because they complemented commodity groups' focus on supply control, and in part because the environmental movement was in a position of relative power at the time as it came off its "environmental decade" of the late 1960s and early 1970s. In the 1980s, the environmental movement turned its attention from an exclusive focus on industrial pollution and national parks to this consideration of agricultural conservation as well (Buck 1996, Kraft and Vig 2003).

The 1990, 1996, and 2002 farm bills each added new conservation programs designed to address different resources of concern, for example wetlands, wildlife, grasslands, or farmland protection (Faeth *et al*. 1991, Moyer and Josling 2002, Cain and Lovejoy 2004). But despite this major expansion of conservation in the farm bill over the last 20 years, many programs were funded at only a portion of authorized levels, had to turn applicants away, or suffered from low enrollment because farmers found the extensive paperwork needed to qualify to be not worth the benefits (B.A. Johnson 2004b, National Governors Association 2006, American Farmland Trust 2007a, United States Department of Agriculture 2007b).

Most environmental groups involved in farm bill debates stress ecological criteria and the impacts of farming on natural resources, forest preservation, and air, water, and soil quality (Knutson *et al*. 1990). They often focus on set-aside lands such as the Conservation or Grasslands or Wetlands Reserve Programs, which pay farmers to set aside and not farm environmentally-sensitive land. They tend to favor programs that can get the biggest conservation bang for their investment.[9]

[9] Tensions between environmental and sustainable agriculture groups rose sharply during the 2002 farm bill debates around just this question of how to target conservation programs. In these debates, environmental groups promoted the Environmental Quality Incentives Program (EQIP) for its ability to clean up large livestock operations, while sustainable agriculture groups opposed funneling such money into large animal feedlots, which they saw as contributing to both environmental *and* rural community degradation (Environmental Defense 2001, Land Stewardship Project 2001). For more information on sustainable agriculture group positions on farm policy, see p.24.

Most of groups also focus on conservation program that are additions to the farm bill rather than significant commodity reforms (Bonnen *et al*. 1996). This is especially true of wildlife groups (*e.g.* Ducks Unlimited, Pheasants Forever), many of whose members are also commodity crop farmers who benefit from subsidy provisions. Some other conservation groups, however, (*e.g.* American Farmland Trust) do advocate more radical policy changes that include replacing commodity payments with farm revenue protection programs and green payments that reward farmers for stewardship rather than for per-bushel crop production (American Farmland Trust 2007b).

Many environmental groups active in the 2008 farm bill debates (*e.g.* Environmental Defense, The Nature Conservancy, Izaak Walton League of America) are thus asking for increased funding as well as streamlined enrollment processes for conservation programs (Izaak Walton League of America 2007, Environmental Defense 2007, The Nature Conservancy 2008). Others (*e.g.*, National Wildlife Federation) are focusing on new conservation provisions for an emerging biofuels industry, supporting legislation that promotes the development of ethanol from perennial plant material such as switchgrass or trees, in addition to or instead of the corn ethanol being produced today. These positions arise out of a desire to push the biofuels industry from promoting the planting of large expanses of corn for ethanol production, with associated fertilizer, pesticide, and water use, to more environmentally-friendly perennial cellulosic ethanol production with a higher energy balance and fewer pollution impacts (Sustainable Agriculture Coalition 2006, National Wildlife Federation 2007).[10]

Rural development groups

Rural development groups argue that the fantastic productivity of industrial agriculture has been accompanied by several serious side effects not only for the environment, but for rural America as well, including changes in rural employment structure and economic development incentives. Throughout history farmers have tended to produce more grain than required by demand, driving prices down. Whereas in most industries, low prices motivate producers to limit production, individual farmers working

[10] For more details on environmental groups and ethanol production, see Chapter 5.

independently and on a seasonal cycle instead increase production to make their profits through volume. In fact there has been overproduction and over-accumulation of agricultural stocks at every peacetime moment in U.S. history since the Civil War, with the exception of 1900-1914 (Cochrane 2003).

As farms have grown larger to make up in volume what they lose in price, smaller farms have become less competitive and many have gone out of business, contributing to a consolidation of farm ownership and production. Compounding this, data show that the bulk of income transfers from subsidy payments go to upper income farmers (Offutt and Gundersen 2005). As former small, often unsubsidized, farmers left rural areas for opportunities in the cities, and as large farmers turned to more sophisticated machinery and technologies to handle larger acreages, fewer farm jobs remained in the countryside, and rural communities declined. Between 1900 and 2000 the average farm size increased by 67% and the number of farms dropped by 63%. In 1900 41% of the U.S. population worked in agriculture compared with 1.9% in 2000, and 60% lived in rural areas compared to 20% in 2000 (Dimitri *et al.* 2005).[11]

Rural development groups argue that while agricultural supports have helped stabilize some rural communities, overproduction of commodity crops has led on the whole to a decline in the number of small farmers and local businesses populating other rural communities (Sustainability Institute 2003, Center for Rural Affairs 2007a). Many groups (*e.g.* Land Stewardship Project, National Family Farm Coalition) thus look to the 2008 farm bill to help restore options for living in the countryside, with programs to help new farmers begin farming, and stricter subsidy caps to limit support for consolidated operations and non-farming landowners (Center for Rural Affairs 2007a).

[11] Whether one sees this urbanization as positive or negative depends on one's perspective. Many argue that one explicit purpose of industrialization is to make agricultural production more efficient, produce to diverse consumer demands, and allow people to work in sectors that generate greater economic return (S.C. Blank 1998). Others argue that increased efficiency and specialization of agriculture do not have to lead to outmigration from the countryside. Schuh (1999), for example, argues that rural outmigration is primarily the result of underinvestment in agricultural research, rural education, and infrastructure; explicit and implicit subsidies for business development, water, sewer, and transportation systems in urban over rural areas; and monetary policies that disfavor agriculture within a context of agricultural modernization.

Public health groups

Health, and specifically the impact of cheap, high-fat, high-sugar processed foods on consumers, has only recently become a focus of farm bill debates. Public health and social justice advocates have noted that the greater affordability and availability of processed foods has, among other factors, been correlated with rising rates of obesity and diet-related illnesses in the U.S., especially among low-income consumers (Johns Hopkins School of Public Health 2007, Pollan 2006). The fact, for example, that the sweetener high fructose corn syrup is relatively cheap, in part due to corn subsidies, has meant that portions of items such as soft drinks and sweets could be increased without a proportional increase in price (Pollan 2006). In addition, as subsidized corn and soybeans are fed to livestock, the cost of meat remains low, making a relatively large-portion, high-meat diet accessible and affordable for most Americans (Cochran 2006, Johns Hopkins School of Public Health 2007). According to the National Institutes of Health, 66% of adults age 20 and older are overweight or obese (32% obese), up from 45% (13% obese) in 1960 (National Institutes of Health 2006). According to the Surgeon General, diet-related illnesses such as heart disease and diabetes are now considered the leading cause of death in the U.S., and their costs have reached over $110 billion a year (Imhoff 2007). While these trends certainly have to do with more than just portion sizes and cheap sugars and fats, the subsidizing of corn and soybeans that are then converted to fats and sugars have made processed foods cheaper and more readily available than they otherwise might have been (Corn Refiners Association 2006).

Public health and community food security advocates (***e.g.***, Community Food Security Coalition, American Dietetic Association) argue that Americans are paying for their cheap food with both their tax dollars and their health, and are looking to the 2008 farm bill to reshuffle agricultural production incentives so that processed foods no longer become the cheapest and most convenient foods in the grocery store (Healthy Foods and Communities 2006, American Dietetic Association 2007, Johns Hopkins School of Public Health 2007). These groups often conflict with more established anti-hunger and nutrition groups (***e.g.***, Food Research and Action Center, Center on Budget and Policy Priorities) that focus on the food stamp and emergency feeding programs included in the

farm bill. Since these programs rely on surplus (cheap) commodities, most anti-hunger advocates do not share public health groups' opposition to commodity subsidies (Food Research and Action Center 2007, Johns Hopkins School of Public Health 2007).

Trade groups

A focus on trade and on exports of agricultural commodities has long been part of the farm bill debates. Relevant provisions include export subsidies and credits, marketing development programs to generate demand abroad for U.S. commodities, and food aid programs such as P.L.480. However, many of these provisions have come under increased scrutiny as WTO countries have sought to lower subsidies and tariffs as barriers to global trade. Specifically, countries making up the WTO have argued that many of the U.S.'s trade provisions and commodity subsidies distort the free flow of markets and disadvantage other countries' agricultural production (Hanrahan 2007). Advocates of liberalized trade, who seek a lowering of barriers to trade, have hoped that WTO negotiations would eventually force reductions in these domestic commodity subsidies (World Trade Organization 2001). These groups include not only trade associations, livestock groups, and industry, but also social justice and faith-based groups such as Oxfam America and Bread for the World, who advocate for reducing commodity subsidies to allow developing countries to compete more fairly in a global agricultural market (Oxfam America 2006).

Some of these normally philosophically-divergent groups have even come together in unusual coalitions. One example is the Alliance for Sensible Agricultural Policies, a grouping of fairly liberal social justice and fair trade groups such as Oxfam and Bread for the World combined with more conservative think tanks and taxpayer groups such as the Cato Institute and National Taxpayers Union. These groups all see U.S. agricultural subsidies as trade distorting and would like to see them eliminated. They advocate the creation of "farmer savings accounts" and additional support for conservation, nutrition, and rural development to compensate for the changes and reductions they propose in farm bill commodity supports. These groups see commodity cuts as necessary for reducing the budget deficit, the taxpayer costs, and the

environmental and social impacts of subsidizing corn, soybeans, wheat, cotton, and rice grown in monoculture or bi-culture (Kondracke 2007).

Sustainable agriculture groups

Sustainable agriculture groups (***e.g.*** Sustainable Agriculture Coalition, The Minnesota Project) advocate for agricultural systems that address "stewardship" – promoting environmental protection, vibrant communities, consumer health, and equitable trading relations simultaneously (Feenstra ***et al.*** 1997). While they generally favor government support of farmers, they argue that these support dollars should go to diversified farmers who protect the environment and rural communities rather than exclusively to commodity-oriented growers.

One common focus of sustainable agriculture groups' efforts has been on shifting the emphasis of conservation programs from taking marginal lands out of production in set-asides like CRP to also protecting ***working*** croplands. For many in the sustainable agriculture movement, these efforts culminated in the 2002 Conservation Security Program (CSP), which pays farmers for improving water and soil quality, protecting wildlife habitat, and instituting other environmental stewardship practices on their farms. CSP addresses environmental and rural development concerns together by supporting farmers whose cropping practices explicitly protect the environment, legitimizing the idea that farms can be "green" and productive at the same time.

But while CSP was designed as an open enrollment program, authorizations bills capped funding at a fraction of Congressional Budget Office cost estimates, and disaster assistance provisions tapped CSP funds two years in a row. Thus, in the end, a given farmer could only apply for CSP one out of every eight to fourteen years, limiting its impacts for promoting conservation on working farmlands (Lenz 2003, Freeman 2004, B.A. Johnson 2004a, B.A. Johnson 2004b, Imhoff 2007). Funding CSP at authorized levels is one goal of many sustainable agriculture groups for the 2008 farm bill (Sustainable Agriculture Coalition 2006).

Promoting CSP, and a related proposal for "green payments," in the 2008 farm bill is seen by many sustainable agriculture groups not only as support for working lands

conservation, but also as a way to encourage more radical farm policy reform. Because CSP payments are generally considered non-trade-distorting – they support farmers for conservation practices without affecting crop market prices – they have been touted by groups as a way to convert commodity crop subsidies into an alternative environmentally-friendly farmer safety net that conforms to WTO pressures. A green payments program would provide farmers a payment on top of whatever price they receive for their crops in the marketplace, in this case rewarding them for soil, water, and wildlife conservation on their farms rather than for their crop production per se. Adding green payments into the farm bill, and eventually channeling them into a substitute for commodity payments, is thus one form of radical farm policy reform that has been proposed by such groups.

Interest groups and questions of farm policy change

Despite the enormous increases in productivity associated with industrialized agriculture and its use of fertilizers, pesticides, machinery, and improved seed technology, there have been a number of negative consequences associated both with industrial agriculture itself and with the subsidizing of it through U.S. farm policy. There has been increased soil erosion, energy use, and water pollution from fertilizer and pesticides in fields dedicated to just one or two crops. There has been a loss of employment options and community vitality in some rural areas, and increased inequity between wealthy and poor farmers. There has been increased prevalence of cheap processed sugars and fats, correlated with rising levels of obesity and diet-related illness. And there have been changes to trade dynamics that affect other countries' agricultural production capacities. While many provisions have been incorporated into farm policy to mitigate these impacts, the baseline incentives for monoculture production remain in place. It is primarily because of these continued environmental, health, trade, and community impacts that sustainable agriculture, environmental, rural development, trade, and social justice groups have been pushing for varied levels of farm bill reform, even as many commodity groups argue that federal support for agriculture has been appropriate.

Environmental and sustainable agriculture groups promoting green payments and trade-oriented groups promoting simple subsidy reductions are two examples of major changes to commodity policy proposed for the 2008 farm bill. Historically, such changes to farm policy have been made alongside or in addition to commodity supports rather than by directly challenging them. But in 2005-06 there looked to be an opportunity for more radical farm bill reform.[12]

Given that farm bill discussions more often focus on farm policy tweaks than on radical reforms, the question arises as to why these reform debates rose to the farm bill agenda in 2005-06. This dissertation delves into this question in order to understand where these reform debates came from, how they were exploited and also shaped by various interest groups, how they grew (and then faded), and what they meant for farm policy and for sustainable land use.

This question of farm bill policy reform opportunities is important because much of current soil and water pollution, trade disputes, health concerns, and decline of rural communities has been associated with large-scale modernized agriculture and the non-point pollution and cheap processed food it creates, even as it promotes great efficiency and availability of food to consumers. A fundamentally "greener" and more socially-concerned farm bill could preserve the benefits of modern agriculture while improving its environmental footprint, as well as the health of farm workers exposed to pesticide residues, residents who live near fertilizer- and pesticide-polluted waters, and consumers both domestically and internationally who seek healthier food options. It could give farmers more freedom to plant a greater diversity of crops and cut down on the costly chemical inputs needed for monocultures, rather than encourage them to plant corn and soybeans to ensure their eligibility for government support in case of low prices or disaster. Changes to farm bill legislation that could achieve these benefits are certainly possible. Shifts have already been made to regulate point source polluters (power plants, industry) through environmental legislation. Similar changes in agricultural legislation

[12] This is not to say that in the past, groups and individuals have not suggested such radical changes in the past. Rather, such changes have not typically made it through the political process.

could improve the environmental, health, and community record of agriculture on non-point rural lands (National Academy of Sciences 2007).

The remainder of this dissertation will build on the map of farm bill interest group positions laid out in this chapter to analyze the dynamics, debates, and changing contexts that favored and then inhibited such major farm bill policy reform. First, however, it will turn to a description of the methods and data upon which these analyses were based.

Methods

The analysis presented in this dissertation is based on several sources of information. The first source of data is farm bill-related documents. These documents include newspaper articles on the farm bill collected between March 2004 and February 2008, with special focus on the 15-month period from September 2006 to December 2007. They also include interest group position papers detailing various groups' positions and strategies for the 2008 farm bill debates, similarly collected between September 2006 and December 2007. These articles and position papers were collected in three ways: 1) downloaded from the internet, through both academic and web searches; 2) provided through subscriptions to online mailing lists such as farmpolicy.com and Red River Farm Network News, which compile nationwide articles about farm policy on a daily and weekly basis; and 3) procured at conferences or from group representatives interviewed. These documents provided a written record of both the changing issues and changing discourses most relevant to farm bill debates over the time frame studied, and of groups' positions, political strategies, and framings of issues relative to this changing context. They assisted in narrowing down the range of farm bill-related conferences to attend (see below). Documents collected were read, analyzed for content and for themes, and categorized based on these common themes and frames.

The second source of data was participant observation at 28 farm bill related conferences and meetings, attended by the author between December 2005 and January 2008. These meetings were organized by groups representing the breadth of farm bill perspectives discussed in this chapter. Conferences ranged from the Commodity Classic to the National Farmers Union Convention to the Soil and Water Conservation Society

and Sustainable Agriculture Research and Education meetings. Table 1 shows the full list of conferences attended, along with type of conference, location, and month and year attended.

Conference name	Location	Month/year
Farm bill-focused conferences		
Soil and Water Conservation Society's Annual Conference	Keystone, CO	July 2006
Minnesota Wetlands Summit	Bloomington, MN	February 2007
Twin Cities Agricultural Issues Round Table on the New Farm Bill	Minneapolis, MN	February 2007
The Food Pyramid and the Farm Bill Conversation	St. Paul, MN	March 2007
What's for Dinner? The Ethics and Aesthetics of Eating	Chaska, MN	April 2007
National Farmers Union Legislative Fly-In	Washington, DC	September 2007
Interest group-focused conferences		
Midwest Sustainable Agriculture Working Group/Sustainable Agriculture Coalition's Farm Bill Kickoff	Oconomowoc, WI	August 2006
Sustainable Agriculture Research and Education (USDA-SARE)'s National Conference	Oconomowoc, WI	August 2006
Land Stewardship Project Farm Bill Meeting	Minneapolis, MN	December 2006
Minnesota Farmers Union Annual Meeting	Minneapolis, MN	December 2006
Minnesota Farm Bureau Annual Meeting	Minneapolis, MN	December 2006
The Farm Foundation's Specialty Crops Forum	Washington, DC	January 2007
Commodity Classic (joint annual meetings of the American Soybean Association, National Corn Growers Association, and National Association of Wheat Growers)	Tampa, FL	March 2007
National Farmers Union Annual Convention	Orlando, FL	March 2007
The Kellogg Foundation's Food and Society Networking Conference	Traverse City, MI	April 2007
Community-Based Food Systems Seminar	St. Paul, MN	May 2007
Minnesota Natural Resources Conservation Service (NRCS) State Technical Committee Meeting	St. Cloud, MN	May 2007
Trade- and WTO-focused conferences		
The Freeman Forum – Globalization and U.S. Farm Policy	Minneapolis, MN	December 2005
Towards a Global Food and Agricultural Policy for an Open International Economy	Minneapolis, MN	May 2007
Whither U.S. Agricultural Trade Policy?	St. Paul, MN	January 2008

Bioenergy-focused conferences		
Humphrey Institute Sustainable Energy Workshop	Minneapolis, MN	October 2006
Farmer's Cooperative Conference on Renewable Energy	Minneapolis, MN	November 2006
Twin Cities Agricultural Issues Round Table on Biofuels	Minneapolis, MN	December 2006
Midwest Ag Energy Summit	St. Paul, MN	December 2006
The Freeman Forum – Food or Fuel: The Emerging Competition	Minneapolis, MN	April 2007
Biofuels Production and Wildlife Protection Conference	St. Paul, MN	July 2007
Soil and Water Conservation Society West North Central Conference	Dubuque, IA	October 2007
The Global Biofuels Debate: Science, Policy, and Ethics	St. Paul, MN	October 2007

Table 1. Farm bill-related conferences attended.
List of conferences attended, locations, and dates, organized by type of meeting.

I became aware of these conferences through farm bill-related internet sites, listserves, and word of mouth, and attended those that were particularly pertinent to the farm bill debates, plus additional conferences that were easily accessible. There were three primary purposes for attending these conferences: 1) The first was to get a preliminary sense of what issues were relevant to the farm bill debates starting in December 2005, across groups and regions. This allowed for the identification of changing political and situational drivers underlying farm bill debates, and also helped develop and refine research and interview questions. 2) While some of the conferences were primarily geared toward information-sharing, others explicitly represented one group's point of view on the farm bill. Attending these conferences as a participant observer provided a sense of how very different groups were approaching the farm bill debates, and a sense of the differences and similarities among their points of view and approaches to political activism. 3) Attending these conferences facilitated the process of later contacting key group representatives for interviews. Meeting and talking with these representatives at conferences made it easier to schedule future one-on-one meetings with them and ensured a broad diversity of interview participants. Some conferences also led to opportunities to listen in on subsequent conference calls, for example with some sustainable agriculture working groups.

The third, and particularly important, source of data for this study was 56 informational interviews conducted by the author with farm bill-related groups. These interviews took place between September 27, 2006 and August 21, 2007. Groups interviewed included sustainable agriculture, environmental, social justice, commodity, farmer, and trade groups; industry representatives; funders; and government and Congressional staff. These interviews provided direct access to a broad range of groups and their often conflicting perspectives during the 18 months before the anticipated passage of the farm bill. This was appropriate in that farm bill contexts are generally influenced by the situational and political contexts of the year or two preceding the passage of the bill, and the 2008 farm bill is expected to be completed by April 2008 (Orden *et al*. 1999, Moyer and Josling 2002, Patashnik 2003). Table 2 shows the complete list of groups interviewed, categorized by type of group.

Type of Group	**Group name**
Agribusiness companies	Cargill Corporation Tyson Foods, Inc.
Commodity groups	American Soybean Association (ASA) (2 interviews) National Association of Wheat Growers (NAWG) National Cattlemen's Beef Association (NCBA) National Corn Growers Association (NCGA) National Cotton Council (NCC) National Pork Producers Council (NPPC) National Potato Council (NPC)
Environmental groups	American Farmland Trust (AFT) (2 interviews) Ducks Unlimited (DU) Environmental Defense (ED) Izaak Walton League of America (IWLA) National Association of Conservation Districts (NACD) Soil and Water Conservation Society (SWCS) The Nature Conservancy (TNC)
Executive branch of government	Farm Credit Administration (FCA) Natural Resources Conservation Service - Minnesota (NRCS) United States Department of Agriculture (USDA)
Farm organizations	American Farm Bureau Federation (AFBF) National Farmers Union (NFU)

Legislators or legislative staff	House Agriculture Committee (2 interviews, with former staff and former legislator) Office of Saxby Chambliss (R-GA), Minority leader of the Senate Agriculture Committee Office of Kent Conrad (D-ND), Chairman of the Senate Budget Committee Office of Bob Goodlatte (R-VA), Minority leader of the House Agriculture Committee Office of Tom Harkin (D-IA), Chairman of the Senate Agriculture Committee Office of Collin Peterson (D-MN), Chairman of the House Agriculture Committee
Lobbying firms	Cornerstone Government Affairs, LLC Olsson, Frank, and Weeda, P.C.
Social justice groups	Community Food Security Coalition (CFSC) Food Research and Action Center (FRAC) Evangelical Lutheran Church of America (ELCA) Institute for Agriculture and Trade Policy (IATP) Land Stewardship Project (LSP) National Family Farm Coalition (NFFC) Oxfam America
Sustainable agriculture groups	Center for Preparedness Research, Education and Practice (C-PREP) Michael Fields Agricultural Institute (2 interviews) Northeast Midwest Institute Sustainable Agriculture Coalition (SAC) The Minnesota Project
Sustainable agriculture funders	Headwaters Group Philanthropic Services Sustainable Agriculture and Food Systems Funders group W.K. Kellogg Foundation
Trade associations	American Meat Institute (AMI) National Chicken Council (shorter phone interview) National Grain and Feed Association (NGFA) Renewable Fuels Association (RFA) United Fresh Produce Association

Table 2. Farm bill interest groups interviewed.
List of groups interviewed, categorized by group type (note that group categorizations are by nature imperfect).

Interviews were semi-structured: while there were a number of key issues and questions addressed with all participants, the flow, pace, and primary foci of each interview were largely determined on an individual basis by the particulars of each conversation and participant. Each participant was asked to comment on the history of

his/her organization and its role in the farm bill, the group's position and strategies for working on the farm bill, its view of other players working on the bill, its viewpoint on political and situational factors influential in previous and current farm bill debates, and its sense of how these external factors affected the group's farm bill position. Depending on the participant, some interviews also focused on other specific issues – for example a particular legislator's views on the farm bill, or a particular organization's history with sustainable agriculture and the farm bill. Please see the appendix on p. 222-223 for an interview guide outlining the points addressed.

Interviews ranged in length from 40 to 100 minutes. They were taped with the permission of the interviewee, except for three interviews not taped due to technical or logistical constraints. For un-taped interviews, information was reconstructed from notes, but participants were not quoted. For taped interviews, the interviews were transcribed, and the transcriptions were read and hand coded for salient themes. They were then used alongside document analyses and conference findings to construct the analysis presented in subsequent chapters.

The interview quotes and citations presented in the remainder of this dissertation were taken directly from interview transcripts. If permission was given, these quotes are attributed in the text with the interview participant's name, organization, place of interview, and date. If the participant preferred to remain anonymous, the quote is cited by number, type of group, place of interview, and date. Quotes were edited for flow, as expressed with ellipses and bracketed word additions, but were not altered in any meaningful way. In addition, relevant chapters of the dissertation were forwarded to interview participants to double-check permissions and attributions for the quotes used.

The sample of groups approached for interviews was purposive rather than representative, a technique used in in-depth research to avoid bias from working with smaller population universes (Miles and Huberman 1994, Tashakkori and Teddlie 1998). The goal was to talk to a range of key people involved in farm bill debates, rather than to select a random sample of all groups with farm bill interests. Interview participants were chosen to reflect a high degree of heterogeneity of farm policy perspectives and

involvement, and were stratified so that several interviews were conducted within each of several generalized interest group categories.

Interview participants were identified and contacted based on their participation in farm bill-related conferences, presence in newspaper articles, availability of farm bill materials on their organization's websites or farm bill list-serves, or recommendations from other groups interviewed. Interview participants occupied positions within their organizations focused on farm policy. Most of the people interviewed represented national-level groups, and most were based in Washington D.C. However, several were regionally-based groups particularly active on issues of federal farm policy. Groups ran the gamut from those favoring current farm policies to those seeking radical changes to the farm bill. Some were heavily involved in the internal workings of farm bill policy creation, while others sat more on the sidelines of day-to-day farm politics. Some had a grassroots organizational model, while others were structured as more centralized, top-down organizations.

The group representatives interviewed shared a diversity of opinions both on their own groups' positions and on the surrounding political context and viewpoints of other groups in the farm bill debates. Reliability and credibility of data were ensured through triangulation among written, oral, and observed sources, and through regular observation of groups and farm policy dynamics over a period of more than two years. In particular, interview data were analyzed alongside document sources and conference notes to produce the analysis presented here. In addition, relevant chapters of the dissertation were forwarded to interview participants to be checked for accuracy.

Conclusions

This dissertation focuses on a particular moment of opportunity for farm bill reform that surfaced in 2005-06, and the subsequent closing of this window of opportunity in 2006-08. It builds on policy change and social movement literatures to examine the external factors driving or inhibiting farm bill change and the resources and framing strategies interest groups used to argue for and against reform. This opening and subsequent closing of a political opportunity for change provides a particularly

interesting backdrop against which to look at how agricultural policy drivers change over time, and at what these changes mean for land use more broadly. This study also uses the case of the 2008 farm bill to explore potential for future farm policy reform efforts, specifically options for helping sustainable agriculture principles make their way into mainstream farm and commodity policy. Finally, these questions of how policy change takes place and of how external events can hinder (or support) policy change can be useful for other types of policy analysis as well, as the farm bill is a particularly good example of the omnibus bills often passed by the federal government (Womach *et al.* 2007).

This first chapter presented a brief history of previous farm bills and their economic, environmental, rural development, health, and trade implications. It described interest group positions on the idea of 2008 farm bill reform, and suggested that some kind of reform to corn, soybeans, wheat, cotton, and rice subsidies could be particularly beneficial for the environment and for improving social equity in agriculture. It then highlighted, as a subject for analysis in the rest of this dissertation, a particular window of opportunity for this kind of reform in 2005-06 that diminished in 2006-08. Finally, it addressed the theoretical and empirical contributions of this study, and discussed the methods used in the research. The remainder of this dissertation focuses more closely on processes of policy change, and on the ways in which history, context, and interest group tensions and strategies informed evolving attempts at agricultural policy reform. Specifically, this dissertation asks what factors drove the opening and closing of an opportunity for reform in the 2008 farm bill debates, and what implications this changing context, layered upon history and shifting interest group tensions, had for current and future farm policies and land-use incentives.

CHAPTER 2

Windows and frames: A farm bill analysis framework

Introduction

The question of how and why an opportunity arose for farm bill reform in 2005-06 and then closed in 2006-08 is essentially a question of how policy changes (or does not change). In addressing this case of farm policy reform opportunity, this chapter therefore draws both from policy theories and from social movement theory.

Policy theories are appropriate in their focus on the mechanisms and drivers of change over time and across issues within the U.S. political system (Baumgartner and Jones 1993, Kingdon 2003). This analysis focuses on traditional policy theories that address how questions of policy change are defined and brought to the political agenda, and post-positivist policy theories that pay particular attention to the role of discourse in policy development. Because these theories provide tools for understanding why policy change becomes possible at particular moments in time (and not at others), they are particularly appropriate for the examining how farm policy reform became a prominent issue in 2005-06 and then faded in 2006-08.

Social movement theory in turn is appropriate to this dissertation because it asks how groups of people organizing for change work to achieve it, and what forces influence their successes (Tarrow 1998, McAdam et al. 2001). Although "farm policy reformers" is not necessarily a classifiable social movement, and therefore certain pieces of social movement theory are less relevant than others to this case of farm bill change, the idea of asking what allows groups to make change in some cases and not in others is nevertheless helpful in understanding this case of policy change (McAdam *et al*. 2001, Andrews and Edwards 2004).[13] In any case, in both branches of theory, the potential for policy change is seen as dependent on the contextual opportunities of the time, groups' goals and policy ideas, the resources they have, the ways in which they interact with other players in the policy process, the ways in which they choose to frame or present their ideas, and the

[13] As mentioned in Chapter 1, social movements are groups brought together by a sense of common purpose, common identity, and sustained efforts to make change (Tarrow 1998). The interest groups discussed in this dissertation are more formal, institutionalized, and individualized groups (see footnote 3, p.4).

ways in which these frames resonate with current societal discourses (McAdam *et al.* 2001).

This chapter uses these theories to build a framework for analyzing change and lack of change in U.S. farm bills, especially during the 2008 farm bill debates. It assembles a model for understanding how policy is created, and what specific policies mean for sustainable land use and for future policy development. The first part of this chapter focuses on the role of political opportunities and situational context in influencing the extent to which reform ideas become politically feasible. It examines policy theory's concept of a *policy window* and social movement theory's concept of *political opportunities*, focusing on the combination of events, contexts, interest group activities, and discourses or ideologies that create (or close off) political opportunities for change. The second part of the chapter focuses on how groups choose to present their messages, and on how these framing choices affect their potential for success within a particular context. It draws from social movement literature on *framing*, related to the policy concept of *tone*, and on a broader social science literature on *discourse* and *discourse analysis*.

The third part of this chapter turns to the role of discourse specifically in policy analysis, looking at *deliberative* or *post-positivist* theories of policy development as a model for analyzing the shifts in language accompanying the 2005-08 farm bill debates and their implications for policy development.

The fourth section briefly discusses literature on interest group resources and interactions – how groups establish credibility, gain access to Congress, and interact with other groups within contentious political debates.

The chapter concludes by specifying the contributions this dissertation makes to the literature, and by tying theory back to farm policy to provide a framework for analyzing farm bill change in subsequent chapters.

This study makes two theoretical contributions to the varied literatures on policy change. First, the inclusion of discourse or ideology in this analysis, or the ways in which cultural values and assumptions, as reflected in language, can influence political opportunities for change, adds a unique element to farm policy analyses that more often

focus on primarily political and economic forces in examining policy change. This addition of discourse analysis provides insight into how the resonance of policy ideas at a certain moment in time can make calls for policy reform particularly (or minimally) salient. Discourse analysis can be an especially good measure in particular of public mood, one of the political opportunity factors that can influence the degree of policy change possible. This study's second theoretical contribution is the incorporation of social movement theory into policy analysis to add nuance and depth to understandings of both political opportunities and framing concepts. This dissertation uses social movement theory concepts to elaborate on the ways in which policy opportunities are constructed, interpreted, and used by groups. By examining in detail the ways in which discourse affects action, for example, social movement theory adds analytical leverage to policy theories for understanding processes of change.

Opportunity: Contexts, windows, and policy impacts

Theories of political opportunity

Groups seeking to promote policy change must develop coherent policy positions to communicate to Congress. However, the extent to which these positions are heard and seriously considered by legislators depends in part on factors largely outside an interest group's control – for instance, their relative power in legislative circles, other groups' positions, and the situational context within which they are operating. In particular, situational factors and events taking place prior to and during policy debates color how a group's position is received. For example, because the 1996 farm bill and 2008 farm bill were both debated in a climate of budget shortfalls, policymakers at both times favored platforms that could be construed as money-savers (Orden *et al*. 1999; Lubben, Bills, *et al*. 2006). The extent to which a given group's policy proposal was seen as acceptable, or the degree to which it resonated in Congress, depended in part on how it conformed to budget constraints and other similar (changing) external forces.

This idea of *situational context* also incorporates the ways in which contextual factors are interpreted based on societal discourses – ideologies, assumptions, and undercurrents. Policies that seem to "make sense" do so because they implicitly tap into

what are considered key values at a particular place and time. For example, in the U.S. policies that "help family farmers" have often resonated well in Congress, in part because they suggest a valuing of farmers as stewards of the land and keepers of a moral heritage. Those policies that seek to "promote rural development" have resonated at other times because they suggest a different American cultural discourse valuing economic growth and community stability. Societies, of course, support multiple cultural discourses that reinforce and sometimes collide with one another. And in the end, these values and ideologies, and the way a farm policy proposal taps into them, matter to policymakers just as much as conforming to a tight budget context. Thus, the context surrounding a policy debate – the current events, political trends, and underlying discourses that can make certain issues seem more pressing than others – heavily influences possibilities for policy change.

While most policy change takes place incrementally or piecemeal, as legislators with diverse constituent interests negotiate compromises within a particular context, policy can at times also change more rapidly and dramatically. Such "bursts" of sweeping policy change are often precipitated by contextual shifts that create new opportunities for change that previously did not exist (Dluhy 1981, Rochon 1998 p.6). As many groups promoting commodity policy reform are interested particularly in these kinds of sweeping changes, theories that address the differential drivers of such rapid change possibilities are particularly helpful for understanding the goals of and prospects for farm policy reformers.

Baumgartner and Jones (1993) write about this kind of *punctuated equilibrium* model of policy change, arguing that there are long periods of equilibrium when dominant interests keep policy changes off the agenda. These periods are usually interspersed, they argue, with periods of more rapid change brought along in "waves of enthusiasm" that are eventually institutionalized into new periods of more incremental policy development (Baumgartner and Jones 1993 p.5, Kenney 2003).

John Kingdon (2003), also writing about these moments of rapid policy change, argues that bursts of change come about when three policy streams converge in a *policy window* to temporarily bring an issue to the top of a national or state governmental

decision agenda. These policy streams are 1) *problems* or perceived needs, as highlighted by events, crises, changes in indicators (*e.g.* poverty levels, traffic accident statistics), or feedback from previous policies; 2) *policies*, or potential mechanisms or proposals for dealing with a problem; and 3) *politics*, or changes in national mood, interest group activities, or turnover in Congress or the presidency. When these three streams – problems, policies, and politics – converge, a policy window or opportunity for change is opened. This policy window must then be perceived and exploited by a "policy entrepreneur" in order to actually produce policy change. If the window of opportunity is missed, actors must wait until the next policy window opens in order to have a chance at producing change (Zahariadis 1999, Kingdon 2003 p.165).

This concept of a policy window explains change as a somewhat coincidental occurrence, in which some issues come to be subjects for policy-making at particular moments in time while others do not. Although there are debates in the policy literature as to the merits and shortcomings of these theories, they do provide some explanatory power for understanding how change happens. In addition, Kingdon's work on policy windows and policy streams dovetails well with Baumgartner and Jones' theory of punctuated equilibrium. Taken together, these theories suggest that while most policy change is gradual, if factors converge to open a policy window that interest groups can exploit, change can happen much more quickly (Sabatier 1999).

Social movement theorists' conceptions of political opportunity structures are similar to Kingdon's understandings of the "problem" and "politics" streams. Political opportunity structures are essentially contextual factors that establish a grievance "around which activists mobilize" (Meyer 2004, p.128). In a mix of interest group positions on various policy issues, an item can only reach the political agenda if the political opportunity context is there for groups or legislators to see it as important and appropriate for legislation (McAdam 1999). This context affects how likely a movement is to organize in the first place, to favor particular policy positions, strategies, or tactics over others, to form certain alliances over others, and in the end, to affect policy. Contextual factors can include changes in public mood or in the economy, shifts in the administration or the distribution of seats in Congress, demographic changes, shifts in

international relations, catastrophic events, the emergence of new movement allies, the activities of movement opponents, and the rise of divisions that weaken the political elite, all or any of which can create an opening for change or make change seem somehow more appropriate or appealing (McAdam 1982, McAdam *et al*., 1996).

One analytical advantage of the political opportunity structures concept as described in the social movement literature is that it recognizes how political opportunities are in part also *created* by groups through their activities and their discursive work. In contrast to the policy literature, which describes the policy window as an opportunity that interest groups must wait for and exploit, the social movement literature recognizes that policy opportunities are both used by *and* shaped by groups (Gamson and Meyer 1996). This iterative relationship between groups and opportunities will be discussed in more depth later in the chapter.

Farm policy examples of political opportunity

Federal farm policy as a whole has largely conformed to this punctuated equilibrium model, in which incremental policy development is interrupted by periodic bursts of change created through the opening of a policy window. While most farm policy change has been piecemeal, the 1933, 1973, 1985, and 1996 farm bills have been examples of more rapid change. The 1996 farm bill (nicknamed "Freedom to Farm"), for example, was designed to move toward eliminating agricultural subsidy payments by separating these payments from market prices and production and giving farmers more flexibility to respond to market signals in their operation, as their safety net would no longer depend on specific planting decisions (Orden *et al*. 1999).

Analysts explaining why this philosophical shift from previously more-protectionist farm bills was made at this particular moment in time pointed to a policy window formed by the combination of several factors. First, Republican control of Congress created an atmosphere in which legislators were looking to limit government intervention in agriculture. Second, there was pressure to reduce the growing budget deficit, for example by reducing commodity subsidies. Third, the General Agreement on Trade and Tariffs had highlighted an ideal of liberalized trade to be achieved by countries

reducing domestic subsidies and tariffs. Fourth, House Speaker Newt Gingrich (R-GA) authorized commodity programs to be written by budget committees rather than in the more status-quo-oriented agricultural committees. Fifth, the writing of the 1996 bill coincided with a burst of high commodity crop prices in 1995-6.

This burst of high prices was especially important because it muted the calls of farm lobbies advocating for sustained commodity supports. The lobbies could be persuaded to accept short-term price benefits in exchange for longer term commodity program reductions (Orden *et al*. 1999, Moyer and Josling 2002, Patashnik 2003). When prices fell in 1997-8, however, commodity lobby pressure resurfaced and President Clinton authorized emergency support to re-couple payments to market values (Orden *et al*. 1999, Moyer and Josling 2002). The 2002 farm bill maintained these re-coupled payments, reversing the free-market oriented reforms that had taken place in 1996 (Patashnik 2003).

The 1996 farm bill was an example of rapid policy change, spurred when proponents of reducing barriers to trade were able to exploit the opening of a policy window for change formed by the convergence of the situational factors described. While the details of this window of opportunity, the legislators and interest groups that acted on it, and the policies that resulted from it will be discussed in more detail in Chapter 3, the point here is that the 1996 farm bill provided an example of the kinds of unexpected, sweeping policy changes that Kingdon (2003) and Baumgartner and Jones (1993) describe. It was a case in which a particular combination of problems, policies, and politics came together in a wave of enthusiasm to push through broader policy changes than had previously been possible. Many interest groups participating in the 1990 farm bill, for example, had been proponents of subsidy elimination as well, but in 1990 the particular combination of interest group messages, contextual factors, political mood, and other drivers did not converge to facilitate major policy reform as they did in 1996.

Of course the rapid policy changes embedded in the 1996 farm bill were also ultimately muted by emergency payments granted in 1997-8 and reinvigorated commodity supports reincorporated into the 2002 farm bill. However, the point remains

that certain policies have changed more rapidly at certain points in time than at others, in part because of the situational context that surrounds a particular moment of policymaking. Both policy theories and social movement theories offer ways to understand these moments of rapid change as they arise, often unexpectedly, in a sea of incremental policy change.

Additional notes on political opportunity

It is clear from the example above that political opportunities are constantly changing and that they differentially open and close for different groups at different times. Most policy issues attract multiple active interest groups with conflicting agendas and interests, and a policy opportunity for one group's change agenda is often an obstacle for another group's agenda. Not only do policy windows differ, thus, depending on whose shoes one is standing in, but they also shift dynamically and asymmetrically over time. It is not necessarily the case that suddenly multiple factors converge to produce a policy window and then dissipate to close that window. Rather, each factor can change independently over time, at times combining with other contextual factors to broaden a policy window, shrink a policy window, or shift a policy window's beneficiaries. These shifts and convergences simultaneously produce and dissolve different opportunities and challenges, whose impacts vary by group and over time (Tarrow 1998, McAdam 1999, McAdam *et al.* 2001). This dynamic and ever-changing nature of the policy window is suggested in McAdam *et al.*'s (2001) term "policy spirals," and has certainly been supported by the evidence gathered in this dissertation.

For example, while the policy changes made in the 1996 farm bill, driven by multiple factors including budget shortfalls and partisan politics, were considered a victory for proponents of liberalized trade, 1996 was a difficult year for conservation and nutrition interests to get their programs included in the farm bill, according to Ferd Hoefner, Policy Director of the Sustainable Agriculture Coalition, and Ellen Teller, Director of Government Affairs at the Food Research and Action Center (FRAC). In part these difficulties were caused by the same budget shortfalls that had facilitated commodity reform, as well as an associated emphasis on shrinking government

intervention in social welfare programs. An opportunity for some groups was thus a barrier for others (Anderson 1995; author interviews, Washington DC, June 27, 2007).

In addition to creating different opportunities for interest groups to exploit, political opportunities are also in part created by the actions and positions of these groups and movements themselves. For instance, in order to become a political opportunity, an event or context shift has to be recognized or seen as relevant to a particular policy at hand. Budget shortfalls are not by definition a necessary opportunity or constraint for farm policy – they might simply be a reason to raise taxes or cut services in other areas. They are only relevant to farm policy if the majority of legislators come to see them as such. Liberalizing trade is similarly only relevant to farm policy if groups notice and point out that agricultural subsidies, which have become an obstacle to trade, can be appropriately modified through the farm bill (Benford and Snow 2000).

Thus, groups not only react to but also help shape what becomes politically feasible by directing what stories are told about U.S. agriculture and farm policy. And these groups' actions can in turn shape the political opportunities that enable or constrain future change. Both policy theory and social movement theory, then, describe policy windows as dynamic, both shaping and shaped by interest group positions, and with different implications for different groups. Attention to policy windows and opportunities begins to address the questions of how changing contexts bring issues to the political agenda, and of *why* certain issues come to be seen as eligible or appropriate for government intervention in the first place. These theories can thus provide some leverage for studying the shifting potential for rapid change in the 2008 farm bill.

Framing change: Messaging, discourse, and policy impact

Theories of framing and discourse

How effective groups are in making their voices heard within a context of multiple competing and collaborating interest groups depends not only on the underlying context, but also on how effectively they present or frame their message once they have access to policymakers (or as part of their strategy for gaining access to policymakers). Part of this, of course, has to do with what a group's message is, and how the substance

of it matches what policymakers are looking to do. But part of it, especially when groups' goals are not already on policymakers' agendas, has to do with how the message is framed or couched.

Social movement theorists consider framing an integral component of movement efficacy, and groups will often work to develop a coherent and credible frame that appeals to multiple audiences and potential allies (Snow *et al.* 1986, Benford and Snow 2000).[14] For example, the idea of cutting commodity subsidies so that large corporations no longer profit from government agricultural assistance will appeal to a very different set of Congress-people than the idea of cutting commodity subsidies to ease taxpayer burdens or facilitate global trade negotiations. Each of these arguments is made in farm bill debates, but by very different groups. And while the policy recommendations that follow from them in this case would be the same, the ways in which they are framed appeal very differently to different legislators' beliefs and convictions, and therefore can matter for whether or not certain policy positions are considered.

The process of framing a position is not only an attempt to capture the attention of policymakers or link to other issues already on the public's mind; it is also one way that groups construct a shared understanding of their position. Groups and individuals typically decide to frame or tell their story in a way that highlights particular grievances and naturalizes, or automatically implies, one set of assumptions or actions over any others. In other words, they attempt to frame their positions in a way that fits a particular underlying discourse. Discourses are acts of speech, writing, and action that articulate a particular set of shared values, cultural beliefs, or underlying assumptions that are implicit, unrecognized, uncontested, or often unconsciously-employed (Gamson and Herzog 1999).

The use of a particular frame is part of what helps groups argue for a particular solution to the problem they highlight, one that attracts potential supporters by resonating with culturally accepted ideologies and discourses (McAdam *et al.* 1996, A. Morris

[14] Policy theorists too note the importance of framing in policy development, often referred to as *tone*. However, this section draws more from social movement literature, as it has delved more deeply into ideas of framing than has the traditional policy literature (Sabatier 1999).

2000). For example, sustainable agriculture groups rally around negative environmental and social impacts of industrial agriculture and attribute blame to overuse of low-diversity plantings, fertilizers, and pesticides. They tap into a discourse of environmental conservation and sustainability that is both appealing to a particular subset of the public and of Congress (but not to others), and that also makes the policies they support for cover cropping, crop rotations, and organic growing seem like the logical and natural solutions to the problem (Hunt *et al.* 1994, Gamson 1992). In order to be meaningful and effective, these frames must tap into or harmonize with implicit discourses, existing cultural beliefs, and deeply embedded values like (in the U.S.) individual rights, technological progress, national security, global responsibility, democracy, and self-reliance (Gamson 1992). Often, successful frames will also portray policymakers as the keepers and promoters of public good while protecting them from any blame levied by potential opposition (Patashnik 2003, Jacobs and Sobieraj 2007).

One good example of the power of framing was given by Joseph Gusfield (1981) in his analysis of drunk driving as a social problem. He argues that the concept of *drinking-and-driving* has framed drunk driving specifically as a problem of personal responsibility on the part of the drinker. Resonating with the American cultural values of self-reliance and individual responsibility, and reproduced through the media, this particular framing moves personal responsibility from one factor or one possible construction of the problem of drinking-and-driving to a naturalized common sense representation of *the* problem. Drunk driving comes to represent only lack of personal responsibility and not also, for instance, the failures of bartenders to control alcohol supply to patrons or a lack of public transportation options for drinkers.

This framing of the causes of drinking-and-driving in turn shapes the strategies of intervention that can be used for an anti-drunk-driving campaign – for instance focusing on educational messages rather than also on structural changes. One could imagine that in another culture, blame for drunk driving might just as easily be located in a family's inability to control a drinker's behavior, or in the devil's role in pushing a drinker to make bad decisions. Despite having similar explanatory power, these frames would be less likely to resonate in current American culture.

Policy impacts of framing and discourse

The choice of frame used for mobilizing collective action, then, both represents the underlying philosophical assumptions of a group and also influences what actions must be taken to address the problem as defined. And in many cases, this choice of frame is particularly important because it not only operates within, but also helps *create* windows of political opportunity necessary for social movement success (Gamson and Meyer 1996). In Gusfield's case, framing drinking-and-driving as such helps *make* it primarily into a problem of personal responsibility, which then calls for particular policy solutions.

Scholars note that in trying to create these opportunities through framing, movements often use symbols to tap into pre-existing culturally-relevant storylines and build support for their cause. Conflicts, then, often become symbolic contests between labels that groups use to represent their positions. For example, in conflicts over the spotted owl and Pacific Northwest logging industry, the owl became a symbol for both parties involved of a broader conflict between the preservation of nature and the utilization of natural resources. In fact, the use of the owl as a symbol by both loggers and environmentalists was so effective in rallying support for their respective points of view that in the end it actually diverted attention away from the material issue of forest management practices and toward a more polarized and irreconcilable symbolic conflict (Moore 1993). In this case, a stalemate resulted when opposing groups used the same frame to represent their different positions. In other cases, such a strategy can also bring groups together around common goals, depending on the particular situational context and inter-group interactions involved.

Framing works, when done effectively, because it taps into typically deep-seated cultural beliefs or symbols. A frame that matches an underlying cultural discourse just seems to make implicit sense, and by extension the policy idea framed around it also achieves common sense traction. For example, framing drinking-and-driving as a problem of personal responsibility taps into an underlying cultural discourse of self-

reliance as a component of American individualism, which lends the solutions following from it legitimacy, respectability, and staying power (Gusfield 1981).

In policy circles, the way a group chooses to frame its position becomes an important part of its strategy. Once a group decides on a position, it tries to identify politically salient themes that can focus policymakers on the group's priority issues. It works to frame its issue to resonate with Congressional interests and public momentum, and the most salient frames are salient because they tap into deeper seated cultural discourses and avoid clashes with other powerful discourses (Gamson 1992, Moore 1993). Thus, discourse becomes an important determinant of what frames make for compelling messages, which in turn contributes to how effective groups are in influencing policy. And just as current discourse (and broader situational context) inherently makes some frames and positions more or less appealing than others, groups can also influence what comes to be seen as appealing by shaping the frames they use and the stories they tell about policy needs and goals.

The study of discourse comes out of a tradition of post-structuralism associated with philosophers such as Roland Barthes, Jacques Derrida, and Michel Foucault (Jorgensen and Phillips 2002). It builds on a notion of the world as socially constructed, rather than as pre-existing reality, and posits the idea that language not only describes reality but also works to create it. Descriptions, arguments, and actions, by selecting or emphasizing certain points and leaving out others, are not neutral factual descriptors, but rather participate in shaping the object of description. "Factual claims," then, provide as much insight into a speaker's worldview and into the underlying cultural context that makes the worldview seem natural, as they do any sort of objective truth value (Potter 1996, Lewis 2000).

An example of how groups' positions and frames both reflect their worldview and also change alongside shifting societal discourses, with implications for policy, is provided by Gottweis' (1998) study of the discursive politics of genetic engineering in Europe and the U.S. Specifically, Gottweis found that changing discourses surrounding biotechnology had significant implications for the biotechnology policies governments adopted. These discourses both shifted in response to and also changed the quality and

quantity of scientist and citizen concerns about genetically-modified crops and pharmaceuticals, or more broadly, genetically-modified organisms (GMOs).

For example, investing in molecular biology was initially framed simply as a quest for economic development and modernization, and risk was constructed as a question of workplace safety and self-regulation by scientists. However, an outbreak of Mad Cow disease in Britain and the growth of an "ecology discourse" that valued environmental and social sustainability alongside progress and modernization later called into question the adequacy of existing food regulation and prompted interest groups to question the safety and desirability of GMOs (Gottweis 1998, p.232). Biotechnology came to be seen, especially by citizens and consumers in Europe, less as a key to progress and more as an imposition of technology on nature in ways that were unpredictable, hard to control, and dangerous for consumers and the ecosystem.

Government policies shifted accordingly in an attempt to manage, regulate, and contain the new perceived risks of GMOs, rather than just to promote the new technology. Similarly, the biotechnology industry shifted its framing of the issue from one where GMOs were portrayed as the epitome of a new and modern "high-tech field" to one where genetic engineering was simply a "basic methodology to study nature" (Gottweis 1998, p.156). The technology had not changed in this time. Instead, this shift in language reflected a need for industry to downplay the novelty of biotechnology in order to minimize growing concerns about its risks.

What Gottweis' study highlights is that the direction policy takes depends as much on the discourses surrounding an issue as it does on material context and actors. And just as context and actors change over time, so too does the salience and hence resonance of particular discourses and of perceived policy needs. In other words, new policy responses come to be seen as natural as the resonance of a particular discourse shifts over time. Thus, while the material risks of GMOs did not change over the period of Gottweis' study, the ways in which countries and companies drew boundaries around these risks and identified the concerns that needed to be addressed by policy did.

In policy settings, identifying dominant discourses can provide hints as to *why* certain policy options seem implicitly more acceptable than others. Policy options

become appealing not just because they respond to budget needs or other material aspects of context. Instead, policy is shaped in part through language, and a policy proposal that taps into a current societal discourse often comes to be seen as the natural solution to the issue at hand. This was the case in Gottweis' study of biotechnology policy, where the "natural solution" changed over time as citizen views of biotechnology moved from interest to concern. It was also the case, as will be seen, in the early years of the 2008 farm bill debates, in which a discourse of competition highlighted a sense of urgency or crisis among interest groups about how liberalized trade would affect U.S. agriculture. Such a sense of crisis, as will also be seen, has been found in other instances of rapid farm bill change throughout history, and is often a key contributor to the formation of a policy window for such change.

In understanding the impacts of these changing discourses, it becomes important to identify the underlying cultural assumptions or ideologies that currently hold sway for policymakers and the public. One way to do this is by observing which frames groups use to promote their policy positions, and which of these end up becoming particularly salient and why. Like putting together a puzzle, noticing the words and phrases interest groups and media sources use to describe their positions and the broader drivers of policy debates can provide insight into how culture and strategy intersect in the formation of policy (Knott 1998, MacDonald 2003). While policy theory acknowledges the importance of factors such as "public mood" in creating a policy window, it does not provide tools for measuring this kind of concept. Discourse analysis, however, can be a good complement to policy theory in its ability to operationalize just this kind of idea within the concept of a policy window.

Post-positivist or deliberative policy analyses

An understanding of the discursive context of a policy debate thus helps shed light on when and why certain groups, with particular resources and framing strategies, acting within a particular policymaking context, are more or less effective in promoting (or constraining) policy change. In this way, discourse analysis adds a key layer to

understanding the ways in which rapid or incremental farm bill change does or does not occur.

Analyzing policy with particular attention to discourse and framing follows in the footsteps of what Hajer and Wagenaar (2003) describe as *deliberative policy analysis*, a post-positivist strain of policy analysis that incorporates a social constructionist approach, attends to discourse, and acknowledges the ways in which language shapes reality. Hajer and Wagenaar contrast deliberative policy analysis with "classical-modernist" or more traditional policy analysis, which favors material context – actors, events, and institutions – over attention to both material and discursive contexts (Hajer and Wagenaar 2003, p.27). In deliberative policy analysis, one learns as much from analyzing groups' representations of issues as from analyzing the issues themselves (Hajer 2003).

Mettler and Soss (2004) note that although much of the political science literature focuses either on material or on discursive (what they call ideational) context, analyses are more complete when they address both types of context and their interactions. Deliberative policy analysis acknowledges that not all interest group interests are clear-cut and that policy discourse, and its political and cultural underpinnings, is both created from and also helps produce actors' positions (Gottweis 1998). Hajer and Wagenaar (2003) argue that deliberative policy analysis is especially well adapted to an era of complex "governance" in which traditional government structures share or struggle for power with international institutions, corporations, non governmental organizations, and other actors, as these particular situations are rife with competing representations from groups negotiating their respective powers through the policy process.

While some analyses of agricultural policy do take this kind of post-positivist approach, paying attention to the role of discourse and the shaping of policy through the use of language, most of the farm bill literature has taken a more classical-modernist approach – either through economic analyses of farm policy impacts or play-by-play political analyses of a particular farm bill or series of farm bills. While critical to the understanding of political opportunities, interest groups, and policy implications, these traditional analyses tend to focus on the workings of the policy process, and descriptions of what happened in a particular policy debate. More often than not, they gloss over

issues of framing and discourse. Even when do they mention the role of ideology or marketing as a factor influencing farm policy, their focus quickly returns to budgetary concerns, trade pressures, legislative priorities, partisan or regional politics, and other such material factors to understand why a certain farm bill looks the way it does.

For example, two key studies of the 1996 farm bill, Orden *et al.*'s *Policy Reform in American Agriculture* and Schertz and Doering's *The Making of the 1996 Farm Act*, both represent mainstream approaches to analyzing farm policy, each different from the other and from a deliberative policy analysis approach. Orden *et al.*'s analysis focuses on economic and political factors – especially market conditions, trade pressures, and legislative coalitions – in pushing for commodity policy reform. Schertz and Doering's analysis focuses more on the policy process itself – how key legislators' goals and the activities in Congress shaped the 1996 debates politically. While both analyses are extremely complex, nuanced, thorough, and purposeful in their scope, they do not address the role of discourse or framing in farm policy debates. This dissertation attempts to bring these elements of discourse and framing into such more traditional farm policy analyses (Orden *et al*. 1999, Schertz and Doering 1999).

Highlighting an exception to such traditional farm policy analyses can demonstrate the value of paying attention to language and discourse, in addition to politics and economics, in policy analysis. Dixon and Hapke (2003)'s study of the 1996 farm bill uses a discourse approach to analyzing the 1996 bill's efforts to reduce commodity supports and increase market liberalization. Dixon and Hapke argue that over the course of farm bill debates, opposing sides used images invoking different aspects of the traditional American agrarian myth, or the notion that farmers are the bulwark of moral virtue in society, to support their positions (K.L. Robinson 1989). Proponents of protectionist subsidies argued that farmers deserved financial support as they were the backbone of democracy and virtue in America. Proponents of reducing subsidies argued that farmers did not need support because they were independent and deserved to be free from government interference (Dixon and Hapke 2003).

Thus, deeply rooted aspects of national identity – deserving support for virtuousness or deserving independence from interference – were conjured to support

different policy outcomes, and these images interacted with broader situational factors to influence the trajectory of policy development at that particular historical moment. In this case, the public appeal of the strong and independent U.S. farmer image of the time helped push Congress to pass a farm bill that was said to preserve the independence of American farmers by reducing subsidies and making the U.S. a leader in international trade and a better competitor in the world market (Dixon and Hapke 2003).

Dixon and Hapke (2003) conclude that the ways in which key discourses are mobilized to represent policy options to Congress and the public can in fact have a tangible impact on public policy. Specifically, their analysis highlights the power of tapping into America's unique national identity to mobilize public support for agricultural policies. Added to the way that Orden *et al.*'s analysis cites budgetary and trade reasons for the outcomes of the 1996 bill and Schertz and Doering's analysis cites particular goals and actions of legislators, Dixon and Hapke's study highlights a cultural element that deepens the explanatory power of policy change analyses.

This dissertation attempts to blend analyses like Dixon and Hapke's with analyses like Orden *et al.*'s and Schertz and Doering's, to combine an understanding of discursive drivers with institutional, political, and economic drivers to better explain how farm bill changes that looked likely in 2005-06 faded from the agenda in 2006-08. It focuses on deliberative policy analysis, with special attention to discourse and framing as a gap in the literature. This is largely because discourse analysis can help operationalize concepts such as public mood, acknowledged as important to policy windows but generally difficult to measure. This incorporation of discourse into the study of farm bill debates in 2005-08 thus adds explanatory power to an understanding of how policy change happens (or does not happen). As such, it makes a case for the study of discourse and framing alongside political and institutional factors in understanding farm policy change.

Accessing Congress: Resources, power, and coalitions

Understanding policy change means looking at the political opportunity structures that enable or constrain change, at the ways in which this change is framed, and at the discourses these frames and positions tap into. But it also means understanding groups

involved in the policy process, and the internal characteristics that allow them to construct or take advantage of potential policy windows (Rochon 1998, McAdam 1999, Kenney 2003).[15] For example, groups have differential access to political power. Even with a striking rise in the number of citizen interest groups active in policy over time, wealthier business, occupational, and trade associations have typically been overrepresented in Washington D.C., leading to an emphasis on policies that support business interests (Baumgartner and Leech 1998). Patashnik (2003) argues that even when "general public good" policy is promoted at the expense of a smaller group of elites (for example, through reductions in agricultural subsidies), these reforms are often sidestepped during implementation (through lack of funding, complex rules, and exemptions), ultimately favoring elite groups. Lukes (1974/2005) argues similarly that democracy is often dominated by the power of elites, because of their funding, their strong relationships with policy-makers, and their ability to influence the policy agenda quietly, largely by controlling which issues can even become subjects for debate. Lukes argues that American democracy achieves a perception of consensus because elites are able to suppress even the consideration of alternatives that would promote conflict and thus limit the discussion to issues where compromise can be reached. Hansen (1991) similarly argues that groups are effective in policy arenas not so much because they "pressure" legislators, but because they help control and filter the kinds of information that legislators use to make their decisions (p.227).

Policy theorists Sabatier and Jenkins-Smith look at such interest group dynamics through the lens of an *advocacy coalition framework (ACF)*. Rather than seeing policy development as a struggle among interest groups, ACF takes policy as a struggle among advocacy coalitions, formed of individuals with parallel beliefs from across institutions.

[15] Social movement theorists refer to a group's organizational strengths and ability to bring resources and allies to its support as *resource mobilization*. While group resources explain much about farm policy over time, and have been addressed extensively in the farm policy literature, resource mobilization theories are not a focus of this dissertation (Browne 1998). For one, they do not provide particular leverage for understanding why policy change opportunities shifted between 2005 and 2008, a time period during which group resources changed little. Second, resource mobilization is more appropriately used to describe an individual social movement's origins and activities, placing one particular social movement at the center of analysis (McAdam *et al*. 2001). Here, instead, the focus is on how multiple competing interest groups interacted to produce (or stymie) change, in an arena where different groups advocated farm policy reform or stability for different reasons, with different levels of conviction, and for different periods of time.

This distinction acknowledges what was highlighted in Chapter 1, that there is great diversity and nuance on policy positions even within sectors and within groups. These diverse groups of players thus ally themselves into advocacy coalitions – for example an advocacy coalition in support of stable farm policy and a minority advocacy coalition in support of farm policy reform. At times, these coalitions do not even necessarily follow interest group or sector lines. ACF theory argues that while coalitions can influence policy change through inter-coalition collaboration, most change is precipitated as a response to external events and drivers. This model thus provides an addition to the framework gleaned from policy window and social movement theories – a conception of farm bill interests as broader, loosely grouped coalitions rather than as movements or independent interest groups (Jenkins-Smith and Sabatier 1993, Sabatier and Jenkins-Smith 1993).

Contributions to the literature

This dissertation asks how and why farm bill debates changed so drastically between 2005 and 2007, and what the implications of this shift were for farm policy reform and for land use. Using a framework melded from policy window theory, deliberative policy theory, and the social movement theory concepts of political opportunities and framing, and colored by an understanding of group resources, power, and advocacy coalitions, this dissertation seeks to analyze *how* a changing context surrounding farm bill debates in 2005-08 changed opportunities for policy reform. Further, it uses the attention to framing and discourse suggested by deliberative policy and social movement theories to understand *why* these contextual changes affected policymaking, by examining the underlying cultural values that made certain policy positions resonate in Congress at particular moments in time.

This dissertation, which acknowledges the importance of social and cultural explanations of policy change in addition to economic and political ones, emphasizes the linguistic, discursive, and symbolic drivers of farm policy debates alongside more material ones. It builds from theories of policy change and social movements to analyze the ways in which political opportunities and situational contexts, interest group

resources and power, and framing and discourse all intersect in dynamic and iterative ways to at times produce a window for rapid policy change and at times favor more incremental policy shifts – both from one farm bill to the next and within the trajectory of 2008 farm bill debates. It approaches policy change as a moving target, as reflective of dynamic interactions among shifting forces and actors that over time drive debates and policy formation. In other words, rather than compile a static listing of forces that have favored or inhibited change in the farm bill, this research focuses on how these forces have shifted and interacted over time.

Specifically, this study adds to the literature on U.S. agricultural policy by paying particular attention to the ways in which language and discourse combine with situational factors and interest group dynamics to open and close windows of opportunity for policy change over time. Analyzing discourse, or attempting to recognize shared underlying assumptions *as assumptions,* or as representatives of one particular worldview rather than as objective reality, is useful for helping to explain why groups take the positions they do, why certain solutions are seen as more politically feasible than others, and why certain policy changes become possible in particular contexts.

Attention to discourse and to language is an important part of analyzing policy context and interest group strategies, as a policy position often comes to seem reasonable specifically because its framing taps into an underlying cultural discourse. Seeing these interest group positions not as common sense per se, but as a product of particular situational contexts and moments in time, helps shed light on the processes of change and stability associated with past and present farm bills. This dissertation in particular highlights a shift from a discourse of competition associated with the World Trade Organization negotiations that dominated farm bill debates in 2005-06 to a discourse of energy independence associated with the growth of the ethanol industry that dominated the farm bill debates in 2006-08. It suggests that the discourse of competition resonated with an underlying sense of crisis common to moments of rapid farm policy change, while the discourse of energy independence gravitated more towards a consensus-oriented frame that minimized tension and disfavored rapid change. This dissertation

also analyzes the impacts of these shifts in moods, frames, and policy contexts on farm bill outcomes.

Finally, this dissertation provides a model for integrating social movement theory, traditional policy theory, and post-positivist theories of policy analysis. It argues that these theories together provide a deeper and more nuanced understanding of political opportunities, framing, and discourse as they interact in dynamic change processes than any of them do alone. For example, the concepts of framing and discourse from social movement theory and deliberative policy analysis provide a tool for measuring factors such as public mood that can help policy theory better explain drivers of change. While policy window theory acknowledges the importance of public mood, it finds such concepts difficult to measure. Social movement and deliberative policy theories in turn provide a way to understand and operationalize these types of factors and incorporate them more thoroughly into the study of policy change.

Conclusions

This chapter examined those factors identified by policy and social movement theorists as necessary for policy change. The first factor discussed was political opportunity context – how situations, events, political dynamics, cultural assumptions, and values influence the kinds of policy ideas that come to be seen as feasible and appropriate, at times opening a policy window for rapid change against a background of incremental policymaking. The second factor addressed was the question of framing inherent to social movement theory and deliberative policy analysis, or the ways in which groups' presentation of their message taps into deeper cultural discourses to influence the resonance of their claims in policy circles. The third focused on resources, power, and coalitions – how groups' internal strengths, organization, and interactions with others help them gain access to policymakers and make their positions known.

The rest of this dissertation builds a framework based primarily on these first two factors in order to analyze the forces driving the 2008 farm bill debates and the reasons for the opening and closing of a policy window for reform in 2005-08. Drawing from the sociological, political, and post-positivist models of change discussed above, this study

provides a unique opportunity to look at how a changing context from 2005-06 to 2006-08 interacted with shifting group positions and frames to influence the 2008 farm bill. It also provides some insight into the political opportunities and interest group positions and frames that might continue to shape possibilities for farm bill change in the future.

In addition to using theory to inform an empirical study, this dissertation uses the case of the 2008 farm bill to add to theoretical understandings of social and policy change. Particularly, this study emphasizes and elaborates on the complexity, dynamism, and three-dimensional nature of the policy change models described by theorists. It adds to the theoretical conception of policy development by providing a concrete illustration of the continually changing context, and shifting constellation of interacting interest groups and framing strategies that played into and reflected these various drivers of policy change and stability. This dissertation also adds to the literature on U.S. agricultural policy by integrating aspects of policy and social movement theories, and by incorporating an explicit focus on framing and discourse into analyzing farm policy change. This focus builds on previous deliberative-style analyses of farm bill debates, and also complements other more politically- and economically-focused work on farm bill histories and drivers. Chapter 3 looks at the role that these interacting factors played in creating farm bill change historically, before moving on to issues of change and stability in the 2008 farm bill debates.

CHAPTER 3:

Policy change and policy stability in farm bill history

Introduction

United States agricultural policy has for the most part changed incrementally over time. However, a few farm bills in particular have produced more dramatic changes. This pattern raises two questions: First, what factors would cause the same kind of policy to change significantly one year and much less in another year? Second, does an understanding of change drivers during these policy change years offer insight on how interest groups can push policy towards either rapid or incremental change in the future?

As discussed in Chapter 2, policy and social movement theories suggest that rapid change can occur when situational contexts, political opportunities, interest group activities, inter-group interactions, framing strategies, discourse, and cultural context converge to produce a unique change-oriented moment, while incremental policy change is more likely to occur when, as is more typical, these factors do not come together fortuitously. This chapter looks back to farm policy history to identify which farm bills have produced moments of rapid change and why – which contexts, group strategies, frames, ideologies, and interactions combined to make change possible – and which produced other, more status quo-oriented farm bills.

Identifying patterns of policy change specific to farm policy provides a historical context within which to then examine the prospects for farm bill change in 2008, and to understand why, in the end, the 2008 farm bill shifted from a change-oriented to a stability-oriented bill. Such an understanding of current change dynamics, bolstered by an understanding of farm bill history, in turn proves useful for assessing future farm policy reform efforts.

This chapter identifies four farm bills as change farm bills: 1933, which was the first farm bill; 1973, which created a significant change in commodity policy; 1985, which created a significant change in conservation policy; and 1996, which was presumed to be a first step towards the phasing out of commodity subsidies altogether. These four are identified as change bills because they each made substantive structural or philosophical alterations to the goals of farm policy, in ways that were not seen in other

farm bills, and because they were widely recognized across groups and scholars as significant shifts in the direction of farm policies of the time. This chapter highlights the history of each of these bills within a chronological accounting of general farm bill history, to emphasize both what pushed them toward change and also what differentiated them from the more incremental-change bills that separated them – as understanding the process of policy change requires attention to all kinds of change.

In each farm bill case, the political and situational contexts surrounding policy debates, the interactions of various interest groups with varied positions on the debates, and the ways in which change issues were framed to tap into the broader cultural discourses of the time are highlighted. Drawing on policy window and social movement theories to analyze what made change possible at certain times and not at others, this information is used to identify patterns in drivers of change for U.S. farm policy over time. While this analysis finds that it is difficult to find such patterns or isolate particular drivers that *routinely* favor farm policy change or stability, it does suggest that a sense of crisis, especially economic crisis, may be important in pushing for rapid farm bill change. But it also confirms that it is the unique, ever-changing combination of interacting drivers that in the end can make for or inhibit farm policy change at a particular moment in time. And while this element of serendipity makes predicting change difficult, still, the changes that take place during one iteration of policymaking do in many ways affect the changes that can take place during the subsequent ones. Thus, an historical understanding of farm policy can inform the analysis of reform efforts that arose and then receded in the 2008 farm bill debates, and provide a base for assessing prospects for future farm policy reform.

Note that to some extent, categorizing some farm bills as change bills and others as stability bills is an artificial distinction. Nutrition groups, for example, might consider the 1977 farm bill a change bill because it incorporated food stamps, bringing them solidly into the realm of farm policy. Environmental groups might consider the 2002 farm bill a change bill because it added significant numbers of conservation programs. However, the four bills chosen here to represent change bills are recognized across groups as having created significant and rapid change, and their changes were major

alterations to rather than just tweaks of previous farm policy. While they do not necessarily represent more lasting change than do groups of other more incremental farm bills summed over time, they do mark points of significant departure from previous farm policies. And since the question of change in the 2008 farm bill focuses on the potential or lost potential for rapid policy change, it is appropriate to look specifically at rapid change moments throughout history, where policy after the passage of a bill looks or has implications that are quite different from policy before the passage of the bill.

It should also be noted that while this chapter provides a close-up picture of farm policy drivers over time, it does not give intimately detailed accounts of all contextual factors, interest group strategies, or frames in every case. And unlike many traditional farm policy analyses, it does not focus primarily on underlying economic forces driving change, but rather mentions these drivers alongside an accounting of the institutional changes that took place. This chapter has instead been structured to highlight broader patterns of change across farm bill history. This level of detail was chosen to adequately reflect the goals of this dissertation, which are not to analyze the history of farm bill politics over time, but instead to develop a particular knowledge of history that can inform an understanding of change and stability in the 2008 farm bill. Table 3 below provides a listing of all farm bills, years, titles, and selected provisions to help guide the reading of the following sections.

Year	**Farm bill title**	**New provisions**
1933	Agricultural Adjustment Act of 1933	Supply control measures Government loan programs Government grain stocks
1938	Agricultural Adjustment Act of 1938	Voluntary (rather than mandatory) set-asides for supply control
1948	Agricultural Act of 1948	Proposed commodity reform defeated
1949	Agricultural Act of 1949	Permanent farm bill legislation (in case of current farm bill expiration)
1954	Agricultural Act of 1954	PL 480 food aid export program
1956	Agricultural Act of 1956	Soil Bank (set-aside lands)
1965	Agricultural Act of 1965	Direct cash payments to producers Involvement of anti-hunger groups

1970	Agricultural Act of 1970	First payment limitations
1973	Agriculture and Consumer Protection Act of 1973	Planting "fencerow to fencerow" Deficiency payments to producers
1977	Food and Agriculture Act of 1977	Food stamps
1981	Agriculture and Food Act of 1981	First conservation title
1985	Food Security Act of 1985	Set crop base production levels for support payment calculations Conservation Reserve Program (CRP) Low-Input Sustainable Agriculture program (LISA)
1990	Food, Agriculture, Conservation, and Trade Act of 1990	Flexibility provision to plant 15% of acreage to non-commodity crops (without losing subsidy base acreage) New conservation programs (*e.g.*, Wetland Reserve)
1996	Federal Agriculture Improvement and Reform Act of 1996	"Freedom to Farm" Decoupled subsidy payments Environmental Quality Incentives Program (EQIP)
2002	Farm Security and Rural Investment Act of 2002	Counter-cyclical payments (to "re-couple" subsidy support payments) Conservation Security Program (CSP) First energy title
2008	Food and Energy Security Act of 2007 (Senate draft) Farm, Nutrition, and Bioenergy Act of 2007 (House draft)	Green payments??? Payment limitations??? Renewable energy

Table 3. Farm bills by year.
List of farm bills by year, title, and select provisions of note (sources included author interviews, Knutson *et al.* 1990, Orden *et al.* 1999, J.B. Johnson *et al.* 2002, National Agricultural Law Center 2003, Sumner *et al.* 2007).

Change moment #1: the 1933 Agricultural Adjustment Act

The late 1800s was a "golden age" for American agriculture, characterized by rich soils, availability of land, and high demand for food both at home and abroad (McGovern 1967). To sustain agricultural growth, Congress invested in credit systems, roads and railroads, irrigation in the West, incentives for settling land, and research on production and improved technology (Browne and Cigler 1990). By the early 1900s, farmland expansion had begun to slow while prices continued to rise, creating favorable economic

conditions for established farmers. This boom was strengthened during World War I by an increased demand for food, and farmers took on debt to expand their production (K.L. Robinson 1989, Orden *et al*. 1999). In 1920, however, the wartime and post-war boom collapsed, foreign demand fell, and farm prices dropped. Farmers were saddled with debt and plagued by overproduction and falling incomes (Knutson *et al*. 1990). These conditions sparked the formation of a farm support network made up of Congressional agriculture committees, the American Farm Bureau Federation farmer organization, and the U.S. Department of Agriculture extension service to push for agricultural price supports.[16] In the 1920s this coalition failed to achieve most of its goals, but by 1933 the non-farm economy had also collapsed, farm interests had become better organized, and a Democratic president and Congress were in power. Conditions were ripe for agricultural policymaking (Orden *et al*. 1999).

As part of the sweeping New Deal era changes of President Roosevelt, Congress passed the Agricultural Adjustment Act (AAA) of 1933. The AAA had farmers plow over crops, kill newborn livestock, and take land out of production in order to reduce supply and raise farm incomes. It also established government loan programs to moderate the risks associated with the boom-bust cycles of agriculture and created grain stocks to ensure the public a steady grain supply over time (Talbot and Hadwiger 1968, Organization for Economic Cooperation and Development 1987, K.L. Robinson 1989, Knutson *et al*. 1990, Orden *et al*. 1999). These provisions proved not always popular, but fairly successful. In the AAA's first years, droughts drove prices up and farmers were able to pay off their loans in cash, creating a source of revenue for the federal government. Thirty-five million acres of land were taken out of production and income to farmers rose by $1.1 billion (Orden *et al*. 1999).

Support for farmers was widespread at the time. American culture was infused with a Jeffersonian ideology of agriculture as the basic mode of human life, and rural life as morally superior to urban existence. This agrarian ideology considered small

[16] The American Farm Bureau Federation is a general farm organization founded in 1919. Generally considered a conservative group, its northern branch is generally more market-oriented and its southern branch more protectionist. It is funded in part through its insurance agency (Kile 1948, McCune 1956, Knutson *et al*. 2001).

independent farmers the "backbone of democracy" and the epitome of an American work ethic and Puritan spirit (Hassinger 1978, Knutson *et al*. 1990, p.7). Especially during the dust bowl of the 1930s, the image of farmers came to be associated with strength of character and hardships overcome. Policies that were framed as supporting the family farmer thus had the cultural advantage of tapping into this discourse of farming as morally good and necessary for the health of the nation (K.L. Robinson 1989, Browne 2001).

Thus, a combination of several factors made farm supports a practical policy solution in 1933. First, policy was responding to a farm crisis that had come on the heels of agricultural growth and optimism. Farmers had helped the nation through a war, and now the nation was being asked to provide them support in a time of need. The new Democratic Congress came to see a role for itself in supporting farmers during these times. Second, a more general downturn in the economy folded support for farmers into part of a larger New Deal package to deal with the Great Depression. Third, the American Farm Bureau Federation, which itself had been established in response to the needs of the farm crisis in 1919, built on an already established relationship with Congress and the USDA to promote a comprehensive program of farm support. Fourth, an image of farmers as the moral heartbeat of America, saddled with debt and dust, created a climate of sympathy and support for farmers and for the cultural "wholesomeness" that they represented (K.L. Robinson 1989, Orden *et al*. 1999). This particular combination of an economic downturn for both farmers and consumers, a Congress willing to intervene to provide jobs, income supports, and a consistent food supply, well-connected interest groups promoting support for farmers, and an ideology of public support for family farmers came together to facilitate the creation of an integrated approach to farm policy that would support commodity production through the present.

Stability period #1: the 1938 Agricultural Adjustment Act and 1948, 1949, 1954, 1956, 1965, and 1970 Agricultural Acts

From 1938 through 1970, farm policy change patterns were relatively stable in terms of basic commodity support mechanisms. Although there was significant

incremental expansion of farm policy's reach into new areas, each new bill was not all that different from the previous one. In part, this was because the 1933 farm bill had been fairly successful, and was supported by a so-called iron triangle of farm bloc groups (originally the Farm Bureau, later other farm and commodity groups as well), the USDA, and Congressional agriculture committees (K.L. Robinson 1989, Orden *et al*. 1999).

The 1938 farm bill was fairly similar to the 1933 bill, but altered those portions that had been less popular or needed tweaking. For example, in 1936, the acreage idling portion of the AAA was declared unconstitutional, as it was funded through taxes on processing commodities, which the Supreme Court declared could not be used for regulatory purposes as they inflated food prices. So in 1938 Congress reworked the funding stream and linked acreage idling supply controls to the Soil Conservation Service instead (Cain and Lovejoy 2004). The Farm Bureau was given partial responsibility for administering county-level farm programs, further strengthening its standing with Congress and its support for the subsidy system (K.L. Robinson 1989, Orden *et al*. 1999). Thus, the factors that had supported the farm bill in 1933 – popular support for farmers, a Democratic Congress, a philosophy of government involvement in social welfare, and a stable interest group coalition – stayed consistent through 1938.

By the late 1940s, however, the context had changed. The farm sector had recovered from its 1930s crisis, in part through increased export demand during World War II (Sumner *et al*. 2007). In response to this prosperity, and in an effort to extend it, President Truman's Secretary of Agriculture Charles Brannan proposed that farm programs loosen their control on production, and focus more on building demand to keep prices up than on controlling supply. High crop prices and farm profits encouraged many legislators and interest groups to view supply management as no longer necessary. In an attempt to phase out commodity provisions, Congress considered instituting capped direct payments to family farmers, but could not reach a consensus on the policy details in 1947 (V.W. Dean 2006).

By 1948, agriculture had experienced a post-war drop in demand and prices, and the previously broad support for reducing price supports disintegrated. As the labor force that had been pulled out of agriculture to support the war efforts came back into the

sector, and as farmers adopted new post-war technology and modern inputs (chemical fertilizers and pesticides), crop production increased, flooding the market and further lowering prices (K.L. Robinson 1989, Orden *et al.* 1999). In addition, in the post-war context, the direct payment proposals of the previous year now smacked of socialism, as these payments would pay farmers simply for being farmers rather than for their products. This kind of proposal generated fierce opposition in Congress, where controlling the spread of socialism had since become an overriding concern (V.W. Dean 2006). The 1949 farm bill, written after another Democratic capture of Congress, instead reinforced price supports and codified them as "permanent" legislation (Orden *et al.* 1999, p.56).[17]

Aside from signaling a continuation of status quo farm policy, the policy dynamic in the late 1940s is particularly interesting because it showed how a potential change-oriented farm bill was converted into a stability-oriented farm bill through rapid changes in Congress and public discourse after World War II. It demonstrates that ideological political winds can quickly shift the direction of farm policy, and that nationalism in particular, embodied in the 1930s as support for agrarian farm families, and in the late 1940s as protecting democracy against socialism, can be an important cultural driver of farm policies.

The dynamics of the 1949 Agricultural Act also demonstrate two related points regarding commodity subsidies. First, although crop subsidies of various sorts have been in place since the 1930s, they have rarely been uncontroversial – as early as the 1940s there have been periods of close to majority consensus to reduce or eliminate them (Schapsmeier and Schapsmeier 1992). Second, when Congress came close to reforming commodity subsidies, their efforts were stymied by a combination of changing situational factors and opposition by interest groups who had come to depend on program support.

The arrival of President Eisenhower and a Republican Congress in 1952 brought with it new efforts to move to a freer market strategy of reduced price supports. While

[17] All farm bills since 1949 have come with expiration dates. If a new farm bill is not passed by the expiration date, legislation reverts back to 1949 law. This provides Congress with a deadline-induced incentive to pass (or extend) farm bills on time (Orden *et al.* 1999, Johanns 2007).

this idea again gained temporary traction, price supports were by then thirty years entrenched. Increased efficiency and productivity on the farm through improved technologies, and the availability of industrial jobs in urban areas, had contributed to an exodus from farming. The remaining farms prospered, becoming larger, wealthier, and more politically influential, especially through their membership in farm bloc organizations. Price supports had raised farm property values, and second-generation farmers who grew up with supports came to see them as a given (Orden *et al*. 1999).

When prices fell at the end of the Korean War, the farm sector came to recognize that it still needed government support for bust years, and used the political clout and wealth it had developed over the previous thirty years to push back against Eisenhower's market-oriented aims to reduce agricultural subsidies (V.W. Dean 2006). The 1950s in general was a fairly imbalanced period in U.S. agriculture, with a rapid drop from high to low prices and significant instability in and restructuring of the sector.[18] Within this context, a brief move towards reduced government intervention in agriculture was quickly reversed due to a combination of situational and political factors, uncertainty and instability, and strong established interest group positions.

The 1954 and 1956 Agricultural Acts, however, continued to monitor overproduction and reinstituted acreage idling programs of the 1930s through the Soil Bank (1956). They also authorized sales and donations of food aid to foreign governments through P.L. 480, the Food for Peace program, in order to dispose of excess supply and stimulate foreign demand for U.S. agricultural exports (1954). P.L. 480 enjoyed broad-based support because it served humanitarian goals while disposing of excess wheat, corn, rice, sorghum, soy, and dairy, and benefited the transportation industry. It was criticized, however, for undermining local agricultural production in the receiving countries and creating a dependence on imported commodities that was sometimes tied to political objectives (McGovern 1967, Talbot and Hadwiger 1968, K.L. Robinson 1989, Ackerman *et al*. 1995).

In the late 1950s, authority was given to the Secretary of Agriculture to establish another surplus commodity disposal mechanism – a federal food stamps program.

[18] Thanks to G. Edward Schuh for this observation.

However, as will be discussed later, this was not in fact effected until the 1960s (in pilot form) and the 1970s (as a full federal program) (United States Department of Agriculture 2007a). Thus the 1950s marked early attempts to dispose of excess commodity supply not just through controlling production by idling land, but also by funneling surpluses into exports and emergency feeding programs. Food aid to foreign governments, food stamps, free and reduced cost lunch programs, and surplus commodity distribution to the domestic poor attempted to combine humanitarian goals with the distribution of excess supply to keep crop prices higher for farmers (K.L. Robinson 1989, Knutson *et al.* 1990).[19]

The 1965 and 1970 farm bills brought additional tweaks to the commodity system, for example readjusting loan rates and land set-aside provisions, and also incorporating a system of direct payments (and in 1970 payment caps) that allowed farmers slightly more flexibility in their planting decisions. In other words, their payments became slightly less tied to what they produced (National Agricultural Law Center 2003). However, the more important changes to farm policy in the 1960s came from an expansion of its constituent base (American Farmland Trust 1984, Orden *et al.* 1999). Specifically, as crop surpluses were increasingly funneled into food stamps and free and reduced cost school lunch programs, urban anti-hunger and nutrition interests were brought into policy debates (K.L. Robinson 1989, Knutson *et al.* 1990).

While food stamps were not yet officially part of the farm bill, an agreement whereby urban legislators would vote for the farm bill if rural legislators would support the Food Stamp Act was already taking shape. This was the start of an urban-rural alliance that to this day keeps the farm bill relevant to most legislators, if not for crop subsidies then for feeding programs. Farm policy expanded, then, via negotiations among interest groups and legislators, to keep the commodity programs in place. The trend here is one of incremental expansion of farm bill programs alongside broadening interest group involvement, where more radical reforms, if proposed, do not find the resonance in Congress and in the public to be passed.

[19] Here again is an example of multiple policy goals being addressed with one policy instrument.

This long period of stability from 1938 to 1970 did not mean that farm policy did not change at all over forty years; rather it meant that farm policy was gradually broadened to include new interest group positions without changing the 1933 heart of farm programs. Attempts to reform commodity programs were repeatedly defeated due to a combination of changing political and situational contexts which at times included falling prices, post-war influxes of labor and inputs into agriculture, the establishment of new coalitions through nutrition and export programs, the presence of long-involved interest groups defending status quo policies, and a cultural ideology supporting farmers and farming as part of a strong democratic nation. Note that during this period of farm bill stability, each farm bill was simply called an Agricultural Act (or Agricultural Adjustment Act in the case of the 1938 bill). However, as farm bill content began to change in 1973 and beyond, the names given to farm bills too became much more specific and representative of their expanding focus (National Agricultural Law Center 2003).

Change moment #2: the 1973 Agriculture and Consumer Protection Act

The 1973 farm bill marked a change in strategy from straight control of overproduction of commodities to an explicitly demand-oriented farm policy. While the base for this type of policy shift had been established in earlier farm bills, for example with the creation of food aid programs to stimulate demand for surplus commodities, the 1973 Agriculture and Consumer Protection Act marked a more dramatic shift in this direction. In the early 1970s, sales of grain stocks to the Soviet Union depleted stores and tightened international grain markets, and poor harvests around the world created a demand that was higher than supply for the first time since World War I. Added to this was a de-linking of the dollar from the gold standard and associated currency devaluation that contributed to a rise in exports and in food, fuel, and fertilizer prices that spawned consumer protests (Gelb and Lake 1974-5, K.L. Robinson 1989, Knutson *et al*. 1990, Ray and Frederick 1994, Orden *et al*. 1999). This growth of foreign export markets and change in the balance of supply and demand conjured up fears of a food shortage as well,

and pushed government to reformulate policies in ways that would increase, rather than decrease or simply manage production (Orden *et al.* 1999).

The 1973 farm bill stimulated domestic agricultural production by introducing guaranteed producer payments calculated using target prices, or minimum commodity prices below which the government would compensate producers. Whereas previous price support policies had kept farmer incomes high but limited exports by raising U.S. prices relative to the world market, these direct producer payments enabled government to provide support to farmers directly without raising the value of the commodity in the marketplace. Essentially this shift in mechanism eliminated the government price floor, let market prices drop, and passed benefits on to consumers in terms of lower food prices. This in turn stabilized consumer and urban legislator support for the farm bill, and represented a major shift in the way that farm support was oriented and distributed (K.L. Robinson 1989, Knutson *et al.* 1990, Orden *et al.* 1999).

This move to these direct payments was accompanied by a charge from President Nixon's Secretary of Agriculture Earl Butz to plant "fencerow to fencerow" and "get big or get out" (Spitze and Flinchbaugh 1994 p.47, S. Dean 2003). The emphasis, then, was on productivity and large-scale expansion, on having U.S. farmers ramp up production on large operations as the way to best respond to high prices and demand. Years of controlling overproduction were reversed, as set-aside acres were put back into production, and stocks previously used to keep a floor under prices in bad years were depleted. But by institutionalizing this strategy as policy, Congress failed to adjust for a future when crop prices might fall once again. When international demand dropped as conditions – exchange rate, international production levels, fuel prices – changed in the mid 1970s, farmers once again found themselves overproducing. Prices dropped, pleasing consumers, but leaving growers again in need of government support (Bonnen 1973, Orden *et al.* 1999). Earl Butz's call to produce "fencerow to fencerow" no longer served farmers, but the policy mechanisms instituted to encourage overproduction were by then already in place. This 1973 episode is particularly interesting because it was in part the excitement over agriculture enjoying good times that allowed policymakers to

simply ride this wave of enthusiasm rather than base policy on historical patterns and likely future farm sector needs (Bonnen 1973).

Stability period #2: the 1977 Food and Agricultural Act and the 1981 Agriculture and Food Act

By 1977, it was clear that the early 1970s golden age for agriculture was over. Farmers once again suffered as foreign market demand wavered and surpluses returned. And although the farm interest bloc had begun to lose its exclusive status as primary keeper of farm policy, it was still able to reincorporate more traditional commodity provisions into the 1977 farm bill by teaming up with nutrition interests, who had grown accustomed to supporting commodity measures in exchange for food stamps. The 1977 bill was in fact the first to completely incorporate food stamp provisions into the farm bill through a nutrition title. Bolstered by this alliance, the 1977 bill adjusted commodity payments to respond to farmers in periods of overproduction. At the same time, it retained the direct producer payment mechanism, cementing the 1973 shift in farm policy that had focused more on direct deficiency payments than on supply control (Browne 1978, Hadwiger 1978, Orden *et al.* 1999, Public Broadcasting System 2007).

In 1978 and 1979, the U.S. once again sold large quantities of grain to the Soviet Union, reducing supply and raising crop prices yet again. In response, President Carter imposed a Soviet grain embargo in 1980, refusing to sell any more of U.S. grain stocks (including some previously promised) to the Soviet Union. The embargo was instated as a response to the Soviet invasion of Afghanistan, and while it only affected Soviet food supply for a few months, until the U.S.S.R. began importing from other countries, it caused grain prices in the U.S. to drop, pushing Congress and the Administration to again raise farm support levels (Luttrell 1980, Scharff 1981, Mustard and Schmidt 1983).

Following these increases in support levels, the 1981 farm bill made few changes to basic commodity policy structure. Budget shortfalls and lack of agreement among normally united commodity interests created a context where change was not really seen as feasible (Peters 1982). But if the 1960s and 1970s established nutrition and anti-hunger interests as key players in agricultural policy, the 1980s brought environmental

and sustainable agriculture groups into the mix. In 1981, some environmental and sustainable agriculture groups began looking to the farm bill for policies that would mitigate the environmental impacts of the increased agricultural production of the 1970s, but met with minimal success (Meyers 1989, Heimlich and Claassen 1998). While Congress did create a conservation title for the first time in the 1981 farm bill, two other bills promoting organic agriculture were defeated. Similarly, the USDA had commissioned a *Report and Recommendations on Organic Farming*, which both gained national attention with its openness to alternative agriculture, and also generated a backlash in the new Reagan administration, which rejected the report (Youngberg *et al*. 1993, Anderson 1995, Heckman 2007, Madden 2007).

These mixed impacts highlight a tension between burgeoning interest in alternative agriculture to address the negative environmental impacts of extensive "fencerow to fencerow" agriculture, and a political establishment opposed to fundamental changes to farm policy (Youngberg *et al*. 1993). The alternative agriculture community responded to the opposition with a shift in their framing strategies. They moved from use of the word "organic," which had come to have negative connotations in mainstream culture as "a primitive, backward, nonproductive, unscientific technology suitable only for the nostalgic and disaffected back-to-the-landers of the 1970s," towards framing their goals as "sustainable" agriculture for greater political traction (Buttel 1993, Youngberg *et al*. 1993, p.298).[20]

Thus, the 1977 and 1981 farm bills produced little change in commodity policy, but set the stage for increased involvement of nutrition, environmental, and sustainable agriculture groups in farm politics. In other words, the particular combination of political

[20] The use of the word "sustainable" gave sustainable agriculture groups a rhetorical advantage for a time, as it is hard for anybody to really be against sustainability, vaguely defined as environmentally, socially, and economically friendly agriculture. This vague definition of sustainability, however, also enabled multiple groups to advertise themselves as promoting sustainability, no matter how well their views matched up with the original criteria of sustainable agricultural production (Youngberg *et al.* 1993, p.296, Lewis 2000, McGregor 2004). Many proponents of industrial agriculture, for example, touted the sustainability of their systems too – systems that original proponents of alternative agriculture would argue were not sustainable at all. This blending of different views under the one heading of sustainability thus helped push sustainability from a radical to a more "watered down" agenda for farm policy (Allen and Sachs 1992).

context, interest group advocacy, and attention to framing over the late 1970s and early 1980s favored not reform per se but rather a broadening of the number and kind of interest groups that would come to have an impact on future farm bills, especially as context shifted again in the early- to mid-1980s.

Change moment #3: the 1985 Food Security Act

In the early 1980s the Reagan administration, like many administrations before, proposed limiting governmental intervention in agriculture, but was opposed by a mixed Congress (Democratic House and Republican Senate) and the farm lobby (Orden *et al*. 1999). By 1982, the value of the dollar had risen and export markets had collapsed, creating a new financial crisis. Many farmers went out of business in what was termed the 1980s farm crisis, and those remaining used government payments to expand their operations and stay in business (American Farmland Trust 1984, Pfeffer and Gilbert 1989). The federal government was forced to pay out large sums in deficiency payments, and grain stocks began to grow as farmers forfeited their loans (K.L. Robinson 1989, Knutson *et al*. 1990). The cost of income supports went from a few billion dollars in 1981 to $17 billion in 1985 and $20 billion in 1986 and 1987, creating tensions between the visible need for farm supports and the exploding costs of providing these supports (Pfeffer and Gilbert 1989).

In 1985, payment calculations for future farm supports were frozen at 1985 production levels, weakening incentives to increase productivity simply to qualify for more subsidies. Although this move has since been interpreted by some as the first step toward the subsequent more radical subsidy reductions (or liberalization) of 1996, separating productivity from payments in 1985 did not in and of itself significantly change commodity policy (V.H. Smith and Glauber 1997, Orden *et al*. 1999).

Conservation policy, on the other hand, changed significantly. The 1985 farm bill was the first farm bill to incorporate conservation as an explicit purpose of farm policy, rather than simply as a way to conserve soil for future agricultural production. By establishing Conservation Reserve Program (CRP) set-asides, Congress explicitly acknowledged that soil and water conservation was important in and of itself (Cox 2007).

The 1985 farm bill also prohibited farmers from receiving any sort of government commodity payments if they converted new wetlands or marginal uplands to cropping without a soil conservation plan. This concept of denying subsidies to farmers who increased productivity at the expense of the environment was new, and dramatically changed the feel of commodity policy even if it did not actually change the commodity title itself (Youngberg *et al*. 1993, Helmers and Hoag 1994, Heimlich and Claassen 1998, Cox 2007). The bill also authorized money for sustainable agriculture research under the Low-Input Sustainable Agriculture (LISA) program, now the Sustainable Agriculture Research and Education (SARE) program (Youngberg *et al*. 1993, Poincelot *et al*. 2006, Cox 2007, Sustainable Agriculture Research and Education 2007).

The 1985 farm bill thus marked the clear entry of environmental interests into farm policy debates. Twenty years later, the environment is one of the major lynchpins of farm bill debates, and the conservation title is the third largest in terms of farm bill funding, after commodities and nutrition (Outlaw 2002, United States Department of Agriculture 2008).

Conservation was brought into the 1985 farm bill for several key reasons. First, the atmosphere at the time was characterized by a financially weak farm economy, record budget expenditures, and declining exports. Thousands of farmers had defaulted on loans taken out during the agricultural heyday of the 1970s, making it clear that over-expanded production could leave rural society vulnerable to collapse (Pfeffer 1992, Hawkes 2004). And federal *National Resources Inventory* and *Resource Conservation Act* reports from 1977 and 1981 had brought serious soil erosion problems to light.

The farm sector began looking for a way to bail itself out of the farm crisis without adding to commodity subsidies, which would have been unpopular in the free market years of the Reagan administration. Sustainable agriculture and environmental groups, building on their work from 1981, were also looking for solutions to the problems of pollution and soil erosion and the growing bankruptcy rates among family farmers (Pfeffer 1992). While environmental and sustainable agriculture groups were still new to farm bill debates, and had relatively little power compared to commodity and farm

groups, they were also coming off an era in which broader conservation concerns had risen to the forefront of public awareness.

Building on books such as Rachel Carson's 1963 *Silent Spring*, which highlighted dangers of pesticide use, environmentalists built popular support for environmental protection throughout the 1970s, framing their work to shift public perception from pollution as an unfortunate but necessary consequence of progress and industrialization to pollution as morally wrong. The environmental community, having focused on industrial pollution through the 1970s, turned its attention in the 1980s to agricultural pollution (Reichelderfer and Hinkle 1989, Lowe *et al*. 1997, Kraft and Vig 2003). The sustainable agriculture community, meanwhile, built on its early experiences with alternative and organic agriculture, reframed its work around the concept of "sustainability," and came to the 1985 farm bill looking to stem the loss of family farms brought about by the 1980s farm crisis (Youngberg *et al*. 1993, Heimlich and Claassen 1998).

The Conservation Reserve Program passed in 1985 because it satisfied the multiple goals of each of these groups in a way that seemed to make sense in the context of the time. It took farmland out of production to continue to address oversupply problems plaguing the farm sector, addressed soil conservation for environmentalists and sustainable agriculture advocates, and provided income support to family farmers through conservation (Ogg 1988, Anderson 1995). It was a win-win situation in which sustainable agriculture and environmental groups, new to farm bill debates, did not have to oppose traditional farm groups to get conservation policies implemented (R. Roberts and L.E.R. Dean 1994, Bonnen *et al*. 1996). And this shift in focus from pure commodity concerns to commodity plus conservation concerns has shaped farm bills to the present, both through actual policy measures and by bringing sustainable agriculture and environmental interests into farm bill debates as active and accepted players.

As Craig Cox, Executive Director of the Soil and Water Conservation Society described it, "In 1985 you could put all of the primary advocates that were engaged in the farm bill and the conservation title… all in one cab – there were really four or five major players… In 2007 you can barely get them into a hearing room" (phone interview, July 16, 2007). Whereas in 1981, there was interest in conservation but little policy action on

it in the farm bill, the 1985 farm bill brought conservation solidly into farm policy. In this case, conservation objectives temporarily aligned with supply-control commodity objectives of the time to create common ground between sustainable agriculture and environmental groups and the more established commodity and farm groups previously driving farm politics. The 1985 farm bill was thus a rapid change farm bill for conservation interests and for the balance between conservation and commodities, if not for commodity policies themselves.

Stability period #3: the 1990 Food, Agriculture, Conservation, and Trade Act

The 1990 farm bill was much more a stability-oriented farm bill than a change-oriented farm bill. It came up for passage within a context of high commodity crop prices, declining farm program costs, increasing exports, increased market-orientation, a Democratic Congress, and budget deficits. Production needs were minimal, and Congress added provisions like allowing farmers to plant 15% of their acreage to non-commodity crops without losing base acreage for subsidy payments, but otherwise made few changes. Policymakers expanded conservation somewhat, bolstered by the support of an interested public, a strong environmental movement in the wake of the "anti-environmental" Reagan years, a new report on the environmental benefits of organic agriculture by the National Academy of Sciences, and an increasingly urban Congress receptive to environmental concerns (Korves 1989, Reichelderfer and Hinkle 1989, Riemenschneider and Young 1989, R. Roberts and L.E.R. Dean 1994, Anderson 1995, Vig 2003).

Even so, the conservation provisions that ended up incorporated into the farm bill were ones that complemented rather than contradicted commodity program provisions – none challenged the environmentally-damaging aspects of commodity policy itself (Youngberg *et al*. 1993). Many farm interests still viewed environmental groups as "enemies of 'traditional' agriculture," but certainly, environmental interests had become an undeniable part of the farm policy picture (Meyers 1989, p.599). Conservation activity in the farm bill had thus broadened again, but changes made to farm policy were still incremental both in commodity and conservation policy areas.

Change period #4: the 1996 Federal Agriculture Improvement and Reform Act

While the 1985 farm bill was a rapid change bill for conservation but not commodity policy, the 1996 farm bill was the opposite. The 1996 Federal Agriculture Improvement and Reform Act (FAIR) marked a clearer and more decisive move in the direction of reducing commodity subsidies than had been seen before (Harvey 1998, Moyer and Josling 2002). It eliminated temporary supply control programs (although permanent CRP programs remained) and separated, or decoupled, deficiency payments from market prices and productivity.[21] The new direct payments came to be calculated based on the number of acres in production (frozen at 1985 levels), allowing the government to predict more easily the amount of money that would go to farm payments in a given year. FAIR is reported to have saved $2 billion from the 1996 federal budget and to have given farmers more flexibility in their farming practices by distancing subsidy mechanisms from planting decisions (Schmitt 1996, Orden *et al.* 1999).[22]

While decoupling payments had been considered as a policy mechanism in 1990, there had not been sufficient support for it in Congress until 1996 (Helmers and Hoag 1994). This change in 1996 was due in part to the combination of a Republican Congress looking to reduce government intervention in agriculture, pressure to control the budget deficit by reducing commodity payments, international pressure to reduce commodity subsidies to promote free trade, and high farm prices and profits in 1995-6 resulting from a combination of high demand, low reserves, and low global production (Paarlberg and Orden 1996, Orden *et al.* 1999).[23]

In addition, the ideas of promoting free market economic systems had gained political and discursive traction. The World Trade Organization (WTO) had been created in 1994 to regulate trade among nations and, with major support from the U.S., promote

[21] Payments remained coupled, however, for import commodities like sugar (Orden *et al.* 1999)
[22] However, like in the 1950s, decoupled payments were also criticized as a form of welfare, paying farmers for who they were rather than what they produced (Orden *et al.* 1999).
[23] The context surrounding the 1996 farm bill is perhaps the one with the closest parallels to the 2008 farm bill, specifically in terms of high commodity prices, pressure to reduce subsidies, and budget shortfalls. However, as will be discussed, the outcomes of the two farm bills were, for various other reasons, quite different.

the idea of eliminating tariff and subsidy barriers to international trade (New York Times 1994). The idea of reducing government intervention in the economy gained steam as the WTO, the Contract for America, and the Republican majority in Congress came to favor smaller governments and free markets as goals for government and trade relations (National Center for Public Policy Research 1994).[24] Agribusiness interests too at the time maintained strong relationships with the USDA and became more involved in the 1996 farm bill than they typically had been (Marshall 2000). As Ferd Hoefner, Policy Director for the Sustainable Agriculture Coalition put it:

> [Agribusinesses in 1996 were] really organized. They formed an alliance. They were really front and center in everything in a way they're not usually. They usually sit in the background – not that they're not influential, but they're usually not so organized… I think they felt emboldened by the Gingrich revolution in '94, so now the Republicans controlled the House. They not only controlled the House, but they did so in a very ideological fashion. And so they saw that opening. (author interview, Washington DC, June 27, 2007)

Thus, Congress and the agribusiness sector collaborated to push farm policy toward a liberalized trade agenda, increased efficiency and competitiveness, a balanced federal budget, and reductions in "unnecessary" social welfare programs (Dicks and Osborn 1994, Sorensen 1994, Marshall 2000). And because commodity prices were high in 1995, traditional agricultural interest groups that normally fight for commodity subsidies became open to reducing government intervention in agriculture. In fact they wanted to be able to access higher market prices without being constrained by the conservation and production restrictions that were tied to commodity supports. "Freedom to Farm," as the 1996 bill was nicknamed, was their answer (Orden *et al*. 1999).

In conservation, however, budget shortfalls and increasing conviction to reduce government intervention in agriculture meant that environmental regulation became less of a priority in Congress as well. The Fund for Rural America (FRA), a program promoting rural development and family farms, was passed but never implemented due to lack of appropriated funding and opposition from the now proactive agribusiness sector

[24] Glauber (2008), however, argues that the new WTO and trade rules featured surprisingly little in the 1996 Congressional farm bill debates, and that the subsidy liberalization of the time was more coincidental than purposive.

(Marshall 2000). However, the 1996 farm bill did see the passage of the Environmental Quality Incentives Program (EQIP), one of the first programs to promote conservation on working agricultural lands (Dicks and Osborn 1994, Cox 2007). Kuch and Ogg (1996) argue, though, that the environmental provisions that made it through the 1996 bill were less the result of increasing sustainable agriculture and environmental strength, and more the result of a political compromise to get Democrats to support Republican subsidy reforms in exchange for environmental gains. Thus, the ideas of liberalized trade, reduced government interference in agriculture, high prices, and a need for budget reform combined to make lowering commodity subsidies politically feasible, while conservation gains, unless tied to this program of subsidy reform, became harder to achieve.

Stability period #4: the 2002 Farm Security and Rural Investment Act

Farm commodity prices dropped in 1997-8 after the 1995-6 highs hit during the passage of Freedom to Farm. Congress responded by authorizing emergency farm payments to replace the producer payments that had been reduced through FAIR, and the FAIR Act in fact came to be seen by many as an example of what *not* to do with agricultural policy. Between 1996 and 2000, subsidy expenditures rose from an annual $4.6 billion, where they had settled after the 1980s farm crisis, to $32.2 billion (Sumner *et al*. 2007). Many policymakers interpreted this to mean that a better safety net for farmers was necessary both for farmers' well-being and also to avoid costly emergency expenditures during agricultural downturns.

Accordingly, the 2002 farm bill reversed many of the commodity reforms made in 1996. While it retained the use of the direct payments decoupled from production that had been instituted in 1996, it added counter-cyclical payments to the package that would pay farmers the difference between the target price for a crop and these fixed decoupled payments (J.B. Johnson *et al*. 2002). This meant that whereas the 1996 farm bill had moved toward more trade-compliant payments with less influence on farmer planting decisions, the 2002 farm bill reinstated subsidies to farmers in times of low prices. These subsidies once again affected world markets and were seen by trading partners as an affront to trade negotiations (Agra Europe 2001, Atkins 2004). Proponents of counter-

cyclical payments argued that this return to stronger institutional subsidies was warranted, citing the yearly emergency aid authorized between 1998 and 2001 as evidence of the 1996 farm bill's inadequacy (Patashnik 2003).

This reversal of the 1996 farm bill's reductions in subsidies was actually somewhat surprising given a strong Republican leadership in Congress and the presidency in 2002. However, the image of farmers suffering at the hands of an economic downturn after years of prosperity, like in 1933, had also created a climate of support for a farm safety net. And according to some analysts, the more protectionist 1930s agricultural alliance between Congress, the farm bloc, and the USDA had never disappeared, and was simply able to step back into power once market prices dropped from their 1995-6 highs. Just because policy changes happened rapidly and dramatically in 1996 did not mean that they would necessarily stick (Patashnik 2003). Like the transition from 1973 to 1977, the 2002 farm bill held onto certain aspects of the 1996 changes, but in other areas returned to previous commodity policy.

The 2002 bill did, however, add to conservation provisions. Because of budget surpluses, increased participation of sustainable agriculture and environmental groups in farm policy, growing public support for the environment, and a renewed commitment to supporting agriculture with permanent (but preferably not too trade-distorting) payments, the 2002 farm bill became, potentially, the "greenest" farm bill ever (Lubben, Funk, *et al*. 2006, p.5). In fact, environmental issues were so important to the 2002 debates that a bill introduced by Representative Ron Kind (D-WI) to essentially replace traditional commodity supports with conservation provisions was only narrowly defeated on the floor of the House of Representatives (Environmental Defense 2001, Land Stewardship Project 2001, Kind 2007). Had this bill passed, it might have made the 2002 farm bill into a change bill. However, while there was some support for expanding conservation and some associated dissatisfaction with status quo commodity policy among legislators and the public, support for such dramatic change was not sufficient.

Without the passage of the Kind amendment, the 2002 farm bill instead became a stability bill with additions to conservation. Among other provisions, it added the Conservation Security Program (CSP), a program designed by the sustainable agriculture

community to pay farmers for soil, water, and wildlife conservation on working lands. However, the CSP was implemented in a much more limited form than originally intended, indicating the sustainable agriculture community's increasing but still restricted influence in policy circles (B.A. Johnson 2004a, B.A. Johnson 2004b, Imhoff 2007). It can also be seen as an example of the relative ease with which programs can be added in a political context dominated by budget surpluses rather than budget shortfalls.

Patterns of farm bill change over time

Looking back at farm bills from 1933 through 2002, it becomes clear that agricultural policy, like all policy, usually changes only slowly and incrementally. However, occasionally change comes more rapidly, as policymakers respond to market conditions, public concerns, partisan struggles, and current events, as well as to the interactions of newer interest groups with more established ones (Harvey 1998). Even though these large leaps of change are sometimes followed by partial returns to previous policies, still they represent particularly instructive moments of rapid policy change. And these moments of rapid change combined with periods of more incremental change to make farm policy in 2002 look quite different from farm policy of the 1930s – thus representing broad changes over time.

Bonnen *et al.* (1996) suggest that the general lack of radical reform in farm policy is in part due to the distributive nature of power in legislative processes, especially over the last 30 years. Whereas agricultural policy decisions used to be made by a few particularly invested legislators, interest groups, and USDA representatives, there are now so many interests involved in the process that decision-making has become a more diffuse and complicated negotiated process. Farmer interests, which used to be represented by one or two large farmer organizations, are now represented by more fragmented commodity-specific interest groups. Environmental, sustainable agriculture, public health, rural development, nutrition, trade, and other groups are also now involved in the farm bill and advocate their own particular agendas. In turn, individual legislators have found it in their interests to promote provisions that will build them support among their constituents, be they environmental groups or peanut growers. As such, farm policy

is now built in a much more piecemeal fashion that tries to placate all groups involved rather than create a coherent suite of legislation. This has served to increase public participation in farm policy legislation, but has also has made coordinated change much more difficult to accomplish.

Each of the rapid change farm bills discussed in this chapter came about because of a unique combination of circumstances and interest group activities that created a temporary policy window or opportunity for change. But looking across farm bills and keeping in mind their tendency for incrementalism, few steady characteristics stand out as predictors of rapid change. For example, there are no drivers that appear in all change bills but not stability bills or vice versa. Table 4 below demonstrates this in detail, listing each farm bill, party control of Congress and the presidency at the time, farm prices of the time, and other driving forces pushing for change or stability.

Farm bill year	**Party control** [a]	**Farm prices**	**Other forces *(for change and/or stability)***	**"Stability" or "change bill" status**
1933	Dem Pres Dem Cong	Low (dropped from high)	Farm crisis *(change)* Great Depression *(change)* New farmer organizations *(change)* Agrarian ideology *(change)*	Change
1938	Dem Pres Dem Cong	Low	Similar to 1933 forces (see above) but now stability oriented	Stability
1948/9	Dem Pres Rep Cong	Low (dropped from high)	Drop in export demand *(stability)* Charles Brannan leadership *(change)* Entrenched interest groups *(stability)* Direct payments sounded socialist *(stability)*	Change potential, then stability
1954/6	Rep Pres Dem Cong	Low	Powerful farm groups involved *(stability)* President Eisenhower *(change)* Farm sector instability *(stability)*	Change potential, then stability
1965/70	Dem/Rep Pres Dem Cong	Low	Surplus commodities and nutrition *(stability)* Expanding interest groups *(stability)*	Stability
1973	Rep Pres Dem Cong	High	Drop in the dollar *(change)* Higher fuel prices *(change)* Grain sales to USSR *(change)* Failed harvests abroad *(change)* Earl Butz leadership *(change)*	Change
1977	Dem Pres Dem Cong	Low	Drop in exports *(stability)* Surplus commodities *(stability)* Powerful agricultural bloc *(stability)* Incorporation of food stamps *(stability)*	Stability

1981	Rep Pres Rep/Dem Cong	Low	Budget shortfall *(stability)* Incorporation of environment and sustainable agriculture groups *(unclear)* Less commodity group unity *(change?)*	Stability
1985	Rep Pres Rep/Dem Cong	Low	Farm crisis *(change)* Dollar higher *(stability)* Drop in exports *(stability)* Weak farm economy *(stability)* Rising farm bill budget costs *(change)* Soil erosion worries *(change)* Farm bloc goals *(stability)* Sustainable agriculture and environmental goals *(change)* Rural society worries *(change)*	Change (in conservation)
1990	Rep Pres Dem Cong	High	Declining farm program costs *(stability)* Increasing exports *(stability)* Budget shortfalls *(change?)* Increased market orientation *(change?)* Conservation group power *(change?)*	Stability
1996	Dem Pres Rep Cong	High	Budget deficit *(change)* International pressure *(change)* Partisan compromise *(change)* Agribusiness goals *(change)* Market-oriented convictions *(change)*	Change
2002	Rep Pres Rep Cong	Low	High farm program costs *(change)* Budget surplus *(stability)* Environmental groups *(change)* Ideology of farmer support *(stability)*	Stability
2008	Rep Pres Dem Cong	High	Early WTO pressures *(change)* Budget pressures *(change, then stability)* Biofuels boom *(stability)* Consumer interest in alternative agriculture *(change)*	Change potential, then stability

Table 4. Historical farm bill drivers
Farm bills by year, political party control, farm price, and other change- or stability-oriented forces. Abbreviations: Dem = Democrat, Rep = Republican, Pres = President, Cong = Congress.
[a] While common farm policy wisdom suggests that farm bill conflicts are more regional than partisan, still party control in Congress and the presidency has at times influenced farm bill outcomes and can thus be instructive for understanding periods of farm bill change and stability.

Both change and incremental bills, for instance, were passed under all combinations of Republican and Democratic Presidents and Congresses. And the 1933 and 1985 farm bills were rapid change bills passed at times of low crop prices, while the

1973 and 1996 bills were rapid change bills passed with high crop prices.[25] Thus while certain factors – party control, budgets, crop prices, trade pressures, new interest groups, particularly resonant frames – consistently played into farm bill change patterns, there was not necessarily a consistent combination of factors that could be distilled as favoring incremental versus rapid policy change. Of course not all change farm bills produced the same kinds of changes either – 1933 created farm supports, while 1973 changed their focus, and 1996 loosened them (and 1985 focused on conservation). Therefore, it makes sense that each of these different kinds of change would be driven by a different combination of factors.

Perhaps what rapid change bills do share, however, (aside from 1996) is that they were passed at a time when there was a larger sense of crisis, especially economic crisis, in the country.[26] In 1933 that crisis was the Great Depression. In 1973 it was high levels of inflation, rising food prices, and depleted commodity stocks. In 1985 it was the farm crisis, with countless farmers going out of business. In 1996, however, while there were certainly budgetary pressures to reduce commodity subsidies, and a set of strong beliefs that farmers should be able to plant without interference from government, it probably could not be described as a crisis in the same way that the others were. And in the 1950s, a time that many considered a very difficult and perhaps more crisis-like time for agriculture, major changes to the farm bill did not result.

Granted, with only four change farm bills identified, and only fifteen farm bills total, it becomes difficult to distill clear patterns. But the partial common denominator of an underlying sense of crisis (in three of the four change bills analyzed) may make sense as a general driver of change. Certainly, change in response to a crisis is typically more common than change in response to moments of calm. This would suggest that when looking at the potential for change in the early 2008 farm bill debates, the presence or

[25] This makes sense in that government loosened supply control measures in 1973 and 1996 when the market was providing farmers a high price, and created new commodity and conservation programs in 1933 and 1985 when prices were low. However, the 1990 and 2008 farm bills were also passed at times of high prices, and neither made significant changes to commodity policy (see details of the 2008 debates in chapters 4 and 5), and most farm bills passed under low price conditions did not produce (even non-commodity-oriented) changes like those seen in 1933 and 1985.

[26] Thanks to Rachel Schurman for this observation.

absence of a sense of crisis may provide some leverage for understanding the prospects for change at the time. Chapters 4 and 5 in fact suggest that change was proposed for 2008 and then faded, in part because the context moved from crisis-oriented to calm.

And while a sense of crisis can be difficult to measure, the use of discourse analysis can be a particularly useful tool in this regard, particularly as a measure of concepts like public mood, which are often reflected in societal discourses. A sense of urgency in discourse, for example in Earl Butz's 1973 call to plant "fencerow to fencerow" and "get big or get out," or in the prevalence of discourses of "competition" during the early 2008 farm bill debates, to be discussed in Chapter 4, adds evidence that it is in part a feeling of crisis that propels farm policy action at certain points in time over others.

Historical leverage for understanding current debates

An examination of farm bill history thus suggests that in many cases, a sense of urgency or crisis could be one factor in propelling rapid policy change. Second, it suggests that despite this potential common denominator, a diversity of other factors ebb and flow in different combinations to create unique episodes of policy change at particular moments in time. In each of the cases described in this chapter, different interest group strategies and inter-group power dynamics combined co-terminously with economic, political, situational, and cultural factors to create a unique policy opportunity for each farm bill debate. For example, while many of the conditions present in the 2008 farm bill conjure up memories of the 1996 farm bill, the differences between the two contexts illustrate how even similar situational patterns, when present in different combinations, settings, or time periods, can produce different policy results. These specific dynamics of the 2008 farm bill are presented in greater depth in Chapter 4 and 5.

Finally, this examination of history provides an understanding of policies and contexts leading up to the 2008 farm bill debates, and a sense of how previous debates over farm bill reform both changed and yet also remained consistent over time. Given that past political debates color present political debates, a historical perspective on trade, budgets, conservation, nutrition, partisan politics, productivity, and subsidy conflicts in

previous debates can provide insight into some of the reasons for and implications of current farm bill controversies and points of consensus as well. But even beyond just drawing on history to give meaning to current debates, understanding what happened in past farm bills is important to future farm bills in that past outcomes by necessity constrain future outcomes. This idea is based on the notion of path dependence, a theoretical framework found in economics, political science, and historical sociology among other disciplines. This concept of path dependence implies that that from an initially wide range of possible outcomes, current events will constrain future possibilities to a more limited set of options. Even small events, if they occur at the right time and in the right sequence, can help determine what options are available or unavailable for the future (Mahoney 2000, Pierson 2000).

For example, the introduction of nutrition groups into farm bill debates in the 1960s and 1970s, and of environmental groups in the 1980s, forever changed subsequent farm bill outcomes. They established the urban-rural coalitions that allow farm policy provisions to pass through Congress, even with few farmers left in the country, and added actual conservation and nutrition programs into the farm bill that now have extended bases of constituent support defending them. The decision to expand farm legislation from commodity subsidy provisions into other policy areas meant that future farm bills would have to continue to include these new areas of policy. Unless a move is made to separate the multiple policy goals embedded into the farm bill into separate pieces of legislation – for instance, a food and nutrition bill, a conservation bill, an agricultural supports bill – all future farm bill debates too will continue to be influenced by the agendas of nutrition and environmental groups, as well as by other past events that have had implications for future bills.

Looking to farm bill history thus provides several analytical advantages for understanding current farm bill debates. It highlights the kind of factors that can drive and that can stymie incremental and rapid change. It suggests that a sense of urgency or crisis is often one common denominator of rapid farm bill change. And it reiterates the idea that every combination of situational, interest group, and rhetorical drivers is unique and has unique implications for farm policy at a particular moment in time. Looking at

history also provides a sense of how future farm bill paths have been constrained by past events and group activities, and how they will continue to be constrained by current farm bill decisions.

Conclusions

This chapter focused on moments of change and stability in farm policy from 1933 to 2002. It examined the ways in which agricultural policy did and did not change over time, and highlighted tensions between forces for change and for stability-oriented policy. It focused on the roles that previous farm policy debates, situational and political forces of the times, and changing resources, goals, and strategies of interest groups played in each of these debates.

This chapter identified four farm bills as rapid change farm bills – 1933, 1973, 1985, and 1996. It argued that particular combinations of political, situational, cultural, and interest group forces made various kinds of rapid change possible in these farm bills more than in the intervening farm bill years. While it was difficult to draw out patterns or factors that always promoted or inhibited farm policy change, aside from a suggested relationship between crisis conditions and farm bill reform, looking at the combination of factors that promoted change in these different farm bill cases was still instructive. Looking at these factors helps in understanding the conditions under which rapid change in farm policy has occurred in the past, and in analyzing the forces of change and stability at play in the 2008 farm bill debates.

This chapter also provided examples of farm bills that, like 2008, had the potential to be change bills but ended up as stability bills. Many of these cases were bills such as 1948 and 1954 where change had been brewing but was sidestepped due to a particular combination of reasons (V.W. Dean 2006). These examples both provided historical precedent for the dynamics of 2005-08 and also further reinforced the idea that one or two particular factors do not make or break change in farm policy. Instead, it is a full suite of ever-changing political, situational, interest group, framing, and cultural forces that shift over time to create a unique policy window that may or may not in the end produce substantial change, as described in the policy and social movement

literatures discussed in Chapter 2. Finally, this chapter provided background on the history of reform-oriented debates in farm bill history, providing a historical context within which to understand the 2005-08 debates over farm bill reform and stability. Chapters 4 and 5 draw on these theoretical and historical understandings of farm bill change to analyze in greater detail the opportunity context, interest group interactions, and framing processes that influenced the early and later years of the 2008 farm bill debates.

CHAPTER 4:

Trading the farm bill: WTO and U.S. agricultural policy, 2005-07

> *This was supposed to be the year that international trade concerns would shape the farm bill. They didn't.*
>
> – Philip Brasher, *Des Moines Register*, November 4, 2007 (Brasher 2007)

Introduction

In 2005 and early 2006 it seemed as though the 2008 farm bill debates would be significantly affected by World Trade Organization (WTO) negotiations. Agricultural policy-oriented groups of all sorts were justifying their farm bill positions by citing trade concerns. Newspaper stories were highlighting foreign agricultural production and the need to protect U.S. agriculture from "unfair competition."

During the summer of 2006, however, WTO negotiations were suspended and WTO as a major public driver of farm bill debates stalled along with them. Although still acknowledged by most stakeholders as relevant to domestic agricultural policy, WTO forces dropped significantly on the list of rallying points for farm interest groups, and were no longer highlighted in the press as a principal farm bill driver the way they had been previously. If anything, 2008 farm bill outcomes were affected more by the collapse of WTO negotiations – in the decision of many farm interest groups to shift from recommending an extension of the 2002 farm bill to recommending that a new 2008 farm bill be written – than they were by pre-existing pressures to bring U.S. agricultural subsidies into compliance with international trade rules.

This chapter tells the story of the rise and fall of a change-oriented moment in farm policy history in 2005-06, and examines the factors that came together to create and then dissipate this policy window. It argues that pressure from the WTO and liberalized trade advocates to reduce domestic agricultural supports converged in 2005-06 with the involvement of new interest groups in farm policy and with increasingly negative public perceptions of subsidy payments. This in turn created a wave of enthusiasm for farm bill

reform similar to reform waves seen in farm bill debates in 1947 and 1996.[27] The chapter further argues that in 2006, political opportunities shifted with the stalling of the WTO Doha Round negotiations, new Congressional elections, a foregrounding of biofuels, high corn and soybean prices, and concurrent budgetary repercussions to make subsidy reform no longer a broadly appealing option.

This chapter pairs the understanding of changing situational drivers in 2005-06 with an analysis of associated interest group positions and framing strategies. It looks at the changes in interest group debates that occurred during this opening and closing of the policy window, and finds that debates moved from contentious 2005-06 discussions over whether farm policy should be reformed or simply tweaked and extended to consensus-oriented discussions in 2006-08 about how to adjust a much more stability-oriented farm bill.

In its examination of interest group positions this chapter focuses particularly on the ways in which farm bill arguments were framed. Specifically it finds that the strong, competitiveness-oriented language used by groups to argue both for and against farm bill reform highlighted the urgency with which groups approached their positions, as well as the tensions that infused farm bill debates of the time. In contrast to debates in 2006-08, in which there was little discussion of farm policy reform, in 2005-06 debates focused almost exclusively and heatedly on questions of reform, indicating that a policy window for reform was indeed open at the time. This idea that change was possible at the time is further supported by drawing parallels between the sense of urgency and tension pervading farm bill debates in 2005-06, with the feelings of crisis that underlay the 1933, 1973, and 1985 farm bills, bills that all brought about rapid policy change. In the case of the 2008 bill, however, that sense of crisis was dissipated by the changes in situational context in 2006-08, converting the 2008 farm bill from a potential change farm bill to a more stability-oriented bill.

[27] While the factors that converged to create these windows were different in each case – in 1946-7 it was high crop prices and export levels that encouraged consideration of subsidy reform; in 1995-6 it was high prices plus a budget deficit and Republican Congress interested in limiting government intervention and promoting liberalized trade – there was nevertheless a convergence of particular situational factors in each case that combined with specific interest group positions and frames to create a temporary moment where change seemed possible.

By bringing the study of these discourses, often glossed over in traditional farm policy analyses, into the study of farm bill dynamics, this dissertation highlights the contribution that language and framing can play in developing a fuller understanding of policy change. As discussed in Chapter 2, this approach specifically emphasizes the role that discourse analysis can play in operationalizing concepts such as public mood that are integral to the idea of a policy window but difficult to measure with traditional policy analysis tools. This incorporation of discourse into farm policy analysis also helps shed light on the implications that these discourses and associated shifting contextual factors can have in changing potential future policy outcomes.

The first part of this chapter provides a brief history of the WTO and its influence on U.S. agricultural policy, discusses the drivers influencing farm bill debates in 2005-06, and highlights interest group policy positions and framings at the height of WTO pressure to reform domestic subsidies. It then discusses the collapse of the Doha Round talks in 2006, the broader shifts in farm bill context surrounding these debates, and the concurrent changes in group positions and frames during 2006-08. It also provides the background for a more in-depth analysis in Chapter 5 of stability-oriented farm bill debates that arose in 2006-08 with the emergence of a biofuels boom. Broadly speaking, this chapter argues that trade intersected with other drivers and interest group activities in 2005-06 to create a policy window for change in the 2008 farm bill. It contends that, had the context not changed so significantly in 2006-08, trade-induced commodity policy reform would have been a very real possible outcome for the 2008 farm bill.

WTO concerns and U.S. domestic policy

Countries' domestic agricultural support measures have repeatedly collided with international trade provisions. Since before the establishment of the General Agreement on Tariffs and Trade (GATT) in 1947 to develop common rules for international trade and the 1995 creation of the WTO, internal conflicts between countries' domestic agricultural support measures and their international policy interests have affected trade negotiations (World Trade Organization no date). The GATT was in fact established as the second attempt of countries after World War II to negotiate their way back from

isolationist policies that they, beginning with the U.S., had adopted in the 1930s, and that were considered contributing forces to the Great Depression (Denny 1998). The U.S. had been a strong advocate of bringing down the barriers to trade that had been erected in the 1930s. It saw trade liberalization, or limiting the domestic subsidies, tariffs, quotas, and price supports that interfere with free market flows, as an engine of economic growth, a driver of competition and increased efficiency, and a way to benefit consumers (Orden *et al*. 1999). However, it also faced strong internal opposition to trade liberalization from domestic farm lobbies that benefited from those barriers and domestic supports, and that were able to lobby to keep agriculture out of the negotiations until 1992 (Jank 2001).

During the 1986-1993 GATT Uruguay Round negotiations on agriculture, the U.S. advocated liberalizing international trade (Orden *et al*. 1999). However, because European agricultural policy was generally more interventionist than U.S. agricultural policy, GATT pressures did more to stimulate liberalization in Europe than in the U.S. (K.L. Robinson, 1989). Additionally, U.S. farm lobbies argued against liberalization, equating it to "unilateral disarmament" and loss of "bargaining leverage" with the Europeans (Orden *et al*. 1999, p.99). Thus, there was a visible conflict between U.S. goals for trade policy in the international realm and the U.S. farm lobby's goals for domestic agriculture (Jank 2001).

In the end, the multilateral 1994 Uruguay Round Agreement on Agriculture (URAA) set a goal of reducing trade-distorting subsidies, but left in-depth negotiations over agricultural subsidies to the following rounds of WTO talks (Orden *et al*. 1999, Moyer and Josling 2002). Thus, while the URAA did not significantly change agricultural U.S. policy at the time it was enacted, it did set a precedent for liberalized trade, and for changes to domestic agricultural supports, as an international goal. Signing countries to the URAA committed to a long-term process of opening domestic markets to imports, reducing domestic supports and export subsidies, and explicitly defining allowable exemptions to trade liberalization. This was visible both in domestic considerations of subsidy reform in the U.S., which have since at least taken into account trade concerns, and trading nations' decisions to discuss agricultural reforms more fully during the Doha Round of negotiations, 2001-present (Hart and Babcock 2002)

However, despite increased attention, the question of how to negotiate agricultural trade barriers remained a major point of contention in WTO negotiations. Developing countries argued that when developed countries subsidized their agricultural producers, prices dropped on the world market, undermining the profitability or subsistence of poorer producers in their countries (Schuh 1988, Fabiosa *et al.* 2003, Cline 2005). In addition, subsidies tended to multiply on themselves as they were capitalized into higher land values, which in turn required more subsidies to keep product prices competitive (Pasour 1984, United States Department of Agriculture 2006a). Many developing nations argued further that strategic use of allowable domestic supports protected developed nations from a need to truly limit these domestic subsidies, while developed nations argued that they needed freer access to developing countries' markets for their products in order to reduce domestic subsidies. Developed and developing countries essentially differed, then, as to how much market access should be exchanged for how much domestic subsidy reform and when (World Trade Organization 2002).

Since 1994, there has been an expectation on the part of both the international community and of domestic advocates of liberalized trade that the U.S. and other developed nations would reduce their agricultural subsidies and other trade distorting policies as steps on the road to liberalized trade.[28] The 1996 U.S. farm bill accordingly decoupled farm payments from prices and production, and was considered a first step toward the gradual phase-out of U.S. agricultural subsidies. However, following a crash in farm prices and an associated increase in disaster assistance to farmers (seen by many as a sign of the danger to producers of trade liberalization) the 2002 farm bill re-coupled subsidies to domestic production. This move was viewed by developing nations as an affront to good faith trade negotiations, as they saw the U.S. "backtrack[ing]… on earlier free market reforms" (Bergsten 2002, Reuters 2002, Stancato 2002, Rivas-Campo and Benke 2003).

Such conflict between nations on how subsidy reform should take place also manifested itself during the Doha Round of WTO talks. In 2003, Brazil led the formation

[28] These trade distortions include export subsidies, market certificates, taxes, tariffs, and distortions enacted through the under- or over-valuing of currencies and through the exchange rate (Schuh 1988).

of a coalition of 22 farm-produce-exporting developing nations that resisted U.S. and E.U. calls for liberalized trade as long as they continued to protect their agricultural producers. The breakdown of WTO talks in Cancun in September 2003 has often been attributed to the group's refusal to participate in negotiations until these developed countries changed their use of trade-distorting policies (Agencia Brasil 2003, Rapoza 2003, Svartzman 2003).

These concerns were also featured in a set of disputes brought to the WTO by Brazil in 2004, one of which argued that U.S. domestic cotton subsidies violated established trade agreements. Brazil argued that U.S. cotton subsidies lowered prices and hurt developing country producers, and that the U.S. had been unwilling to negotiate this matter during talks. The WTO ruled in Brazil's favor and required the U.S. to reduce its subsidies and bring cotton into compliance with mutually agreed upon trade rules. Under the cotton decision U.S. subsidies had to be lowered by $5-6 billion from levels of over $20 billion and the U.S. had to eliminate farm bill provisions restricting the planting of fruits and vegetables on subsidized acres (Morgan 2005, Griswold *et al.* 2006, Schnepf 2008). Although appeals are still running through the WTO system, it is possible that corn, soybean, and other crop subsidies could be affected by similar complaints to the WTO that would build on the cotton case (Becker 2004b).[29] A similar dispute was in fact brought to the WTO by Brazil against European sugar subsidies and more recently by Canada against U.S. corn subsidies (Associated Press 2007a, Schnepf 2008). According to a Congressional Research Service report from 2005, "a key question likely to be asked of virtually every new U.S. farm policy proposal is how it will affect U.S. trade commitments to the WTO" (Womach 2005, p.14).

These disputes and trade negotiations appeared on the radar just as discussions of the 2008 farm bill were beginning in 2004-05. The 2002 farm bill had been set to expire in 2007, calling into question how a new farm bill would be affected by trade pressures

[29] The gray area revolves around whether or not subsidies are structured so that they influence farmers' planting decisions, thus interfering with demand as the determinant of supply (Monke 2007). Of course, many would argue that in agriculture, supply and demand forces do not operate perfectly, even in ideal conditions, as farmers have a lag time between sensing demand, planting, harvesting, and selling, and that individual incentives to overproduce when prices are low create a need for governments to moderate market forces in agriculture through policy (Ray *et al.* 2003).

for reform. Subsidy reform-oriented interest groups saw these pressures as a window of opportunity for commodity policy change, while other interest groups saw them as a threat to the farm policy safety net. Early debates over the 2008 farm bill thus reflected tensions among groups that had been brought to the surface by these trade pressures. These tensions and discomforts in turn both signaled and contributed to the existence of a policy window for change.

Other reform-oriented farm bill forces

Other factors influencing debates over farm bill reform in 2005-06 included new interest group involvement in farm policy and public perceptions of subsidy and trade policies.[30] Specifically, the 2008 farm bill debates drew the involvement of several new interest groups, including the public health community and the fruit, vegetable, and specialty crop producers (Barrionuevo 2006a). The public health community advocated commodity policy reform in response to a correlation found between subsidized corn, associated use of corn syrup as a sweetener, and a rise in levels of adult and child obesity (Johns Hopkins School of Public Health 2007). Fruit, vegetable, and specialty crop producers organized for block grants, improved access to foreign markets, and conservation and nutrition programs that would benefit their sector (Kline 2007, Specialty Crop Farm Bill Alliance 2007). Both groups favored some kind of commodity policy reform, arguing that farm supports favoring corn, soybean, wheat, rice, and cotton production negatively impacted their interests.[31] Both organized and built on smaller involvements in past policy debates to gain the attention of Congress and the public.

Their critiques also became part of the broader wave of critiques circulating around commodity subsidies and discussed in Chapter 1. These critiques focused in large

[30] Budget shortfalls and the Republican majority in Congress were other factors that some commentators felt supported the push towards trade liberalization and reductions of farm bill supports (Babcock 2006, DiPeso 2007, Harwood 2007). However, these factors were less exclusively or certainly reform-oriented than the trade, public health, specialty crop, and public sentiment pressures described here.

[31] The fruit, vegetable, and specialty crop growers, however, asked to be included in farm programs more than they commented on other groups' support mechanisms. They did ask, though, that commodity growers not be allowed to plant specialty crops while still maintaining the ability to collect future subsidies on those acres, a provision considered trade-distorting by the WTO. Thus, while they favored commodity subsidy reform and market-oriented agriculture, they did not necessarily eschew all forms of government protection (Guenther 2007).

part on the inequity with which commodity policy operated, in its provision of substantial subsidies only to (generally large-scale wealthier) farmers growing corn, soybeans, wheat, rice, and cotton.[32] The Environmental Working Group developed a website in 2002 listing the top recipients of farm subsidies, bringing attention to the millions of dollars that went to large corporate agriculture ventures and billionaire absentee landlords in the name of a farm safety net, and generating an outcry of public criticism (Environmental Working Group 2006).

Similarly, calls for subsidy reform from environmentalists concerned with agricultural pollution, lack of plant diversity, and resource use; social justice groups concerned about exporting cheap commodities abroad; rural residents concerned about the loss of small- and mid-sized farms; and fiscal conservatives concerned about tax dollars going to "corporate welfare" for wealthy farmers all added to increasingly negative public perceptions of commodity policies (Griswold *et al.* 2006, Pollan 2007).

The implication of these critiques was that commodity subsidies, while supporting farmers and consumers, also created significant environmental degradation, inequity, and loss of small farmer incomes domestically and abroad. Reforming commodity subsidies to better support environmental and social goals could minimize these negative impacts, and a trade-influenced policy window in 2005-06 seemed to provide just the opportunity for this sort of reform.

Manifestations of WTO pressure in farm bill debates, 2005-06

In 2005, many farm bill interest groups were talking about the ways in which WTO goals for liberalizing trade could force reductions in U.S. agricultural subsidies. Depending on their perspective towards farm bill reform, groups either saw this as a possible opportunity or a threat to American agriculture. One of the clearest manifestations of these debates was found in discussions on the growth of Brazilian agriculture and its impacts on the U.S. In the press, a series of newspaper articles highlighted a presumed threat posed by competition with foreign nations. The

[32] As mentioned earlier, subsidy payments also go to a small number of other products. However, these five are the primary supported commodities.

Minneapolis Star Tribune produced a series of articles in 2004 with subheadings like, "Brazil's flourishing farm economy is **threatening U.S. dominance** of world crop markets" (Diaz 2004b, p.A10).[33] Many American farmers, farm groups, and agribusiness and government leaders similarly began to worry that rapid growth of foreign agricultural production (such as Brazilian soybeans) would soon surpass U.S. production, with negative economic consequences for U.S. agriculture and farmer incomes. They expressed concern that if the U.S. were to "**give in**" to WTO pressure to eliminate domestic agricultural subsidies, U.S. agriculture would be left behind, sacrificed to "**unfair competition**" from nations like Brazil, whose lower land and labor costs made its products cheaper on the world market compared to the U.S.[34] One example of these kinds of concerns comes from an article about American farmers moving to Brazil to purchase farmland:

> Josh Neusch is a modern-day settler in the new global economy. Raised on a family farm in southern Minnesota, Neusch now owns 7,500 acres in the Mato Grosso state of Brazil, one of the planet's last great expanses of virgin farmland… Best of all, he doesn't have to sweat the low-cost competition from South America. **He *is* the competition** (Diaz 2004c, p.A1).

WTO pressure manifested itself in an increased focus by American farmers, agribusinesses, lobbyists, government officials, environmental organizations, and the press on competition from foreign agricultural production. Sources ranging from newspapers and radio to government documents and environmental policy briefs emphasized the role especially of Brazil as a threat to U.S. agricultural prowess and an instigator of WTO pressure to reduce domestic agricultural supports.[35]

Several other debates from 2005-06 also provide good examples of the ways in which WTO pressures manifested themselves in the farm bill debates. One in particular pit supporters of an extension of the 2002 farm bill against supporters of a new 2008 farm

[33] All bolded emphases are added to highlight key frames.
[34] Of course in part, land values are higher in the U.S. because of the ways in which agricultural subsidies have been capitalized into these land values (United States Department of Agriculture 2006a).
[35] Note that similar discourses were used by Brazilian farmers, officials, environmental organizations, and the press to highlight the threats posed to *their* agricultural sector by U.S. production and policies (Becker and Benson 2004). One sample discussion of this idea of U.S./Brazilian competition from the Brazilian perspective is found in a 2002 article in the popular Brazilian magazine *Primeira Leitura* entitled "O Brasil que assusta Bush – The Brazil that scares Bush" (Primeira Leitura 2002).

bill that would include "green payments" to pay farmers for environmental services, and ultimately to serve as a potential replacement for corn, soybean, wheat, rice, and cotton subsidies. These divergent positions were each fiercely held, and indicated significant tensions over what role WTO pressures should play in domestic farm policy. Interest groups used strong language that focused on maintaining U.S. "competitiveness," and that served to convey the urgency with which their positions were held.

This kind of strong language suggested, in other words, that groups saw the threat (or opportunity) of farm policy reform as a real possibility in 2005-06, and that they crafted their positions to take advantage of or protect themselves from such reform. Had trade pressures not represented an imminent possibility for radical farm bill reform, interest groups both for and against it would not have been nearly as emphatic in staking out their trade and commodity policy positions. But as it was, an observer of farm bill debates in 2005-06 would have been overwhelmed by the nearly monolithic focus of debates on trade issues. The following sections discuss in turn the position in support of a farm bill extension and the position in support of a green payments plan, and incorporate into each an analysis of the discourses used to construct these two opposing positions. This incorporation of discourse into the analysis provides additional leverage for understanding the tenor and implications of these farm bill positions and debates.

Farm bill extension

In 2005-06, many groups began calling for the 2008 farm bill to simply be an extension of the 2002 bill, and maintain status quo farm policy. farm bills are often extended past their expiration date because situational or political factors delay the writing of a comprehensive new farm package.[36] In the case of the 2008 bill, those calling for an extension included major farm organizations such as the American Farm Bureau Federation (the Farm Bureau) and National Farmers Union,[37] several commodity

[36] One example is the 1996 farm bill, which had originally been scheduled as a 1995 farm bill (Orden *et al*. 1999).

[37] The National Farmers Union is a Democratic-leaning general farm organization founded in 1902, with both large commodity grower and smaller niche-market members, as well as members from its insurance sales (National Farmers Union 2007b).

groups, and the then House agriculture committee minority leader Collin Peterson, who became chairman in 2007 after the Democrats took control of Congress. These groups argued that, on the heels of the Brazilian cotton dispute, the U.S. should wait until WTO rulings were finalized before rewriting domestic policies to comply with them (National Farmers Union 2006). They argued that extending the 2002 farm bill would ensure that the subsequent farm bill would be trade-compliant from the outset according to new WTO rules, and that the U.S. would not lose negotiating leverage by reducing subsidies pre-emptively (Laws 2006b, American Farm Bureau Federation 2007).[38] One agricultural lobbyist put it this way:

> Three years ago when the Brazilians went after cotton, everybody went 'oh, they finally got us… There goes the end of the U.S. farm programs...' [But really,] messing with the commodity title at this stage is not getting you very much… Let's just do a straight extension (author interview #45, agricultural lobbying firm, Washington DC, June 29, 2007).

Many reform-oriented groups, however, argued that this support for an extension had less to do with complying with WTO regulations and more to do with using WTO as a reason to continue current commodity support provisions for as long as possible (James 2007). They argued that extension-supporters recognized that trade agreements, WTO trade disputes, and a general philosophical push towards liberalized trade would eventually undermine U.S. subsidy policies, but believed that a farm bill extension would at least allow them to hold onto more favorable provisions for a little longer. These arguments were especially common from social justice-oriented groups frustrated by agricultural lobbies' opposition to substantial reforms of corn, soybean, wheat, rice, and cotton supports. In the words of Stephanie Larsen, Acting Policy Director at the Community Food Security Coalition:

> WTO is one common reason why people say they want to stall. You could speculate that… if your constituency has a lot of big farmers that benefit from the subsidy program, they're going to want to benefit from that for as long as possible because the writing's… on the wall [to reform non-trade-compliant subsidies] (author interview, Washington DC, September 27, 2006).

[38] Note that this discussion largely revolved around the producer impacts of trade, without much mention of the consumer side of the debates. Thanks to G. Edward Schuh for this observation.

While many reform-oriented groups looked to WTO as a potential opportunity for farm policy change, as will be discussed in the green payments section found later in this chapter, groups who benefited more from policies subsidizing corn, soybean, wheat, rice, and cotton production used WTO uncertainties to frame a need to forestall such change. And the urgency with which these groups promoted an extension of 2002 farm policy is illustrated particularly well by the frames used to discuss it.

Framing revisited

In addition to the different ways in which groups used political context to promote their farm bill positions, the language that they used to describe these positions affected their potential access to policymakers, depending on how well their frames resonated within a broader cultural context. As discussed in Chapter 2, attention to discourse and framing is an under-utilized tool in agricultural policy analysis, but one that can be useful in constructing a picture of how farm policies (and farm policy reform prospects) come into being. If one accepts the notion that the language used to describe a situation in part determines what questions can be asked and thus what answers can be found, attention to discourse becomes crucial to understanding policy formation and interest group strategy.

In this case, commodity groups, farm organizations, agribusiness, some environmental groups, and the press tapped into discourses of global competitiveness to support their positions on the farm bill. For some of these groups, the idea that the U.S. would be more competitive in agriculture with commodity subsidies than without in turn helped them naturalize their 2005-06 proposals to extend the farm bill. Extending the farm bill, they argued, would provide the U.S. negotiating leverage that could help sustain national competitiveness even as trade barriers were gradually reduced under the WTO. While many other groups contested the notion that maintaining a farm bill status quo would increase competitiveness, claiming either that competitiveness could be better enhanced by conforming to trade rules in the farm bill, or that competitiveness was less important than fairness or responsibility or security in the food system, competition was certainly a dominant frame in the 2005-06 farm bill debates. Added to the material pressures being put on the U.S. by the WTO to reform subsidies, the language used to

describe these pressures by interest groups, government, and the media inspired feelings of defensiveness among those benefiting from agricultural subsidies (and, as will be discussed later, feelings of opportunity in those hoping for change). This focus on national competitiveness indicated the urgency with which groups approached and attempted to use the policy window provided by WTO pressures to their benefit.

National competitiveness frames and a farm bill extension

The discourse of national competitiveness prevalent in 2005-06 farm bill discussions added a particular sense of urgency to debates over a farm bill extension. In particular, the use of strong language common at the time conjured a sense of gravity and haste in resisting WTO pressures and in maintaining status quo farm policy.[39]

For example, the press referred to the tremendous growth in Brazilian agricultural production in particular as "soybean **ground zero**," connecting images of agricultural competition with the 2001 terrorist attacks on the World Trade Center, and provoking concomitant action in defense of U.S. agriculture (Diaz 2004a, p.A12). Brazilian rhetoric reinforced this adversarial take on trade, as Roberto Azevedo, top legal advisor to Brazil's Foreign Ministry declared, "[The Brazil cotton victory] is a precedent; this is a **war** that must continue (Azevedo, quoted in Becker 2004a). This type of language lent a sense of necessity and importance to arguments for extending the farm bill, framing the position as a way for the U.S. to defend itself against unfair competition (and associated attacks) and instead continue to negotiate more favorable trade provisions. One farmer's testimony before the House agriculture committee in summer 2006 represented this sentiment quite well:

> Today farmers across the country **remain very fearful** that our trade negotiators might **give away the farm** in the Doha Round of the WTO in exchange for market access that nobody is quite sure how to pencil-in to their operation's

[39] Note that this section on competitiveness does not weigh in on the relative merits of liberalized trade for promoting competitiveness (or efficiency or consumer benefit). Nor does it comment on the role that agricultural research and technology played in increasing countries' agricultural productivity, or that monetary policies played in affecting the growth of countries' agricultural sectors. While these issues are extremely important to questions of agricultural trade and policy, the focus here is instead on the use and utility of competitiveness as a *discourse* for achieving political goals, rather than on the intricacies of competitiveness as an economic concept.

> bottom line… It would hit all of us in farm country very hard if – right in the middle of the current WTO impasse – the United States government ended up doing to us what our trade negotiators have not: and that is to **unilaterally disarm us** (Obermoller 2006, p.3).

These frames reflected a strong sense of fear that WTO negotiations might put U.S. farmers in a position of vulnerability, as foreign agricultural production increased while the U.S. safety net was reformed to meet trade guidelines.

These competitiveness frames were not unusual. The National Pork Producers Council (NPPC) argued in issue papers that "…NPPC and U.S. pork producers want a farm policy that will **maximize competitiveness** and the country's ability to compete effectively in global markets" (National Pork Producers Council 2007, p.1). One Minnesota producer at a 2006 House agriculture committee hearing specified that Congress' role should be to "maintain our **competitive advantage**… [and] **defend our industry**" (FitzSimmons 2006, p.7).[40]

The position presented through these discourses of competition was that U.S. agriculture was under assault both from low-cost production in other countries and by the proposed WTO cuts in U.S. subsidy payments. This double affront, groups argued, was leaving American farmers vulnerable to out-competition by foreign producers, undermining America's role as an agricultural supplier for the world and threatening U.S. farmer livelihoods. The discourses of competition used, and the feelings of fear they represented, were thus channeled into policy positions advocating the defense (and thus extension) of the commodity support system that groups felt would keep U.S. farmers in business through this rise of lower-cost competition.

Many such groups' statements were infused with a sense of national pride and patriotism alongside an articulation of this need to defend the U.S. against other countries' agricultural growth. The American Sugar Alliance, pointing to other countries' barriers to trade, stated in its promotional materials that, "**U.S. sugar farmers can compete with foreign growers**… **but should not have to compete with foreign subsidies**" (American Sugar Alliance 2005). In another example, the Minnesota corn,

[40] Note that these frames were pervasive across groups; I have highlighted only a few examples in order to keep this section concise.

soybean, and hog producer quoted above responded to the idea that commodity subsidies go primarily to large, wealthy farms by stating, "Mr. Chairman, helping **feed a hungry world, fuel a nation, and creating millions of American jobs** doesn't sound like corporate welfare to me. It sounds like common sense" (Obermoller 2006, p.4). These frames were thus used to support arguments for maintaining the commodity crop support system. In addition, the kind of strong and patriotic language used indicates just the extent to which groups saw trade pressures as a threat, and helps explain why positions defending status quo farm policy and advocating a farm bill extension were so fierce at the time.

The fact that competitiveness frames were so prevalent across groups suggests that they provided a certain if perhaps intangible utility in policy circles. In addition, the fact that they were echoed in the halls of Congress and the administration provides further indication that they resonated with policymakers as well as with diverse interest groups. During the 2005 listening sessions kicking off the 2008 farm bill season, for example, U.S. Secretary of Agriculture Mike Johanns traveled the country asking citizens six questions about their goals for farm policy. One of these six questions focused specifically on how the U.S. could maintain agricultural competitiveness in a global environment (United States Department of Agriculture 2007c). Saxby Chambliss (R-GA) and Bob Goodlatte (R-VA), the chairmen of the Senate and House Committees on Agriculture at the time, expressed their concerns about trade policy influencing farm policy in a letter to U.S. Trade Representative Robert Portman in October 2005 stating:

> Let us caution you that… negotiations and modalities should not preempt the responsibilities and prerogatives of Congress. The agriculture negotiations can set the broad parameters of spending limits, but they should not write the next farm bill which Congress will be reauthorizing in 2007 (United States Senate 2005).

Thus, Congress exhibited a defensiveness similar to that of farm and commodity groups in response to the idea that international agreements (negotiated by the executive branch) could play a leading role in altering domestic agricultural subsidy policies. This indicated again that there was in fact a very real possibility that trade pressures *would*

require just such changes to domestic subsidy policy – otherwise there would have been little need for the kinds of defensive posturing seen among opponents of subsidy reform.

Even the White House, with its explicitly pro-free-trade stance, was defensive in response to the settlement of the Brazilian cotton case. In the words of White House spokesperson Scott McClellan, "We will be defending U.S. agricultural interests in every form we need to and have no intention of unilaterally taking steps to **disarm** when it comes to this" (McClellan, quoted in Becker 2004b).[41]

The pervasiveness of this competitiveness frame, then, and the defensiveness it represented, indicated that 2005-06 was a time when change was indeed possible. Like the crisis situations of 1933 and 1973, events and discourses indicated that a change was on the horizon. However, as will be discussed later in this chapter, the farm bill was not actually written within this context of trade pressures and competitiveness discourse, but rather under a quite changed set of circumstances. Thus, the impacts of these competitiveness frames, and of the political context and interest group dynamics that both reinforced and were reinforced by them, can be measured more by their presence in early debates than in terms of actual legislative outcomes. However, their prevalence in these early debates was quite noticeable, not only in the farm bill extension debates already discussed but also in the green payments debates discussed in the following sections. These green payment discussions also provide an example of the kinds of significant policy change that seemed possible at the time.

Green payments and CSP

While WTO pressure to reduce or eliminate U.S. agricultural subsidies for corn, soybeans, wheat, rice, and cotton provoked calls for a farm bill extension among some groups, it did not elicit such a defensive reaction from all farm bill stakeholders. While the Farm Bureau and Farmers Union responded to what they saw as a WTO threat by advocating a farm bill extension, some sustainable agriculture and environmental groups

[41] Note that the language of unilateral disarmament used here is quite similar to that used by farm bill extension supporters as well as by subsidy proponents during the earlier GATT Uruguay Round negotiations.

instead responded to WTO as a window of opportunity for reforming agricultural policy toward greater environmental conservation and social equity in agriculture. New and reinvigorated coalitions saw WTO as a frame that could be used for focusing on environmental conservation and food production, particularly via diversified agricultural systems (Sayre 2005).

Many of these groups argued for "green payment" plans, which would pay farmers for environmental conservation on farmland, rewarding them for their stewardship of resources rather than for their production of commodities. Green payments were also seen by some as one possible avenue for quite substantial subsidy reform, as they could maintain a farmer safety net while eventually replacing crop subsidies with trade-compliant environmental subsidies, as had been done in the European Union (Skogstad 1998). Groups such as The Minnesota Project[42] suggested that green payment plans build off the Conservation Security Program (CSP), a program created in the 2002 farm bill to provide payments to farmers for environmentally-friendly farming practices such as water and soil conservation, and maintenance of wildlife habitat. Since WTO regulations regarding domestic subsidies apply mainly to products that are exported to other nations, and since environmental services are not exported as such, green payments were seen as a mechanism for supporting farmers and promoting ecologically-friendly agriculture without affecting export prices (Kemp 2006).

Thus, groups such as the Minnesota Project and others such as American Farmland Trust[43] argued for a green payments policy proposal as a way to reduce non-point source pollution, encourage sustainable agricultural practices, and provide a WTO-compliant farm safety net alongside major subsidy reform (B.A. Johnson 2004a). Note that the suggestion of green payments as a replacement for commodity subsidies was not explicit among all groups involved. However, most tried at least to ensure that green payment plans would be beyond WTO reproach should negotiations push for a reduction in commodity subsidies and raise questions about how to provide a non-trade-distorting

[42] The Minnesota Project is a Minnesota-based but nationally-focused nonprofit organization that works on agricultural policy, water quality, local foods, and renewable energy (The Minnesota Project 2007).
[43] American Farmland Trust was founded in 1980 as a farmland preservation group. It has since gotten involved in broader environmental and agricultural policy issues (American Farmland Trust 2007c).

farmer safety net. In the words of Loni Kemp, Senior Policy Advisor at The Minnesota Project, "Our strategy all along has been to point out the advantages of CSP as a means of supporting farmers and to make sure we design CSP to be trade neutral" (author interview, Lanesboro MN, February 16, 2007). Mark Halverson, Democratic Staff Director for the U.S. Senate Committee on Agriculture, Nutrition, and Forestry put it as follows:

> We need to make investments in programs such as conservation… [which are WTO] green box – [also] agricultural research, rural development, renewable energy… We think that that lays a foundation for the future because… [we] are headed in a direction where… American agriculture is going to have to… operate under less trade-distorting support (author interview, Washington DC, March 30, 2007).

Other groups, especially farm and commodity groups, argued that promoting green payments in the name of WTO was more a strategy for pursuing an environmental agenda through the farm bill rather than a necessary reaction to WTO pressures. There were debates, for example, as to whether or not green payments would actually be non-trade-distorting, or green box-compliant. The following statement by one staff member for the Republican minority leadership of the U.S. Senate Committee on Agriculture, Nutrition, and Forestry, illustrates this argument that CSP payments would not really be green box-compliant:

> Chairman Harkin… talks about… provid[ing farm] support… through green payments. [But]… he's purporting to do green payments through CSP – and CSP (as currently configured) won't be noted as green… You just can't give farmers a payment and say it's green… To the extent that you're paying people for practices they're already doing, that's not green (author interview #46, legislative staff, Washington DC, June 27, 2007)

Different groups and individuals disagreed on how trade-compliant green payment programs would be, in part because, as Loni Kemp, Senior Policy Advisor at The Minnesota project noted, WTO regulatory language often becomes clear only once it has been challenged and litigated (author interview, Lanesboro MN, February 16, 2007). This uncertainty over what trade guidelines actually allow meanwhile helped different groups continue to argue for opposing agendas based on the same impending, but

arguably vague, WTO pressures. While the Farm Bureau argued that the farm bill should be extended to provide negotiating leverage for future WTO talks, American Farmland Trust argued that WTO pressures to reform subsidies should be taken as an opportunity to "green" the farm bill (American Farmland Trust 2006a). Skeptics of each of these positions argued that the position itself had less to do with real trade pressures and more to do with using WTO as a framing device to promote a group's interests.

But regardless, pressure from the WTO to reform domestic commodity supports produced a great deal of discussion around whether or not to reform, refocus, or maintain existing farm policy provisions. Both the case of green payments and the case of a farm bill extension illustrated the ways in which interest groups used situational context in support of their positions, and specifically the ways in which different kinds of groups used the same contextual factor (WTO pressure) to promote different policy agendas – in one case an extension of status quo farm policy and in the other an eventual replacement of corn, soybean, wheat, rice and cotton subsidies with payments for environmental stewardship. How successful they were in these pursuits depended in part on how well the framing of their position resonated with Congress at the time and, as will be discussed, on how inter-group dynamics and contextual winds shifted over the course of the farm bill debates.

National competitiveness frames revisited – green payments

As highlighted in the discussion of farm bill extension proposals, the idea of competition, as represented through urgent and often nationalist language, was a primary way that commodity groups, farm organizations, trade associations, and the press framed their worries over WTO pressures affecting the farm bill. Interestingly, farm bill reform-oriented groups actually used similar language to convey their opposing political agenda of writing a new farm bill and/or of instituting provisions such as green payments. For example, American Farmland Trust wrote in one of its policy briefs that "recent rulings by the World Trade Organization… and increasing budget deficits make **reform very likely, if not inevitable**" (American Farmland Trust 2004, p.1). Such farm bill reform ideas were framed as necessary to "enhance… the long-term **viability and**

competitiveness of America" (American Farmland Trust 2006a, p.15). The language used, like that used by farm bill extension supporters, was often patriotic: "All Americans, whether farmers or not, recognize that **agriculture is vital to the nation** and must remain productive, profitable, and sustainable (Farm and Food Policy Project 2007, p.1)" or "There can be **great days ahead for rural America** if *together* we summon the will to create that future" (Center for Rural Affairs 2007b).

As with farm bill extension supporters, this use of nationalistic discourses conveyed the idea that it was important to the country to, in this case, reform farm policy. The frames used conveyed a sense of the urgency with which many environmental and sustainable agriculture groups approached the possibility of instituting new environmentally-friendly and socially-conscious farm bill reforms.

In other words, these frames and discourses served as a manifestation and reinforcement of situational, political, and cultural factors pushing policy development at this particular moment in time. Discourses of competition both reflected and contributed to the charged atmosphere of contention over what role trade and WTO should play in U.S. farm policy. The broad use of competitiveness frames across groups in the 2005-06 farm bill debates lent a sense of overarching urgency both to positions that resisted WTO pressures through a farm bill extension and to positions that channeled WTO pressures into green payments programs or other reform scenarios.[44] It brought philosophical tensions over the goals of farm policy to the fore, creating an atmosphere of creative conflict where change seemed both possible and yet enormously contentious.

The ways in which competitiveness frames highlighted these areas of contention could be seen not only in their repetition across interest groups, but also again in their prevalence among policymakers. The prevalence of competitiveness frames in Congress indicated that ideas of national competition resonated particularly well within the cultural, situational, and political context of the time, and had implications for the types

[44] Some other more radical reform scenarios were offered by trade and social justice groups like the Alliance for Sensible Agricultural Policies described in Chapter 1, which combined concerns over farmer prices in developing countries with concerns over the high farm bill price tag for taxpayers. Some of these groups proposed the straight elimination of commodity supports while others promoted new, more environmentally-, socially-, trade-, and taxpayer-friendly farmer safety net mechanisms (Kondracke 2007).

of policy changes being promoted from within government as well. Specifically, the urgency with which competitiveness and trade was discussed in 2005-06 indicated that the conflict between domestic agricultural supports and international trade pressures was seen by many as a crisis situation. As discussed in Chapter 3, the fact that most rapid change farm bills have occurred in response to crisis situations suggests that within the perceived crisis of 2005-06, rapid farm bill change had been a strong possibility.

Thus, the fact that almost all participants in farm bill debates, including legislators, were using competitiveness as a way to either support or oppose farm bill change in 2005-06 demonstrated both the salience of the frame itself, and the real farm bill change possibilities propelled by WTO and trade pressures. The urgency with which these positions were presented highlighted a recognition that policy windows are unusual, and generally, temporary. Thus it became important for groups to respond to any perceived window quickly, while the window remained open.

While in the end, the factors contributing to this policy window were overpowered by new situational forces, and therefore did not succeed in changing farm policy, they would likely have been significant driving forces for change had the situation not changed.[45] But meanwhile, situational changes nudged the farm bill playing field away from trade-related discussions in 2006, and these associated discourses of competition faded as well. Situational changes, concurrent changes in interest group positions, framing strategies, and dominant discourses, and the implications of these changes for farm policy in 2006-08 are discussed first in the following section, and again later, in more detail, in Chapter 5.

The stalling of WTO negotiations: Changing the domestic farm policy playing field

In the summer of 2006, the Doha Round of WTO negotiations was suspended, and the U.S. domestic playing field shifted alongside it. The stalling of this round of talks came about as negotiating nations were unable to come to a mutually satisfactory compromise on trade rules, primarily with regard to the phase-out of agricultural commodity supports by developed countries (Weisman and Barrionuevo 2006). This

[45] The possibility of renewed opportunities for trade-induced farm bill change is discussed in Chapter 6.

type of stalemate in trade talks had been threatening for years – starting with disruptions of the 1999 Seattle WTO ministerial by activists, the collapse of the 2003 talks in Cancun, and the frequent fits and starts in talks that had occurred through 2005-06 (British Broadcasting Corporation 2007).

In October 2005, the U.S. Trade Representative (USTR) had offered a 60% reduction in U.S. agricultural subsidy payments, with support from a commodity group council known as the "Gang of 11," which the USTR typically consults before trade negotiation offers are made (Laws 2006a).[46] This trade offer heightened the sense in 2005 that a Doha agreement might be reached, and that it might have important implications for farm policy. However, according to Bob Metz, Chairman of the American Soybean Association, the Council later withdrew its support for the offer in light of what it saw as unsatisfactory return concessions by the European Union. This withdrawal of support was in part what contributed to the stalling of the Doha Round (author interview, Browns Valley MN, February 26, 2007). As the Gang of 11 became disillusioned with trade talks, and with their potential to provide market access in exchange for subsidy reduction, other U.S. agricultural groups also came to see the previously impending idea of WTO-driven farm bill change as decreasingly relevant. As Johnny Dodson, commodity group representative, argued, "Six or eight months ago [WTO] was going to dictate… how the farm bill was going to be written… [But] WTO seems to be dead in the water right now… I don't know that it's going to have a big impact." (author interview, Tampa FL, March 2, 2007).

By the summer of 2006, negotiating countries found themselves at an impasse on these agricultural subsidy negotiations, and declared the trade talks dead (Weisman and Barrionuevo 2006). In addition, in July 2007, President Bush's ability to negotiate trade agreements independently of Congress through Trade Promotion Authority (TPA) provisions expired. Under TPA, the president could negotiate international trade agreements that would then be voted on but could not be amended by Congress. With the

[46] The Gang of 11 includes groups representing commodities such as cotton and soybeans, among others (Laws 2006c). It is worth noting here that those commodity groups making up the Gang of 11 have a great deal of power in guiding the development of U.S. trade concessions in ways that many other groups do not.

expiration of TPA, Congress became free to change trade agreements once negotiated. This meant that other nations had less incentive to put in the time and effort to negotiate with U.S. trade representatives than before, as any compromises reached were likely to be picked apart by Congress during ratification. This significantly reduced the ability of the U.S. to arrive at new trade agreements that might bear on domestic farm policy (Palley 2007). Thus the stalling of the Doha Round of trade talks and the expiration of TPA were major contextual changes that began closing the 2005-06 policy window for farm bill reform.

Other contextual factors changing in 2006

Changes in the status of WTO negotiations were one major driver shifting the direction of the 2008 farm bill debates. However, they were only one driver among many. Other drivers included the budget context, which began to play a particularly important role just as WTO trade talks stalled. In 2006 corn prices began to rise, in part because higher gas prices led investors to corn-based ethanol as a fuel alternative, thus increasing the demand for corn as fuel in addition to food and livestock feed. Rising corn prices pushed farmers to plant more corn and fewer other crops (like soybeans), raising the price of these other commodities as well, as their supply dwindled. As these commodity prices rose, the federal government did not have to pay out as much in marketing loan deficiency and counter-cyclical payments, normally triggered once commodity prices fall below a certain level (James 2007). These high crop prices, then, automatically reduced spending on commodity subsidies, conforming both to domestic pressures to reduce the farm bill budget and WTO pressures to reduce spending on domestic subsidies (Schnepf 2007). In other words, rising crop prices not only made the farm bill cheaper, but automatically brought the U.S. closer to compliance with pre-existing trade rules. Thus the pressure to reduce U.S. subsidy payments so prevalent in 2005-06 faded *both* because Doha Round negotiations stalled *and* because high grain prices automatically reduced projected subsidy payments.

Second, partisan politics shifted the context within which the 2008 farm bill was debated. In the November 2006 elections, Democrats won control of both houses of

Congress, granting leadership of the agriculture committees to Collin Peterson (D-MN) in the House and Tom Harkin (D-IA) in the Senate. This change in leadership shifted power in the agriculture committees from Southern rice and cotton producers to Midwestern grain farmers.[47] But more importantly, it shifted power from generally more free-trade oriented Republicans to more domestically-focused Democrats. In the words of one legislative staff member:

> Democrats are not as supportive of trade as Republicans are… [You] have the overall philosophy of free market versus… more domestic, more inward looking… And with unions, they generally never met a trade agreement that they've liked… We're all influenced by our constituencies that support us. And that's one that supports [the Democrats]. So I think… the changeover in Congress has made a big difference (author interview #46, legislative staff, Washington DC, July 27, 2007).

Since the 2007-08 Democratic Congress tended to favor greater domestic protection of agriculture than the previous Republican Congress, and since the expiration of Trade Promotion Authority transferred some negotiating power over trade from the President to Congress, the likelihood of liberalized trade policies pressuring reductions in farm subsidies decreased in 2007, even as the executive branch continued to favor more liberalized trade policies. In addition, because the balance of power in Congress between Republicans and Democrats was, in 2007-08, precarious, Democrats became hesitant to promote even changes to farm policy that they might otherwise have considered, for fear of losing rural farm-policy-supporting seats to Republicans in the 2008 elections, and therefore losing majority status in Congress (Laney 2007).

Thus, this combination of a stalled Doha Round, commodity groups withdrawing support for WTO talks, the release of farm bill budget pressures associated with high crop prices and ethanol demand, expiration of Trade Promotion Authority, and the new Democratic majority in Congress combined to make the prospects for farm bill reform less likely. Accordingly, many groups' recommendations for U.S. farm policy changed as well.

[47] While all these groups benefit from and support the commodity subsidy programs, they have different regional priorities depending on the specific requirements of their crops (National Cotton Council 2005, J. Roberts 2006).

Manifestations of this change in context, 2006-08

This change in context manifested itself in farm bill debates in several ways in 2006-08. First, the calls for a farm bill extension that had been so prevalent at the height of WTO pressures disappeared. Second, while groups advocating green payments continued to do so, most framed their position less around WTO and more around the conservation and social benefits a green payments program would provide. Third, while competition discourse did not disappear entirely from farm bill discussions, it was largely replaced by a discourse of national security, spawned by increased interest in renewable fuels. The first two manifestations of this change are discussed in the sections that follow, while the shift to a national security discourse is incorporated into Chapter 5 as a part of a broader look at the impacts of the biofuels economy on 2008 farm bill outcomes.

Dropping calls for a farm bill extension

With the collapse of WTO negotiations, many farm and commodity groups became less staunch in their calls for a farm bill extension and began considering alternative proposals. Released from the potential threat of WTO pressure to change the farm bill in ways they did not want, such previous extension-supporters as the Farmers Union began to promote smaller tweaks to farm policy that would benefit them in ways they *did* want (National Farmers Union 2007a). As explained by a former staff member of the House agriculture committee, "The producer groups saw… [Doha as] an untenable negotiation…. [with] nothing to gain in the agreement… [So] they said… this is an opportunity… to address our additional producer needs." (author interview #50, legislative staff, phone interview, July 18, 2007).

Thus, WTO pressure went quickly from being at the forefront of farm bill debates to being a less prominent driver. John Keeling, Executive Vice President and CEO of the National Potato Council commodity group described this change of heart as follows, "[There came a] sense that WTO was probably not going anywhere and so therefore…

we shouldn't wait… We're the biggest ag power in the world and we should just set our policy and then negotiate later (author interview, Washington DC, April 4, 2007).

Even originally staunch supporters of an extension such as the Farm Bureau eventually reworded their position to recommend small changes to the bill (Laws 2007). As described by Robert Young, Chief Economist at the American Farm Bureau Federation:

> Last year our language said that we supported continuation of the current farm program until we got a successful completion of the WTO negotiations… That particular language was stricken…, but it still says that we support the concepts of the 2002 farm bill... Rather than write a farm bill that… assumes some hypothetical WTO conclusion…, let's wait until we get a WTO conclusion and then… modify where need be (author interview, Washington DC, January 19, 2007).

Thus, many groups responded to the change in situational context brought about by the stalling of trade talks, budgetary changes, and partisan shifts in Congress by retracting their calls for a farm bill extension and instead supporting the writing of a new farm bill to tweak, but not reform, existing farm policy. In other words, when trade pressures were threatening commodity subsidies, these groups preferred to call for an extension of the farm bill rather than engage in a debate over radical change possibilities. But once this threat was removed, they abandoned calls for a completely status quo policy and instead began to consider tweaks to the farm bill that would adjust and update farm policy in ways that they saw as beneficial.[48]

[48] Note, however, that while many influential groups such as the Farmers Union and Farm Bureau changed their position from recommending an extension to recommending the writing of a new farm bill, not all groups changed their farm bill positions in response to WTO shifts. Generally, these were groups less affected by trade-induced farm policy pressures – for example, the National Association of Wheat Growers, which receives support mostly in the form of direct payments rather than the counter-cyclical payments most affected by WTO trade rules (Mark Gaede, Director of Government Affairs, Environmental Policy, National Association of Wheat Growers, Washington DC interview, January 18 2007); the National Cattlemen's Beef Association, which focuses on promoting exports more through trade policy than through farm policy (Colin Woodall, Director, Legislative Affairs, National Cattlemen's Beef Association, Washington DC interview, January 18, 2007); Oxfam America, which argues that whether or not Doha negotiations have stalled, the U.S. should phase out agricultural subsidies in order to even the playing field for developing countries (Oxfam America, Washington DC interview, September 28, 2006); and Cargill, Inc., which argues that it takes an approach to farm policy consistent with free trade principles no matter where WTO negotiations are (Cargill Inc., Washington DC interview, January 17, 2007).

Green payments without the WTO twist

Similarly, interest group positions around the idea of green payments reshuffled somewhat with the suspension of the Doha Round trade talks. In contrast to the extension case where many groups reversed their positions once Doha stalled, here groups calling for green payments generally remained consistent in their stance. However, several of them began relying less on WTO as a way to frame their positions. Brad Redlin, Director of Agricultural Programs at the Izaak Walton League of America, described it as follows:

> Our policy platform… is the same except it's not hinging on WTO so much anymore… It's entirely accurate to say that it wasn't something that we… wanted and were championing to begin with, we just looked at the landscape and said… "We can leverage that to our benefit." (author interview, St. Paul MN, October 18, 2006)

For many green payments supporters, their change of frame was not a rejection of the idea that green payments could be useful as trade-compliant farm supports, but simply a de-emphasizing of WTO rationale relative to other benefits, consistent with the shifting of farm policy focus away from trade and towards other issues.[49]

Many environmental and sustainable agriculture groups continued to support green payments for the major reform they could bring to the farm bill in their subsidizing of farmers for land stewardship rather than productivity. But in staking out these positions, groups came to focus more on the benefits that green payments would provide to the environment, to farmers, and to rural communities than on the role they could play in increasing WTO compliance.[50]

---

[49] This shift was also consistent with an environmental group study released at the time, which found in a 2006 series of focus groups with non-farming voters, that trade competition was not a particularly useful frame for communicating with non-specialists about the farm bill, as most audiences did not understand the intricacies of trade agreements (ActionMedia 2006).

[50] Interestingly, the National Corn Growers Association similarly shifted its framing but not its farm bill position with the collapse of Doha, although its focus was not on green payments – rather, it reframed its support for a revenue assurance proposal for farmers as a new farmer safety net rather than as a response to WTO concerns (National Corn Growers Association, Washington DC interview, January 18, 2007; Richert 2007b).

In other words, whereas in 2005-06 WTO was a salient enough driver of farm policy that positions invoking it tapped into a certain degree of policymaker recognition and support, in 2006-08, WTO was not as useful a frame for groups to use to support their positions. While those inherently committed to WTO issues held onto this frame as a way to advocate for their positions, others dropped the WTO frame in search of arguments that would resonate more within the changing context of farm bill debates. As the power of the global competitiveness frame decreased with the collapse of Doha, those stakeholder groups not inherently invested in WTO concerns for their own sake reframed their arguments around other "hot button" issues to maintain public and Congressional support.[51]

Policy implications of this change in context

These shifts in interest group positions as Doha declined and other contextual factors changed accordingly were paralleled in Congress and the administration, with important implications for farm policymaking. For instance, after the stalling of WTO talks, many legislators came down on the side of the Farmers Union and Farm Bureau in positing that WTO would no longer seriously affect the 2008 farm bill debates. Collin Peterson (D-MN), chair of the House agriculture committee, was particularly vocal in this regard. Before the November 2006 elections, he had been one of the strongest proponents of a farm bill extension, but reversed his position when he became committee chair. Instead he came to support a rewriting of the farm bill with only minor tweaks, consistent with the goals of the corn, soybean, and sugar beet farmers of his district. As he put it, "the current commodity title is the best farmer safety net… Anyone who is going to take this apart is going to have a fight on their hands" (Tomson 2006, Data Transmission Network 2007). One staff member of a different agriculture committee legislator explained Congress' increasing resistance to WTO pressure as follows:

> There are [trade] rules in place today, and the United States has agreed to abide by those rules… Now the future rules, the rules under negotiations? Most of our

[51] One of these new hot button issues was biofuels, which became a farm bill driver just as the Doha round was stalling out. The frames that arose in the context of biofuels debates and their impacts on the 2008 farm bill will be discussed in greater detail in Chapter 5.

> members are not interested in that. Once the rules have passed, [when] they become the law of the international trade community, we'll abide by them. But we're not going to write our rules to conform to what somebody wants (author interview #51, legislative staff, Washington DC, June 25, 2007).

But even as Congress was hesitant to acknowledge trade as a key driver of U.S. farm policy, the President and USDA continued to see it as crucial. While the executive branch had historically played a variable role in farm bill debates, this Administration took a prominent role in the 2008 farm bill debates, mostly due to its strong stance on promoting liberalized trade (Johanns 2006, Hagstrom 2007). Although in the end farm bills are written by Congress, the USDA demonstrated its commitment to the process by conducting its own field hearings, writing comprehensive theme papers, and releasing its own farm bill proposal quite visibly driven by a desire to make U.S. subsidy policy both trade-compliant and less expensive (United States Department of Agriculture 2007d, Hirsch 2007). A USDA staff member described the Administration's position as follows:

> We've been hammered on the WTO cotton case…We expect other countries, when we win a WTO case, to respond with a certain efficiency in terms of providing the access or the remedies that we are seeking. So, when we lose a case… we need to move forward and make the appropriate adjustments… The things that cotton got beat up on could just as easily apply to corn – to a little lesser degree to soybeans, to rice, and so forth… You've got to have a farm bill that better withstands challenge (author interview, United States Department of Agriculture representative, Washington DC, June 26, 2007).

While the Administration's farm bill recommendations were considered by Congress, and while some were even incorporated into House and Senate farm bills, the larger proposed changes to commodity subsidies were mostly ignored. However, the Administration, as of early 2008, threatened to veto the final farm bill if it did not avoid tax increases or make more significant cuts to commodity subsidies, especially by tightening payment limitations to wealthier farmers (Abbott 2008).

Thus, despite the stalling of Doha Round negotiations and the changes it precipitated in farm bill debates, conflict over trade and farm policy did not completely disappear. Rather it moved from an all out debate over commodity reform to a more contained standoff between Congress and the White House. Despite being de-

emphasized by most, trade impacts could still manifest themselves in farm bill debates, through a White House veto, a Brazilian cotton dispute settlement that requires cuts in farm bill spending, or even a new potential trade agreement (Klapper 2007, Schwab 2007, United States Wheat Associates 2007). Serious, albeit quiet, efforts to reach a Doha Round trade agreement have resumed since late 2007 (Glauber 2008). As one Congressional staff member put it, "If you discuss the WTO on microphone or in the press, it can be used against you in a WTO case. So a lot of the discussions about WTO are done privately and quietly. They're still taking place." (author interview #51, legislative staff, Washington DC, June 25, 2007).

The question, then, may not be whether WTO is still relevant to the farm bill, but whether trade enforcement or White House veto threats push Congress to see it as immediate enough to make changes. As Ralph Grossi, President of American Farmland Trust and long-time observer of and participant in farm bill debates, put it, "[Just because Doha] is a non-factor… doesn't mean that the WTO is any less [important] – the WTO issues are still very much a factor and the threat of litigation is still a very important issue (phone interview, June 21, 2007). In the words of another long-time farm bill observer, "I wouldn't be so quick to assume that those [WTO] considerations are now dead." (author interview #2, sustainable agriculture funder, phone interview, May 21, 2007). While trade pressures thus continue to have potential implications for farm policy in general, however, their implications for the 2008 farm bill are much less certain.[52]

Clearly, the stalling of the Doha Round of WTO trade negotiations, alongside concurrent political, situational, and interest group shifts, did change the tenor of debates around the 2008 farm bill. The climate shifted from one of anticipation and/or fear of a WTO-induced change-oriented farm bill, accompanied in 2005-06 by debates over a farm bill extension, green payments plans, and the crisis-oriented language of national competitiveness, to one more consistent with a stability-oriented farm policy in 2006-08, marked by considerably less tension and conflict. This change was reinforced by an

[52] The possible future influences of trade (and other factors) on U.S. farm policy reform debates are discussed in more depth in Chapter 6.

ethanol boom that coincided with the stalling of the Doha Round, and that will be discussed in greater detail in Chapter 5.

Conclusions

In 2005-06, a trade-influenced farm bill debate in the shadow of a strong Doha Round of trade talks looked as though it might produce substantial reform of corn, soybean, wheat, cotton, and rice subsidies. Defensive positions elevating ideas of national competitiveness and questioning the authority of the WTO over a sovereign nation pointed to a conflict that the WTO looked capable of winning. The urgency of these competition discourses indicated a crisis mode among interest groups that also pointed toward potential commodity reform. Such crisis modes have in fact often led to the creation of rapid change policy windows in previous farm bills. A trade-influenced farm bill might thus have reformed commodity subsidies, potentially creating greater equity among producers around the world, reshaping certain sectors of American agriculture, and increasing or decreasing environmental conservation depending on how successful a green payments-type program might have been. But after the collapse of Doha Round negotiations, the balance tipped towards increased authority of domestic farm interests in policy, and increased incentives to forego reform in favor of a gentle tweaking of the farm bill.

Different interest groups in turn responded differently to this changed policy window. Farm organizations such as the Farmers Union and Farm Bureau, as well as many commodity groups, developed WTO-independent but not radically-changed farm bill platforms. And some conservation and sustainable agriculture groups maintained their positions on green payments, but ceased to focus on the WTO-related benefits they would provide. But most groups across the spectrum from commodity to environmental groups to legislators conceded that with the stalling of the Doha Round, WTO came to matter less for the 2008 farm bill. The previous sense of crisis and its associated push to action had passed.

The Bush administration, on the other hand, argued that trade provisions still mattered for farm policy – in the form of continued trade negotiations, the Brazil cotton

case, and a potential veto of any 2008 farm bill that was seen as overly costly or non-trade-compliant. But even though trade could still affect the 2008 farm bill in such ways, it was nowhere near the same driver in 2007-08 that it had been in 2005-06. The WTO-induced policy window that commodity and farmer groups had seen as a threat to farm subsidies, and that some environmental and sustainable agriculture groups had seen as an opportunity for green payments, dampened alongside the competition discourses that had been so prevalent at the time.

This change in the influence of WTO trade negotiations on farm bill debates provides an example of how political context, interest group choices, and framing strategies came together to shape a window for policy change. In this case, in 2005-06, pressure from the WTO to reform domestic subsidies seemed great enough to overcome the resistance of historically powerful commodity groups favoring current farm subsidies for corn, soybeans, cotton, rice, and wheat, and supporting them through discourses of competitiveness.

Whether such potential WTO-induced commodity reform would have also included a move to green payments, as some environmental and sustainable agriculture groups had wanted, remains a question. But in any case, with the collapse of WTO negotiations, interest groups that no longer felt threatened by the WTO softened their calls for a farm bill extension and instead shifted to promoting a tweaked but heavily status quo-oriented farm bill. The collapse of Doha also represented a closing of the window of opportunity for trade-compliant green payment proponents. While many groups continued to promote these programs, their 2005-06 hook – that green payments could help resolve the impending trade-induced crisis – dissolved with the suspension of talks. Thus WTO shifted from being both a rhetorical and a political force driving impending farm bill change to more of a wild card – an uncertain even if still potential driver. Meanwhile, the trend towards a farm bill status quo was reinforced by the rapid rise of a biofuel economy in 2006, as discussed in Chapter 5.

CHAPTER 5

(Bio)fueling the farm bill: Energy and agricultural policy, 2006-08

> *[Biofuels are] important for our national security…, good for the economy and the environment. For rural America, it is the greatest opportunity for new markets, new investment, new jobs and wealth creation in our lifetimes.*
> -USDA Undersecretary for Rural Development Tom Dorr (Dorr 2006)

Introduction

As trade concerns declined as a 2008 farm bill driver, the influence of biofuels, or fuels produced from plant materials, increased. Rising gas prices, political instability in the Middle East, pollution, and fossil fuel depletion caused many Americans to see the U.S. as vulnerable in its reliance on imported petroleum, and to advocate domestic energy production as a policy goal. Biofuels came to be seen as the primary way to move America toward "energy independence." They were touted as environmentally-friendly energy alternatives, and a source of economic revitalization for rural America.

While these potential benefits of a biofuels economy are salient and appealing, they have also been challenged by stakeholders who see the biofuels boom as a "green gold rush" accompanied by significant costs and significant uncertainties (Genetic Resources Action International 2007). Still, the excitement over biofuels significantly altered the context within which the 2008 farm bill was debated, and in many ways displaced the hubbub surrounding trade and the WTO that had been driving farm bill debates in 2005-06.

This chapter argues that biofuels became a prominent driver of farm policy during 2006-08 in part because they helped policymakers sidestep debates over whether or not to reform the farm bill. Alongside the decline in WTO pressure to reform agricultural subsidies, the growth in biofuels markets alleviated budgetary pressures for subsidy reform by raising crop prices. The double reduction in reform pressure was combined with a framing of biofuels that tapped into public support for the environment and for national security. This, in turn, removed the spotlight from potential economic,

environmental, and social benefits that might have resulted from the commodity policy reforms discussed in Chapters 1 and 4.

This is not to say that reform-oriented groups stopped advocating reductions in or changes to corn, soybean, wheat, cotton, and rice subsidies. It is more that within the context of enthusiasm over biofuels, there was little room left for critiques of subsidy policy to be heard. Framing biofuels as the solution to energy security, environment, and rural development problems made it a winning argument that seemed to address the environmental and social concerns of farm policy reformers without upsetting traditional farm interests, and while concurrently promoting national security. These discourses were particularly powerful because they created a broad consensus in support of biofuels through the use of nationalistic "common good" symbolism – and used this consensus to promote a farm policy status quo.

Even so, this was not a case in which all interest groups were supportive of biofuels in the same way. Rather, while some groups advocated producing biofuels in the form of ethanol made of corn, others argued against continued large-scale corn ethanol production in favor of cellulosic ethanol made from agricultural or forest byproducts or perennial grasses (American Farm Bureau Federation 2003, Kemp 2007). Different groups argued over the relative economic and environmental benefits a biofuels economy would bring, depending on how these fuels were produced. However, because few groups opposed biofuels development outright, the feeling that developed among policymakers was that there was broad-based consensus in support of it. This perceived consensus obscured the many differences among interest group positions, and facilitated the development of biofuels policies that in some ways encouraged and in other ways discouraged sustainable land use.

In other words, what was good for biofuels in 2006-08 became good for farm policy – and in this case, large-scale production of corn for conversion to ethanol became a presumably temporary path to more sustainable energy production. Especially when compared to the 2005-06 idea of significantly revamping farm policy supports to conform to WTO pressures, promoting biofuels became an easier way for policymakers to approach the 2008 farm bill. It did not run contrary to the current system of producer

supports, nor did it require going against interest groups opposed to policy reform. It seemed to attend to environmental and social concerns, especially in its consideration of cellulosic ethanol, but meanwhile did little to mitigate the environmental and social impacts of continuing to support a corn and soybean bi-culture, even if only as a "bridge" to more sustainable biofuels production.

This chapter examines how and why biofuels became such a powerful driver of farm policy, and what this implies for sustainable land use policy. It highlights the benefits, costs, and role of biofuels in the farm bill debates, provides a history of the origins and trajectory of biofuel-related policies, and examines the ways in which interest group positions gravitated toward biofuels and related discourses of national security, energy independence, environmentalism, and rural development. It then focuses on reasons for the power of biofuels as a policy driver, and turns to the implications of the biofuels economy for the 2008 farm bill, the 2007 energy bill, and for sustainable agriculture more broadly.

Biofuels in the 2008 farm bill debates, 2006-08

While in 2005-06 WTO and trade were primary drivers of the farm bill debates, in 2006-08 biofuels moved to the forefront of farm policy discussions. Discussions of renewable energy featured in the press, made their way into the policy positions of diverse groups, surfaced as a priority issue in public polls, and seeped into policy discussions in Congress (Farm Foundation 2006, Quaid 2006).

This shift from WTO as a driver to biofuels as a driver is visible in a LexisNexis search of farm bill-related articles published between 2005 and 2007 in 50 major U.S. newspapers, using search terms "farm bill and WTO/world trade," and "farm bill and ethanol/biofuels." Results, shown in Table 5, revealed that the number of farm bill articles mentioning biofuels increased dramatically over time, while the number mentioning trade decreased. This change took place, even as the number of articles mentioning other factors that affect farm bill debates, in this case budgets and party

politics (using search terms "farm bill and budget/prices," and "farm bill and Democrat/Republican") stayed relatively constant.[53]

Year [a]	Farm bill	WTO or world trade	Ethanol or biofuels	Budget or prices	Democrat or Republican
2005	186	**45 (24%)**	**10 (5%)**	126 (59%)	94 (44%)
2006	216	49 (23%)	41 (19%)	136 (64%)	125 (58%)
2007	983	**91 (9%)**	**224 (23%)**	547 (56%)	524 (53%)

Table 5. Ethanol, trade, budget, and political party issues in farm bill press, 2005-07.
Farm bill articles mentioning trade, energy, budget, or political party concerns from 2005 to 2007. Changes of note are highlighted in bold.

[a] The second column from the left presents the number of farm bill-related articles in each of the three years listed in the first column, found through a LexisNexis Academic search for each calendar year (January 1 - December 31) using the search term "farm bill." Each search was then narrowed using the terms "WTO or world trade," "ethanol or biofuel," "budget or prices," and "Democrat or Republican," to generate the data for the third, fourth, fifth, and sixth columns. Each search tapped the 50 top English language newspapers in U.S. circulation according to *Editor and Publisher Year Book*, as searched by LexisNexis databases when the category "Major U.S. newspapers" is selected. Search was conducted Feb. 24, 2008.

In 2007, biofuels were mentioned in 23% of farm bill articles, up from 5% in 2005. About a third of biofuels-related articles from all three years combined were published during the last three months of 2007. Meanwhile, the WTO was discussed in 9% of articles in 2007, down from 24% in 2005. Furthermore, many of the 2007 articles mentioned the WTO simply to cite its *decreasing* influence on farm bill debates. In addition, during this same time period, the percentage of articles mentioning budget issues or political party issues remained relatively stable in the 60% and 50% ranges, respectively. Thus, biofuels in particular rose to the top of the farm bill agenda rapidly while other typically relevant factors stayed constant, and in doing so, displaced at least some of the talk surrounding the WTO and the farm bill. As Boyden Gray, U.S. trade representative to the E.U., put it, "My sense is the biofuels revolution that has hit this country is the most profound change in agriculture in 200 years" (Gray 2006).

Farm bill interest groups – across the spectrum from commodity, farm, and trade associations to environmental, sustainable agriculture, and social justice groups – began

[53] While it is possible that other factors changed significantly in farm bill press from 2005 to 2007 as well, no such changes surfaced through a preliminary skimming of relevant articles.

to focus on biofuels as well. In the words of Colin Woodall, Director of Legislative Affairs for the National Cattlemen's Beef Association, "six months ago, we were kind of talking about ethanol, but nobody was really getting too excited about it. And now … all we talk about is ethanol... I've had three meetings this week alone on ethanol" (author interview, Washington DC, January 18, 2007). Similarly, in a national survey of farm bill priorities released by the Farm Foundation in September 2006, renewable energy was among producers' top three goals – and the one new goal compared to previous years' surveys (Farm Foundation 2006). Legislators, too, were swept along in the tide of biofuels excitement. In December 2006, House Agriculture Committee chairman Collin Peterson called energy "the biggest issue in this farm bill" (Associated Press 2006). And Senate Agriculture Committee chairman Tom Harkin posited around the same time that "energy actually may be the engine that pulls this farm bill" (Quaid 2006). As one commodity group representative put it, "Every member of Congress is tripping over himself to say, 'I did something for renewable fuels'" (author interview #32, commodity group, Washington DC, March 30, 2007).

As discussed in Chapter 4, the window of political opportunity for farm bill reform opened by WTO talks was closed in part when the Doha Round negotiations were suspended in July 2006. But it was biofuels that sealed this window shut. As gas prices started to rise, beginning in 2004-05, demand for corn- and soybean-based biofuels as an alternative energy source increased as well. By 2006-07, this rising demand for ethanol and biodiesel had raised corn and soybean prices and lowered commodity program budgets (for payments that kick in when grain prices are low) (Wall Street Journal 2007, Energy Information Administration 2008). Fewer counter-cyclical and loan deficiency payments in turn produced budget savings and brought down the U.S.'s level of non-trade-compliant subsidies – simply by keeping current farm bill commodity provisions in place, without any need to officially reform payments to conform to WTO rules (Babcock 2006).

These high projected prices for corn and soybeans in turn became one primary driver of a largely stability-oriented 2008 farm bill. As demand for corn to process into ethanol rose, increasing corn prices and lowering projected subsidy payments, current

commodity policy came to seem like a good and affordable option. Ethanol made hanging onto current farm policy cheaper, easier, and more appealing. It also integrated conservation, rural development, and national security concerns into a stability-oriented farm bill that promised economic, environmental, social, and security benefits without a need to significantly change policy.

Benefits of ethanol

Biofuels are produced when plant materials are converted into liquid fuels as an additive or substitute for petroleum-based gasoline or diesel fuels. Ethanol, in the U.S. produced primarily from corn kernels, is used as an additive or substitute for gasoline. Biodiesel, in the U.S. produced primarily from soybeans, is used as an additive or substitute for diesel fuel. While biofuels excitement revolved around both ethanol and biodiesel, the greater production and larger policy incentives were for ethanol over biodiesel. Thus, the following sections focus primarily on ethanol.

While studies differ on how energy efficient the conversion process is for ethanol, estimates are that corn ethanol yields 1.35 units of energy for every 1 unit used to produce it, compared to a ratio of 0.81 for gasoline (Wang 2005).[54] Thus, while more energy-efficient to produce than gasoline, corn ethanol conversion is not strikingly energy-efficient, and yields fewer vehicle miles per gallon than gasoline (Lavigne 2007). However, it is made from a more renewable feedstock than petroleum-based products. And if ethanol is produced out of materials other than the corn kernel – the most commonly-cited being cellulosic ethanol from perennials such as switchgrass – it tells an even better environmental story.

Cellulosic ethanol has a potential energy balance of 5-6 units of energy gained per unit invested. Its feedstocks require less fertilizer and pesticide to grow than corn, emit fewer greenhouse gases, and provide year-round plant cover (and less erosion) on the landscape (Wang 2005, Rinehart 2006, Tilman *et al*. 2006, Tilman *et al*. 2007). While significant resources are being invested in cellulosic research and development, cellulosic

[54] However, corn ethanol's energy efficiency estimates are slowing increasing. Thanks to Paul Porter for this observation.

ethanol is not yet available on a large or commercially profitable scale. Thus, at least for the moment, when we talk about ethanol, we are talking primarily about corn kernel ethanol (Montenegro 2006).

Ethanol has been touted not only for its potential environmental benefits, but also as a potential source of rural economic development for agricultural communities. U.S. ethanol production doubled between 2001 and 2005 from 2.5 to 5 billion gallons, and went from utilizing 6% of the U.S. corn crop in 2000 to 20% in 2006 (Center for Rural Affairs 2006, Institute for Agriculture and Trade Policy 2007, Krauss 2007). By 2008-10, with the construction of new ethanol plants, 8-10 billion gallons are projected (National Corn Growers Association 2005a, Barrionuevo 2006b, Eidman 2006). This growth has brought corn prices up to over $4 a bushel, compared to $2 for most of the 1980s and 1990s, a big economic boon for farmers and some rural communities (National Corn Growers Association 2006a). Especially where ethanol plants have remained producer-owned, accruing benefits to local residents, ethanol has seemed to promise a new form of revitalization to parts of rural America (Kleinschmit 2007).

Finally, ethanol has been marketed as a way to promote national energy security, allowing the U.S. to become less dependent on imported petroleum by growing its own fuel sources domestically. Even though the amount of corn ethanol produced in 2006 (with 20% of the U.S. corn crop) only displaced 1.5% of U.S. petroleum imports, still it is argued that the more biofuel produced at home, the less petroleum imported from politically unstable regions (Center for Rural Affairs 2006).

Downsides of ethanol

Although these benefits of ethanol are important, they are not a given. Rather, they depend on the feedstocks used for production, and on how and where ethanol is processed. For example, even though corn ethanol is a more renewable fuel source than gasoline, many of the inputs for corn ethanol actually come from fossil fuels – from petroleum-based fertilizers for corn production to coal-generated electricity in firing ethanol processing plants – and planting large expanses of corn tends to increase water pollution and soil erosion (M. Morris and Hill 2006, Union of Concerned Scientists 2007,

Webb 2007). While a move to cellulosic ethanol would improve the environmental record of biofuels, and while most groups and policymakers support such a move, there are questions as to how soon cellulosic ethanol will be commercially available, as the first pilot cellulosic ethanol plants are as of early 2008 only in the earliest phases of construction (Kenney 2007).

Meanwhile the emphasis on corn ethanol also diverts attention from other, perhaps more environmentally-friendly energy options, including simply using less energy or developing more energy efficient technologies. For example, increasing fuel economy standards by four and a half miles per gallon would produce about the same reduction in gasoline consumption (once older vehicles are retired) as converting the entire U.S. corn crop into fuel (Congressional Budget Office 2004, Krugman 2007).[55] In other words, calling ethanol environmentally-friendly is premature – while it could be quite "green," ethanol production is not necessarily green yet. *How* ethanol development is approached becomes just as important as the fact that it is approached at all. Brad Redlin, Director of Agricultural Programs at the Izaak Walton League of America, expressed this sentiment particularly well, "This could be just the most wonderful thing to happen to the countryside in a long time – if we… do it right." (author interview, St. Paul MN, October 18, 2006)

Similarly, while rural economic revitalization is a possible outcome of ethanol development, it is not a necessary outcome. While all ethanol plants in 1999 were owned by farmers, in 2006 only 19% were farmer-owned (Cook 2006). In addition, the ethanol boom has raised land values, a boon for landowners, but an obstacle for small or beginning farmer renters (Davey 2007). In fact, W. Wright and Reid (unpublished manuscript)[56] argue that the model of ethanol development currently promoted favors a large-scale agricultural model where inputs and outputs leave or remain outside the community, undermining some of the rural development benefits ethanol could be said to have had.

[55] Such an improvement in fuel economy standards was in fact enacted in the 2007 energy bill (Hebert 2007).
[56] This manuscript by W. Wright and Reid was submitted and is in the review process for publication.

Finally, although ethanol could certainly displace some of the U.S.'s reliance on petroleum imports, the U.S. does not currently produce enough corn to satisfy even a small portion of its energy needs (Fleischauer 2006). In the words of one legislative staff member, "If you… look at [the numbers], the opportunity for ethanol to really make a dent in… our larger energy use is really very… modest." (author interview #46, legislative staff, Washington DC, June 27, 2007). An expansion of corn acreage would increase the amount of ethanol produced, but likely at the expense of water quality, soil conservation, and carbon sequestration (Searchinger *et al.* 2008). Alternately, a shift toward cellulosic ethanol could help meet demand in a more environmentally-sustainable way, but would not be available in the short-term. Thus, while ethanol has the potential to make economic, environmental, and social contributions, these benefits also come with costs, doubts, or downsides.

Nevertheless, the excitement over ethanol and its potential benefits remains, and has had important implications for the 2008 farm bill. Interestingly, this is not the first time in history that an ethanol boom, with its mix of benefits and costs, has captured the imagination of interest groups, policymakers, and the public.

Ethanol history

Although ethanol played a driving role in the 2008 farm bill debates only recently, it has had a long history of influencing U.S. policy (W. Wright and Reid unpublished manuscript). The first Ford Motor Company engines were designed to run on ethanol (Environmental Grantmakers Association 2006). And since the early 1900s, there have been repeated surges of broad public interest in ethanol, followed by periods where interest fell below the public radar. Power alcohol, as it was known at the time, gained popularity particularly in times of low crop prices, oil scares, and weak farm policy (D.E. Wright 1993).

In the mid-1920s, a group known as the Farm Chemurgists began to advocate producing power alcohol from corn – pulling farmers out of crisis with a new market for their products and creating a new application for modern chemistry. Collaborations between Chemurgist groups and the USDA advanced both technical options and policy

proposals for a Midwestern corn-based ethanol industry. One proposal, for example, would have required all fuel sold to be a mix of 10% ethanol with 90% gasoline, the equivalent of today's E-10 mandates (D.E. Wright 1993, American Coalition for Ethanol 2007). Ultimately, however, opposition by the automobile and petroleum industries thwarted the creation of a federal power alcohol policy, and government responded to the 1930s farm crisis with a farm bill that controlled grain supplies, rather than one that created new demand through ethanol (D.E. Wright 1993, W. Wright and Reid unpublished manuscript).

Despite their losses in this 1933 farm bill, the Chemurgists continued to work toward the development of power alcohol, mostly through research (D.E. Wright 1993). The first farm bill, then, was almost an ethanol bill – and it was in part the Farm Chemurgists' political loss that facilitated the establishment of subsidies for corn, soybean, wheat, cotton, and rice instead, keeping power alcohol below the radar for another forty years.

During the oil crises of the 1970s, higher gas prices raised the profile of ethanol once again. In 1973, an oil embargo imposed by petroleum-producing countries in the Middle East exacerbated periodic shortages already taking place in the domestic petroleum sector. This inspired a renewed interest in "homegrown" fuels that promoted "national security" and "energy independence" (Tugwell 1988, p.106, 108). But once the embargo was lifted, petroleum prices fell and enthusiasm for ethanol faded (Wallace 2006).

In 1978-79, the Iranian revolution brought Iranian petroleum exports to a stop, and the Organization of the Petroleum Exporting Countries (OPEC) further increased prices, leading to long gas lines in the U.S. These shortages were viewed as symbolic of the dangers of America's reliance on foreign petroleum, and provided a political context within which the U.S.'s first comprehensive energy policy was passed. Although the Energy Security Act of 1980 was significantly more limited than what President Carter had hoped for, it did include subsidies for renewable energy, including gasohol – the reincarnation of 1930s power alcohol (Tugwell 1988, United States Department of Agriculture 2006b).

In the 1980s, however, international petroleum supplies recovered once again, prices fell, and enthusiasm over biofuels faded once more. President Reagan cut subsidies for renewable energy, and investment in alternative technologies returned to the "shadows of the counterculture" until the mid-2000s (Tugwell 1988, p.177).

While ethanol faded from many peoples' radars in the mid-1980s, some groups continued to work on its development even after the political context no longer favored it (W. Wright and Reid unpublished manuscript). According to Bart Chilton, former Chief of Staff and Vice President of Government Relations for the National Farmers Union, the National Farmers Union (and the National Corn Growers Association) have favored the development of ethanol since the 1970s (author interview, Washington DC, January 16, 2007; National Corn Growers Association 2007b). In the mid-1980s Colorado set a precedent for state legislation that increased the use of ethanol-blended gasoline in order to lower carbon monoxide emissions from cars (National Corn Growers Association 2006b). Many industry groups, agribusiness companies such as Archer Daniels Midland (ADM), and oil companies also continued investing significantly, albeit often quietly, in ethanol research, development, storage, transportation, and pipelines (Barrionuevo 2006b, Philpott 2006b; author interview #24, environmental group (former commodity group and legislative staff) Washington DC, June 25, 2007).

Increases in the production and use of ethanol again in the mid-2000s were driven by several factors. First, rising oil prices made ethanol cost-competitive with gasoline (Coyle 2007).[57] Second, the gasoline oxygenate MTBE (methyl tertiary butyl ether) was phased out by state mandates, Environmental Protection Agency recommendations, and oil company decisions, leaving room for ethanol to replace it as a cleaner, safer gasoline additive (Energy Information Administration 2007, United States Department of Agriculture 2006b). And third, increased government investment in biofuels development brought ethanol and biodiesel back onto the public agenda (United States Department of Agriculture 2006b, Coyle 2007).

[57] However, part of this cost-competitiveness can be attributed to ethanol subsidies and tax credits (E. Robinson 2006).

Ethanol production has been increasing since 1996, rapidly since 2003 (National Corn Growers Association 2006b). Policies in the early 2000s extended tax exemptions for ethanol-blended fuels and authorized the USDA to establish pilot programs for harvesting biomass on Conservation Reserve Program lands for conversion to ethanol. The 2002 farm bill was the first farm bill to include an energy title, or subsection, which included provisions for federal procurement of bio-based products and grants and loans to farmers for energy efficiency and renewable energy (United States Department of Agriculture 2006b). According to Charles Rawls, General Counsel for the Farm Credit Administration and a former Congressional staff member, much of this legislation was built on the urging of Senator Tom Harkin (D-IA):

> Harkin… insisted on an energy title in the '02 bill. And you know he was really ahead of the time… Maybe it was just a long-held belief… coming out of the 80's… He used to run around showcasing alternative agricultural products. He'd go places and he'd hold up… forks made out of corn starch and stuff like that… The House thought it was crazy. But Harkin… ultimately… got some [money for it] (author interview, Washington DC, June 28, 2007).

The 2005 Energy Policy Act (energy bill) created a renewable fuels standard requiring the U.S. to increase annual production of renewable fuels to 7.5 billion gallons by 2012 (United States Department of Agriculture 2006b). According to Kayt Wahlert, former Legislative Aid at the Renewable Fuels Association, this policy was one of the most significant policy initiatives driving the growth of the ethanol industry at the time (author interview, Washington DC, April 4, 2007). The 2007 energy bill upped the renewable fuels standard to 36 billion gallons by 2022, and required two-thirds of that to come from cellulosic feedstock after 2015 (Hebert 2007).

Additional biofuels policies include tax credits for producers and blenders (who mix ethanol with gasoline for commercial sale), loan incentives for the construction of new ethanol plants, and provisions to encourage the production of biodiesel as well (Montenegro 2006, R. Johnson *et al*. 2007, Sustainable Agriculture Coalition 2007). On the state level, many states have also implemented policies to promote biofuels development, including individual state renewable portfolio standards (American Coalition for Ethanol 2007).

Although the production of ethanol increased dramatically over the past two years and is expected to continue increasing, production dampened somewhat towards the end of 2007 because of oversupply from new ethanol plants (M. Daily 2007). And while there continues to be enormous excitement over ethanol, there are some who look to this slow-down and to both ethanol and corn's historical cycles of boom and bust, and worry about markets collapsing if petroleum prices dropped to pre-2005-06 levels. As one former legislator put it, "If oil were to go back to $30 a barrel, we would destroy the alternative energy business in the United States – that quick." (author interview #52, former legislator, Washington DC, June 25, 2007). Despite the words of caution, many still are optimistic about ethanol's ability to drive agricultural development and policy. The USDA's Chief Economist calculated that ethanol can continue to be a viable industry as long as it is priced at at least 70% of gasoline prices (C. Clayton 2007).

Within this context, farm and energy groups became cautiously optimistic about the potential of ethanol to revitalize American agriculture with an environmentally-friendly recipe for national security. Although not all groups saw the benefits and risks of ethanol the same way, still there was a remarkable level of consensus that ethanol, if approached carefully, could be an enormous boon to agriculture and to the nation. In other words, what stands out more than any variation among groups is that there were few who were flat out opposed to the development of ethanol.

While some argued that there were dangers to pursuing ethanol production without appropriate environmental or social safeguards, or in subsidizing corn ethanol production above other agricultural uses, there were few straight opponents of ethanol along the range from social justice groups to trade associations. This could be because of the political unpopularity of opposing ethanol production. Or it could be because, depending on how it is approached, ethanol does promise certain benefits for environmental conservation, rural development, and business opportunities important to most groups.

Whatever the reasons for it, this broad-based consensus had important implications for energy and commodity policies alike, as can be seen in the discussions that arose over energy and farm policy in 2006-08, and in the discourses used to support

them. The following sections examine three areas of biofuels-related debates among farm bill groups before turning to questions of framing and discourse, in order to highlight the ways in which groups' positions came to be seen as a broad consensus in support of ethanol.

Ethanol debates

Conservation Reserve Program

One ethanol-related debate arose over the use of Conservation Reserve Program (CRP) set-aside lands for growing ethanol feedstocks. Several strong supporters of ethanol production, for example, recommended that in order to meet rising demands for corn, CRP environmental set-aside contracts be cancellable without penalty so that new lands could be brought into production (National Grain and Feed Association *et al.*, 2004, Bernard and Wiesemeyer 2007). In the words of Christopher Holdgreve, Director of Legislative Affairs at the National Grain and Feed Association, "Having acreage available to meet demand right now is the key policy priority… We wouldn't advocate getting rid of all the acres in the Conservation Reserve Program… [but] we would argue for a more targeted approach... We shouldn't be putting productive resources idle right now" (author interview, Washington DC, March 29, 2007).

Environmental and sustainable agriculture groups, on the other hand, argued that converting idle lands to corn production would increase water pollution, air pollution, and greenhouse gas emissions, and threaten wildlife (Keeney 2007). According to Martha Noble, Senior Policy Associate at the Sustainable Agriculture Coalition, and Ralph Grossi, President of American Farmland Trust, many groups responded to the increased demands for fuel by considering allowances for haying and grazing on CRP lands, and promoting better targeting of conservation areas to allow for sustainable perennial cellulosic feedstock production on suitable lands. However, most hunting and wildlife groups explicitly opposed any alterations of CRP acreage in response to rising ethanol demand (author interview, Washington DC, September 29, 2006; phone interview, June 21, 2007; Collins 2006; De la Torre Ugarte and Hellwinckel 2006; Hallinan 2006; Sustainable Agriculture Coalition 2006). As Mark Muller, Director of the Environment

and Agriculture Program at the Institute for Agriculture and Trade Policy, put it, "That's kind of the line in the sand for …some of the other fish and wildlife groups, saying don't touch CRP" (author interview, Minneapolis MN, December 1, 2006). The question, then, over whether or not to use CRP acres for ethanol production, brought out differences of opinion as how to balance conservation and fuel production in a growing biofuels economy.

Cellulosic ethanol

Additional debates arose over how to approach the development and commercialization of cellulosic ethanol. Most groups, including conservation, livestock, and some commodity groups saw cellulosic ethanol as having distinct advantages over corn kernel ethanol. For example, many environmental groups favored the environmental and energy contributions that cellulosic ethanol could make over corn kernel ethanol in terms of improved water quality, soil cover, and pesticide reduction (Adrienne Wojciechowski, former Government Relations Associate, The Nature Conservancy, Washington DC interview, September 28 2006). Livestock groups that purchase corn for feed saw a transition to cellulosic ethanol as beneficial for taking the pressure off corn prices (Colin Woodall, Director of Legislative Affairs, National Cattlemen's Beef Association, Washington DC interview, January 18 2007; Ginger Langemeier, Deputy Director of Government Relations, National Pork Producers Council, Washington DC interview, April 5 2007). Finally, wheat growers saw cellulosic ethanol as a promising way to produce energy from wheat straw, currently a wheat byproduct (Mark Gaede, Director of Government Affairs and Environmental Policy, National Association of Wheat Growers, Washington DC interview, January 18 2007).

Even corn and soybean growers, who benefited more from current ethanol production than from potential alternative feedstocks, were supportive of an eventual transition to cellulosic ethanol. In the words of Loni Kemp, Senior Policy Advisor for The Minnesota Project, "The thing that I was most worried about was that the corn and soybean commodity groups wouldn't see beyond the end of their nose. But… they're right up there saying, we know corn isn't the end of the game" (author interview,

Lanesboro MN, February 16, 2007). It is probable that corn growers supported cellulosic ethanol because it was politically difficult to oppose, because corn stover could potentially be used as a feedstock, and because cellulosic ethanol is still so far from commercialization that it did not yet threaten the market for corn kernel ethanol.[58]

At the same time, proponents of corn ethanol were careful in making sure that, even while supporting a transition to cellulosic ethanol, policies continued to support corn grain ethanol:

> We're certainly not discouraging the development of other feedstock… [but] there's been a lot of time and resources invested by corn growers over the years in building that industry… We are concerned that any changes in the farm bill would put us at a disadvantage (author interview #28, commodity group, Washington DC, January 18, 2007).

Many groups therefore suggested a slow transition to cellulosic ethanol. Mark Gaede, Director of Government Affairs and Environmental Policy for the National Association of Wheat Growers described it as follows: "We're suggesting a very modest proposal to begin transitioning people into growing these new kinds of energy crops while providing some assistance… It's not rocket science, but you can't just say 'okay, let's everyone grow switch grass now'" (author interview, Washington DC, January 18, 2007).

Still others were more skeptical of cellulosic ethanol's potential to displace corn anytime soon. Robert Young, Chief Economist for the American Farm Bureau Federation, for example, argued that for decades now proponents of cellulosic ethanol have predicted its imminent commercial availability (author interview, Washington DC, January 19, 2007). Others just saw grain ethanol as more practical. Christopher Holdgreve, Director of Legislative Affairs for the National Grain and Feed Association argued that, "[with cellulosic] you've got transportation issues, you've got storage issues. We've never stored or transported switch grass. We have hundreds of years experience with corn, soybeans, and wheat." (author interview, Washington DC, March 29, 2007). Despite these variations in position, however, the breadth of support for cellulosic ethanol

[58] Thanks to Paul Porter for this middle observation.

across sectors was quite striking, illustrating this atmosphere of at least perceived consensus.

Ethanol subsidies

A third area of debate over ethanol revolved around the appropriate role of government in supporting a biofuels industry. Even as very few groups were opposed to ethanol production, many worried about the ways in which it was being subsidized by government. Livestock producers in particular were wary of government incentives for corn ethanol and soybean biodiesel because they had them competing with ethanol and biodiesel plants for high-priced feed grains (House Agriculture Committee 2007a; Raloff 2007; author interview #37, agribusiness corporation, Washington DC, March 29, 2007).

Within the livestock industry, beef producers were slightly less concerned because they could substitute dried distillers grains (DDGs), a byproduct of ethanol production, into their cattle feed. Hogs and poultry, however, cannot digest DDGs well (Eidman 2006; National Cattlemen's Beef Association 2007; Jesse Sevcik, Vice President of Legislative Affairs, American Meat Institute, Washington DC interview, March 29 2007). Even so, most livestock producers were concerned less with the actual price of corn and soybeans and more with the way that government mandates favored the use of corn for ethanol over corn for livestock feed. Most preferred a scenario where ethanol would compete more evenly for corn in the open market:

> If the market determines that corn is more valuable than fuel, so be it. We'll adjust. But if it's the subsidies behind the ethanol that cause the price of corn to be higher, then we've got a little problem because that means government is directing what should happen to our industry (author interview #52, former legislator, Washington DC, June 25, 2007).

Trade associations were similarly supportive of free market competition for ethanol and wary of government involvement in industry. While they generally agreed that there is a role for government in protecting a new sector, they also argued that government policies came to reward certain energy solutions over others, creating disincentives for new technology development. In the words of Jesse Sevcik, Vice President for Legislative Affairs at the American Meat Institute, "Some of it might have

to do with what's [in] vogue… We're spending a lot of money on cellulosic. Why don't we… build a better sugar beet...? Maybe we can do something on… fuel conservation [instead]" (author interview, Washington DC, March 29, 2007).

Corn and soybean producers, however, were generally pleased with government support for ethanol and biodiesel, and argued that public investment was necessary for the moment. At the same time, they recognized that livestock producers were their primary customers and worked to maintain cooperative alliances with them (Johnny Dodson, commodity group, Tampa FL interview, March 2, 2007).

Groups across the range of farm bill interests, then, were excited about biofuels in 2006-08. Some were concerned about CRP acres being brought into production, about the focus remaining primarily on corn grain ethanol, or about the impacts that ethanol subsidies would have on their industry. But generally these concerns did not manifest themselves as opposition to ethanol, simply as a tweaking of biofuels policy in one direction or another.

Ethanol consensus

Thus, while there were numerous debates about the specifics of ethanol, there has been little direct opposition to the idea of ethanol production itself. This is particularly interesting among a group of policy players known for fierce debates over other aspects of farm policy – for example, commodity supports, environmental provisions, or trade implications, as seen in debates over WTO influences on farm policy in 2005-06. Even groups who worried about the environmental or social implications of corn ethanol, even as a bridge to cellulosic ethanol, nevertheless engaged in trying to guide the industry. Many environmental and sustainable agriculture groups established sustainability criteria to guide ethanol production toward environmentally- and socially-sustainable practices. Others suggested that the 2008 farm bill expand research efforts and pilot programs for cellulosic ethanol, to build the knowledge necessary (processing plant location, farmer learning curves, time to establish the crop) for policy promotion in future legislation (National Wildlife Federation 2007, Sustainable Agriculture Coalition 2006).

Many of these groups recognized that since ethanol became a hot topic so quickly, it is likely to shape farm bill debates with or without solid research behind it. Some therefore decided to take a position on ethanol as part of their farm bill platform for the first time, producing particular challenges. From the perspective of one agribusiness representative, "Renewable energy… is like taking a drink of water out of a fire hydrant. I mean, there's so much of it. There's so much we weren't really working on a year ago, and all of a sudden… I don't even… know who I need to talk to (author interview #37, agribusiness corporation, Washington DC, March 29, 2007). Some farm organizations advocated going ahead with ethanol promotion but maintaining a safety net in case of a downturn in the renewable energy economy. In the words of Robert Young, Chief Economist at the American Farm Bureau Federation, "I have no doubt that there will be a hiccup some place down the road… [and] you ought to be providing… a safety net… You just don't dump that much additional demand on the system and not... take a little time to get ramped up" (author interview, Washington DC, January 19, 2007). Even those more skeptical of the ethanol boom have not dismissed it outright. In the words of one sustainable agriculture funder, "It doesn't mean you would ignore the issue of biofuels at all – …[more just] not to let the tail of biofuels wag the dog" (author interview #2, sustainable agriculture funder, phone interview, May 21, 2007).[59]

Despite these differences in interest group perspectives on ethanol, there was very limited opposition to the broader idea of promoting biofuels development in the farm bill. This sense of consensus was reinforced by the use of a common language to discuss ethanol. The fact that most interest groups and the media used similar frames to talk about ethanol helped create the impression that support for ethanol united disparate policy groups. The following section examines the reasons for this shared use of ethanol discourses, and argues that those discourses are part of what helped construct a consensus around ethanol, even among groups typically opposed to one another's policy positions. It argues that this rhetorical consensus, while providing some useful common ground, also had a tendency to make these groups' positions look closer than they often are.

[59] In fact, by-far the most skeptical comment heard in interest group interviews for this study described biofuels as "contemporary snake oil" (interview #5, social justice group, phone interview, May 18, 2007)

Framing biofuels

Framing and discourse revisited

Just as in the case of trade and farm policy discussed in Chapter 4, particular ways of framing biofuels positions tend to repeat themselves. The phrases that groups use are echoed in the media, in Congress, in the public, and in groups' interactions with one another, creating a shared understanding of biofuels that takes on the appearance of common sense, even if it is just one understanding of many. This kind of linguistic elevating or naturalizing of a particular approach to an issue takes on the characteristics of a discourse, or an assumed accepted truth, and becomes more difficult to contest.

Note that it is difficult to determine the origins of such discourses, or to figure out which groups began framing issues in shared ways first. The point is more that over time, diverse groups converged around these particular discourses because they offered political advantages for furthering their positions. The repetition of these discourses built from one group to another until they were heard so often that they became favored or "common sense" understandings of the reasons to pursue ethanol development.

Because in this case there were so few counter-discourses being advanced, arguments for ethanol in some ways took on the characteristics of a hegemonic or dominant discourse. With ethanol justified as a provider of national security, energy independence, conservation, and rural development, it took on notably nationalistic overtones that solidified its support. Like with WTO and competitiveness discourses, this framing of ethanol and the consensus (or perceived consensus) it produced introduces important implications for policy and ultimately sustainable land use.

National-security, energy independence, etc.

One of the most common ways to support ethanol development is to couch it in a discussion of national security and energy independence. The argument commonly made is that importing oil from petroleum-producing countries in the Middle East makes the U.S. vulnerable to price volatility and political instability in the region. Producing ethanol at home would thus make the U.S. more "secure" or "energy independent." In the words of one producer:

> The **instability we see in the Middle East** creates havoc in the oil markets… If our country put forth the same effort into making the United States **energy independent** as we did putting a man on the moon in the 1960s we could come a long way in solving our energy problem in ten years (Magnusson 2006).[60]

Groups ranging from the Great Plains Institute to the American Lung Association to the American Coalition for Ethanol to Turkey Producer groups to the Healthy Foods and Communities work group use phrases like **"dependence on foreign oil," "national security," "homeland security,"** and **"home grown energy"** to substantiate their varied positions on ethanol (American Coalition for Ethanol no date; 25x'25 no date; Great Plains Institute 2006, p.11; Healthy Foods and Communities 2006, p.3; Rothfork 2006, p.1; American Lung Association 2008). They commonly present the issue in the following vein: "Our nation is becoming increasingly **dependent on foreign oil**, **directly compromising national security**… **Instead of importing oil from the Middle East**, we can produce more energy **here at home**" (J.R. Smith 2007).

The language used paints a particularly vulnerable picture of America and a particularly urgent need to minimize petroleum imports: "**America has been at the mercy** of imported oil for decades," and ethanol can "**loosen the economic stranglehold** of our dangerous dependence on imported oil" (Tolman and Tumbleson 2006, p.2; National Corn Growers Association 2007b, p.5). Some groups use the language of addiction, calling gas price volatility an outcome of "America's **dangerous addiction** to imported oil" or "**insatiable appetite** for energy," from which the country has to "**wean** itself" (Environmental Law and Policy Center 2006, p.ii; National Corn Growers Association 2006a, p.8; National Corn Growers Association 2007b, p.5). President Bush made this representation of the issue famous in his 2006 State of the Union address, citing the concept that "America is addicted to oil" as a reason to spur investment in ethanol and other forms of renewable energy (Bush 2006).

This use of national security frames extends to visual images as well. Figure 1 shows a Missouri Corn Growers Association billboard depicting a baseball cap clad farmer on one side and the former king of Saudi Arabia on the other, separated by the

[60] All bolded emphases are added to highlight key frames.

text, “Who would you rather buy your gas from? Support the statewide ethanol standard” (C. Blank 2006).

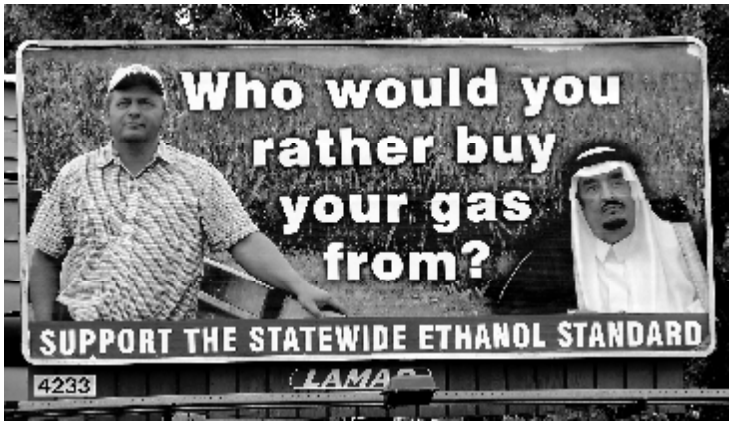

Figure 1. Who would you rather buy your gas from? (Stephen Brooks/Jefferson City News Tribune photo, C. Blank 2006)

These particularly strident calls for energy independence come mostly from unequivocal supporters of ethanol like the National Corn Growers Association or Renewable Fuels Association. However, even groups with much more nuanced positions of support for ethanol use national security discourse. Many environmental groups marry national security language with conservation arguments.

The Izaak Walton League of America, for example, supports cellulosic ethanol “to **displace dependence on foreign oil and decrease emissions of heat-trapping gases**” (Izaak Walton League of America 2007, p.18). American Farmland Trust similarly pairs such national security arguments – “reduc[ing] our nation’s **reliance on imported oil**” – with conservation arguments – “**protecting the nation’s soil, water, air and wildlife**” (American Farmland Trust 2007d). The Theodore Roosevelt Conservation Partnership uses this same combination, adding elements of urgency and national pride that make the development of ethanol seem even more compelling: “The U.S. faces an **unprecedented need** to develop domestic energy resources… America’s farmers, ranchers, and forest owners can help… [provide] a **secure homeland – and Heartland**…, protect our soil and water, and benefit fish, wildlife, and habitat (Theodore Roosevelt Conservation Partnership 2007, p.7).

Other groups tie the national security argument to a rural development one, arguing that "instead of spending a billion dollars a day buying **oil from hostile countries**, we can be creating good paying **jobs here at home,**" or that "[Biofuels is] a fantastic opportunity…, **bringing hope and a path to a bright future for rural America**" (Kemp 2007, Walz 2007). The most comprehensive positions bring energy security, rural development, and conservation arguments together to support ethanol:

> The production of bioenergy… from the nation's agricultural resources presents a significant opportunity to **reduce our dependency on foreign oil**, enhance our **economy,** improve our **environmental quality**, and increase our nation's **energy security**" (United States Department of Agriculture 2007d, p.130)

> These new energy projects are **good for rural economies, good for the environment, and good for our national energy security** (Senator Tom Harkin, quoted in Environmental Law and Policy Center 2006)

Noticeably, the language of many of these farm bill interest group and policymaker positions on ethanol is quite patriotic. This patriotism essentially equates supporting ethanol with being a good citizen, and makes opposing ethanol seem almost "un-American."[61] Consider the following set of quotes, which draw from commodity group writings, statements from journalists, and public health group publications:

> Our ability to grow and add value to **corn is one reason the United States is the standard by which the world measures itself** (Tolman and Tumbleson 2006).

> There's a **groundswell in rural America that is lifting the entire nation**. An ever-stronger pulse beating in the Heartland – signaling **rejuvenation, rebirth, renewal**. A tremendous surge of energy – generated in America's cornfields (McCauley and Tolman 2007)

> Small-town America has **responded to the challenge presented us the dark morning** of Sept. 11. **We will not be held hostage** to foreign oil in this country for eternity. (Couser 2007)

> "**Green is the new red, white and blue**… Green… has gone Main Street" (Friedman 2007)

[61] For more analysis on use of the term "un-American" in current political environmental debates, see the 2007 Economist article "Greening America," which quotes Hillary Clinton calling President Bush's failure to institute emissions caps "un-American," and noting this as a "remarkable change since 2000, when Al Gore toned down his environmental rhetoric during his presidential campaign for fear of sounding pious and obsessive." (The Economist 2007 p.23)

Biodiesel: Clean. Renewable. **Made in USA** (American Lung Association 2008)

This language portrays America as a leader, guiding the world toward a brighter energy future. It uses uplifting and hopeful words to suggest that the U.S. is producing ethanol for the betterment of the nation and of society as a whole. Says Renewable Fuels Association president Bob Dineen, for example, "When we utilize the entire corn stalk…, our industry will **completely transform** America's liquid fuel economy. We will truly be **driving on liquid sunlight**" (Renewable Fuels Association 2007, p.21).

Such patriotic appeals extend to visual images as well as text. Figure 2 shows an American Coalition for Ethanol Political Action Committee flyer of an American flag against a blue sky background, with the statement inside that "American-made ethanol holds tremendous promise for our local communities, for our states, and for our nation" (American Coalition for Ethanol no date).

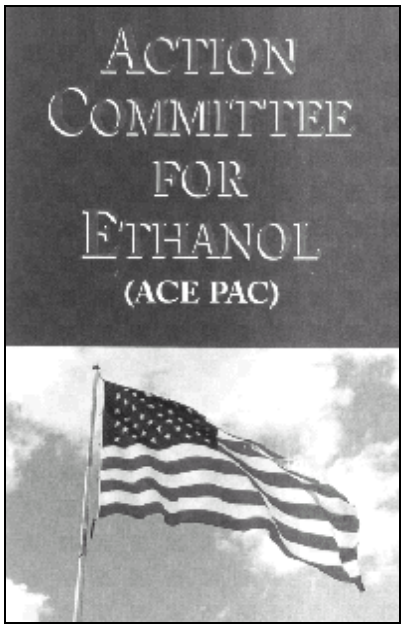

Figure 2. American Coalition for Ethanol Political Action Committee brochure (American Coalition for Ethanol no date).

Finally, Figure 3 shows a similarly patriotic visual appeal in support of a corn-based bio-economy from the National Corn Growers Association 2006 "World of Corn" brochure.

This image melds the folds of an American flag into waves of grain during the corn harvest to demonstrate the contributions that the corn industry makes to the nation.

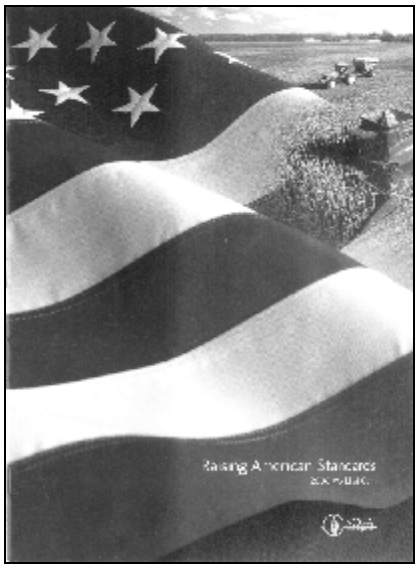

Figure 3. National Corn Growers Association 2006 "World of Corn" brochure cover. (National Corn Growers Association 2006a).

This kind of patriotism in image and in text remakes ethanol into a call to serve the nation – to extricate the U.S. from its involvement in war-torn regions, to encourage economic development in rural America, and to once again establish the U.S. as a world leader. This use of patriotic language and imagery also makes it difficult to raise objections or critiques of ethanol development, no matter how helpful they might ultimately be to the industry or to the country, again for fear of being pegged as "un-American."

W. Wright and Reid (unpublished manuscript) studied the framing of biofuels debates in media channels between April 2006 and April 2007. Like related studies by Meyer and Hinrichs (2007) and Glenna and Thomas (in review), they found that the three frames of national security, environmental protection, and economic development were those most often used to make the case for ethanol production. W. Wright and Reid (unpublished manuscript) found that the "twin frames" of national security and environmental protection were a particularly powerful combination for defending the biofuels economy, while the economic development frame was used more as a secondary

argument to bring farmers into the fold of the biofuels economy (p.18). Meyer and Hinrichs (2007) agreed that farmers (in their case, in Iowa) put more stake in the environment frame than the economic development one, while Glenna and Thomas (in review) found that the economic frame carried more weight among legislators. In Glenna and Thomas' case, the economic development frame was convincing enough to broaden Pennsylvania's Renewable Energy Portfolio Standard to include waste coal as a "clean" energy source.

These studies provide substantial evidence in support of the argument presented here – that national security, especially when paired with conservation and/or rural development has become a strong rhetorical device for supporting ethanol development. W. Wright and Reid (unpublished manuscript) noted that, "No doubt, part of the growing momentum of the renewable energy movement is… due, in part, to its resonance with a wide swath of the public. It would be difficult, if not impossible, to argue against renewable fuels... [or] to imagine any campaign for 'non-renewable energy' to garner any support" (p.16-17). National security, environmental conservation, and rural economic development, they argued, are taken as "common good," together producing an almost uncontestable frame, or a "consensus frame" that precludes dissent or tension, and that might help explain the commonality in positions seen among multiple interest groups in the 2008 farm bill debates (p.16-17).

Implications of the national security frame for consensus policymaking

The implications of diverse groups converging around national security as a consensus frame in support of ethanol are multiple. For one, it facilitates policymaking. To take a specific example, groups as different in their farm bill positions as The American Farm Bureau Federation, American Farmland Trust, and The Minnesota Project all make similar statements about ethanol providing "new market opportunities for farmers and ranchers" and a "bright future for rural America" (American Farm Bureau Federation 2003; American Farmland Trust 2006b, p.8; Kemp 2007). The specifics of their arguments are quite different – the Farm Bureau argues for a stability-oriented farm policy that continues to support crop-based benefits to rural America, while

American Farmland Trust and the Minnesota Project argue that farm policy should be shifted away from the status quo to focus on rural revitalization through sustainable agriculture practices and cellulosic energy production – but the idea that ethanol can be good for rural America is common to all three.

Similarly, groups as varied as the National Corn Growers Association, National Family Farm Coalition, Ducks Unlimited, and Western Governors' Association argue that ethanol represents a "green," "clean," "diversified," "renewable," "biodegradable," "sustainable" energy solution for protecting "air and water quality," providing "wildlife benefits," and "mitigating climate change" (Kleinschmit and M. Smith 2006; Minnesota Corn Research and Promotion Council 2006; National Corn Growers Association 2006a, p.4-6; Ducks Unlimited 2007, p.2; National Family Farm Coalition 2007; National Campaign for Sustainable Agriculture 2007; Sustainable Biomass no date, Western Governors Association no date). Their actual positions vary from favoring investment in corn ethanol with supplementary research money for cellulosic technologies, to focusing exclusively on sustainability criteria for cellulosic ethanol, but still their language is similar.

These common frames are repeated over and over by so many different groups that they come to take on the qualities of undisputed truths, in turn creating the perception that groups agree on how to pursue ethanol development. The ideas of "homegrown energy" and "energy security" are salient enough at this particular moment to make otherwise opposed groups equally interested in investing in ethanol, and to obscure at times for Congress some of the differences in their positions (National Corn Growers Association 2005b, Sustainable Agriculture Coalition 2006).

There are two important ideas to tease apart here: First, that biofuels frames are resonating in Congress and with the public, making them an important potential driver of farm policy. In the words of Ginger Langemeier, Deputy Director of Government Relations for the National Pork Producers Council:

> People like to know that… our oil… is coming from American farmers and not from Saudi Arabia… It's one of those issues that polls so well… and that's what members [of Congress] respond to. Whether it's good policy or not…is up for

> debate. But… that's the public pulse (author interview, Washington DC, April 5, 2007).

Interest groups understand that marketing biofuels as a provider of national security is a powerful tool. They understand that whether ethanol production ultimately limits U.S. dependence on foreign petroleum is less important in political circles than the idea that it might do so. The framing of ethanol as national security matters to policymakers because it serves as a source of constituent support

Second, the perceived consensus over biofuels brings diverse groups together, facilitating policymaking but obscuring important differences among group positions. Because environmental groups come to ethanol wanting to improve its environmental footprint, farmer groups come to ethanol wanting to talk about economic development, and foreign policy advocates come to ethanol wanting to advocate energy independence, ethanol provides common ground for these very different groups to work together toward similar policy goals. And when normally opposed interest groups begin promoting such similar policy goals, it becomes easier for policymakers to support those goals as well, and to start seeing these rather diverse positions as a form of consensus – focusing on their similarities and forgetting their important differences. As Johnny Dodson, commodity group representative, put it:

> Bio diesel has been wonderful… When you go into a meeting and this long-haired hippy-looking guy… comes to you wanting to support what you're doing, then that really begins the dialogue… There's a lot more common ground than… people would like to admit (author interview, Tampa FL, March 2, 2007).

Biofuels thus came to be understood as providing something – economic, environmental, or social – for almost all interest groups involved. Since no one could really come out against national security, energy independence, conservation, or vibrant rural communities, ethanol, as a symbol of these attributes, became an obvious source of common ground. Furthermore, the use of such common frames conveyed almost instant recognition in Congress. In the words of one agribusiness representative, "If you're from the chicken industry and you walk through the door [of a legislator]… they say, 'I know, I know, corn prices.' You don't even have to say anything. They just know. And you

basically already have their attention" (author interview #37, agribusiness corporation, Washington DC, March 29, 2007).

Passing biofuels legislation in this sort of shared-language climate thus became relatively easy. Instead of mediating between interest groups advocating reform of commodity subsidies and interest groups defending the status quo, as was the case under 2005-06 trade pressures, Congress could simply create new renewable energy legislation where "everyone" won. Instead of being pressured either to continue or to stop payments to corn, soybean, wheat, rice, and cotton producers, which would displease a large group of stakeholders, Congress could sidestep the issue by focusing on biofuels – implicitly retaining status quo commodity policy without drawing attention to it. In other words Congress recognized the biofuels boom as an opportunity for common ground policy-making, and, in the words of one agribusiness representative, "committees on the Hill [were]… trying to elbow each other out-of-the-way" to promote biofuels (author interview #37, agribusiness corporation, Washington DC, March 29, 2007).

This excitement over ethanol and the consensus discourses used to frame it shifted farm bill debates from contentious questions of trade and subsidies to a common-ground policymaking opportunity – a policy window for status quo-oriented groups and for legislators, and concurrently a closed policy window for farm bill reformers. This is not to say that reform-oriented groups stopped calling for change to corn, soybean, wheat, rice, and cotton supports. In fact, as of this writing, the Administration was threatening to veto Congress' farm bill for its inattention to trade-driven subsidy reforms (Willette 2008). However, changed political opportunities, including the stalling of Doha and the rise of biofuels as an alternative focus for policymaking, made these calls for reform much less resonant and therefore much more difficult to hear in policy circles in 2006-08.

While this kind of perceived consensus made farm bill policymaking easier in 2006-08, it also had negative implications for reform prospects in the bill. Whereas in 2005-06, tensions centered around whether or not to reform commodity crop subsidies, in 2006-08 these tensions were secondary relative to discussions of ethanol promotion. This in turn resulted in a backgrounding of critiques of the negative environmental and social impacts associated with commodity crop subsidies and discussed in Chapter 1. This is

important because even though ethanol production may come to provide certain environmental and social benefits, it may also meanwhile cause certain environmental and social harms, as discussed previously in this chapter. While the foregrounding of ethanol as a basis for consensus policymaking did open some opportunities for guiding ethanol toward environmentally and socially-friendly fuel production, it also took the focus away from any environmental and social benefits that might have been gained, for example through the addition or substitution of green payments for crop subsidies as discussed in Chapter 4. The lack of attention to differences among interest group positions on ethanol thus made it more difficult to guide policy toward mitigating ethanol's potential negative impacts while maximizing its potential benefits.

The power of consensus frames for ethanol

Discourses of national security, environmental protection, and rural development, combined with a particular constellation of political opportunities and group positions, were powerful enough to nudge farm bill debates toward a perceived consensus for the status quo, a situation very different from what had seemed to be brewing in 2005-06.

There are several factors which help explain this power of ethanol as a farm policy driver. First, the ethanol boom coincided quite precisely with the actual writing of the 2008 farm bill. Corn prices began to rise as the USDA was putting together a farm bill draft, and continued to rise throughout the entire House and Senate farm bill drafting processes. As corn prices rose, the acreage planted to corn increased. This implicitly reduced the acreage planted to other crops such as soybeans and cotton, in turn raising the price of those commodities as well. At the same time, rising demand for grains and oilseeds in developing countries, favorable exchange rates, droughts abroad, and an associated tightening in particular of world wheat supplies further raised the prices of these crops to record highs. And even as U.S. producers were benefiting from such higher prices, U.S. consumers on the whole were not seeing proportional increases in

food prices (Leibtag 2008).[62] Thus, corn, soybean, and wheat growers were benefiting from higher crop prices in 2007-08, while cotton and rice growers were benefiting both from these price effects and from the higher crop supports they tend to receive (National Cotton Council 2005).

High crop prices were thus first and foremost in legislators' minds as they went to work on the 2008 farm bill, and they were seen primarily as a positive indicator that agriculture was headed in the right direction. As mentioned previously, these high crop prices automatically brought the U.S. into compliance with WTO trade rules by reducing the amount of money going to subsidy payments, and they also lowered projected farm bill budgets. They thus reinforced incentives for policymakers to focus less on trade and more on how to support continued production of ethanol in ways that would continue to benefit farmers and rural economies (Babcock 2006, Quaid 2006).

A second factor that helps explain the power of ethanol as a farm bill driver is that energy security arguments tend to be particularly salient at times of political instability and economic crisis, for the same reasons that competitiveness arguments were salient during the WTO debates. Instability often promotes a turn inward, a focus on self-sufficiency and pulling back from negative interactions with other countries. Inward-looking policies can be touted as patriotic in times of trouble, as producing for your own country's needs without depending on other parts of the world (Frank 1999). Ethanol in particular has been seen as a way to promote such self-sufficiency because it can be produced and consumed domestically.[63] While 2005-06 represented a crisis moment that opened up the question of policy reform, the 2006-08 atmosphere favoring ethanol production opened up not an opportunity for reform of crop supports, but instead a different opportunity for increased ethanol production in the name of national security.

---

[62] There were, however, some increase in food prices domestically, increased costs for livestock producers and grain exporters, and some cases of larger increases in food prices abroad, for example in the price of tortillas in Mexico (Hagenbaugh 2007, Leibtag 2008).

[63] While the idea of self-sufficiency is understandable as protective strategy, it is actually unlikely that ethanol markets would be exclusively domestic. The marketplace is a global one, and U.S. companies are more likely to purchase cheaper ethanol from Brazil (depending on tariff negotiations) than more expensive ethanol from Iowa (Tokgoz and Elobeid 2006). Energy security discourse thus assumes a national level of economic activity, while purchasing decisions are made at the firm level, where low prices are worth more than nationalist sourcing preferences.

The use of similar national security, energy independence, and rural development discourses has long been found in farm and energy policy debates. In 1950 and 1952 the farm lobby was able to push restrictions through Congress with the rationale of "defend[ing] the country against any import which endangered **national security**" (Friedmann 1993, p.36). The early Farm Chemurgists argued that power alcohol espoused values of "**self-reliance**… and the importance of **revitalized rural life**… deep in the **American grain**" (D.E. Wright 1993 p.66).

In the 1970s, Nixon's "**Project Independence**" promoted energy conservation and self-sufficiency in the heat of the energy crisis (Tugwell 1988, W. Wright and Reid unpublished manuscript). Similarly, President Ford argued in 1975 for "harness[ing] market forces to achieve **energy independence**" through the creation of an "**Energy Independence Authority**," and President Carter was quoted as saying that "the country's security was '**dangerously dependent** on a thin line of oil tankers stretching **halfway around the earth**'" (Tugwell 1998, p. 107-8, 121). Thus, when President Bush said in his 2006 State of the Union address that the U.S. needed to "**break… [the] addiction**" to foreign petroleum for the sake of national security, he was building on a long tradition of presidential discourse (Isser 1996, Bush 2006). These ethanol frames were compelling in the 1970s (until gas prices fell), and seem to be similarly compelling in the 2000s.

Third, as mentioned previously, ethanol policies and discourses seemed to offer something for a surprisingly wide range of interest groups.[64] Almost all interest groups participating in the ethanol debates, for example, employed the national security, environmental conservation, and rural development frames to describe the benefits of ethanol. And although sustainable agriculture and environmental groups, for example, had a different conception of what a sustainable energy system would look like than did commodity and farm groups, the language they used to promote such a system was similar. As Lukes (1974/2005) and other scholars have noted, this kind of perceived consensus and consensus framing tends to stymie change by creating the impression for

[64] While the rise of ethanol and associated corn prices has been detrimental to some parties – grain exporters and importers, some consumers, and some livestock producers, for example – even these groups have for the most part not opposed biofuels development outright. Some have opposed the subsidizing of ethanol, but flat opposition has been rare.

policymakers that at least in principle all groups are on the same page (Hajer and Fischer 1999, Timura 2001).[65]

The fact that the details of each groups' proposals were different could easily be lost in sweeping rhetoric about energy independence and environmentally-friendly energy conversion in rural America. This, added to the budget savings that ethanol's high corn prices delivered, made it difficult to argue that there might also be problems with ethanol – that the boom might not last forever, that it might not be the complete answer to energy security qualms, and that it could even damage the environment and rural communities if not approached carefully (Kleinschmit 2007, McKinney 2007, Webb 2007). In the words of one journalist, "It is… a tough time, politically, to make a case against ethanol. With continuing turmoil in the Middle East, sky-high gas prices and presidential candidates stumping in Iowa, the heart of the Corn Belt, a new renewable fuel standard has plenty of supporters on Capitol Hill" (Martin 2007).

Of course this did not mean that those promoting sustainable biofuels development, for instance, did not have any influence on the farm bill energy provisions developed – in fact they did, and farm bill ethanol policy certainly looks more environmentally-sound for their efforts. But what it did mean is that the biofuels train picked up speed so quickly that the work of sustainable agriculture groups was more to guide a moving target than to help create an "optimal" sustainable ethanol economy from scratch.

Finally, ethanol became a salient farm bill driver because the policies required to support the industry, especially a corn ethanol industry, were similar to those already in place. They favored the continuation of the corn/soybean model of agriculture as is, maintaining current farm policy rather than replacing existing provisions. While trade pressures would have required agriculture to change, supports for corn, soybeans, wheat, rice, and cotton to be altered, and Congress to take sides between policy reformers and

[65] Both industry groups and environmental groups, for instance, talk about the environmental benefits of ethanol production, even though they differ on how best to achieve these environmental benefits. In this case, ethanol serves as a path for bringing environmental groups into discussions around corn production and industry groups into discussions about conservation. Thanks to Dennis Becker for this observation. Again, while this common ground is valuable, it also risks blending these groups' positions in ways that celebrate the environmental benefits of systems that are not necessarily environmentally-sound.

status quo groups, ethanol allowed Congress to accommodate, at least on some level, most parties involved. Promoting ethanol allowed interest groups to call themselves both environmentally-friendly and patriotic without requiring major changes to energy consumption, commodity support policy, or agricultural diversification. Not only, then, was ethanol a particularly compelling driver of farm bill debates because it evolved alongside the writing of the farm bill, turned policymaking inwards at a time of political and economic instability, and helped bring together what at least looked like a consensus among diverse interest groups, but also because that consensus could be leveraged for a "win-win" policy opportunity without opposing historically-entrenched farm group interests.

Another testament to the power of ethanol: the energy bill

Ethanol promotion, then, helped close a window for possible commodity policy reform in the 2008 farm bill, producing a very different farm bill than the one that seemed possible in 2005-06. But in fact the best evidence of the power of the ethanol consensus comes from looking at the 2007 energy bill. Even early in the farm bill energy debates, there was a question of how far the farm bill itself could go in promoting renewable energy. While it was already clear that the ethanol boom was heavily coloring the 2008 farm bill debates, most biofuels policies had traditionally been routed through the Congressional energy committees, not the agriculture committees. Most analysts argued that too much focus on actual energy policy provisions in the farm bill would set off jurisdictional debates over whether ethanol could even rightfully be addressed in the farm bill or should be relegated to the energy bill (The Hill 2007, Hagstrom 2006, United States Department of Agriculture 2006b).

In the end, the really significant changes to biofuels policy came with the 2007 energy bill (Mufson 2007). As ethanol closed off debates around farm bill commodity policy reform, it opened the door for new energy mandates in the energy bill. The *Energy Independence and Security Act of 2007*, as it was called, passed in December 2007 to make the "nation… **stronger, cleaner and more secure**" (White House 2007). It raised the renewable fuels standard from 7.5 billion gallons by 2012 to 36 billion

gallons by 2022. This almost five-fold increase meant that by 2022, the ethanol industry would be required to produce 36 billion gallons of ethanol a year. By 2012, 13% of that would have to be cellulosic ethanol, and by 2022 the level would rise to almost 60% cellulosic (Baker 2007, Gardner 2007, GovTrack 2007).

In addition, the energy bill increased Corporate Average Fuel Economy, or CAFE, standards. New CAFE standards required auto makers to average a fuel efficiency rating of 35 miles per gallon by 2020, compared to 27.5 mpg now, a number set during the energy crises of the 1970s (White House 2007). What is most remarkable about this provision is that through the 1990s and early 2000s, proposals to raise CAFE standards had been repeatedly opposed as attempts to over-regulate the auto industry (Bamberger 2003). Yet in this case, in this 2005-07 climate supportive of ethanol and accompanied by rising gas prices and political instability, Congress voted overwhelmingly for the energy bill and President Bush signed it quickly and easily.

While it certainly had its critics, what was most striking about the energy bill was the broad support it enjoyed. As analyst Bracken Hendricks at the Center for American Progress put it, "There's a fundamentally different dynamic in Congress now. The fact that an increase in fuel economy standards was able to pass by a 3-to-1 margin would have been unimaginable a year ago" (M. Clayton 2007). In fact, the notion that such major changes were made to energy policy as a whole – raising CAFE standards that had been stagnant since 1975 and establishing a Renewable Fuel Standard for cellulosic ethanol unachievable with current technology – was a testament both to the salience of energy issues among legislators and the public, and also of course to the rising price of gasoline and associated political instability that brought these issues to the fore.

The farm bill, while less substantively changed by ethanol provisions, nevertheless reflected the salience of ethanol in the current political and historical context. The Senate version of the farm bill was called *The Food and Energy Security Act of 2007*, and the House version *The Farm, Nutrition, and Bioenergy Act of 2007* (House Agriculture Committee 2007b, Senate Agriculture Committee 2007). The titles of these bills reflect energy as a very clear priority of farm legislation, whatever specific biofuels provisions were (or were not) included in the texts. Substantively, the House

and Senate bills invested $1-2 billion into biofuels tax credits, programs for energy crops and cellulosic processing plants, and incentives for feedstock development and refining (Abbott 2007, Associated Press 2007b), and rhetorically, they "renew[ed] our nation's commitment to… a clean energy future" (Obama 2007). Thus, the power of the discourses used to promote biofuels, layered across situational drivers such as the rising price of gasoline and the stalling of the Doha Round of trade talks, can be seen both in the extent to which ethanol changed the tenor of the 2008 farm bill debates and also the extent to which it underwrote significant investment and innovation in the 2007 energy bill.

Implications of the ethanol consensus for sustainable land use

The ethanol boom thus had implications for both the farm bill and the energy bill. And in turn, the farm bill and the energy bill have implications for future patterns of land use. As discussed in Chapter 1, subsidies for producing corn, soybeans, wheat, cotton, and rice tend to subsidize wealthy farmers over poor farmers, and reinforce incentives for planting fewer crops with higher rates of fertilizer, pesticides, and agricultural pollution.

Policy proposals to improve this environmental and social record of farm policy take many different forms. One example is the green payments program proposed by sustainable agriculture groups to pay producers for environmental stewardship on working agricultural lands, rather than payments just for production. However, the policy window for such farm bill reform that closed with the suspension of WTO talks, the ethanol boom, and the associated price and budgetary drivers of 2006-08 reduced the likelihood that such a green payments program would be incorporated into the 2008 farm bill. So, what do the current policies of the soon-to-be-passed 2008 farm bill and 2007 energy bill imply instead about sustainable land use?

In 2007-08, U.S. corn acreage increased almost 20% from the previous year, from the 78 million acres typically planted annually since the mid-1990s to about 93 million acres. Soybean acreage dropped concurrently from a little over 75 million acres to just over 63 million acres (University of Illinois 2008). This change implied, in many cases, a switch from a corn-soybean rotation to continuous corn cultivation. The corn-soybean

rotation, although it does not represent a particularly diversified cropping system, at least breaks up some pest cycles and replenishes some soil nutrients as it alternates corn, a grass, with soybeans, a nitrogen-fixing legume, on one piece of land. The switch to continuous corn pushed by the ethanol boom moved this bi-culture cropping system toward a monoculture system, in turn implying increased fertilizer use to replenish nutrients, pesticide use to stave off crop loss or damage, and associated pollution impacts (Killpack and Buchholz 2006, Pennsylvania State University 2007). In cases where new land was brought into production for ethanol production, rather than simply converting land from soybeans or other crops to corn, a loss of carbon (a contributor to climate change) was added to the other negative environmental impacts of continuous corn production (Searchinger 2008).

These changes seen to recent cropping patterns are a logical producer response to increased crop prices and to the ethanol incentives embedded in the energy bill and farm bill. With government mandates to produce increasing amounts of renewable fuels, which for the moment come mostly from corn grain ethanol, the incentive to increase corn production, with associated environmental impacts, has grown. In addition, these policies have encouraged the construction of new ethanol plants, with associated high levels of water and energy use (Coltrain 2001, M. Morris and Hill 2006). Thus, land use under the new farm and energy bills is moving more toward continuous corn and increased use of natural resources, and less toward a notion of more sustainable diversified crop production.

However, energy and farm bill policies have also had a role in improving certain aspects of land use sustainability. First, the promise of cellulosic ethanol embedded in both farm bill and energy bill policies has increased the likelihood that future ethanol production will be more sustainable – using perennial grasses and agricultural or forestry byproducts for ethanol that require less fertilizer, pesticide, water use, and land clearing, and that sequester carbon alongside their significant energy gains (Wang 2005). Second, even the increases in corn ethanol production associated with environmental damage have had positive effects on the sustainability of certain rural communities. Communities with an ethanol plant, especially a farmer-owned ethanol plant, have seen increases in

local job potential and business revitalization with increased demand for ethanol (Barrionuevo 2006b).

Thus, the implications of ethanol-influenced farm bill and energy bill policies are likely to have negative impacts on agricultural sustainability in the short term, but also hold promise for more sustainable land use in the longer term, provided that cellulosic ethanol begins to make up a larger part of the ethanol produced from agricultural feedstocks.

Conclusions

While WTO drivers had been pushing for a farm bill with reduced commodity crop supports, excitement over biofuels production has since shifted the debates to favor a 2008 farm bill that looks more like the 2002 farm bill with respect to corn, soybean, wheat, rice, and cotton subsidies. High commodity prices associated with ethanol production automatically reduced the costs of current commodity supports, alleviating budgetary pressures. Meanwhile, ethanol production came to symbolize the promise of American energy security and renewable conservation and development.

This chapter argued that while biofuels were not new to American policy debates, they rose to the top of the current political agenda due to a combination of rising gas prices, instability in the Middle East, concern about climate change, and advocacy by groups working to promote the development of an ethanol industry. By associating biofuels development with concepts of national security, energy independence, environmental conservation, and rural revitalization, ethanol came to be seen as a common good solution to many of the nation's woes. These frames were used by multiple diverse interest groups in the 2008 farm bill debates, leaving policymakers and the public with the impression of a consensus of support for biofuels, despite some important distinctions among their positions.

Because biofuels became associated with national pride, it in turn became difficult for groups to be heard when raising concerns about the sustainability of the ethanol industry. Biofuels frames successfully relegated WTO to the background of farm bill debates in 2006-08. Even though the Doha round negotiations were continuing, the

extent to which their implications were considered in 2006-08 farm bill debates dropped significantly. At the same time, these considerations were replaced by an excitement over biofuels and a context within which significant increases to renewable fuels mandates and fuel economy standards were passed through the energy bill.[66]

Interestingly, much of the context surrounding ethanol debates in the mid-2000s was reminiscent of energy debates of the late 1970s and early 1980s. During and following the energy crises of the 1970s, for example, feed manufacturers were worried about competition with ethanol plants for corn. Conservation groups worried that increased ethanol production would spread to marginal lands, increase erosion, pollution, fertilizer and pesticide-use, and raise food costs and land values, making it harder for beginning farmers to get into agriculture. Many felt that more research was needed on biomass conversion processes, transportation, use, and control and ownership of ethanol plants. Even in 1982, there was debate as to whether the U.S. could produce enough ethanol to reduce fossil fuel dependence, and as to whether ethanol would revitalize rural America or whether benefits would accrue only to larger farms and companies (Buttel and Youngberg 1982).

Very similar statements have been made during the 2008 farm bill debates, and they draw attention to the fact again that these issues are not new. Rather, they re-emerged because the political and historical context once again favored attention to energy. This context combined with specific group and framing strategies to create an atmosphere which stymied farm bill reform while it advanced new energy bill policies. Further, these policy changes have had important implications for sustainable agricultural land use, largely negative implications in the short term, but potentially positive ones in the long term.

This chapter has contributed to a larger project of analyzing the material and discursive contexts that made farm policy reform sometimes more and sometimes less appealing during the farm bill debates of 2005-08, focusing specifically on global trade

[66] Note that because most of the substantive biofuels policies were included in the energy bill, the farm bill had little reason to include substantial policy provisions for ethanol. Nevertheless, discussions over ethanol permeated the farm bill debates and helped move its focus away from commodity reform debates.

and ethanol influences. In 2005 and 2006, pressure from the WTO made changes to U.S. farm subsidies seem imminent for reasons outside of U.S. control, opening the door for reform-oriented groups to promote "outside the box" alternatives for commodity policy reforms. The subsequent decline of WTO pressures, combined with budget shortfalls and the growth of the biofuels industry in 2006-08, pushed these ideas to the background and returned the farm bill to a status quo orientation, dampening prospects for such trade-induced policy reform. In the words of one journalist:

> As the Agriculture Committee prepares to put the final touches on the farm bill on Wednesday, Mr. Harkin has come up mostly empty-handed [on reform]. A near-final draft bill… leaves the subsidy programs largely unchanged… Mr. Harkin said he had hoped for more but was pleased with the bill… "In agriculture you don't make sharp turns, but I do try to bend the rails a bit" (Senator Tom Harkin, quoted in Herszenhorn 2007)

CHAPTER 6

Farm bill futures and agricultural sustainability

Introduction

The tenor of the 2008 farm bill debates changed between 2005-06 and 2006-08, with important implications for farm policy. While 2005-06 was a time for debating commodity policy reform, 2006-08 conversations focused more on promoting the development of a biofuels industry within an otherwise status quo farm bill. This is not to say that questions of commodity reform disappeared, or that biofuels became an exclusive focus of debates – simply that the emphases and implicit goals of these discussions changed.

This dissertation asked how and why these farm policy debates changed between 2005 and 2008, and what these changes meant for the land use incentives embedded in the farm bill. It took the baseline position that current corn, wheat, soybean, cotton, and rice subsidies, for all their benefits, exacerbate the negative environmental impacts of modern agriculture and concentrate wealth among larger farmers.[67] It asserted that reforming these subsidies could help better protect farmers, consumers, rural communities, and the environment, and went on to ask how such policy change might be brought about. The dissertation focused on the rise of reform ideas to the political agenda in 2005-06, and their subsequent decline in 2006-08. Using participant observation, document analysis, in-depth informational interviews, and secondary analyses of farm bill history, it examined the shifting constellation of situational drivers and interest group frames and positions that opened and closed this window for policy reform. Specifically, it identified trade pressures as a major policy window opener in 2005-06, and ethanol as a dominant closing force in 2006-08.

This dissertation described how, in 2005-06 when commodity reform seemed likely, WTO pressure to reduce crop subsidies propelled reform-oriented groups to push for alternatives to commodity subsidies, while groups happy with major components of the 2002 farm bill adopted a defensive posture to forestall such change. The mere fact of

[67] One could also argue that they promote inefficient use or wastage of resources that could otherwise be used to address other policy needs. Thanks to G. Edward Schuh for this point.

such widespread tension and conflict over how far WTO should be allowed to push subsidy reform, and the urgency with which these debates were framed, indicated that such reform was indeed a possibility.

In 2006-08, however, a decline in trade concerns, a rise in ethanol demand, and associated price and budget effects combined with a discourse of national security to cast a stability-oriented farm bill in a more generally positive light. This is not to say that reform-oriented groups stopped calling for the farm policy changes they had promoted under WTO pressure, but simply that these calls could no longer be heard amidst much "louder" calls for ethanol development. It became easier for policymakers to shift their attention to corn grain ethanol and soybean biodiesel as points of consensus, rather than try to mediate conflicts over trade and commodity reform. This by default left existing commodity policies in place – policies that support corn and soybean production for food, feed, and now for fuel. The largely status quo-oriented farm policy that resulted in 2008 is set in contrast to a more contentious atmosphere in 2005-06, where tensions over whether or not to reform farm policy were rife.

The analysis conducted in this dissertation drew on policy window theory, deliberative policy analysis, and social movement theory to argue for bringing situational, political, interest group, and discursive factors together in analyzing farm policy dynamics and implications. In doing so, it also yielded several lessons about farm policy for observers, analysts, and participants in farm bill debates alike.

First, the findings of this dissertation emphasized that rapid policy change is unusual. Historically, moments of rapid farm bill change have occurred only occasionally. While the 2008 farm bill looked in 2005-06 like it might be one of these occasions, its conversion to a stability-oriented bill in 2006-08 was in fact more typical of farm bills over time.

Second, this dissertation highlighted situational context as an extremely important determinant of farm policy change. Suspension of international trade talks, when combined with increased demand for ethanol and associated budget impacts, completely altered the context within which the 2008 farm bill was being debated. This changed the conversations that could be had about the farm bill, and in turn created a situation in

which stability-oriented farm policy became more acceptable to more groups, even if just as a necessary compromise strategy. In 2005-06, groups opposed to a reform-oriented farm bill felt they had little to gain from such reform, and therefore stayed firm in their opposition of it. This created an atmosphere of fierce contention among groups. But in 2006-08, groups opposed to a primarily corn-based ethanol economy still saw a possibility for guiding the industry towards cellulosic options, if they could get involved in the crafting of farm and energy policies. The environmental and social benefits to be gained from this focus on ethanol may or may not have been as significant or as certain as those that could have been gained from commodity reform, for example, through the establishment of a green payments program. However, involvement in ethanol policy nevertheless did represent a politically feasible way to promote more sustainable land use within the context of the time.

Third, this dissertation underscored the ways in which discourse and framing played into changing situational contexts, interest group positions, and policymakers' responses. In WTO-influenced moments, the prevalence of a discourse of competition highlighted the tensions and urgency with which groups challenged or defended status-quo farm policy. It was indicative of the real threat or opportunity that trade pressures posed for rapid farm bill change. In ethanol-influenced moments, the prevalence of a discourse of national security instead reinforced a perception that all groups were in agreement in their support of ethanol development, despite significant differences in their positions. These differences especially revolved around what kinds of ethanol production should be promoted and what environmental, social, and economic criteria should guide it. The fact that these discourses had an impact, alongside other situational, political, economic, and interest group drivers, on the policies that were developed in 2007 and 2008, lends support to the combined model of social movement, traditional and deliberative policy analysis theories that provided the framework for this dissertation.

When trade issues dominated farm bill discussions, debates between groups supportive of and opposed to commodity policy reform were contentious. When ethanol dominated farm bill debates, excitement over ethanol overshadowed these policy reform debates. Note that the focus on ethanol did not resolve conflicts – it simply allowed

policymakers to sidestep these conflicts and choose to legislate on popular rather than contentious issues. The presumed consensus constructed around ethanol in turn obscured differences in interest group positions around how to promote ethanol production in a sustainable manner, and contributed to a wave of biofuels enthusiasm that charged ahead with energy policy and overpowered any push to reevaluate commodity policy as well. This made the idea of commodity policy reform, which had been prominent in 2005-06, unlikely by 2008. It meant that for the next several years, the farm bill would continue to protect commodity crop agriculture in ways that were supportive of some farmers and consumers, but also environmentally damaging and inequitable for others. It meant that groups interested in reforming farm policy would have to wait until 2012 to create or make use of another potential opportunity for farm bill change.

This final chapter of the dissertation addresses this study's contributions to understanding farm policy and policy change theories, and also discusses the future of farm policy with respect to commodity reform, ethanol, and sustainable land use. In highlighting the study's contributions, this chapter focuses both on an understanding of the role of discourse and framing in policy analysis and on the construction of an interdisciplinary theoretical framework for analyzing farm policy. In discussing the future of farm policy, it examines the roles of trade and ethanol in future farm bills, and the work that sustainable agriculture and reform-oriented policy groups can undertake to advocate for more environmentally- and socially-sustainable farm policies in the future.

What we have learned

In addition to understanding how and why farm bill debates changed between 2005-06 and 2006-08, and what the implications of these changes were for farm policy reform prospects, this dissertation incorporated analyses of framing and discourse into a framework for understanding policy change processes. The dissertation began with the premise that the way that language is used in policy circles and in the public sphere matters for policy outcomes. In the case of the 2008 farm bill, a discourse of competitiveness permeated discussions over a trade-influenced farm bill in 2005-06, lending a sense of urgency to interest group positions and reflecting a high level of

tension among and investment by groups in addressing WTO's implications for farm policy. In 2006-08, a discourse of national security gained traction as ethanol promised greater energy independence, creating a base of perceived consensus that facilitated policymaking. High gas prices, concerns about political instability and the future security of petroleum supplies, and worries about fossil fuel's contributions to climate change and pollution all seemed to point to a clear advantage of ethanol over gasoline. And meanwhile, rising corn and other crop prices seemed to provide a boon to farmers that kept farm interests satisfied, promised rural development, created budget savings, and kept U.S. subsidies within WTO guidelines. While these presumed benefits were questioned by some groups, the discourses of national security, environmental conservation, and rural development helped carry the perception of support for ethanol across groups, glossing over areas of contention by making support for ethanol seem like an all-American responsibility.

Discourses take pieces of claims and elevate them to the status of "truth." Acting within a particular context, they serve both to mobilize support and to stabilize one way of understanding a situation as the "common sense" understanding. The discourse surrounding ethanol, for example, constructed ethanol as a way to ensure U.S. security and independence at a time when both were perceived to be lacking. This, in turn, pushed legislators to support ethanol, whatever the balance of benefits and downsides were. Anyone who brought up the negative environmental impacts of increasing corn ethanol production came to be seen not as a cautioning or guiding voice but as one speaking out against American security and independence.[68] And even though few groups opposed ethanol outright, many did differ significantly on how best to approach it. But within a situational context so overwhelmingly supportive of ethanol, these differences and debates faded in comparison to the perception that a broad consensus supporting ethanol existed.

This sense of consensus does not imply that groups downplayed hesitations about corn grain ethanol, or that they were unaware of its environmental consequences. Interest

[68] This seems to be changing as more voices urge caution with respect to ethanol development (Searchinger *et al.* 2008)

groups from sustainable agriculture to commodity groups to policymakers acknowledged that corn ethanol was not a permanent solution – that sustainable fuel production required the growth of a cellulosic ethanol industry as well. However, even as this acknowledgement made space for a more sustainable ethanol sector in the future, it sidelined the question of the current ethanol industry's sustainability. Corn ethanol's environmental and social record did not necessarily have to be scrutinized or managed, under this logic, because it was simply a bridge to something better.

In other words, the overwhelming excitement around biofuels development meant that policy goals were established to increase ethanol production, without necessarily being accompanied by provisions to mitigate current as well as future unintended consequences. Farm policy continues now to support plantings of continuous corn for fuel in addition to food and feed, exacerbating the negative environmental and social impacts of large-scale modern agriculture even as it protects producers of the five commodity crops and provides low-cost food to consumers. Renewable fuel mandates in the energy bill reinforce and increase governmental support for such continuous corn production, at the same time that they support the development of new sustainable cellulosic fuel sources for the future. In other words, while these mandates will eventually be met with cellulosic ethanol, for right now they will be met with corn, as indicated by the significant increases in corn acreage seen in the 2007-08 planting season (University of Illinois 2008). Thus even as these policies set the stage for a more sustainable ethanol industry in the future, they also reward and encourage an agricultural system that for now suffers from environmental degradation and the privileging of large wealthy farms over a broader range of stakeholders.

This dissertation explored the ways in which national security discourse helped create a consensus for stability-oriented farm policy in 2006-08. This kind of attention to the role of discourse in policymaking is explicitly incorporated both into deliberative or post-positivist policy theories, which acknowledge the ways in which language shapes policy realities, and into social movement theories. In traditional policy theories, however, it is acknowledged but not emphasized. Thus, the bringing of post-positivist and social movement conceptions of discourse and framing into traditional models of

policy theory serves to add depth and nuance to concepts like John Kingdon's (2003) policy window by incorporating into the analysis the ways in which language, alongside other situational factors and actors, helps shape policy. Similarly, social movement understandings of political opportunities add to the policy windows approach, highlighting the ways in which these opportunities shift dynamically over time, creating opportunities for some groups, obstacles for others, and implications for future policymaking. Of particular note is the way that social movement theory conceptualizes discourse as an element that both reflects and creates political opportunities. This role of discourse, here especially national security discourse, was clearly visible as a driver of political opportunity or lack thereof in the 2008 farm bill debates, as it interacted with shifting policy opportunities including rising gas and corn prices. The incorporation of such discourse analyses into the study of farm policy provides an added, crucial layer of understanding to analyses of farm bill change and farm bill stability processes.

This bringing together of multiple elements of theory to construct a complex picture of how policy change happens also requires attention to the internal dynamics inside Congress. While such attention to the "insider baseball" aspects of policy development was implicit in the farm bill analyses in this dissertation, it is worth making them explicit here as well. In addition to responding to interest groups, frames, and political opportunities, policy outcomes depend too on how legislators approach ideas of policy reform or stability. Factors influencing a given legislator's perspective include his/her personal beliefs, the interests of his/her constituents, prospects for re-election, direction from party leadership, vote trading, and relationships with other interest groups, among other factors. (Browne 1995).

For example, the traditional alliance between urban legislators who come to support farm bill commodity subsidies despite their lack of farmer constituents, and rural legislators who come to support food stamps and conservation provisions, similarly in the name of political cooperation, highlights the role of internal Congressional dynamics in keeping the farm bill in place as a piece of stability-oriented legislation. In another example, the shift from two Southern chairmen of the agriculture committees in 2005-06, with rice and cotton growers as their constituents, to two Midwestern chairmen, with corn

and soybean growers as their constituents, highlights regional differences that can affect farm policy outcomes. Certainly the 2006 agriculture committees did not just focus on southern commodities, and the 2007 agriculture committees did not switch to focus primarily on Corn Belt commodities. However, their different geographical perspectives necessarily influenced their farm bill priorities and positions on issues such as payment limitations, which Midwestern growers generally support and Southern growers generally oppose, and which became in 2008 a primary obstacle to the passage of a new farm bill. These kinds of factors thus very much play into the kinds of policymaking opportunities that arise during a farm bill cycle, and the ways in which they evolve.

In sum, this dissertation used theory to provide an understanding of complex farm policy debates, and also used the 2008 farm bill case to build on theory, reinforcing the idea that change (or lack of change) comes from dialectical interactions among situational context, interest groups, legislator priorities, and discourses – that policy change is not linear, but rather a product of political, contextual, group, and discursive forces opposing and reinforcing one another in an iterative fashion over time. This dissertation assembled a theoretical model that added depth and nuance to traditional policy theory, brought deliberative policy analysis to farm bill debates, and drew from social movement theory to better understand complex processes of change.

Looking to the future

Future farm bill prospects

This dissertation paints a picture of a 2008 farm bill that in the end looked very much like the 2002 farm bill. It describes a situation where commodity policy reform was a real possibility that faded from the agenda with a change in situational context. Such reform, however, could have opened doors for increased environmental protection and rural community development within farm policy. This absence of such rapid reform in the 2008 farm bill raises the question of what other possibilities for future policy change exist, particularly for promoting sustainable land use. Five specific possibilities are discussed here. The first is that trade concerns might resurface as a driver for commodity subsidy policy reform. The second is that new factors might arise and collide

to once again favor change. The third is that ethanol issues might converge with trade issues to again open up new possibilities for change. The fourth is that ethanol, specifically cellulosic ethanol development, might become a new engine of sustainable land use. And the fifth is that possibilities might arise in the future for more incremental rather than rapid policy reform. Such possibilities for incremental change have been sidelined at times by this dissertation's focus on rapid policy change, but nevertheless can be crucial to regular processes of change. For this reason, they are discussed more fully later in this chapter.

This first possibility for future farm policy reform lies in trade and WTO concerns, the 2005-06 drivers of reform debates. In the short term a Presidential veto of the 2008 farm bill, and in the longer term the resolution of Brazilian cotton and other WTO disputes, could require changes that would make U.S. commodity policy more trade compliant. In addition, continuing Doha Round negotiations could still produce a new trade agreement – as of February 2008, some new progress had already been made in agricultural negotiations (Glauber 2008, World Trade Organization 2008). If such a Doha Round settlement was ultimately reached, Congress would likely be required to make corresponding changes to the farm bill.[69]

Interestingly, with the high crop prices of 2007-08, U.S. subsidy payments now fall within the allowable limits of a proposed Doha Round cap on trade-distorting subsidies (Glauber 2008). However, if crop prices were to fall again, say with decreasing gas prices and a decreased demand for corn ethanol, the U.S. would face more immediate pressure to reform its agricultural subsidies. Thus, while trade issues have faded somewhat from the 2008 farm bill debates, they promise to be relevant to farm policy in the future. Under a changed situational and interest group context, trade drivers for reform could easily resurface as a force for farm bill change, just as they have in the past.

[69] Note, however, that even the trade concessions offered in 2005 by the U.S. Trade Representative of a 60% reduction in subsidies would not have revolutionized U.S. agricultural policy. Caps on trade-distorting subsidies were originally established in the WTO at levels well above what countries were employing. Thus, significant reductions could be made over time without major shocks to domestic agricultural sectors. In other words, reforms often look more substantial on paper than they are in practice (Burfisher 2001).

A second possibility for future farm bill reform is the rise of other change-related drivers. These forces could include political changes, price shocks like those associated with the Soviet grain embargos of the 1970s, the rise of new and particularly resonant discourses and frames, or the entrance of a new group of stakeholders to farm policy whose interests complement other groups, as happened with environmental groups and the Conservation Reserve Program in 1985. Policy window and social movement theories both stress the ways in which constellations of political opportunities, interest group positions, and discourses interact in changing ways to create a window for policy change. As each of these factors shifts over time, it is likely to come together with other factors, propelled even by unanticipated future drivers, to create new opportunities for change (and/or stability).

Energy interests may become, for example, one new major stakeholder group playing a role in farm policy, continuing to shape land use and farm policy just as nutrition and environmental interests have shaped them in the past. Energy has been seen, in the words of John Keeling, Executive Vice President and CEO of the National Potato Council, potentially as "the new food stamps," the issue that gets urban legislators to vote for the farm bill, and that in turn shapes what a compromise farm bill package looks like (author interview, Washington DC, April 4, 2007).[70] The idea that the inclusion of biofuels policies in the 2008 farm bill could bring new ethanol and renewable energy interest groups further into future farm bill debates, and in turn guide farm policy increasingly toward promotion of alternative fuels, is based on the idea of path dependence discussed in Chapter 3 – the idea that current happenings by definition come to shape future possibilities (Mahoney 2000, Pierson 2000). The incorporation of ethanol into the farm bill debates could thus become a change that guides future farm policy in significant ways.

Third, such growth in the biofuels sector could become a trigger for bringing trade back into farm bill debates. Although ethanol is currently produced and consumed

[70] Of course, if the biofuels economy stagnates, ethanol as a farm bill driver may fade as well, and biofuels interest groups may once again go back into abeyance to await future policy opportunities (D.E. Wright 1993).

mostly domestically, it could easily become a point of future trade conflict, especially if the U.S. starts increasing sugar cane ethanol imports from Brazil to meet the new energy bill's renewable fuel standards (Wheatley and Lapper 2007).[71] As argued by Mark Muller, Director of the Environment and Agriculture Program at the Institute for Agriculture and Trade Policy, and Christopher Holdgreve, Director of Legislative Affairs at the National Grain and Feed Association, ethanol could become subject to WTO subsidy caps, and could create a need for expanded negotiations, new trade rules, and further lawsuits to determine how to deal with it as a newly traded commodity (author interviews, Minneapolis MN, December 1, 2006, and Washington DC, March 29, 2007). If such trade implications were brought into the biofuels debates, they might splinter the consensus frame of biofuels that made it so compelling for policy-makers by returning to the more contentious issues of commodity (and now biofuel) subsidy reform. Debates over whether ethanol should be a protected commodity because of its security value could lead again to debates over commodity policy reform as a whole, with implications for future farm bill reform not unlike those that surfaced in 2005-06 (International Food and Agricultural Trade Policy Council 2007, Wheatley and Lapper 2007).

Fourth, this entrance of ethanol interests into farm bill debates could have particularly significant implications for the future of environmental conservation and rural agricultural sustainability. Note that while this dissertation has cast enthusiasm for corn grain ethanol in a somewhat negative light, identifying it as one factor enabling the sidestepping of commodity reform, this position is meant to caution against *over*-enthusiasm for ethanol rather than against ethanol per se. With its current focus on corn ethanol, the biofuels boom portends serious environmental and social consequences alongside its benefits. However, if approached with guidelines to protect and promote natural resources and communities, ethanol might in fact prove extremely beneficial for farm, consumer, conservation and rural development interests alike. A burgeoning cellulosic ethanol industry in particular could increase, for example, the number of

[71] Brazilian ethanol is currently subject to a fifty-four cent per gallon import tariff. While President Bush has developed an agreement with Brazilian President Lula to cooperate on ethanol research, they have not discussed liberalizing trade in ethanol (Wheatley and Lapper 2007).

perennial plantings on the landscape, and reduce pollution from fertilizers and pesticides, and erosion from intensive tillage. As mentioned previously, the fact that most interest groups and policymakers recognize that future domestic fuel production will depend on cellulosic rather than corn grain ethanol, and that the energy bill, the farm bill, and private companies have all invested significant resources in promoting the development and commercialization of cellulosic ethanol technologies, both indicate that cellulosic ethanol dynamics will in any case exert a strong influence on future agricultural policy debates (Hargreaves 2006, Energy Information Administration 2007).

A fifth possibility for future farm bill reform lies in the notion that most policy change occurs incrementally. While this dissertation focused on the potential for rapid change as suggested by Baumgartner and Jones' (1993) "punctuated equilibrium" model of policy change, changes to commodity policy might just as easily be achieved through gradual alterations to conservation, commodity, or energy policies over time. Such incremental change might be slower but also less contentious than the broad leaps in policy discussed here. In other words, biofuels and trade resurgences, with their potential to re-open future policy windows for farm bill change, are not the only option for making farm policy more environmentally- and socially-sustainable. More gradual or incremental change possibilities, accompanied by the rise of new and unanticipated situational, political, group, and cultural factors, could perhaps produce new ways to improve present-day agriculture's environmental and social, as well as economic, record.

Sustainable agriculture and future farm bills

This dissertation began not only as an effort to understand farm policy change, but also as an attempt to determine how effective sustainable agriculture groups had been or could be in improving the environmental and social record of farm policy. The starting presumption was that current commodity policies, while important, benefit mostly larger growers of five specific crops, and that alternative policies such as green payment programs could improve environmental protection and better benefit all farmers, including small diversified farmers.

Sustainable agriculture and environmental groups have certainly had some success in bringing environmental protection and sustainability into the farm bill over time – the 2002 farm bill promotes conservation in ways that would have been almost unimaginable in 1981. However, despite such impressive additions to conservation policy, the environmental damage linked to subsidies for corn, soybean, wheat, cotton, and rice crops remains (Clay 2004, Kirschenmann 2004). This raises the question of why more sweeping success has not been seen in sustainable agriculture, especially given the success that the environmental movement has had in other areas, for example, with its pollution control and wildland preservation initiatives in the 1970s.[72] The answers, of course, are multiple.

First, pollution and preservation policies of the 1970s did not attempt to replace or in any way alter existing policies, while conservation and rural development policies in the farm bill have had to be battled out and reconciled with previously existing commodity policies defended by staunch supporters. As seen in Chapter 4, proposed changes to existing policy provoke strong defensive reactions from many farm interest groups. This suggests that incremental additions to farm policy, such as those achieved in recent farm bill history and those suggested for guiding the ethanol industry towards greater sustainability, might be the most realistic option for sustainable agriculture groups. And yet it also suggests that such incremental changes may not be able to address the root causes of environmental and social degradation on farmland or to have the same sorts of sweeping effects that many environmental policies of the 1970s had.

Second, there have been fissures among environmental and sustainable agriculture interests themselves in agricultural policy debates. In 2002, for example, key members of the environmental community lobbied against the Conservation Security Program (CSP) and in favor of a bill introduced by Ron Kind (D-WI) that would shift money from the commodity title to the conservation title. This bill would have instead focused on the Environmental Quality Incentives Program (EQIP) whose funds, sustainable agriculture advocates argued, too often went to large animal feedlots. Environmental advocates, on

[72] See Szasz (1994) for an example of the ways in which the environmental movement worked to bring an awareness of toxic waste issues to the forefront of U.S. regulatory policy.

the other hand, felt they had had an unusual and precious opportunity to make large, non-incremental strides in a farm bill. Although the Kind bill did not pass, this episode created tensions among environmental and sustainable agriculture groups that are still in play today (Environmental Defense 2001, Land Stewardship Project 2001, Kind 2007).

Even among fairly philosophically-aligned groups, then, individual organizational goals can be different enough that coalitions end up focusing on moderate, easily attainable tweaks to the system rather than substantial changes (Sanchez 2002). These fissures mean that groups spend more time negotiating compromise among complex positions and less time making their voices heard in a unified way on Capitol Hill. As one sustainable agriculture representative put it:

> We had to come to a point where people had to agree, 'Okay, we are not going to agree on… all the major critical components. So we will have to go to much higher level of generality...' That's really unfortunate if you are trying to get actual legislation through. It would have been… better if we could have had a common cause all the way through. (author interview #9, phone interview, sustainable agriculture group, July 16, 2007)

While it would be easy to argue that such smaller groups should work together for increased political power, realistically their goals and strategies must also match their missions, member priorities, and perceived prospects for success. Thus, they can only extend so far in the hope of building alliances.

Given this complex convergence of factors needed for political success, groups must (and usually do) spend significant amounts of time analyzing policy context and other interest group positions as they develop, waiting for (and attempting to shape) a coming together of situational forces they can use to propel their policy platform forward. As described by Loni Kemp, Senior Policy Advisor at The Minnesota Project:

> The trick… is not to imply [that change will happen] overnight… By the next farm bill, if we lay… all the groundwork, you'll see the change. If we don't… we'll be… in the same place we are now… It's not like agriculture can't change. It's that you have to make the conditions right (author interview, Lanesboro MN, February 16, 2007).

Aside from future contextual shifts, sustainable agriculture and environmental groups may also benefit specifically from the recent rise of consumer, public health, and

specialty crop producer interests in the farm bill debates. Many of these groups' positions parallel to some extent those of sustainable agriculture and environmental groups (Pollan 2007). And although many farm policy reform goals have been recently overshadowed by the pursuit of renewable energy as a form of national security, the reform ideas aired during moments of WTO pressure have nevertheless entered the public debate, surfaced in the media, and are ideas that can be stoked and tended in anticipation of potential reform in the 2012 farm bill or through other legislative and regulatory venues (Environmental Working Group 2008).

The growing public awareness of agriculture's role in health and environmental pollution, for instance, and Congress' need to respond to an increasingly environmentally-aware urban constituency, might provide mechanisms for sustainable agriculture and environmental groups to expand their policy reform efforts in the future. Many groups are in fact optimistic that they will be able to take what they have learned and accomplished in previous farm bill campaigns to move towards a "greener" future for farm policy. In the words of one sustainable agriculture funder:

> The signs are more promising than I've ever seen them… I like to use the metaphor for the Berlin Wall. During the decade of the 1980s you could not find a single political analyst… predicting that the Berlin Wall was going to fall…. [But] over many years there were many people… metaphorically chipping away at that wall. We could look at our huge industrialized system in the same way… [I] keep encouraging… [advocates] to keep their hammers and chisels swinging, because none of us know which hammer blow is going to create the tipping point that makes this wall come down… Every time Michael Pollan publishes an article in the *New York Times*, another blow…. Every time somebody introduces one of these marker bills, [another blow]…. It is not that one shot stone that is going to take it down (author interview #2, sustainable agriculture funder, phone interview, May 21, 2007).

This idea, that advocates have been working bit by bit to bring about the formation of a more sustainable food system, and that a growing segment of the public is aware of and interested in this notion of healthy, local, pesticide-free, labor- and environmentally-friendly food production, suggests that slow change in the direction of sustainable agriculture and sustainable land use is happening. Twenty-five years ago the USDA's *Report and Recommendations on Organic Farming* was rejected by the Reagan

Administration and the word organic connoted unscientific nostalgia at best (Youngberg *et al*. 1993). Now organic food sales are growing rapidly, the USDA funds (small) sustainable agriculture projects, debates over whether local foods or organic foods are better for the environment have reached mainstream venues like *Time Magazine*, and the Environmental Working Group's farm subsidy database and associated press have brought the inequities of farm subsidies into the public eye (Sustainable Agriculture Research and Education no date, Hansen 2004, Environmental Working Group 2006, Cloud 2007). This consumer attention to the food system is particularly striking in part because the direct payment mechanism established in the 1970s to support agricultural producers also served to pass low food prices along to consumers, shielding them from some of the market fluctuations that might have raised prices and guided their attentions toward the food system for economic reasons.[73]

Thus, there certainly has been a degree of cultural change that has occurred with regard to public perceptions of agriculture. The importance of this kind of cultural change has been highlighted by Rochon (1998), who argued that changes in culture can be seen in themselves as a marker of social movement success. He argued that a social movement's role, in many cases, is simply to bring new ideas to a wider audience, rather than always to win concrete policy gains. By changing the way that the public sees and talks about an issue, social movements change mainstream culture and discourse, in turn paving the way for future policy changes.[74] If this broad cultural awareness continues to build around sustainable agriculture and commodity reform, it is possible that advocates will have backing from the public to pursue greater farm bill change in 2012.

That said, farm policy debates, even if approached with greater public support for sustainable agriculture, are still dominated by historically powerful farm and commodity groups who benefit from agricultural supports and who defend them. Historically, these groups have been able to uphold subsidy provisions repeatedly, even when circumstances seemed to favor their decline. They generally have strong relationships with legislators and with one another, strong financial backing, and much to gain from the current

[73] Thanks to G. Edward Schuh for this observation.
[74] This idea complements that of path dependence, here on a cultural level.

commodity system. But if pushed, especially by revived external factors such as trade concerns, cellulosic ethanol development, or public concern over the sustainability of the food system, there might be some potential for change.

Given these possibilities and also the real constraints on promoting sustainable land use through policy channels, sustainable agriculture and environmental groups might consider the following lesson from history in approaching their change agenda. Historically, environmental and sustainable agriculture groups have had political influence when they added conservation programs to the farm bill that complemented already-existing provisions. The Conservation Reserve Program (CRP) was a huge gain for conservation groups, not because their interests superseded those of commodity groups, but because their interest in idling marginal land dovetailed with commodity groups' interest in reducing oversupply of grains.

Similarly, environmental and sustainable agriculture groups could look to energy policy today as a way to point future farm bills toward conservation. Even if corn ethanol is not necessarily environmentally-friendly in its current incarnation, conservation groups could continue to build on the current broad-based support for ethanol development to help shape future ethanol production around greater environmental and community benefits. They could continue to promote the development of cellulosic ethanol from perennial grasses and agricultural or forest byproducts in ways that sequester carbon, require minimal inputs, limit agricultural pollution, and support rural economies. Environmental and sustainable agriculture groups have a seat at the farm policy table, gained over many years of farm bill involvement. Under the right circumstances, they might be able to push for such future farm bill change, depending on how the farm policy context continues to evolve. Of course, this kind of common ground incremental change is unlikely to radically transform the policy incentives disfavoring sustainable agriculture production; however, it may be one politically realistic way to start.

Thus, environmental and sustainable agriculture groups can build on current ethanol momentum to promote incremental change – for example, continuing to put forth sustainability criteria that will help make bioenergy production more environmentally-

friendly. They can also take advantage of already-growing consumer awareness of the food system, this cultural change, to mobilize the public in support of a more sustainable food and agricultural system. Even if there was not enough public support to do this in 2008, groups can capitalize on green payment ideas raised during the 2005 WTO-induced moment of political opportunity to drum up support for continued incremental or perhaps more fundamental farm policy change for the 2012 farm bill debates, depending in part on how conditions and groups evolve. While sustainable agriculture and environmental groups will continue to face strong opposition from those supporting a farm policy status quo, mobilizing greater public support for sustainable agriculture policies could give them greater power at least to push, in multiple ways, for a more environmentally- and socially-sustainable agricultural system.

The current 2008 farm bill

Despite these possibilities for future farm policy change, no sweeping changes to reform farm policy have taken place in 2008. This said, several incremental policy changes that could benefit sustainable land use are still on the table for the 2008 debates. While commodity subsidies have remained more or less stable, several proposals are under consideration for tightening payment caps on the amount of subsidies that any given farmer can receive. These caps are, at the time of this writing, one major sticking point between Congress and the White House that stands in the way of a finished farm bill. Particularly, southern growers of rice and cotton oppose payment caps that they feel would negatively and disproportionately affect them, compared to growers of grains and oilseeds, because of their high overhead costs (National Cotton Council 2005). The Senate and House of Representatives have respected this position, while the White House argues for tightening these payment limitations (Abbott 2008). If the White House emerges from this battle victorious, payment limitations could help address some of the inequity issues inherent in commodity policy – that wealthy farmers receive higher payments than poorer farmers – and would help advance the goals of many sustainable agriculture and social justice groups.

Second, while sweeping green payments programs to replace commodity subsidies have not appeared in either the House or Senate versions of the 2008 farm bill, the Conservation Security Program (CSP), for many groups the inspiration for green payments, is still on the table. While the House version of the farm bill does not contain funding allocations for CSP, the Senate version expands CSP into the Conservation Stewardship Incentives Program (CSIP) to provide greater assistance to farmers for working land conservation (Schweikhardt and Batie 2008). Incorporating an improved CSP into the final 2008 farm bill would also be a major win for sustainable agriculture groups, and an incremental step toward a more sustainable farm bill.

Third, the House-passed farm bill incorporates a Biomass Energy Reserve program, and the Senate-passed version includes a Biomass Crop Transition Program, both of which would fund farmer/ethanol plant collaboratives for production and conversion of perennial plants to cellulosic ethanol. Incorporating these provisions into the final 2008 farm bill would again be one step in the direction of future sustainable cellulosic ethanol production (The Minnesota Project 2008).

While current House and Senate farm bill drafts have made only tweaks to commodity programs, they have also added new potential provisions for conservation, energy, and also nutrition programs, which could help propel farm policy slowly towards increased sustainability. These provisions are small, but nevertheless they do exist. As of this writing, however, the House and Senate are still clashing with the Bush administration over farm bill funding schemes and payment limitations. Either these differences will be worked out by April 18, 2008, or the current farm bill will have to be extended – either for another few months, so that sticking points can be resolved, or for up to two years, to be postponed beyond the Presidential elections of 2008 (Shinn 2008).

Future research

Aside from these questions of what the final 2008 farm bill will look like, and of what opportunities exist to promote sustainable land use through the farm bill both now and in the future, the analysis conducted in this dissertation brings up several potential areas for future research. First, while the dissertation provides some insight into why

farm policy has changed at certain points in time and remained stable at others, it does not provide any sort of rubric for understanding when change is more and less likely to occur. While it does suggest crisis as one denominator common to many change-oriented bills, and does emphasize the fact that each farm bill debate takes place under a unique and somewhat unpredictable combination of circumstances, it is possible that future research could help clarify other common structural drivers of policy change that could be used to assess future policy change prospects.

One way to approach this would be to pay greater attention to the discourses that have historically featured in past farm bill debates, particularly through document analysis of past media and interest group reports. While Chapter 3 did make some use of these primary historical documents, it also relied heavily on secondary sources, most of which paid little attention to issues of discourse and framing in past farm bills. Another approach would be to look at such factors as regional differences in the makeup of the agricultural committees over time to see how they may have affected farm policy outcomes. Given that many farm bill conflicts revolve around regional differences, this could be one of several potentially productive avenues for future research into past patterns of farm bill change that in turn can provide insight into the farm policy present and future.

Second, while this dissertation suggests certain avenues for improving the sustainability of agricultural land use through policy, it does not thoroughly answer the question of how effective or ineffective sustainable agriculture and environmental groups have been and might continue to be in propelling such changes. A closer look at these groups themselves – their strategies, goals, members, alliances, conflicts, and thinking processes – could be useful for identifying areas in which they could make a stronger, more effective case for sustainable agriculture in farm policy and also in other policy and non-policy realms. Note that just because this dissertation focused on the farm bill as its target piece of land use legislation does not mean that it is, at all, the only venue for promoting sustainable agriculture.

Third, this dissertation incorporates an analysis of discourse into a model of farm policy analysis to better understand the rhetorical and cultural drivers, in addition to the

political, economic, and situational drivers, of policy change and stability. However, it does not analyze the history and paths that these discourses have taken on their way to involvement in farm policy debates. For instance, where did the use of national security discourses to talk about ethanol production first surface? How did they evolve over time? And when did these discourses begin to permeate policymakers' understandings of ethanol issues? Answers to these sorts of questions could add greater focus and explanatory power to the understandings developed here of the role of discourse in sometimes promoting and sometimes stymieing farm policy change.

Conclusions

This dissertation argued that in 2005-06, trade pressures provided a moment of opportunity for agricultural commodity policy reform – farm bill discussions in the media, among interest groups, and in Congress all revolved around the extent to which WTO pressures could shape the 2008 farm bill. By 2006-08, trade pressures had dropped off, and demand for biofuels had staved off parallel budgetary pressures for reform. Discussions over whether or not to reform commodity policy were replaced by discussions over how to promote the development of a biofuels economy. Looking at this change in policy context through the lens of policy windows theory, deliberative policy analysis, and social movement theories helped construct an understanding of how and why this shift from a trade-dominated to a biofuels-dominated farm bill debate took place, and what this meant for farm and land use policies.

Specifically, this dissertation assessed the implications of such a biofuels-oriented farm bill for sustainable land use. It found that while the pursuit of agricultural energy production could be a boon to the environment and to farmers, it also, as currently implemented, implies significant environmental impacts. Biofuels, framed as a venue for conservation, rural development, and national security, have also served to sidestep discussions over commodity reform as an alternative path to conservation and rural development. Instead, Congress has settled for a more stability-oriented farm bill for 2008. However, biofuels are likely to continue to play a role in farm policy, and groups looking for a more environmentally- and socially-sustainable farm bill can continue

working to guide such ethanol development towards diversified conservation-minded systems. If the context, framing, and group efforts are right, this could in turn promote changes to farm policy that would ultimately benefit farmers, consumers, communities, and the environment.

References

Abbott, C. 2007, November 8. Senate farm bill puts $2.3 bln in biofuels. *Reuters.* http://www.reuters.com/article/politicsNews/idUSN0826943420071108. Cited 29 December 2007.

Abbott, C. 2008, January 24. Senate seeks farm bill funds to avoid veto. *Reuters.* http://www.reuters.com/article/politicsNews/idUSN2428676220080125. Cited 26 January 2008.

Ackerman, K.Z., Smith, M.E., and Suarez, N.R. 1995. Agricultural export programs: Background for 1995 farm legislation. Agricultural Economic Report Number 716. United States Department of Agriculture. ERS-NASS. Herndon, VA. 30 pp.

ActionMedia. 2006, September. Farm policy and non-farming voters: Focus group report prepared for Izaak Walton League. ActionMedia. 15 pp.

Agencia Brasil. 2003, September. Brazil's Lula to Bush: Stop subsidies. Agencia Brasil. http://www.brazzil.com/2003/html/news/articles/sep03/p111sep03.htm. Cited 30 April 2004.

Agra Europe. 2001, August 3. New U.S. farm bill will confirm trend back to more protectionist farm policy. *Agra Europe Ltd.*

Allen, P.L. and Sachs, C.E. 1992. The poverty of sustainability: An analysis of current positions. *Agriculture and human values.* Fall 1992: 29-35.

American Coalition for Ethanol. no date. Action committee for ethanol (ACE PAC): Promoting effective leadership for ethanol policy. Brochure.

American Coalition for Ethanol. 2007. Status 07: A state-by-state handbook. American coalition for ethanol. http://www.ethanol.org/pdf/contentmgmt/ACE120_Status_07_web-1.pdf. Cited 2 January 2008.

American Dietetic Association. 2007. Investments and policies for improving the nation's food and agriculture policies: American Dietetic Association's recommendations for the 2007 farm bill. http://www.eatright.org/ada/files/ADA_Farm_Bill_Recommendations_PDF.pdf. Cited 23 May 2007.

American Farm Bureau Federation. 2003. Legislative agenda 2003. American Farm Bureau Federation.

American Farm Bureau Federation. 2007, March. Farm bill. Issues backgrounders: Farm policy. The Voice of Agriculture –American Farm Bureau Federation. http://www.fb.org/index.php?fuseaction=issues.backgrounders. (position paper at the website has been updated from the original version cited). Cited 22 March 2007.

American Farmland Trust. 1984. Future policy directions for American agriculture. American Farmland Trust white paper. November 1984.

American Farmland Trust. 2004. Farm policy reform Q and A with Ralph Grossi, president of American Farmland Trust. *American farmland*. Fall 2004: 1-4

American Farmland Trust. 2006a, May 8. Agenda 2007: A new framework and direction for U.S. farm policy. Healthy farms, healthy food, healthy people: AFT's 2007 farm policy campaign. American Farmland Trust. http://www.nppc.org/public_policy/americanfarmlandtrust.pdf. Cited 11 December 2007.

American Farmland Trust. 2006b. Farm and food policy for all – farmers, citizens and communities. Agenda 2007: A new framework and direction for U.S farm policy. American Farmland Trust. http://www.farmland.org/programs/campaign/documents/AFTfarmpolicybrochure_2006.pdf. Cited 26 December 2007.

American Farmland Trust. 2007a. Agricultural conservation programs: Strengthening stewardship on the landscape. 2007 Farm Policy Campaign. American Farmland Trust. http://www.farmland.org/programs/campaign/documents/AFT_Conservationbriefing_WebDec06.pdf. Cited 23 May 2007.

American Farmland Trust. 2007b. Safety net policies. American Farmland Trust. http://www.farmland.org/programs/campaign/SafetyNetPolicies.asp. Cited 24 May 2007.

American Farmland Trust. 2007c. About us. American Farmland Trust. http://www.farmland.org/about/default.asp. Cited 11 December 2007.

American Farmland Trust. 2007d. Press release: Balanced renewable energy policies needed to protect working lands and natural resources, says AFT. American Farmland Trust. http://www.farmland.org/news/pressreleases/04032007nrBalancedRenewablEnergy.asp. Cited 27 Dec 2007.

American Lung Association. 2008. Biodiesel: A Minnesota clean air choice. American Lung Association.

http://www.cleanairchoice.org/outdoor/pdf/MNbiodieselbrochure.pdf. Cited 2 January 2008.

American Sugar Alliance. 2005. Sugar and trade. American Sugar Alliance. http://www.sugaralliance.org/desktopDefault.aspx?page_id=24. Cited 11 December 2007.

Anderson, M. 1995. Conservation, the environment, and the farm bill. *Water resources update*. Universities Council on Water Resources. 101:4-11. http://www.ucowr.siu.edu/updates/pdf/V101_A1.pdf. Cited 10 September 2007.

Andrews, K.T. and Edwards, B. 2004. Advocacy organizations in the U.S. political process. *Annual review of sociology*. 30: 479-506.

Associated Press. 2006, December 14. Peterson discusses House ag chairmanship. The associated press. *Agri news*. E63.

Associated Press. 2007a, January 22. Argentina, Brazil join WTO complaint against U.S. corn subsidies. *The associated press.* http://www.iht.com/articles/2007/01/22/business/web.0122davos.php. Cited 22 March 2007.

Associated Press. 2007b, December 14. House, Senate farm bill provisions. *The associated press.* http://www.newsvine.com/_news/2007/12/14/1164344-house-senate-farm-bill-provisions. Cited 4 January 2007.

Atkins, V.J. 2004. The U.S. farm bill of 2002: Implications for CARICOM's agricultural export trade. *Social and economic studies – Institute of social and economic research, University of the West Indies Jamaica.* 53(3): 61-80.

Babcock, B. 2006. Farm policy amid high prices: Which direction will we take? *Iowa ag review online*. 12(4). http://www.card.iastate.edu/iowa_ag_review/fall_06/article1.aspx. Cited 4 January 2007.

Babcock, B. 2007. Farm programs, fuel mandates, and agricultural prosperity. *Iowa ag review online*. 13(3). http://www.card.iastate.edu/iowa_ag_review/summer_07/article1.aspx. Cited 29 February 2008.

Baker, P. 2007, December 20. Solidarity for Bush, Democrats. *The washington post*. http://www.washingtonpost.com/wp-dyn/content/article/2007/12/19/AR2007121900815_pf.html. Cited 26 December 2007.

Bamberger, R. 2003. Automobile and light truck fuel economy: The CAFE standards. Issue brief for Congress IB90122. The Library of Congress, Washington DC. www.ncseonline.org/NLE/CRSreports/06feb/IB90122.pdf. Cited 4 January 2007.

Barrionuevo, A. 2006a, December 3. Imports spurring push to subsidize fruit and greens. *The new york times.* http://select.nytimes.com/gst/abstract.html?res=F30B13FD345A0C708CDDAB0994DE404482. Cited 22 March 2007.

Barrionuevo, A. 2006b, June 25. The energy challenge: boom in ethanol reshapes economy of heartland. *The new york times.* http://www.nytimes.com/2006/06/25/business/25ethanol.html?pagewanted=print. Cited 4 January 2007.

Baumgartner, F.R. and Jones, B.D. 1993. Agendas and instability in American politics. The University of Chicago Press. Chicago, IL: 298 pp.

Baumgartner, F.R. and Leech, B.L. 1998. Basic interests: The importance of groups in politics and political science. Princeton University Press. Princeton, NJ: 223 pp.

Becker, E. 2004a. April 27. Global trade body rules against U.S. on cotton subsidies. *The new york times.* http://query.nytimes.com/gst/fullpage.html?res=9D01E5DA113AF934A15757C0A9629C8B63&n=Top/Reference/Times%20Topics/Organizations/W/World%20Trade%20Organization. Cited 11 December 2007.

Becker, E. 2004b. April 28. Lawmakers voice doom and gloom on W.T.O. ruling. *The new york times.* http://query.nytimes.com/gst/fullpage.html?res=9D02E5DE1F3AF93BA15757C0A9629C8B63. Cited 11 December 2007.

Becker, E. and Benson, T. 2004, May 4. Brazil's road to victory over U.S. cotton. *The new york times.* http://query.nytimes.com/gst/fullpage.html?res=9F06E6DF103DF937A35756C0A9629C8B63. Cited 24 Feb 2008.

Bedford, R.D. and Snow, D.A. 2000. Framing processes and social movements: An overview and assessment. *Annual review of sociology*. 26: 611-639.

Bergsten C.F. 2002. A renaissance for U.S. trade policy? *Foreign affairs.* 81(6):86-+. Nov-Dec.

Bernard, R. and Wiesemeyer, J. 2007, February 24. Ethanol talk remains a staple on a host of fronts. *ProFarmer news.* 35(8): 4.

Blank, C. 2006, April 26. Signs overshadow ethanol bill. *Jefferson city news tribune.* http://www.newstribune.com/articles/2006/04/26/news_state/249news05.txt. Cited 26 February 2008.

Blank, S.C. 1998. The End of Agriculture in the American Portfolio. Quorum Books. Westport, CT: 232 pp.

Bonnen, J.T. 1973. Implications for agricultural policy. *American journal of agricultural economics.* 55(3): 391-398.

Bonnen, J.T., Browne, W.P., and Schweikhardt, D.B. 1996. Further observations on the changing nature of national agricultural policy decision processes, 1946-1995. *Agricultural history*. 70(2): 130-152.

Brasher, P. 2007, November 4. Farm bill snubs trade challenges, gripes from other lands. *Des moines register.* http://desmoinesregister.com/apps/pbcs.dll/article?AID=/20071104/BUSINESS03/711040324. Cited 11 December 2007.

British Broadcasting Corporation. 2007, December 19. Timeline: World trade organization – A chronology of key events. BBC News. http://news.bbc.co.uk/1/hi/world/europe/country_profiles/2430089.stm. Cited 27 January 2008.

Browne, W.P. 1978. Agricultural policy changes and American political institutions. In Hadwiger, D.F. and Browne, W.P. (Eds). The new politics of food. Lexington Books. Lexington, MA: 3-5.

Browne, W.P. 1995. Agriculture as a policy domain. In Cultivating congress: Constituents, issues, interests in agriculture policy. University Press of Kansas. Lawrence, KS: 22-39.

Browne, W.P. 1998. Groups, interests and U.S. public policy. Georgetown University Press. Washington, D.C. 276 pp.

Browne, W.P. 2001. The failure of national rural policy: Institutions and interests. Georgetown University Press. Washington, D.C.: 229 pp.

Browne, W.P. and Cigler, A.J. 1990. U.S. agricultural groups: Institutional profiles. Greenwood Press. Westport, CT: 274 pp.

Buck, S.L. 1996. Understanding environmental administration and law. Island Press. Washington, D.C.: 225 pp.

Burfisher, M.E. (Ed). 2001. With Diao, X., Elbehri, A., Gehlhar, M., Gibson, P., Leetmaa, S., Mitchell, L., Nelson, F.J., Nimon, R.W., Normile, M.A., Roe, T., Shapouri, S., Skully, D., Smith, M., Somwaru, A., Trueblood, M., Tsigas, M., Wainio, J., Whitley, D., and Young, C.E. The road ahead: Agricultural policy reform in the WTO – summary report. United States Department of Agriculture Economic Research Service. Agricultural Economic Report No. 797. 32 pp. http://www.ers.usda.gov/publications/aer797/aer797.pdf. Cited 25 February 2008.

Bush, G.W. 2006, January 31. State of the union address by the president. Whitehouse.gov. http://www.whitehouse.gov/stateoftheunion/2006. Cited 22 March 2007.

Buttel, F.H. 1993. The production of agricultural sustainability: Observations from the sociology of science and technology. In Allen, P. (Ed). Food for the future: Conditions and contradictions of sustainability. John Wiley and Sons Inc. New York, NY: 19-46.

Buttel, F.H. and Youngberg, I.G. 1982. Energy policy and agriculture. Food policy and farm programs. *Proceedings of the academy of political science.* 34(3): 122-133.

Cain, Z. and Lovejoy, S. 2004. History and outlook for farm bill conservation programs. *Choices: The magazine of food, farm, and resource issues.* 4th quarter. http://www.choicesmagazine.org/2004-4/policy/2004-4-09.htm. Cited 23 May 2007.

CampSilos. 2005. Quick facts. The story of corn. Silos and smokestacks national heritage area. http://www.campsilos.org/mod3/students/index.shtml. Cited 23 May 2007.

Cardwell, V.B. 1982. 50 years of Minnesota corn production: Sources of yield increase. *Agronomy journal*. 74:984-990.

Center for Rural Affairs. 2006. Impacts of increased ethanol production. Center for Rural Affairs. *November newsletter*. 1-2.

Center for Rural Affairs. 2007a. About the center for rural affairs. Center for Rural Affairs. http://www.cfra.org/about. Cited 23 May 2007.

Center for Rural Affairs. 2007b. 2007 fundraising letter from Chuck Hassebrook, Executive Director. Center for Rural Affairs. Lyons, NE.

Clay, J. 2004. World agriculture and the environment: A commodity-by-commodity guide to impacts and practices. Island Press. Washington, D.C.: 282 pp.

Clayton, C. 2007, September 17. Collins: Ethanol not to blame. DTN/Farms.com. http://www.farms.com/readstory.asp?dtnnewsid=1704581. Cited 26 December 2007.

Clayton, M. 2007, December 20. As Bush signs energy bill, new issues come to the fore. *Christian science monitor*. http://www.csmonitor.com/2007/1220/p02s01-usgn.html. Cited 29 December 2007.

Cline, W.R. 2005. Doha and development. *Foreign affairs*. December. http://www.foreignaffairs.org/20051201faessay84707/william-r-cline/doha-and-development.html?mode=print. Cited 11 December 2007.

Cloud, J. 2007, March 12. Forget organic, eat local: Eating better than organic. *Time magazine*. http://www.time.com/time/magazine/article/0,9171,1595245-1,00.html. Cited 16 May 2007.

Cochran, J. 2006, August 7. Fuel from the farm. *CQ weekly online*: 2166-2174. http://library.cqpress.com.floyd.lib.umn.edu/cqweekly/weeklyreport109-000002355150. Cited 23 May 2007.

Cochrane, W. 2003. The curse of American agricultural abundance: A sustainable solution. University of Nebraska Press. Lincoln, NE: 154 pp.

Collins, K. 2006, September 6. Statement of Keith Collins, chief economist, U.S. Department of Agriculture before the U.S. Senate committee on environment and public works. United States Department of Agriculture. www.usda.gov/oce/newsroom/congressional_testimony/Biofuels%20Testimony%209-6-2006.doc. Cited 27 March 2007.

Coltrain, D. 2001. Economic issues with ethanol. Risk and Profit Conference. August 16-17, Manhattan, KS. www.agmanager.info/agribus/energy/Econ%20Issues%20with%20Ethanol%20_2_.pdf. Cited 22 March 2007.

Congressional Budget Office. 2004. Fuel economy standards versus a gasoline tax. Economic and budget issues brief. Congressional Budget Office. http://www.cbo.gov/ftpdocs/51xx/doc5159/03-09-CAFEbrief.pdf. Cited 4 January 2007.

Cook, C. 2006, April 14. Biofuel: Who benefits – smaller growers or just large-scale producers and agribusiness? *American prospect*. http://www.commondreams.org/views06/0414-22.htm. In Wright, W. and Reid, T. unpublished manuscript (in review). Dangling promises of riches and rural development: Farming, fault lines, and the re-emergence of U.S. biofuels.

Corn Refiners Association. 2006. Products made from corn. Corn Refiners Association. http://www.corn.org/products.htm. Cited 23 May 2007.

Couser, B. 2007, October 9. Disappointed by myths, but excited about industry. *DesMoines register biofuels blog*. http://blogs.dmregister.com/?p=9211. Cited 17 December 2007.

Cowan, T. 2007. An overview of USDA rural development programs. CRS Report for Congress RL31837. The Library of Congress, Washington DC

Cox, C. 2007. U.S. agriculture conservation policy and programs: History, trends, and implications. In Arha, K., Josling, T., Sumner, D.A., and Thompson, B.H. (Eds). U.S. agricultural policy and the 2007 farm bill. Woods Institute for the Environment. Stanford University: 113-146.

Coyle, W. 2007, November. The future of biofuels: A global perspective. *Amber waves*. USDA economic research service. http://www.ers.usda.gov/AmberWaves/November07/Features/Biofuels.htm. Cited 26 December 2007.

Culver, C. no date. Farm bill definitions excerpted from the glossary of agricultural production, programs, and policy. The National Agricultural Law Center. http://www.nationalaglawcenter.org/assets/farmbills/glossary.html. Cited 29 February 2008.

Daily, G.C. 1997. Introduction: What are ecosystem services? In Daily, G.C. (Ed). Nature's services: Societal dependence on natural ecosystems. Island Press. Washington, DC: 1-10.

Daily, M. 2007, December 18. Battered ethanol stocks saved by energy bill. *Reuters*. http://www.reuters.com/article/reutersEdge/idUSN1835257420071218. Cited 29 December 2007.

Data Transmission Network. 2007, March 12. Farm bill fight seems likely. DTN News. In Good, K. 2007, March 13. FarmPolicy.com News Summary. http://www.farmpolicy.com/?p=205#more-205. http://www.dtn.com/agriculture.cfm?sidenav=sn_ag_producer&content=ago_vartrial&vars=WVE0002429|1001. Cited 22 March 2007.

Davey, M. 2007, August 8. Ethanol is feeding hot market for farmland. *The new york times*. http://www.nytimes.com/2007/08/08/us/08farmers.html. In Wright, W. and Reid, T. unpublished manuscript (in review). Dangling promises of riches and rural development: Farming, fault lines, and the re-emergence of U.S. biofuels.

Dean, S. 2003. Children of the corn syrup. *The believer magazine*. http://www.believermag.com/issues/200310/?read=article_dean. Cited 20 January 2008.

Dean, V.W. 2006. An opportunity lost : The Truman administration and the farm policy debate. University of Missouri Press. Columbia, MO: 275 pp.

De la Torre Ugarte, D. and Hellwinckel, C. 2006, September. Analysis of the economic impacts on the agricultural sector of the elimination of the conservation reserve program. University of Tennessee Agricultural Policy Analysis Center. 18 pp.

Denny, C. 1998, November 19. It's all a matter of balance. World news. *The guardian*. http://www.guardian.co.uk/world/1998/nov/19/eu.wto. Cited 23 February 2008.

Diaz, K. 2004a. March 7. Brazil's the new big bean on the block. *Minneapolis star tribune*. A1, A12. At CropChoice.com. http://www.cropchoice.com/leadstry5314.html?recid=2438. Cited 11 December 2007.

Diaz, K. 2004b. March 8. The new breadbasket. *Minneapolis Star Tribune*. A10, A12.

Diaz, K. 2004c. March 8. The new frontier. *Minneapolis Star Tribune*. A1, A10.

Dicks, M.R. and Osborne, T.O. 1994. Land use issues. In Hallberg, M.C., Spitze, R.G.F., and Ray, D.E. (Eds). Food, agriculture, and rural policy into the twenty-first century: Issues and tradeoffs. Westview Press. Boulder, CO: 95-110.

Dimitri, C., Effland, A., and Conklin, N. 2005. The 20th century transformation of U.S. agriculture and farm policy. USDA Economic Research Service. http://www.ers.usda.gov/publications/EIB3/eib3.pdf. Cited 17 May 2007.

DiPeso, J. 2007, September 15. The farm bill: When water, energy, trade, and budget issues collide. Republicans for Environmental Protection. Washington chapter annual meeting. http://rep.org/opinions/speeches/78.html. Cited 26 January 2008.

Dixon, D.P. and Hapke, H.M. 2003. Cultivating discourse: The social construction of agricultural legislation. *Annals of the association of American geographers*. 93(1): 142-164.

Dluhy, M.J. 1981. Introduction: The changing face of social policy. In Tropman, J.E., Dluhy, M. J., and Lind, R.M. (Eds). New strategic perspectives on social policy. Pergamon Press. New York, NY: 598 pp.

Dorr, T. 2006. New energy sources: Big deal for rural America. *Rural cooperatives.* Nov-Dec. http://findarticles.com/p/articles/mi_m0KFU/is_6_73/ai_n16912232. Cited 8 October 2007.

Ducks Unlimited. 2007. Background of priority farm bill programs. Ducks Unlimited. http://www.ducks.org/Conservation/FarmBill/2823/BackgroundofPriorityFarmBillPrograms.html. Cited 26 December 2007.

Eidman, V.R. 2006. Biofuels: Implications for grain and livestock production. Presentation given December 7, 2006 at University of Minnesota Applied Economics Round Table series.

Energy Information Administration. 2007. Biofuels in the U.S. transportation sector. Energy Information Administration – U.S. Department of Energy. http://www.eia.doe.gov/oiaf/analysispaper/biomass.html. Cited 4 January 2007.

Energy Information Administration. 2008. U.S. retail gasoline historical prices. Energy Information Administration – U.S. Department of Energy. http://www.eia.doe.gov/oil_gas/petroleum/data_publications/wrgp/mogas_history.html. Cited 24 February 2008.

Environmental Defense. 2001. Food for thought: The case for reforming farm programs to preserve the environment and help family farmers, ranchers, and foresters. Environmental Defense. http://www.environmentaldefense.org/documents/160_FoodForThought.pdf. Cited 10 January 2008.

Environmental Defense. 2007. Support conservation funding in the farm bill. Environmental Defense. http://action.environmentaldefense.org/campaign/farmbill_funding_2008?qp_source=anl. Cited 25 February 2008.

Environmental Grantmakers Association. 2006. Biofuels: Opportunity or threat? A background briefing. Environmental Grantmakers Association. http://www.ega.org/news/docs/Biofuels_briefing.66.pdf. Cited 27 December 2007.

Environmental Law and Policy Center. 2006. An American success story: The farm bill's clean energy programs. Environmental Law and Policy Center. www.elpc.org/documents/FarmBillSuccessStories.pdf. Cited 16 December 2007.

Environmental Working Group. 1996, February 22. Pouring it on: Nitrate contamination of drinking water. Environmental Working Group. http://www.ewg.org/reports/Nitrate. Cited 17 May 2007.

Environmental Working Group. 2006. Farm subsidy database. Environmental Working Group. http://farm.ewg.org/farm/. Cited 27 January 2008.

Environmental Working Group. 2008. All over the map: 352 editorials call for farm bill reform. Environmental Working Group. http://www.ewg.org/farmeditorials. Cited 13 February 2008.

Fabiosa, J., J. Beghin, S. de Cara, C. Fang, M. Isik, and Matthey, H. 2003. Agricultural markets liberalization and the Doha Round. Proceedings of the 25th International Conference of Agricultural Economists (IAAE). 16-22 August 2003. Durban, South Africa.

Faeth, P., Repetto, R., Kroll, K., Dai, Q. and Helmers, G. 1991. Paying the farm bill: U.S. agricultural policy and the transition to sustainable agriculture. World Resources Institute. Washington, D.C. 70 pp.

Farm and Food Policy Project. 2007, January. Seeking balance in U.S. farm and food policy. Farm and Food Policy Project. 16 pp. http://www.farmandfoodproject.org/documents/Seeking%20Balance%20final%20report%20-%20Color.pdf. Cited 11 December 2007.

Farm Foundation. 2006, September 13. Bioenergy, safety net tools are producers' top priorities for the next farm bill. National agricultural, food, and public policy preference survey. Farm Foundation. http://www.farmfoundation.org/projects/06-02ProducerSurvey.htm. Cited 27 December 2007.

Feenstra, G., Ingels, C. and Campbell, D. 1997. What is sustainable agriculture? University of California sustainable agriculture research and education program. http://www.sarep.ucdavis.edu/concept.htm. Cited 7 May 2006.

Fernandez-Cornejo, J. 2004. Improved seed is a major contributor to crop yield gains and agricultural productivity. In The seed industry in U.S. agriculture: An exploration of data and information on crop seed markets, regulation, industry structure, and research and development. United States Department of Agriculture Economic Research Service agricultural information bulletin no. AIB-786. 5-6. http://www.ers.usda.gov/publications/aib786/aib786d.pdf. Cited 20 February 2008.

FitzSimmons, P. 2006, July 22. Testimony of Mr. Patrick FitzSimmons, pork producer, Dassel, Minnesota. U.S. House of Representatives Committee on Agriculture 2007 farm bill field hearings. Southwest Minnesota State University. Marshall, Minnesota. 15 pp.

Fleischauer, E. 2006, September 18. Is corn ethanol a viable fuel? Experts disagree. *The decatur daily*.

http://legacy.decaturdaily.com/decaturdaily/news/060918/ethanol.shtml. Cited 22 March 2007.

Flinchbaugh, B. and Knutson, R. 2004. The agricultural policy outlook: Looking back focuses the road ahead. *Choices: The magazine of food, farm, and resource issues.* 4th quarter. http://www.choicesmagazine.org/2004-4/policy/2004-4-07.htm. Cited 23 May 2007.

Foltz, J.C., Lee, J.G., and Martin, M.A. 1993. Farm-level economic and environmental impacts of eastern corn belt cropping systems. *Journal of production agriculture.* 6(2): 290-296.

Food Research and Action Center. 2007, March 2. Joint statement on the 2007 farm bill by Food Research and Action Center, America's Second Harvest, and American Public Human Services Association. Food Research and Action Center. http://www.frac.org/pdf/farmbill07statement.pdf. Cited 22 March 2007.

Frank, D. 1999. Buy American: The untold story of economic nationalism. Beacon Press. Boston, MA: 316 pp.

Freeman, A.A. 2004. Disaster assistance bill cuts $3 billion from CSP: Harkin vows to restore program. *Environment and energy daily.* www.eenews.net/EEDaily/2004/10/13/archive/4?terms=Diasaster+assistance+bill+cuts+$3+billion+from+CSP:+Harkin+vows+to+restore+program. Cited 4 February 2005.

Friedmann, H. 1993. The political economy of food: A global crisis. *New left review.* 197: 29-57

Friedman, T. 2007, April 15. The power of green. *The new york times magazine.* http://www.nytimes.com/2007/04/15/magazine/15green.t.html. Cited 8 October 2007.

Friends of the Earth/Greenpeace. 2006. Hidden uncertainties – risks of GMOs. Network of concerned farmers. Friends of the Earth/Greenpeace. http://www.non-gm-farmers.com/news_details.asp?ID=2731. Cited 24 May 2007.

Gamson, W.A. 1992. Talking politics. Cambridge University Press. Cambridge, UK: 272 pp.

Gamson, W.A. and Herzog, H. 1999. Living with contradictions: The taken-for-granted in Israeli political discourse. *Political psychology.* 20(2): 247-266.

Gamson, W.A. and Meyer, D.S. 1996. Framing political opportunity. In McAdam, D., McCarthy, J.D., and M.N. Zald (Eds). Comparative perspectives on social movements: Political opportunities, mobilizing structures, and cultural framings. Cambridge University Press. Cambridge, UK: 275-290.

Gardner, T. 2007, December 19. U.S. energy law pops corn bubble. *Reuters*. http://www.businessspectator.com.au/bs.nsf/Article/US-energy-law-pops-corn-bubble-A2VCP?OpenDocument?OpenDocument. Cited 29 December 2007.

Gelb, L.H. and Lake, A. 1974-5. Washington dateline: Less food, more politics. *Foreign policy*. 17: 176-189.

Genetic Resources Action International. 2007. An African call for a moratorium on agrofuel developments. Genetic Resources Action International (GRAIN). http://www.grain.org/agrofuels/index.cfm?moratoriumenandprint=yes. Cited 26 December 2007.

Glauber, J. 2008. Whither U.S. agricultural trade policy? Presentation given January 31, 2008 at University of Minnesota Willard Cochrane lecture.

Glenna, L.L. and Thomas, R.R. in review. From renewable to alternative: Waste coal and the Pennsylvania alternative energy portfolio standard.

Gottweis, H. 1998. Governing molecules: The discursive politics of genetic engineering in Europe and the United States. The MIT Press. Cambridge, MA.: 397 pp.

GovTrack. 2007. H.R. 6: Energy independence and security act of 2007. GovTrack.US. http://www.govtrack.us/congress/billtext.xpd?bill=h110-6. Cited 3 April 2008.

Grassley, C. 2007, June 6. Senators ask for payment limits legislation to be included in the farm bill. News/press releases. United States Senator Chuck Grassley of Iowa. http://grassley.senate.gov/public/index.cfm?FuseAction=PressReleases.Detail&PressRelease_id=48047bdb-13c9-4e9c-bed7-86bb64da8651&Month=6&Year=2007. Cited 25 February 2008.

Gray, B. 2006, November 17. Biofuel revolution may not save Doha round. Ag Observatory. www.farmfutures.com/. http://www.agobservatory.org/headlines.cfm?refID=89962. Cited 22 March 2007.

Great Plains Institute. 2006. Biomass working group state policy menu. State policies for promoting the next generation of biomass technologies. Great Plains Institute. http://www.ef.org/documents/BWG_State_Policy_Menu_Final_v3.pdf. Cited 26 December 2007.

Green Lands Blue Waters. 2004. Green lands blue waters presentation. Green Lands Blue Waters. http://www.greenlandsbluewaters.org/GLBW0106.ppt. Cited 24 May 2007.

Griswold, D., Slivinski, S., and Preble, C. 2006, February. Six reasons to kill farm subsidies and trade barriers. *Reason magazine*. http://www.reason.com/news/show/36207.html. Cited 22 March 2007.

Guenther, R. 2007. Specialty crop issues in the 2007 farm bill. In Keeling, J. O'Brien, T., and Guenther, R. Presentation given January 17 2007 at the Farm Foundation's Farm Bill Forum, Washington D.C.

Gusfield, J.R. 1981. Introduction: The culture of public problems. In The culture of public problems: Drinking-driving and the symbolic order. University Chicago Press. Chicago, IL: 1-26.

Hadwiger, D.F. 1978. New agenda issues. In Hadwiger, D.F. and Browne, W.P. (Eds). The new politics of food. Lexington Books: Lexington, MA: 129-134.

Hagenbaugh, B. 2007, January 24. Corn has deep economic roots as high prices create ripple effect. *USA today*. http://www.usatoday.com/money/industries/food/2007-01-24-corn_x.htm. Cited 28 February 2008.

Hagstrom, J. 2006, November 13. DTN News. In Good, K. 2006, November 14. FarmPolicy.com News Summary. www.farmpolicy.com. Cited 22 March 2007.

Hagstrom, J. 2007, March 9. DTN News. In Good, K. 2007, March 12. FarmPolicy.com News Summary. http://www.farmpolicy.com/?p=204#more-204. Cited 22 March 2007.

Hajer, M. 2003. A frame in the fields: Policymaking and the reinvention of politics. In Hajer, M. and Wagenaar, H. (Eds). Deliberative policy analysis: Understanding governance in the network society. Cambridge University Press. Cambridge, UK: 88-112.

Hajer, M.A, and Fischer, F. 1999. Beyond global discourse: The rediscovery of culture in environmental politics. In Fischer, F. and Hajer, M.A. (Eds). Living with nature: Environmental politics as cultural discourse. Oxford University Press. Oxford, UK: 1-20.

Hajer, M. and Wagenaar, H. 2003. Introduction. In Hajer, M. and Wagenaar, H. (Eds). Deliberative policy analysis: Understanding governance in the network society. Cambridge University Press. Cambridge, UK: 1-32.

Hallinan, J.T. 2006, November 17. New game: A pheasant boom lifts farm fortunes on

Great Plains. *The wall street journal*. A1, A14.

Hanrahan. C.E. 2007. Agricultural export and food aid programs. CRS report for Congress RL33553. The Library of Congress, Washington DC

Hansen, J.M. 1991. Gaining access: Congress and the farm lobby, 1919-1981. The University of Chicago Press. Chicago, IL: 265 pp.

Hansen, N. 2004, December 3. Organic food sales see healthy growth: Mainstream food companies promote natural brands. *CNBC*. http://www.msnbc.msn.com/id/6638417/. Cited 17 May 2007.

Hargreaves, S. 2006, June 23. Super ethanol is on its' way. *CNN money*. http://money.cnn.com/2006/06/21/news/economy/cellulose_ethanol/index.htm. Cited 25 February 2008.

Hart, C.E. and Babcock, B.A. 2002. U.S. farm policy and the World Trade Organization: How do they match up? Working paper 02-QP 294. Feb. 2002. Center for Agricultural and Rural Development. Iowa State University. Ames, IA: 21 pp.

Harvey, D.R. 1998. The U.S. farm act: 'fair' or 'foul'? An evolutionary perspective from east of the Atlantic. *Food policy*. 23(2): 1-15.

Harwood, J. 2007, October 4. Republicans grow skeptical on free trade. *The wall street journal*. A1. http://online.wsj.com/public/article/SB119144942897748150.html. Cited 26 January 2008.

Hassinger, E.W. 1978. The rural component of American society. The Interstate Printers and Publisher, Inc. Danville, IL: 397 pp.

Hawkes, C. 2004. A journey in and out of American agriculture: Reflections on *Debt and dispossession* by Kathryn Marie Dudley. *Agriculture and human values*. 21: 413-418.

Hayami, Y. and Ruttan, V.W. 1970. Agricultural productivity differences among countries. *The American economic review*. 60(5): 895-911.

Healthy Foods and Communities. 2006. Healthy food and communities discussion paper. Healthy Foods and Communities work group. Farm and Food Policy Project.

Hebert, H.J. 2007, December 18. Congress approves fuel economy mandate. *The associated press*. http://www.thefreelibrary.com/Congress+approves+fuel+economy+mandate-a01610848349. Cited 18 December 2007.

Heckman, J. 2007. A history of organic farming: Transitions from Sir Albert Howard's war in the soil to the USDA national organic program. *Renewable agriculture and food systems.* 21(3) 143-150.

Heimlich, R.E. and Claassen, R. 1998. Agricultural conservation policy at a crossroads. *Agricultural and resource economics review.* 27(1): 95-107.

Helmers, G.A. and Hoag, D.L. 1994. Sustainable agriculture. In Hallberg, M.C., Spitze, R.G.F., and Ray, D.E. (Eds). Food, agriculture, and rural policy into the twenty-first century: Issues and tradeoffs. Westview Press. Boulder, CO: 111-134.

Herszenhorn, D. 2007, October 24. A bid to overhaul a farm bill yields subtle changes. *The new york times.* http://query.nytimes.com/gst/fullpage.html?res=9A0DE4D81E39F937A15753C1A9619C8B63. Cited 27 December 2007.

Hesse, S. 2005. Too much of a good thing. Industrial forestry. *Japan times.* http://search.japantimes.co.jp/cgi-bin/fl20051127x2.html. Cited 16 May 2007.

Hirsch, S. 2007, March 16. Johanns sees farm bill aiding trade talks. *The washington times.* http://www.washingtontimes.com/business/20070315-111356-3492r.htm. (weblink no longer active). Cited 22 March 2007.

Hoskins, T. 2007, April 12. Intentions report backs speculation. *Iowa farmer today.* http://www.iowafarmertoday.com/articles/2007/05/11/top_stories/planting.txt. Cited 23 May 2007.

House Agriculture Committee. 2007a, March 8. Subcommittee reviews impact of feed costs on the livestock industry. News from the House Agriculture Committee. http://agriculture.house.gov/list/press/agriculture_dem/030807_LDPfeedCosts.html. Cited 26 December 2007.

House Agriculture Committee. 2007b. H.R. 2419. Report No 110. http://agriculture.house.gov/inside/Legislation/110/FB/h2419ag_rh_xml.pdf. Cited 2 Jan 2008.

Hunt, S.A., Benford, R.D., and Snow, D.A. 1994. Identity fields: Framing processes and the social construction of movement identities. In Laraña, E., Johnston, H. and Gusfield, J.R. (Eds). New social movements: From ideology to identity. Temple University Press. Philadelphia, PA: 185-208.

Imhoff, D. 2007. Food fight: The citizen's guide to a food and farm bill. Watershed Media. Healdsburg, CA: 176 pp.

Institute for Agriculture and Trade Policy. 2007. A fair farm bill for renewable energy. Institute for Agriculture and Trade Policy. http://www.agobservatory.org/library.cfm?refid=98058. Cited 26 December 2007.

International Food and Agricultural Trade Policy Council. 2007. U.S. farm bill: Impacts beyond U.S. borders. *Agri-trade forum*. 16(3): 2-3.

Isser, S. 1996. The economics and politics of the United States oil industry, 1920-1990: Profits, populism, and petroleum. Garland Publishing, Inc. New York, NY: 472 pp.

Izaak Walton League of America. 2007. The 2007 farm bill: Stewardship, prosperity, and fairness. Izaak Walton league of America. http://www.iwla.org/publications/agriculture/Farm_Bill_2007_WEB.pdf. Cited 26 December 2007.

Jacobs, R.N, and Sobieraj, S. 2007. Narrative and legitimacy: U.S. congressional debates about the nonprofit sector. *Sociological theory*. 25(1): 1-25.

James, S. 2007, March 15. An extra $15 billion for farm programs. Cato@Liberty: The official Cato Institute blog. http://www.cato-at-liberty.org/2007/03/15/an-extra-15-billion-for-farm-programs/. Cited 22 March 2007.

Jank, M. 2001. U.S. agricultural protectionism: FTAA seed of discord. *Views from beyond*. April 14-20. http://ctrc.sice.oas.org/geograph/westernh/jank2.pdf. Cited 30 April 2004.

Jenkins-Smith, H.C. and Sabatier, P.A. 1993. The study of public policy processes. In Sabatier, P.A, and Jenkins-Smith, H.C. (Eds). Policy change and learning: An advocacy coalition approach. Westview Press. Boulder, CO: 1-9.

Johanns, M. 2006. October 26. Transcript of remarks by Agriculture Secretary Mike Johanns at the Grow America Project, Indianapolis, Indiana. United States Department of Agriculture Release 0433.06. http://www.usda.gov/wps/portal/!ut/p/_s.7_0_A/7_0_1OB?contentidonly=true&contentid=2006/10/0433.xml. Cited 22 March 2007.

Johanns, M. 2007, February 7. Statement of Secretary Mike Johanns U.S. Department of Agriculture before the U.S. Senate Committee on Agriculture, Nutrition and Forestry. Discussion of the United States Department of Agriculture farm bill proposal. http://agriculture.senate.gov/Hearings/hearings.cfm?hearingid=2536&witnessId=6054. Cited 22 February 2007.

Johns Hopkins School of Public Health. 2007. What does the 2007 farm bill have to do with public health? The Johns Hopkins School of Public Health Center for a Livable Future. http://www.jhsph.edu/clf/PDF%20Files/Farmbill.pdf. Cited 24 May 2007.

Johnson, B.A. 2004a. The conservation security program in the 2002 farm bill. CRS Report for Congress RS21739. The Library of Congress, Washington D.C. 6 pp. http://www.nationalaglawcenter.org/assets/crs/RS21739.pdf. Cited 24 May 2005.

Johnson, B.A. 2004b. Implementing the conservation security program. CRS Report for Congress RS21740. The Library of Congress, Washington DC

Johnson, R., Becker, G.S., Chite, R.M, Cowan, T., Gorte, R.W., Hanrahan, C.E., Jurenas, R., Monke, J., Rawson, J.M., Schnepf, R., Womach, J., Zinn, J.A., and Richardson, J. 2007. The house-passed 2007 farm bill (H.R. 2419) at a glance. CRS Report for Congress RL34113. The Library of Congress, Washington DC

Johnson, J.B., McNew, K., and Smith, V.H. 2002. Commodity title of the Farm Security and Rural Investment Act of 2002. 56 pp. http://agecon.uwyo.edu/RiskMgt/ProductionRisk/CommodityTitleOfTheFarmSecurityAndRuralInvestmentActOf2002.pdf. Cited 29 April 2004.

Jorgensen, M.W. and Phillips, L.J. 2002. Discourse analysis as theory and method. Sage Publications. London, UK: 230 pp.

Keeney, D. 2007, August 14. More ethanol, more corn, more nitrogen – and bigger dead zone in the gulf. Institute for Agriculture and Trade Policy commentary. http://www.iatp.org/iatp/commentaries.cfm?refid=99582. Cited 27 December 2007.

Kemp, L. 2006, May 11. Green payments can replace a broken policy. *Iowa natural heritage foundation magazine*. http://www.mnproject.org/csp/Green%20Payments%20by%20kemp%20in%20Iowa%20Nat%20Heritage%20format.pdf. Cited 22 March 2007.

Kemp, L. 2007, January 10. Testimony of Loni Kemp, senior policy analyst, The Minnesota Project. Hearing on renewable energy. Committee on Agriculture, Nutrition, and Forestry, United States Senate. http://agriculture.senate.gov/Hearings/hearings.cfm?hearingid=2465&witnessId=5957. Cited 28 December 2007.

Kenney, B. 2007, July 20. Cellulosic ethanol goes commercial. *Industry week.* http://www.industryweek.com/ReadArticle.aspx?ArticleID=14637. Cited 24 February 2008.

Kenney, S.J. 2003. Where is gender in agenda setting? *Women and politics.* 25(1/2):

179-207.

Kile, O.M. 1948. The Farm Bureau over three decades. Waverly Press. Baltimore, MD: 416 pp.

Killpack, S.C. and Buchholz, D. 2006. Nitrogen in the environment: nitrogen replacement value of legumes. University of Missouri Extension. http://extension.missouri.edu/explore/envqual/wq0277.htm. Cited 23 May 2007.

Kind, R. 2007, March 15. Reps. Kind and Gerlach, Senator Menendez introduce major farm bill reform legislation. News from Congressman Ron Kind. http://www.house.gov/kind/press/070315-%20Healthy%20Farms%20News%20Re.pdf. Cited 22 March 2007.

Kingdon, J.W. 1984/1995/2003. The policy window, and joining the streams. In Agendas, alternatives, and public policies (2nd edition). Addison-Wesley Educational Publishers/Longman. New York, NY: 172-195.

Kingsolver, B. 2007. Animal, vegetable, mineral. Harper Collins Publishers. New York, NY: 370 pp.

Kirschenmann, F. 2004. A brief history of sustainable agriculture. Science and Environmental Health Network. *The networker*. 9(2). http://www.sehn.org/Volume_9-2.html. Cited 21 January 2008.

Klapper, B. 2007, June 19. U.S., Brazil wrangle over farm subsidies. *The associated press*. At Global Policy Forum. http://www.globalpolicy.org/socecon/trade/subsidies/2007/0619usbrazil.htm. Cited 11 December 2007.

Kleinschmit, J. 2007. Biofueling rural development: Making the case for linking biofuel production to rural revitalization. Carsey institute. Policy brief no. 5. www.carseyinstitute.unh.edu/publications/PB_biofuels.pdf. Cited 28 December 2007.

Kleinschmit, J. and Smith, M. 2006. Biofuels or bust?!? How we can make the bioeconomy sustainable for farmers and the land. National Campaign for Sustainable Agriculture. *Ag matters*. Spring: 1, 4.

Kline, H. 2007, February 20. Specialty crop producers get front row seat in '07 farm bill debate. *Western farm press*. http://westernfarmpress.com/farmbill/022007-specialty-crop/. Cited 22 March 2007.

Knott, J.R. 1998. Review of the book Green culture: Environmental rhetoric in contemporary America. Book reviews. *Society and natural resources.* 11(3): 306.

Knutson, R.D., Penn, J.B., and Boehm, W.T. 1990. Agricultural and food policy. Prentice-Hall, Inc. Englewood Cliffs, NJ: 437 pp.

Knutson, R.D., Schweikhardt, D., and Smith, E.G. 2001. Political setting. In Outlaw, J.L. and Smith, E.G. (Eds), The 2002 farm bill: Policy options and consequences. Farm Foundation. http://www.farmfoundation.org/2002_farm_bill/2002_farm_bill_policy.pdf. Cited 20 April 2004.

Kondracke, M.M. 2007, April 12. Big ag faces fight on farm subsidies from Bush, reformers. Bread for the World. *Roll call*. http://www.bread.org/press-room/news/page.jsp?itemID=32796831. Cited 17 May 2007.

Korves, R.C. 1989. Commentary. The evolution of pesticide policy: Environmental interests and agriculture. In Kramer, C.S. (Ed). The political economy of U.S. agriculture: Challenges for the 1990s. Resources for the Future. Washington, D.C.: 174-178.

Kraft, M.E. and Vig N.J. 2003. Environmental policy from the 1970s to the twenty-first century. In Vig, N.J. and Kraft, M.E. (Eds). Environmental policy: New directions for the twenty-first century. CQ Press. Washington, D.C.: 1-32

Krauss, C. 2007, December 18. As ethanol takes its first steps, Congress proposes a giant leap. *The new york times.* http://www.nytimes.com/2007/12/18/washington/18ethanol.html?pagewanted=print. Cited 26 December 2007.

Krugman, P. 2007, January 29. The sum of all ears. *The new york times.* http://select.nytimes.com/2007/01/29/opinion/29krugman.html. Cited 4 January 2007.

Kuch, P.J. and Ogg, C.W. 1996. The 1995 farm bill and natural resource conservation: Major new opportunities. *American journal of agricultural economics.* 78(5): 1207-1214.

Land Stewardship Project. 2001. Action alert: Major farm/environment policy decisions to be decided. Land Stewardship Project. http://landstewardshipproject.org/pr/newsr_011207.html. Cited 10 January 2007.

Laney, K. 2007, August 1. U.S. farm bill update. International Food and Agricultural Trade Policy Council memorandum.

Lavigne, P. 2007, September 15. Marketing ethanol: Car makers focus on improving gas mileage. *Rockford register star*. http://www.rrstar.com/business/x775325910. Cited 4 January 2007.

Laws, F. 2006a, August 14. Column: Farm groups on a roll… more to follow? *Western farm press*. http://westernfarmpress.com/news/08-12-06-column-groups-roll/. Cited 15 August 2006.

Laws, F. 2006b, October 5. Farm groups call for farm bill extension with a little tweaking. *Southwest farm press*. http://southwestfarmpress.com/mag/farming_farm_groups_call/. Cited 11 December 2007.

Laws, F. 2006c, September 7. This fall: Doha negotiations expected to return. *Southwest farm press*. http://southwestfarmpress.com/mag/farming_fall_doha_negotations. Cited 17 February 2008.

Laws, F. 2007, June 11. Farm bureau issues recommendations for 2007 farm bill. *Western farm press*. http://westernfarmpress.com/farmbill/061107-bill-recommendations/. Cited 11 December 2007.

Leibtag, E. 2008. Corn prices near record high, but what about food costs? *Amber waves*. United States Department of Agriculture Economic Research Service. http://www.ers.usda.gov/AmberWaves/February08/Features/CornPrices.htm. Cited 24 February 2008.

Lenz, K. 2003. Assistance welcome, but lacking. FarmAndAuction.com news. http://findarticles.com/p/articles/mi_qn4179/is_20030227/ai_n11795778. Cited 11 February 2005.

Lewis, T.L. 2000. Media representations of "sustainable development": Sustaining the status quo? *Science communication*. 21(3): 244-273.

Lowe, P., Clark, J., Seymour, S., and Ward, N. 1997. Moralizing the environment: Countryside change, farming and pollution. University College London Press. London, UK: 224 pp.

Lubben, B.D., Bills, N.L., Johnson, J.B., and Novak, J.L. 2006. The 2007 farm bill: U.S. producer preferences for agricultural, food, and public policy. National public policy education committee publication number 2006-01. Farm Foundation. Oak Brook, IL: 64 pp.

Lubben, B.D., Funk, S.M, and Dumler, T.J. 2006. The 2007 farm bill: Drivers of the debate. In 2007 farm bill forums issues and options: Kansas and Nebraska.

www.agmanager.info/policy/commodity/2007/farmbillforumbooklet.pdf. Cited 22 March 2007.

Lubowski, R.N., Bucholtz, S., Claassen, R., Roberts, M.J., Cooper, J.C., Gueorguieva, A., Johannson, R. 2006. Chapter 1: Agricultural policy and environmental effects of marginal cropland changes. In Environmental effects of agricultural land-use change: The role of economics and policy. United States Department of Agriculture Economic Research Service Report No. ERR-25: 1-5. http://www.ers.usda.gov/publications/err25/err25a.pdf. Cited 25 February 2008.

Lukes, S. 1974/2005. Power: A radical view. 2nd edition. Palgrave Macmillan. London, UK: 192 pp.

Luttrell, C.B. 1980. The Russian grain embargo: Dubious success. Federal reserve bank of St. Louis. 7 pp. http://research.stlouisfed.org/publications/review/80/08/Russian_Aug_Sep1980.pdf. Cited 28 February 2008.

MacDonald, C. 2003. The value of discourse analysis as a methodological tool for understanding a land reform program. *Policy sciences.* 36: 151-173.

Madden, J.P. 2007. The early years of the LISA, SARE, and ACE programs. Western region sustainable agriculture research and education, Utah State University. http://wsare.usu.edu/about/index.cfm?sub=hist_concept. Cited 10 September 2007.

Magnusson, R. 2006, June 22. Testimony of Richard Magnusson, wheat, barley, corn, soybean, sunflower producer, Roseau, MN. U.S. House of Representatives Committee on Agriculture 2007 farm bill field hearings. Southwest Minnesota State University. Marshall, Minnesota.

Mahoney, J. 2000. Path dependence in historical sociology. *Theory and society*. 29(4): 507-548.

Marshall, A. 2000. Sustaining sustainable agriculture: The rise and fall of the Fund for Rural America. *Agriculture and human values.* 17: 267-277.

Martin, A. 2007, December 18. Food and fuel compete for land. *The new york times.* http://www.nytimes.com/2007/12/18/business/18food.html?hp%3Cbr%3E. Cited 29 December 2007.

McAdam, D. 1982. Political process and the development of black insurgency 1930-1970. The University of Chicago Press. Chicago, IL: 304 pp.

McAdam, D., McCarthy, J.D., and Zald, M.N. 1996. Introduction: Opportunities, mobilizing structures, and framing processes – Toward a synthetic, comparative perspective on social movements. In McAdam, D., McCarthy, J.D., and Zald, M.N. (Eds). Comparative perspectives on social movements: Political opportunities, mobilizing structures, and cultural framings. Cambridge University Press. Cambridge, UK: 1-22.

McAdam, D, 1999. Introduction to the 2nd edition. In Political process and the development of black insurgency 1930-1970. The University of Chicago Press. Chicago, IL: vii-xlii.

McAdam, D., Tarrow, S., and Tilly, C. 2001. Dynamics of contention. Cambridge University Press. Cambridge, UK: 387 pp.

McCauley, K. and Tolman, R. 2007. Can you feel it? In National Corn Growers Association. 2007. Energized: 2007 world of corn. National Corn Growers Association. http://www.ncga.com/WorldOfCorn/2007/. Cited 27 December 2007.

McCune, W. 1956. Who's behind our farm policy? Frederick A. Praeger, Inc. New York, NY: 374 pp.

McGovern, G. 1967. Introduction. In Agricultural thought in the twentieth century. Bobbs-Merrill Company, Inc. Indianapolis, IN: xv-xxxiv.

McGregor, A. 2004. Sustainable development and 'warm fuzzy feelings': Discourse and nature within Australian environmental imaginaries. *Geoforum.* 35: 93-606.

McKinney, M. 2007, October 9. Boom fades as ethanol floods the marketplace. *Minneapolis star tribune*. http://www.startribune.com/business/11226101.html. Cited 27 December 2007.

Mettler, S. and Soss, J. 2004. The consequence of public policy for democratic citizenship: Bridging policy studies and mass politics. *Perspectives on politics.* 2(1): 55-73.

Meyer, D.S. 2004. Protest and political opportunities. *Annual review of sociology.* 30: 125-145.

Meyer, A. and Hinrichs, C. 2007. A tangle of hope and skepticism: Heartland perspectives on impacts of the emerging agricultural bioeconomy. Paper presented at the 2007 annual meeting of the rural sociological society. Santa Clara, CA.

Meyers, R.L. 1989. Washington watch: Greening of the farm bill. *BioScience.* 39(9): 599.

Miles, M.B. and Huberman, A.M. 1994. Qualitative data analysis. Sage Publications. Thousand Oaks, CA: 338 pp.

Minnesota Corn Research and Promotion Council. 2006. Corn: A natural, biodegradable, renewable resource. Minnesota Corn Research and Promotion Council. Brochure.

Minnesota Pollution Control Agency. 2000, spring. What transparency tube measurements are telling us about stream water quality in Minnesota. Stream Reader. Minnesota Pollution Control Agency. p.2. http://www.pca.state.mn.us/water/pubs/streamreader-spring2000.pdf. Cited 15 May 2007.

Monke, J. 2007. Farm commodity policy: Programs and issues for Congress. CRS Report for Congress RS21999. The Library of Congress. 6 pp.

Monsanto. 2007. Global outlook. The advantages of genetically modified foods and crops. Conversations about plant biotechnology. Monsanto Company. http://www.monsanto.com/biotech-gmo/asp/globalOutlook.asp. Cited 23 May 2007.

Montenegro, M. 2006, December 4. The big three: The numbers behind ethanol, cellulosic ethanol, and biodiesel in the U.S. *Grist magazine*. http://www.grist.org/news/maindish/2006/12/04/montenegro. Cited 4 January 2007.

Moore, M.P. 1993. Constructing irreconcilable conflict: The function of synecdoche in the spotted owl controversy. *Communication monographs*. 60: 258-274.

Morgan, D. 2005, March 8. An end to days of high cotton? GOP constituents caught in a battle over subsidies. *The washington post*. http://www.washingtonpost.com/wp-dyn/articles/A15353-2005Mar7.html?nav=rss_politics. Cited 22 March 2007.

Morris, A. 2000. Reflections on social movement theory: Criticisms and proposals. *Contemporary sociology*. 29(3): 445-454.

Morris, M. and Hill, A. 2006. Ethanol opportunities and questions. Appropriate Technology Transfer for Rural Areas/National Sustainable Agriculture Information Service. www.attra.ncat.org/attra-pub/PDF/ethanol.pdf. Cited 22 March 2007.

Moyer, W. and Josling, T. 2002. Agricultural policy reform: Politics and process in the EU and US in the 1990s. Ashgate Publishing Limited. Hants, UK: 271 pp.

Mufson, S. 2007, December 19. House sends president an energy bill to sign. *The washington post*. http://www.washingtonpost.com/wp-

dyn/content/article/2007/12/18/AR2007121800853_pf.html. Cited 29 December 2007.

Mustard, A.P. and Schmidt, S.C. 1983. Short term impact of the 1980-81 partial U.S. grain embargo on grain trade. *North central journal of agricultural economics.* 5(2): 111-121.

National Academy of Sciences. 2007. Water pollution reduction. Water quality in the natural environment. The National Academies' Water Information Center. http://dels.nas.edu/water/pollution.php. Cited 23 May 2007.

National Agricultural Law Center. 1973. Agriculture and consumer protection act of 1973. University of Arkansas' School of Law National Agricultural Law Center. http://www.nationalaglawcenter.org/assets/farmbills/1973.pdf. Cited 15 May 2007.

National Agricultural Law Center. 2003. United states farm bills. University of Arkansas' School of Law National Agricultural Law Center. http://www.nationalaglawcenter.org/farmbills. Cited 20 January 2008.

National Campaign for Sustainable Agriculture. 2007. Our priorities for the 2007 farm bill. National Campaign for Sustainable Agriculture. http://www.sustainableagriculture.net/fb_priorities.php. Cited 4 January 2007.

National Cattlemen's Beef Association. 2007. Renewable fuels and ethanol production. National Cattlemen's Beef Association. http://www.beefusa.org/goveRenewableFuelsandEthanolProduction.aspx. Cited 22 March 2007.

National Center for Public Policy Research. 1994. Contract with America. National Center for Public Policy Research. http://www.nationalcenter.org/ContractwithAmerica.html. Cited 21 January 2008.

National Corn Growers Association. no date. Who do you want in charge of America's energy security? National Corn Growers Association mailer.

National Corn Growers Association. 2005a. National Corn Growers Association annual report 2005. National Corn Growers Association. http://www.ncga.com/annualReport/2005/PDF/AnnualReport2005.pdf. Cited 26 December 2007.

National Corn Growers Association. 2005b. Ethanol and coproducts: Future role of ethanol. National Corn Growers Association. http://www.ncga.com/Ethanol/energy/future.asp. Cited 22 March 2007.

National Corn Growers Association. 2006a. Raising American standards: 2006 world of corn. National Corn Growers Association. http://www.ncga.com/WorldOfCorn/2006/index.asp. Cited 27 December 2007.

National Corn Growers Association. 2006b. Recognizing 50 years of achievement and success. National Corn Growers Association annual report 2006. 23 pp.

National Corn Growers Association. 2007a. World of corn – production. National Corn Growers Association. http://www.ncga.com/WorldOfCorn/main/production2.asp. Cited 15 May 2007.

National Corn Growers Association. 2007b. Energized: 2007 world of corn. National Corn Growers Association. http://www.ncga.com/WorldOfCorn/2007/WorldOfCorn2007.pdf. Cited 27 December 2007.

National Cotton Council. 2005, November 3. NCC grateful for senators' payment limitations opposition. National Cotton Council. http://www.cotton.org/news/releases/2005/paylim.cfm. Cited 22 March 2007

National Family Farm Coalition. 2007. NFFC farm bill policy statement. National Family Farm Coalition. http://www.nffc.net/resources/statements/FarmBillStatement.doc . Cited 26 December 2007.

National Farmers Union. 2006. National Farmers Union 2006 special order of business: Farm bill. National Farmers Union. http://www.nfu.org/wp-content/uploads/2006/03/2006_SOB-Farm%20Bill%20Extension.pdf. Cited 22 March 2007.

National Farmers Union. 2007a. National Farmers Union 2007 special order of business: Farm bill. National Farmers Union. http://www.nfu.org/wp-content/2007-sob_farm-bill.pdf. Cited 22 March 2007.

National Farmers Union. 2007b. History. National Farmers Union. http://www.nfu.org/about/history/. Cited 22 March 2007.

National Governors Association. 2006. Policy position. NR-09 farm and agriculture policy. National Governors Association. http://www.nga.org/portal/site/nga/menuitem.8358ec82f5b198d18a278110501010a0/?vgnextoid=200b9e2f1b091010VgnVCM1000001a01010aRCRD. Cited 15 May 2007.

National Grain and Feed Association, North American Export Grain Association, Nation Oilseed Processors Association, and National Agri-Marketing Association. 2004, December 14. Major grain, milling, processing groups urge reform of CRP. http://www.grainnet.com/articles/Major_Grain__Milling__Processing_Groups_Urge_Reform_of_CRP_____12_14_2004-24541.html. Cited 27 December 2007.

National Institutes of Health. 2006. Statistics related to overweight and obesity. National Institute of Diabetes and Digestive and Kidney Disorders weight-control information networks. National Institute of Health. http://win.niddk.nih.gov/statistics/index.htm. Cited 15 May 2007.

National Pork Producers Council. 2007, March. Issue paper #4: 2007 farm bill. National Pork Producers Council.

National Wildlife Federation. 2007, February 7. News and views: Innovation for the next generation of biofuels. National Wildlife Federation. http://www.nwf.org/news/story.cfm?pageId=9CB92AE3-15C5-5FE8-B0ED784EAB945906. Cited 22 March 2007.

New York Times. 1994, May 8. Mr. Gingrich's false alarm on trade. *The new york times opinion.* http://query.nytimes.com/gst/fullpage.html?res=9D03E1DA1539F93BA35756C0A962958260. Cited 21 January 2008.

Obama, B. 2007, December 14. Obama statement on the farm bill. Barack Obama, U.S. Senator for Illinois. http://obama.senate.gov/press/071214-obama_statement_110/. Cited 29 December 2007.

Obermoller, R. 2006, July 22. Testimony of Ron Obermoller, Minnesota corn, soybean, and hog producer. U.S. House of Representatives Committee on Agriculture 2007 farm bill field hearings. Southwest Minnesota State University. Marshall, Minnesota. 4 pp.

Offutt, S. and Gundersen, C. 2005. Farm poverty lowest in U.S. history. *Amber waves.* United States Department of Agriculture Economic Research Service. 8 pp. http://www.ers.usda.gov/AmberWaves/September05/pdf/FeaturePovertySeptember2005.pdf. Cited 25 February 2008.

Ogg, C.W. 1988. The conservation title of the Food Security Act of 1985: Challenge of a multiple-objective program. United States Department of Agriculture Economic Research Service Resources and Technology Division. 12 pp.

Orden, D., Paarlberg, R. and Roe, T. 1999. Policy reform in American agriculture: Analysis and prognosis. The University of Chicago Press. Chicago, IL: 270 pp.

Oregon Health and Science University. 2007. Colorschematic presentation of organophosphate pesticides found in farmworker family homes in Hood River, Oregon, Spring 2001. Agricultural occupational and environmental health. Oregon Health and Science University. http://www.ohsu.edu/croet/aghealth/colorplot.html. Cited 23 May 2007.

Organization for Economic Cooperation and Development. 1987. National policies and agricultural trade: Country study United States. Organization for Economic Cooperation and Development. Paris, FR: 217 pp.

Outlaw, J.L. 2002. Provisions of the farm security and rural investment act of 2002. Texas A&M extension agricultural economics. http://agecoext.tamu.edu/resources/library/2002-farm-bill-educational-materials/2002act.html. Cited 22 March 2007.

Oxfam America. 2006. Fairness in the fields: A vision for the 2007 farm bill. Oxfam America. http://www.oxfamamerica.org/resources/files/OA-Fairness_in_the_Fields.pdf. Cited 23 May 2007.

Paarlberg, R. and Orden, D. 1996. Explaining U.S. farm policy in 1996 and beyond : Changes in party control and changing market conditions. *American journal of agricultural economics.* 78(5): 1305-1313.

Palley, T.I. 2007, May 21. R.I.P. Trade promotion authority. TomPaine.com. http://www.tompaine.com/articles/2007/05/21/rip_trade_promotion_authority.php. Cited 11 December 2007.

Pasour, E.C. Jr. 1984, October 22. The high cost of farm subsidies. Backgrounder #388. The Heritage Foundation. http://www.heritage.org/research/agriculture/bg388.cfm. Cited 28 January 2008.

Patashnik, E. 2003. After the public interest prevails: The political sustainability of policy reform. *Governance: An international journal of policy.* 16(2):203-234.

Pennsylvania State University. 2007. Organic crop production: Pest management in organic systems. Agronomy guide 2007-2008: Part I section 11 – Organic crop production. Pennsylvania State University. http://agguide.agronomy.psu.edu/cm/sec11/sec112.cfm. Cited 23 May 2007.

Peters, J.G. 1982. The 1981 farm bill. *Proceedings of the academy of political science (food policy and farm programs).* 34(3): 157-173.

Pfeffer, M.J. 1992. Sustainable agriculture in historical perspective. *Agriculture and human values.* Fall 1992: 4-11.

Pfeffer, M.J. and Gilbert, J. 1989. Federal farm programs and structural change in the 1980s: A comparison of the cornbelt and the Mississippi delta. *Rural sociology*. 54(4): 551-567.

Philpott, T. 2006a. I'm hatin' it: How the feds make bad-for-you food cheaper than healthful fare. *Grist environmental news and commentary*. http://www.grist.org/news/maindish/2006/02/22/philpott/. Cited 16 September 2006.

Philpott, T. 2006b, December 6. Give green, go yellow: How cash and corporate pressure pushed ethanol to the fore. *Grist environmental news and commentary*. http://www.grist.org/news/maindish/2006/12/06/ADM. Cited 31 January 2007.

Philpott, T. 2007, January 30. The short-term solution that stuck: Where farm subsidies came from and why they're still here. *Grist environmental news and commentary*. http://www.grist.org/comments/food/2007/01/30/farm_bill2/. Cited 10 January 2008.

Pierson, P. 2000. Increasing returns, path dependence, and the study of politics. *The American political science review.* 94(2): 251-267.

Poincelot, R.P., Francis, C.A., and Bird, G.W. 2006. Overview of the educational social contract: Building a foundation for sustainable agriculture. In Francis, C.A., Poincelot, R.P., and Bird, G.W. (Eds). Developing and extending sustainable agriculture: A new social contract. The Haworth Press, Inc. New York, NY: 1-24.

Pollan, M. 2006. The omnivore's dilemma: A natural history of four meals. Penguin Press. New York, NY: 450 pp.

Pollan, M. 2007, April 22. You are what you grow. *The new york times magazine.* http://www.nytimes.com/2007/04/22/magazine/22wwlnlede.t.html?ex=1180152000&en=f7f9c4acdb5632ff&ei=5070. Cited 14 May 2007.

Potter, J. 1996. Representing reality: Discourse, rhetoric, and social construction. Sage Publications. London, UK: 253 pp.

Primeira Leitura. 2002. Agronegócios: O Brasil que assusta Bush. *Primeira leitura*. 2: 42-46.

Public Broadcasting System. 2007, November 20. Farm bill plays pivotal role in food production. *Newshour extra*. http://www.pbs.org/newshour/extra/features/july-dec07/farm_11-20.html. Cited 20 January 2008

Quaid, L. 2006, December 12. Congress, White House to push ethanol. *The washington post*. http://www.washingtonpost.com/wp-dyn/content/article/2006/12/12/AR2006121201106.html. Cited 27 December 2007.

Raloff, J. 2007. Ethanol juggernaut diverts corn from food to fuel. *Science news online*. 171(5). http://www.sciencenews.org/articles/20070203/food.asp. Cited 26 March 2007.

Rapoza, K. 2003, September 25. Brazil and the WTO: Leader of the pack. *World press review*. http://www.worldpress.org/article_model.cfm?article_id=1665&dont=yes. Cited 30 April 2004.

Ray, D.E. and Frederick, R. 1994. The economic setting for U.S. food and agriculture. In Hallberg, M.C., Spitze, R.G.F., and Ray, D.E. (Eds). Food, agriculture, and rural policy into the twenty-first century: Issues and tradeoffs. Westview Press. Boulder, CO: 3-24.

Ray, D.E., De la Torre Ugarte, D.G., and Tiller, K.J. 2003. Rethinking U.S. agricultural policy: Changing course to secure farmer livelihoods worldwide. University of Tennessee Agricultural Policy Analysis Center. 68 pp. http://www.agribusinessaccountability.org/pdfs/244_Rethinking US Ag Policy.pdf . Cited 11 December 2007.

Reichelderfer, K. and Hinkle, M.K. 1989. The evolution of pesticide policy: Environmental interests and agriculture. In Kramer, C.S. (Ed). The political economy of U.S. agriculture: Challenges for the 1990s. Resources for the Future. Washington, D.C.: 147-173.

Renewable Fuels Association. 2007. Tales from the heartland: The American ethanol scrapbook. Renewable Fuels Association. 22 pp. http://ww.ethanolrfa.org/objects/pdf/scrapbook/RFA_Scrapbook_2007.pdf. Cited 4 January 2008.

Reuters. 2002, May 23. Argentina joins Brazil in WTO appeal vs. U.S. agricultural subsidies. *Environmental news network*. http://www.enn.com/news/wire-stories/2002/05/05232002/reu_47301.asp. (weblink no longer active). Cited 30 April 2004.

Riemenschneider, C.H. and Young II, R.E. 1989. Agriculture and the failure of the budget process. In Kramer, C.S. (Ed). The political economy of U.S. agriculture: Challenges for the 1990s. Resources for the Future. Washington, D.C.: 87-102.

Richert, C. 2007a, January 6. Reshaping the farm agenda. *CQ weekly*. At Ag Observatory. http://www.agobservatory.org/headlines.cfm?refid=96871. Cited 23 May 2007.

Richert, C. 2007b, February 5. Corn growers propose revamping subsidy as farm law rewrite begins. *Congressional quarterly*. At Crop Insurance Research Bureau. http://www.cropinsurance.org/news_room/featured_news/020507a.pdf. Cited 11 December 2007.

Rinehart, L. 2006. Switchgrass as a bioenergy crop. Appropriate Technology Transfer for Rural Areas/National Sustainable Agriculture Information Service. http://www.attra.ncat.org/attra-pub/PDF/switchgrass.pdf. Cited 26 December 2007.

Rivas-Campo, J.A. and Benke, R.T.J. 2003. FTAA negotiations: Short overview. *Journal of international economic law.* 6(3): 661-694.

Roberts, J. 2006, November 12. Strings cut to cotton lobby: Dunavant determined to do its own thing. The Commercial Appeal. http://thrakika.gr/en/news/detail.php?NEWS_ID=4698&phrase_id=26711. Cited 22 March 2007.

Roberts, R., and Dean, L.E.R. 1994. An inquiry into Lowi's policy typology: The conservation coalition and the 1985 and 1990 farm bills. *Environment and planning C: Government and policy*. 12(3): 71-86.

Robinson, E. 2006, May 22. Biggest risk to ethanol is price of gasoline. *Southeast farm press*. http://southeastfarmpress.com/news/052206-Ethanol-price/. Cited 24 February 2008.

Robinson, K.L. 1989. Farm and food policies and their consequences. Prentice-Hall, Inc. Englewood Cliffs, NJ: 294 pp.

Rochon T.R. 1998. Culture moves: Ideas, activism, and changing values. Princeton University Press. Princeton, NJ: 282 pp.

Romanowski, P. 2006. Fertilizer. How products are made, Volume 3. http://www.madehow.com/Volume-3/Fertilizer.html. Cited 15 May 2007.

Rothfork, P. 2006, June 22. Testimony of Pete Rothfork, turkey producer, Melrose, MN. U.S. House of Representatives Committee on Agriculture 2007 farm bill field hearings. Southwest Minnesota State University. Marshall, Minnesota.

Sabatier, P.A. and Jenkins-Smith, H.C. 1993. The advocacy coalition framework: Assessment, revisions, and implications for scholars and practitioners. In Sabatier,

P.A, and Jenkins-Smith, H.C. (Eds). Policy change and learning: An advocacy coalition approach. Westview Press. Boulder, CO: 211-235.

Sabatier, P.A. 1999. The need for better theories. In Sabatier, P.A. (Ed). Theories of the policy process. Westview Press. Boulder, CO: 73-93.

Sanchez, R.A. 2002. Governance, trade, and the environment in the context of NAFTA. *American behavioral scientist* 45(9): 1369-1393.

Sayre, L. 2005. Getting heard on the Hill. The new farm. Rodale Institute. http://www.newfarm.org/features/2005/0305/DCpolicyreform/index_print.shtml. Cited 25 March 2005.

Schapsmeier, E.L. and Schapsmeier, F.H. 1992. Eisenhower and agricultural reform: Ike's farm policy legacy appraised. *American journal of economics and sociology*. 51(2): 147-159.

Scharff, E. 1981, January 12. The embargo's bitter harvest. *Time magazine*. http://www.time.com/time/magazine/article/0,9171,922376-1,00.html. Cited 28 February 2008.

Schertz, L.P., and Doering III, O.C. 1999. The making of the 1996 farm act. Iowa State University Press. Ames, IA: 190 pp.

Schmitt, E. 1996, March 24. Timing helped G.O.P. win farm bill battle but challenge is likely. *The new york times.* http://query.nytimes.com/gst/fullpage.html?res=9D02E5D91439F937A15750C0A960958260. Cited 21 January 2008.

Schnepf, R. 2007. Canada's WTO case against U.S. agricultural support: A brief overview. CRS Report for Congress RS22724. The Library of Congress. 6 pp.

Schnepf, R. 2008. Brazil's WTO case against the U.S. cotton program: A brief overview. CRS Report for Congress RS22187. The Library of Congress. 6 pp.

Schuh, G.E. 1974. The exchange rate and U.S. agriculture. *American journal of agricultural economics.* 56(1): 1-13.

Schuh, G.E. 1988. Some neglected agricultural policy issues in the Uruguay Round of multilateral trade negotiations. In Roberts, C. (Ed). Trade, aid, and policy reform: Proceedings of the eighth agricultural sector symposium. The World Bank. Washington, D.C.: 5-12.

Schuh, G.E. 1999. Agriculture and economic development. *Chicago policy review*. 3(1): 57-65.

Schwab, S. 2007. Keynote address. Presentation given March 2 2007 at the Commodity Classic. Tampa, FL.

Schweikhardt, D.B., and Batie, S.S. 2008, February 15. A tale of two farm bill proposals. *Michigan farm news*. http://www.michiganfarmbureau.com/farmnews/transform.php?xml=20080215/farmbill.xml. Cited 25 February 2008.

Searchinger, T., Heimlich, R., Houghton, R.A., Dong, F., Elobeid, A., Fabiosa, J., Tokgoz, S., Hayes, D., and Yu, T.H. 2008, February 7. Use of U.S. croplands for biofuels increases greenhouse gases through emissions from land use change. *Science online*. http://www.sciencemag.org/cgi/content/abstract/1151861. Cited 24 February 2008.

Senate Agriculture Committee. 2007. 2007 farm bill. United States Senate Committee on Agriculture, Nutrition, and Forestry. http://agriculture.senate.gov/. Cited 2 January 2008.

Shinn, P. 2008, February 24. Harkin: 2002 farm bill extension "most likely" outcome. *Brownfield network*. http://www.brownfieldnetwork.com/gestalt/go.cfm?objectid=4EB4FE21-DC5A-0EBD-2F90C16857ECD89F. Cited 25 February 2008.

Skogstad, G. 1998. Ideas, paradigms and institutions: Agricultural exceptionalism in the European Union and the United States. *Governance: An international journal of policy and administration*. 11(4): 463-490.

Smith, V.H. and Glauber, J.W. 1997. The effects of the 1996 farm bill on feed and food grains. Policy issues paper no.3. Trade Research Center. http://www.staff.ncl.ac.uk/david.harvey/AEF372/Additions/FAIR.pdf. 19 pp.

Smith, J.R. 2007, January 10. Testimony of J. Reed Smith, Steering committee co-chair 25 x '25 renewable energy alliance. United States Senate Committee on Agriculture, Nutrition, and Forestry. http://agriculture.senate.gov/Hearings/hearings.cfm?hearingid=2465&witnessId=5953. Cited 28 December 2007.

Snow, D.A., Rochford, E.B., Worden, S.K., and Benford, R.D. 1986. Frame alignment processes, micromobilization, and movement participation. *American sociological review*. 51: 464-481.

Sorensen, A.A. 1994. Agricultural conservation alternatives: The greening of the farm bill. American Farmland Trust. October 1994. 130 pp.

Specialty Crop Farm Bill Alliance. 2007. Farm bill principles. Specialty Crop Farm Bill Alliance. http://www.competitiveagriculture.org/farmbillprinciples.html. Cited 22 March 2007.

Spitze, R.G.F., and Flinchbaugh, B.L. 1994. Evolution of U.S. food and agricultural policy: 1970s to 1990s. In Hallberg, M.C., Spitze, R.G.F., and Ray, D.E. (Eds). Food, agriculture, and rural policy into the twenty-first century: Issues and tradeoffs. Westview Press. Boulder, CO: 41-54.

Stancato, R. 2002, December 11. CNA: Brazil 02 agri. surplus set to reach $20 bn. Agencia Estado Brazil. http://www.aebrazil.com/highlights/2002/dez/11/102.htm. Cited 30 April 2004.

Sumner, D.A., Arha, K., and Josling, T. 2007. Commodity policy and the 2007 farm bill. In Arha, K., Josling, T., Sumner, D.A., and Thompson, B.H. (Eds). U.S. agricultural policy and the 2007 farm bill. Woods Institute for the Environment. Stanford University: 5-24.

Sustainability Institute. 2003. Commodity system challenges: Moving sustainability into the mainstream of natural resource economies. Sustainability Institute report. http://www.sustainer.org/pubs/SustainableCommoditySys.2.1.pdf. Cited 04 February 2005.

Sustainable Agriculture Coalition. 2006, October. No time for delay: A sustainable agriculture agenda for the 2007 farm bill. Sustainable Agriculture Coalition. http://www.msawg.org/farmbill/NO%20TIME%20FOR%20DELAY%20-%20full%20text.pdf. Cited 22 March 2007.

Sustainable Agriculture Coalition. 2007. Comparison of SAC farm bill platform with House farm bill and draft Senate chairman's mark. Sustainable Agriculture Coalition.

Sustainable Agriculture Research and Education. no date. SARE funding opportunities. Sustainable Agriculture Research and Education. http://www.sare.org/grants/. Cited 25 February 2008.

Sustainable Agriculture Research and Education. 2007. Sustainable Agriculture Research and Education. http://www.sare.org/. Cited 19 September 2007.

Sustainable Biomass. no date. Principles. SustainableBiomass.org. http://www.sustainablebiomass.org/principles.html. Cited 27 December 2007.

Svartzman, J. 2003, November 1. Brazil-Africa: Brazil's Lula building anti-subsidy trade bloc in Africa. *Agence france-presse.* http://www.aegis.org/news/afp/2003/af031104.html. Cited 30 April 2004.

Szasz, A. 1994. Ecopopulism: Toxic waste and the movement for environmental justice. University of Minnesota Press. Minneapolis, MN: 216 pp.

Talbot, R.B. and Hadwiger, D.F. 1968. The policy process in American agriculture. Chandler Publishing Company. San Francisco, CA: 378 pp.

Tarrow, S. 1998. Power in movement: Social movements and contentious politics. 2nd edition. Cambridge University Press, New York, NY: 271 pp.

Tashakkori, A. and Teddlie, C. 1998. Sampling, measurement, and quality of inferences. In Mixed methodology: Combining qualitative and quantitative approaches. Sage publications. Thousand Oaks, CA: 61-94.

The Economist. 2007, January 27. Waking up and catching up. Briefing green America. 22-24.

The Hill. 2007, March 13. *The hill online*. In Good, K. 2007, March 14. FarmPolicy.com News Summary. http://www.farmpolicy.com/index.php?paged=3. Cited 22 March 2007.

The Minnesota Project. 2007. Homepage. The Minnesota Project. http://www.mnproject.org/. Cited 11 December 2007.

The Minnesota Project. 2008, February 19. U.S. farm bill conference committee: Status of biomass energy reserve. The Minnesota Project.

The Nature Conservancy. 2008. 2007 farm bill: Supporting farms and protecting natural resources. The Nature Conservancy. http://www.nature.org/aboutus/howwework/news/news2204.html. Cited 25 February 2008.

The University of Reading. 2007. Glossary. Environmental challenges in farm management. http://www.ecifm.rdg.ac.uk/glossary.htm. Cited 3 April 2008.

Theodore Roosevelt Conservation Partnership. 2007. Growing conservation in the farm bill: Recommendations of the agriculture and wildlife working group. Theodore Roosevelt Conservation Partnership. 35 pp. http://online.nwf.org/site/DocServer/farmbillreport.pdf?docID=1502. Cited 11 December 2007.

Thurman, W.N. 1995. Assessing the environmental impact of farm policies. The AEI Press. The American Enterprise Institute for Public Policy Research. Washington, D.C.: 79 pp.

Tilman, D., Hill, J., and Lehman, C. 2006. Carbon negative biofuels from low-input high-diversity grassland biomass. *Science*. 314(5805): 1598-1600.

Tilman, D., Hill, J., and Lehman, C. 2007. Response to comment on "Carbon negative biofuels from low-input high-diversity grassland biomass." *Science*. 316(5831): 1567.

Timura, C. 2001. "Environmental conflict" and the social life of environmental security discourse. *Anthropological quarterly* 74(3): 104-113.

Tokgoz, S. and Elobeid, A. 2006. An analysis of the link between ethanol, energy, and crop markets. Working paper 06-WP 435. Center for Agricultural and Rural Development: Iowa State University. Ames, IA: 51 pp.

Tolman, R. and Tumbleson, G. 2006. Welcome. In National Corn Growers Association. 2006. Raising American standards: 2006 world of corn. National Corn Growers Association. http://www.ncga.com/WorldOfCorn/2006/index.asp. Cited 27 December 2007.

Tomson, B. 2006, November 13. *The wall street journal*. In Good, K. 2006, November 14. FarmPolicy.com News Summary. www.farmpolicy.com. Cited 22 March 2007.

Tugwell, F. 1988. The energy crisis and the America political economy: Politics and markets in the management of natural resources. Stanford University Press. Stanford, CA: 294 pp.

Union of Concerned Scientists. 2007. Biofuels: An important part of a low-carbon diet. Union of Concerned Scientists clean vehicle program. http://www.ucsusa.org/clean_vehicles/vehicles_health/biofuels-low-carbon-diet.html. Cited 26 December 2007.

United States Department of Agriculture. 2002. The 2002 farm bill: Provisions and economic implications. United States Department of Agriculture Economic Research Service. http://www.ers.usda.gov/Features/Farmbill/. Cited 14 April 2007.

United States Department of Agriculture. 2006a. Land values and rental rates. Farm bill forum comment summary and background. United States Department of Agriculture. 5 pp. http://www.usda.gov/documents/Land_Values_and_Rental_Rates.pdf. Cited 28 January 2008.

United States Department of Agriculture. 2006b. Energy and agriculture. United States Department of Agriculture 2007 farm bill theme paper. http://www.usda.gov/documents/Farmbill07energy.pdf. Cited 27 December 2007.

United States Department of Agriculture. 2007a. A short history of the food stamps program. Food stamps program. United States Department of Agriculture. http://www.fns.usda.gov/fsp/rules/Legislation/about_fsp.htm. Cited 18 May 2007.

United States Department of Agriculture. 2007b. Farm program integrity. United States Department of Agriculture farm bill forum comment summary and background. www.usda.gov/documents/FARM_PROGRAM_INTEGRITY. Cited 23 May 2007.

United States Department of Agriculture. 2007c. Farm bill 2007 comments reading room. United States Department of Agriculture. http://www.usda.gov/wps/portal/!ut/p/_s.7_0_A/7_0_1UH?navid=FARM_BILL_READING&parentnav=FARM_BILL_FORUMS&navtype=RT. Cited 22 March 2007.

United States Department of Agriculture. 2007d. America's farm bill 2007: USDA 2007 farm bill proposals. United States Department of Agriculture. http://www.usda.gov/documents/07finalfbp.pdf. Cited 22 March 2007.

United States Department of Agriculture. 2007e. Farm and commodity policy: Maps and images. United States Department of Agriculture Economic Research Service Briefing Room. http://www.ers.usda.gov/Briefing/FarmPolicy/maps.htm. Cited 25 February 2008.

United States Department of Agriculture. 2008. FY2009 budget. United States Department of Agriculture. http://www.usda.gov/documents/Budget2009.pdf. Cited 22 February 2008.

United States Department of Agriculture Natural Resources Conservation Service. 2003. Soil erosion. Natural resources inventory. 2003 annual NRI. United States Department of Agriculture, Natural Resources Conservation Service. http://www.nrcs.usda.gov/technical/NRI/2003/nri03eros-mrb.html. Cited 17 May 2007.

United States Senate. 2005, October 6. Letter to United States Trade Representative from Senator Chambliss and Representative Goodlatte regarding World Trade Organization negotiations. United States Senate. http://agriculture.senate.gov/wto_scrg.pdf. Cited 11 December 2007.

United States Wheat Associates. 2007. 2007 farm bill: Impact on wheat and the World Trade Organization. U.S. Wheat Associates. http://www.uswheat.org/USWPublicDocs.nsf/0/0bc0452de6e71a6c8525727d00722af

5/$FILE/Farm%20Bill%20Proposal%20Impact%20on%20Wheat.pdf. Cited 22 March 2007.

University of Illinois. 2008. Agricultural supply and demand database. FarmDoc Marketing and Outlook. http://www.farmdoc.uiuc.edu/marketing/supply_demand/supply_demanddata.html. Cited 24 February 2008.

U.S. News and World Report. 1986, March 24. *U.S. News and World Report*. p. 82. In Knutson, R.D., Penn, J.B., and Boehm, W.T. 1990. Agricultural and food policy. Prentice-Hall, Inc. Englewood Cliffs, NJ: 437 pp.

Vig, N.J. 2003. Presidential leadership and the environment. In Vig, N.J. and Kraft, M.E. (Eds). Environmental policy: New directions for the twenty-first century. CQ Press. Washington, D.C.: 103-126.

Wallace, E. 2006, April 27. Ethanol: A tragedy in three acts. *Business week online*. http://www.businessweek.com/autos/content/apr2006/bw20060427_493909.htm?chan=search. Cited 22 March 2007.

Wall Street Journal. 2007, January 27. Very very big corn: Ethanol and its consequences. Hot topic. *The wall street journal*. http://opinionjournal.com/weekend/hottopic/?id=110009587. Cited 24 February 2008.

Walz, T. 2007. Helping America achieve energy independence. The far-reaching impact of the 2007 farm bill. Office of Congressman Tim Walz mailer.

Wang, M. 2005. Energy and greenhouse gas emissions impacts of fuel ethanol. Center for Transportation Studies, Argonne National Laboratory.

Webb, T. 2007, March 5. Green ethanol's dirty fuel. *St. Paul pioneer press*. http://www.twincities.com/mld/twincities/business/16834568.htm (weblink no longer active). Cited 8 April 2007.

Weisman, S.R. and Barrionuevo, A. 2006, July 27. Failure of global trade talks is traced to the power of farmers. *The new york times*. C1, C4.

Western Governors Association. no date. Western regional biomass energy program. Western Governors Association. http://www.westgov.org/wga/initiatives/biomass/. Cited 27 December 2007.

Wheatley, J. and Lapper, R. 2007, March 9. Bush and Lula sign green fuels deal. *Financial times*. http://www.ft.com/cms/s/1311ebdc-ce80-11db-b5c8-000b5df10621.html. Cited 22 March 2007.

White House. 2007, December 19. President Bush signs H.R. 6, the Energy Independence and Security Act of 2007. The White House. http://www.whitehouse.gov/news/releases/2007/12/20071219-6.html. Cited 4 January 2007.

Willette, J.K. 2008, January 31. Farm bill stalls. *Agri news*. A4.

Womach, J. 2005. Previewing a 2007 farm bill. CRS Report for Congress RL33037. The Library of Congress. 53pp. (updated to Womach *et al*. 2007)

Womach, J., Becker, G.S., Chite, R.M., Cowan, T., Gorte, R.W., Hanrahan, C.E., Jurenas, R., Monke, J., Rawson, J.M, Schnepf, R. Zinn, J.A., and Richardson, J. 2007. Previewing a 2007 farm bill. CRS Report for Congress RL 33037. The Library of Congress, Washington D.C.

World Trade Organization. no date. The multilateral trade system – past, present and future. The WTO in brief: Part I. World Trade Organization. http://www.wto.org/english/theWTO_e/whatis_e/inbrief_e/inbr01_e.htm. Cited 23 February 2008.

World Trade Organization. 2001. Globalization: A solution for some. World Trade Organization. http://www.gatt.org/globalization.html. Cited 24 May 2007.

World Trade Organization. 2002. Agriculture negotiations backgrounder: Phase I, Developing countries. World Trade Organization. http://www.wto.org/english/tratop_e/agric_e/negs_bkgrnd09_develop_e.htm. Cited 11 December 2007.

World Trade Organization. 2008, February 8. Doha development agenda agriculture negotiations: Draft blueprints issued for final deal on agricultural and non-agricultural trade. World Trade Organization 2008 news items. http://www.wto.org/english/news_e/news08_e/ag_draft_modalities_feb08_e.htm. Cited 13 February 2008.

Wright, D.E. 1993. Alcohol wrecks a marriage: The farm chemurgic movement and the USDA in the alcohol fuels campaign in the spring of 1933. *Agricultural history*. 7(1): 36-66.

Wright, W. and Reid, T. unpublished manuscript (in review). Dangling promises of riches and rural development: Farming, fault lines, and the re-emergence of U.S. biofuels.

Youngberg, G., Schaller, N. and Merrigan, K. 1993. The sustainable agriculture policy agenda in the United States: Politics and prospects. In Allen, P. (Ed). Food for the future: Conditions and contradictions of sustainability. John Wiley and Sons Inc. New York, NY: 295-318.

Zahariadis, N. 1999. Ambiguity, time, and multiple streams. In Sabatier, P.A. (Ed). Theories of the policy process. Westview press. Boulder, CO: 73-93.

25 x '25. no date. America's working lands: Powering the future. 25 x '25. Energy Future Coalition. Brochure.

Appendix: Interview guide

I. Organizational basics

A. What is your group's position on the farm bill (especially commodity and conservation titles)? What policies does the group promote?
B. What are your group's top two priorities for the farm bill?
C. What are your group's motivations or interests re: the farm bill? What kind of an organization is it? (grassroots organizing, think tank, other)
D. What strategies is your group using to promote its position? (media, lobbying, other)
E. What is the timeline for your group's strategic plan on the farm bill? What are you planning to do when?
F. Is your group new to involvement with the farm bill or has it been working on these policy issues for years? How does your position fit with your work in the last farm bill?
G. Where does your group's funding come from? What, if any, are the requirements associated with that money?

II. Inter-organizational dynamics

A. What other groups do you work with? How do they fit into the larger farm bill debates? Paint a rough map of the playing field of farm bill organizations, from your perspective.
B. How is your group's position the same from that of the coalitions you are a part of? How is it different?
C. Why did your group join the coalitions you are part of? What are the organizational motivations? What are pluses and minuses of working with the coalitions?
D. What is your group's relation to the Kellogg Food and Farm Policy Project (if any)? (for sustainable agriculture and environmental groups)
E. What has been the process of drafting collaborative documents around farm bill positions?
F. Does your group work collaboratively with commodity groups? Wildlife groups? Other? (specific question varied by group type)
G. Who do you view as allies (outside of above stated coalitions) and opponents? What makes them allies or opponents?

III. Farm bill projections and drivers

A. What do you ***hope*** will happen with the 2007 farm bill, in terms of timing and legislation passed?[75]
B. What do you ***think*** will happen with the 2007 farm bill?
C. What factors do you think will most influence the farm bill outcomes? (examples below, but interviewer asked for these particular ones only if they were not already mentioned)

[75] Note that at the time of these interviews, 2007 was the expected date for farm bill completion.

a. Budgets?
b. Trade/WTO? If so, when do you think WTO stalemates will be resolved?
c. Renewable energy? Homeland security and energy independence?
d. Do you think these issues (ethanol/trade/other) will be major pivot points for reforming commodities, etc?
e. And how about politics? Will the farm bill be passed in 2007? (i.e. some groups pushing for an extension)

IV. Group strategies

A. What is your group's position on the "hot button" issues (discussed above) and why? Are these issues central or tangential to your organization's goals?
B. Is this a new interest of your group or one you have worked on for years?
C. (Interviewer also probes for information on any of the other issues that arose above).
D. What do you think other stakeholders' positions are on these issues?

V. Discourse and language (these are questions the interviewer may not need to ask explicitly, if they have already been addressed through the preceding questions. However, if the predominant discourses used to frame their position(s) are not clear, these questions will be asked at the end of the interview)

A. Can you talk about the framing of your group position (especially in relation to public education or lobbying)?
    a. Do you use the "family farmer" as a frame? Focus on discourses around sustainable agriculture? Rural development? Urban consumer arguments? Trade? Ethanol? Other?
    b. What other specific words or phrases do you explicitly use or not use to frame our group's farm bill discourse? Why do you use this language or not use it?
B. What do you think the importance of rhetoric and language and discourse is to your work? Do you strategize around it explicitly as an organization or is it secondary to other concerns?