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FARMING AN UNCERTAIN CLIMATE FUTURE: WHAT COP 15 MEANS FOR AGRICULTURE

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This Article examines some of the legal and political issues raised by the global debate over climate change, with the goal of providing helpful insight to guide future actions. It evaluates the results of the climate talks that took place in Copenhagen in 2010, with a particular emphasis on the opportunity missed by U.S. agriculture in achieving meaningful change. Disappointed by the results of that conference, the author compares the lackluster outcome there with the debate on cap-and-trade legislation in the United States. Detailing an era of missed opportunities, from January 2009 to July 2010, the Article examines the consequential effect on the United States' ability to develop a more balanced renewable energy policy and for U.S. agriculture to participate in potential markets for carbon. The author concludes by looking forward to what may happen in U.S. politics on climate change and the impact on issues important to agriculture.

I. INTRODUCTION: WHY CLIMATE CHANGE IS IMPORTANT TO AGRICULTURE

Some of the most direct and immediate impacts of global climate change (GCC) are on agriculture. Rising sea levels displacing coastal farming communities, declining water supplies, and shifting weather patterns raising the specter of drought and crop failures are just some of the effects already being experienced across the globe. As a result, agricultural systems, people, and institutions will come under increasing pressure and stress. Law and legal systems are significant social institutions with critical roles to play in shaping a more sustainable future for nations as well as individual farmers. GCC presents new challenges to the ideals of sustainable agriculture and sustainable development. Agricultural practices, in particular the concentrated production of livestock and deforestation to increase food production, are significant contributors to

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the greenhouse gasses believed responsible for GCC. Some of the most promising ideas for responding to GCC, however, are agriculturally based, such as producing renewable fuels and increasing markets for carbon and other ecosystem services, meaning agriculture has a potential role in "answering" GCC. The reality is that without effective policy-making, agriculture may get it "coming and going" by experiencing the adverse impacts of climate change *and* absorbing costs and restrictions from legal and regulatory efforts to address GCC. But there is also a more hopeful possibility—that responding to climate change provides the opportunity to develop more resilient and sustainable agricultural systems addressing the underlying resource needs of soil conservation, water-quality protection, and farmland preservation. The challenges posed by GCC may facilitate development of innovative mechanisms to support farmers and landowners who manage land in ways to produce not just food but to reduce the impacts of GCC, such as markets for storing carbon, the development of more renewable energy sources, and support for promoting other climate-friendly practices on the land.

Against this backdrop of challenges and opportunities, the outcome from the recent UN climate talks in Copenhagen (COP 15) should be considered. The run-up to COP 15 was filled with excitement and expectation, but the actual talks (which the author attended) and their results were disappointing for most observers. This Article examines some of the legal and political issues raised by the global debate over climate change, with the goal of providing helpful insight to guide future actions. It analyzes what is happening in the United States with the consideration of cap-and-trade legislation and the relation of that legislation to the outcomes experienced at COP 15. The Article portrays the period from January 2009 to July 2010 as one of lost opportunities and examines how the experience may affect our ability to develop a more balanced renewable energy policy as well as limit opportunities for agriculture to participate in potential markets for carbon. The Article concludes with a series of observations and lessons that can be drawn from this experience and looks forward to what may happen in U.S. politics regarding climate change and the impact on important agricultural issues, including our policy on biofuels.

II. AGRICULTURE AND COPENHAGEN—THOUGHTS ABOUT THE RUN-UP TO COP 15

I traveled to Copenhagen for COP 15 along with two Drake University agricultural law students as part of a U.N. Association delegation of Iowa students and professors. My special interest was in what the talks might mean for agriculture and farmers in the United States and abroad. U.S. policy discussions prior to COP 15 were marked by growing discord and reflected the unwillingness by many in the U.S. farm sec-

tor to take climate change seriously. My thoughts on what we might expect in going to Copenhagen were shaped by several ideas.[1]

First, COP 15 was going to happen with or without the United States' active participation. The common belief and reality shared by the thousands of delegates who traveled to Copenhagen is that climate change is real and its impacts are felt around the globe—whether or not U.S. farm groups and politicians want to accept the truth. Fortunately, most of the world's nations recognize their obligation and the opportunity to engage in how best to craft a response.[2] Unfortunately, as events would unfold, the shared appreciation for the reality of climate change did not make it any easier to address the underlying questions of how nations can best act to limit climate change or how to pay for efforts to mitigate or adapt to it.

Second, agriculture has a significant stake in the climate talks due to both the adverse impacts climate change has on food production and the significant role agriculture may play in addressing its causes. The talks in Copenhagen were an opportunity to show the world's increased appreciation for addressing threats associated with uncontrolled deforestation and continued expansion of livestock production. But as the talks went on, the complicated political reality and the difficulty of negotiating a comprehensive treaty effectively narrowed the range of issues on which agreement could be reached.

Third, the size of the U.S. economy and our contributions to climate change and energy use made the international discussions a key opportunity for the United States to lead in developing effective responses—leadership the world wanted and expected. The international stature and respect for President Obama, enhanced by his receiving the Nobel Peace Prize shortly before the talks, fueled expectations that his participation could help resolve the political tensions associated with climate talks.[3] While events would show his participation played a critical role in salvaging the final agreement that emerged, the President's latitude to negotiate in Copenhagen was constrained by the political reality of needing Senate approval at home.

Fourth, international negotiations historically have been very important to farmers, in part because U.S. agriculture promotes free trade and open markets as the basis for all international rules. My hope was that if U.S. agriculture participated at COP 15, ideas to protect the envi-

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1. For a perspective on the situation before and after the talks in Copenhagen, see Neil Hamilton, *American Farmers Must Step Up on Climate Change*, DES MOINES SUNDAY REG., Nov. 29, 2009, at 4OP; *see also* Neil Hamilton, *After Copenhagen: Make Agriculture More Resilient*, DES MOINES SUNDAY REG., Dec. 27, 2009, at 1OP.

2. *See* Elisabeth Rosenthal & Neil MacFarquhar, *Nations Unveil Plans to Rein In Emissions*, N.Y. TIMES, Nov. 20, 2009, at A10.

3. *See, e.g.*, John M. Broder, *U.S. to Set Short-Term Goal on Emissions Before Climate Change Meeting*, N.Y. TIMES, Nov. 24, 2009, at A24; Jeff Zeleny, *Obama Delays Trip to Copenhagen by One Week*, THE CAUCUS (Dec. 4, 2009, 5:01 PM), http://thecaucus.blogs.nytimes.com/.

ronment and create new income might emerge, whereas sitting on the sidelines while others crafted the agenda was a recipe for conflict and lost opportunities. My fear was that failure in U.S. leadership would not just impact the success of the negotiations and limit the willingness of others like India and China to act, but it would also signal the erosion of U.S. prestige and national confidence.

While the climate change agreement from Kyoto created little role for agriculture, proposals for COP 15 had anticipated a much larger, even central role.[4] But the domestic response of many U.S. farm groups revealed a mixed, even ambivalent reaction—not just to Copenhagen but also to whether climate change is real or U.S. action is needed. Some groups, like the National Farmers Union, recognized the need for Congress to enact cap-and-trade legislation and to use it as the basis for ambitious goals for Copenhagen.[5] But others, like the American Farm Bureau Federation, actively opposed cap-and-trade at home and appeared relatively unprepared, even uninterested, in what the world may do in Copenhagen. Farm Bureau encouraged its members to protest to Congress with "Don't Cap Our Future," arguing agriculture would suffer increased energy costs with no corresponding economic benefits.[6] The strategy prevailed, at least for now.

During 2009 the protests from some in agriculture grew even in the face of studies showing the limited impact of proposed legislation and strong arguments by U.S. Secretary of Agriculture Vilsack that climate legislation will open new streams of farm income through carbon markets and renewable energy.[7] The opposition reflected several strains: un-

4. *Climate Change Talks Should Include Farmers*, FOOD AND AGRIC. ORG. OF THE UNITED NATIONS (Apr. 2, 2009), http://www.fao.org/news/story/0/item/11356/icode/en/. *See generally* FOOD AND AGRIC. ORG. OF THE UNITED NATIONS, ANCHORING AGRICULTURE WITHIN A COPENHAGEN AGREEMENT: A POLICY BRIEF FOR UNFCCC PARTIES (2009), http://foris.fao.org/static/data/nrc/policy_brief_sbstabonn.pdf; Joachim von Braun & Rajul Pandya-Lorch, *Introduction* to INT'L FOOD POLICY RESEARCH INSTITUTE, AGRICULTURE AND CLIMATE CHANGE: AN AGENDA FOR NEGOTIATION IN COPENHAGEN (Gerald C. Nelson ed., 2009).

5. *NFU President Talks Climate Change in Iceland*, NAT'L FARMERS UNION (Aug. 12, 2009), http://nfu.org/news/2009/08/12/nfu-president-talks-climate-change-in-iceland.html.

6. For a link to the "Don't Cap Our Future" campaign to oppose any climate change legislation, see *Sign the Petition: Don't Cap Our Future*, FB ACT INSIDER, www.fbactinsider.org/petition.jsf?petitionUuid=326598ea-35aa-428d-9fb7-181e3858f2577 (last visited Jan. 25, 2011).

7. Secretary Vilsack and environmental groups strongly endorsed cap-and-trade legislation. Secretary Vilsack in particular argued that the legislation will open billions of dollars of new markets for agriculture. *See, e.g.*, Dan Piller, *Vilsack Defends Efforts on Climate Change*, DES MOINES REG., Aug. 20, 2009, at 11B; Tom Vilsack, Op-Ed., *Addressing Climate Change Could Revitalize Rural America*, DES MOINES REG., July 21, 2009, at 19A. The Secretary appeared before the Senate Agriculture Committee in July 2009 and presented the preliminary report from the Economic Research Service to support his argument that the legislation will benefit farmers. OFFICE OF CHIEF ECONOMIST, USDA, A PRELIMINARY ANALYSIS OF THE EFFECTS OF HR 2454 ON U.S. AGRICULTURE 1 (July 22, 2009), http://www.usda.gov/oce/newsroom/archives/releases/2009files/HR2454.pdf. There are a variety of reports analyzing the impacts of the House passed legislation and the opportunities for agriculture created in the 2008 farm bill. *See, e.g.*, NAT'L SUSTAINABLE AGRIC. COAL., AGRICULTURE & CLIMATE CHANGE: IMPACTS AND OPPORTUNITIES AT THE FARM LEVEL, 4, 14, 26–28, 33 (2009), http://sustainableagriculture.net/wp-content/uploads/2008/08/nsac_climatechangepolicypaper_final_20090_07_16.pdf. The paper details performance of sustainable and organic agriculture systems in reduc-

certainty if climate change is real, unwillingness for the United States to lead the international talks, a lack of trust in officials promoting laws to address climate change, and the expectation that other nations like China and India must act first. The farm groups fighting climate change action demonstrated that they expected little from COP 15 and did not fear its failure. The opposition brought to mind the expression "if you aren't part of the solution you are part of a problem" and raised the question of whether our lack of engagement might threaten to make U.S. agriculture the "problem" other nations needed to address. It is dangerous for the United States to assume that the rest of the world will not act without us or that we are immune from the natural effects of climate change or the political effects of international policies developed in our absence.

By the time President Obama and Secretary Vilsack flew to Copenhagen, the lack of U.S. progress on legislation to reform energy policy and address climate change had led to scaled back expectations for what might come from the talks. Opposition from U.S. agriculture had significantly delayed progress on U.S. legislation and jeopardized the development of an international agreement in our best interests. Ironically, it may jeopardize our future ability to engage in the international markets and trade negotiations central to continued growth of much of U.S. agriculture. The economic health of U.S. agriculture has grown increasingly dependent on markets for commodities to produce biofuels, such as corn-based ethanol, as the "answer" to U.S. energy needs and to absorb increasing crop production.[8] U.S. agriculture has a long history of innovation in the face of new challenges and opportunities. These factors make agriculture's opposition to climate change action even more puzzling.

III. WHAT HAPPENED AT COPENHAGEN AND WHAT DOES IT MEAN?

From a legal perspective, the long and the short of what happened at Copenhagen is—not much. No treaty was agreed to, no binding promises committing the world's nations to enforceable reductions in greenhouse gas emissions were signed, and no mechanism was created to fund the needed mitigation and adaptation efforts in the nations most threat-

ing greenhouse gas emissions and sequestering soil carbon. *See also* AGRIC. CARBON MKT. WORKING GROUP, http://www.agcarbonmarkets.com/ (last visited Jan. 25, 2011).

8. One cloud threatening the future of ethanol in the United States concerns the increasing political scrutiny of the generous subsidies given the sector by Congress. A recent report from a somewhat unexpected source raises this issue. In his study, *Mandates, Tax Credits, and Tariffs: Does the U.S. Biofuels Industry Need Them All?*, Dr. Bruce A. Babcock, the economist who heads the Center for Agricultural and Rural Development (CARD) at Iowa State University, examines the economic costs of the policies. *See generally* BRUCE A. BABCOCK, CTR. FOR AGRIC. AND RURAL DEV., MANDATES, TAX CREDITS, AND TARIFFS: DOES THE U.S. BIOFUELS INDUSTRY NEED THEM ALL? (2010).

ened by climate change.[9] Instead, the world's leaders produced a three-page Accord, consisting of twelve paragraphs stating their intentions for action.[10]

By the time the observers and negotiators went home and the hosts cleaned up the meeting halls, the commentators and critics were dissecting what happened in Copenhagen to determine if it was a failure or an important step forward.[11] Most have sided with failure, but, from my perspective, what you see depends on where you start. If you had hoped the talks would produce a treaty committing all nations to drastic greenhouse gas reductions, you were optimistic, perhaps too much so. If you believed citizens and world leaders could unite to "bend the trend" in addressing climate change, you were more realistic and can find hope in the Copenhagen Accord. For the most part, there was little disagreement over the need to act, but the complexity of addressing the global challenge of climate change proved daunting. The enormity of the task challenged, in many ways, the capacity of the United Nations to effectively address the issues in a forum like COP 15. How the talks in Copenhagen and the other follow-up meetings may influence agriculture will depend on how nations act on the commitments they made, in particular, funding to address deforestation and encourage planting trees and other green crops.

Regardless of your view on climate change, one idea that became clear in Copenhagen was the need for agriculture to become more resilient. Perhaps the "unusually" wet fall of 2009 that delayed harvests in Iowa and Illinois and caused billions of dollars in crop losses across the south (leading Congress to consider providing over $1.5 billion in disaster aid) was just "the weather."[12] Perhaps the same is true of the record rainfalls Iowa experienced in the early summer of 2010, with June being the second wettest month on record.[13] But what if these are a preview of

9. *See, e.g.*, John M. Broder, *5 Nations Forge Pact on Climate; Goals Go Unmet*, N.Y. TIMES, Dec. 19, 2009, at A1.

10. *See* Andrew C. Revkin & John M. Broder, *Grudging Accord on Climate, Along with Plenty of Discord*, N.Y. TIMES, Dec. 20. 2009, at A1. The terms of the Accord can be seen at United Nations Climate Change Conference, Copenhagen, Den., Dec. 7–19, 2009, *Report of the Conference of the Parties on its Fifteenth Session, Held in Copenhagen from 7 to 19 December 2009*, at 4, FCCC/CP/2009/11/Add.1 (Mar. 30, 2010).

11. *See, e.g.*, Lawrence Demase & Jennifer Smokelin, *After Copenhagen, It Is Clear There Will Be Winners and Losers*, NAT'L L.J., Feb. 8, 2010, at 15; Editorial, *Copenhagen, and Beyond*, N.Y. TIMES, Dec. 21, 2009, at A30; Al Gore, Op-Ed, *We Can't Wish Away Climate Change*, N.Y. TIMES, Feb. 28, 2010, at WK11; Thomas Kleine-Brockhoff, *Copenhagen Lessons*, FIN. TIMES, Dec. 23, 2009, at 8; Revkin & Broder, *supra* note 10.

12. Shaila Dewan, *In Mississippi Delta, a Promising Summer Washed Away by the Fall*, N.Y. TIMES, Nov. 23, 2009, at A12. The crop losses in the South have resulted in a major political controversy over the efforts by Senator Lincoln of Arkansas to use her position as Agriculture Committee Chair to obtain disaster relief and the White House's support for using a nonlegislative method for the funding. *See, e.g.*, Alec MacGillis, *$1.5 Billion Farm-aid Proposal Assailed as Relief for Sen. Blanche Lincoln*, WASH. POST, August 22, 2010, at A4.

13. Randy M. Cauthron, *Weekend Weather Makes June Wettest Ever*, THE DAILY REPORTER (June 29, 2010), http://www.spencerdailyreporter.com/story/1645909.html.

how climate change may increase the variability of weather and heighten farming's vulnerability? If we care about our future, which is the underlying premise of society, should we not plan now for how we may need to adapt? Adaptation and mitigation were key issues in Copenhagen.[14] One role of the world's gene banks, like international centers for potatoes in Peru,[15] national programs for corn in Ames,[16] and private efforts by Seed Savers Exchange in Decorah,[17] is to help farmers adapt. Gene banks may hold varieties adapted to environmental stress and varieties suited for use as changing weather patterns cause geographic shifts in the production for major crops. My colleague, Cary Fowler of the Global Crop Diversity Trust in Rome, was among those who worked in Copenhagen on a valiant but ultimately fruitless effort to include a statement on agriculture in the final agreement.[18]

Rainforests were another key issue. The strategy known as REDD, "reforestation and reducing forest destruction," was a major topic of discussion, and negotiators made critical progress on crafting an international funding mechanism to protect rainforests.[19] This has special resonance for Midwestern farmers. The truth is, it makes more economic and strategic sense to protect rainforests in Brazil than to plant new ones in Benton County, Iowa. Saving rainforests preserves carbon-storing benefits and avoids huge emissions from their destruction. It is good for the United States and the climate if South American, Asian, and African rainforests stay intact. Moreover, millions of new acres will not be planted with soybeans or palm nut or grazed for beef, helping reduce

14. *See, e.g.*, Stephen Hall & Thomas Rosswall, *Foreword* to CONSULTATIVE GROUP ON INTERNATIONAL AGRICULTURAL RESEARCH (CGIAR), CLIMATE, AGRICULTURE AND FOOD SECURITY: A STRATEGY FOR CHANGE, at iii, iv (2009).

15. The International Potato Center (or Centro International de la Papa, CIP), located in Lima, Peru is part of the Consultative Group for International Agricultural Research and is responsible for maintaining the world's genetic collection of potatoes and related crops. *See* INT'L POTATO CTR., http://www.cipotato.org (last visited Jan. 25, 2011). For information on the work of CIP and its role in improving the fortunes of the world's small farmers, see generally INT'L POTATO CTR., PRESERVING THE CORE, STIMULATING PROGRESS: CIP'S VISION STATEMENT (2003), http://www.cipotato.org/research/docs/CIP_Vision_Statement.pdf.

16. The North Central Regional Plant Introduction Station, located in Ames, Iowa is part of the National Plant Germplasm System and is a collaboration between the USDA Agricultural Research Service, Iowa State University, and the North Central Regional Agricultural Experiment Station. One of its functions is to maintain the nation's genetic collection of maize. *See* USDA AG. RESEARCH SERV., *North Central Regional Plant Introduction Station*, http://www.ars.usda.gov/main/site_main.htm?modecode=36-25-12-00 (last visited Jan. 25, 2011).

17. Seed Savers Exchange is an organization dedicated to the conservation and use of heirloom crops, which are a fundamental element in preserving the resilience of agricultural systems. *See Saving Heirlooms*, SEED SAVERS EXCHANGE, http://www.seedsavers.org/Content.aspx?src=savingheirlooms.htm (last visited Jan. 25, 2011).

18. *Food Security and Climate Change: A Call for Commitment and Preparation*, GLOBAL CROP DIVERSITY TRUST, http://www.croptrust.org/main/climatestatemen.php?itemid=597 (last visited Jan. 25, 2011).

19. *See* Elisabeth Rosenthal, *Deal Seen Near for Payments to Save Forests*, N.Y. TIMES, Dec. 16, 2009, at A1.

competition.[20] These reasons explain why the United States is willing to help pay to protect rainforests. Our willingness to support such efforts are premised on two key issues: monitoring and verification. Our negotiators were adamant on the need for these systems to be in place.

The talks in Copenhagen were often about money, and who should pay to support which practice. Todd Stern, the chief U.S. negotiator, staked out the U.S. position quite clearly, indicating we will not be "shaken down" or pay reparations for alleged climate crimes, but the United States will help fund progress going forward, like preventing deforestation.[21] Any international agreement, whatever its legal status whenever signed, must verify and monitor nations' actions and protect our right to use trade adjustments for those unwilling to observe commitments. The talks showed that on these issues, and others, China remains a special concern due both to its limited view of the rule of law and its reluctance to comply with standards of international transparency.[22]

In the weeks following the Copenhagen talks, several developments fueled a growing uncertainty over future developments. The pace at which nations submitted their commitments, due by January 31, 2010, and the nature of financial contributions to the $30 billion in short-term financial assistance promised countries most impacted by climate change, raised fears that the Accord that emerged might implode.[23] In February 2010 concerns about disarray in the U.N.'s climate change efforts grew when Yvo de Boer, the U.N. official who had lead the COP 15 talks, announced his resignation effective July 1, 2010.[24]

IV. CONGRESSIONAL ACTION ON CLIMATE CHANGE—A YEAR (OR MORE) OF LOST OPPORTUNITIES

The year 2009 was in many ways a year of lost opportunities for the United States on policy for climate change and renewable energy, and the first half of 2010 has followed the same course. The COP 15 talks

20. *See, e.g.*, Jacqui Fatka, *American Ag Can Benefit from Saving Tropical Rainforests*, FEEDSTUFFS, May 31, 2010, at 1 (discussing a report, *Farms Here Forests There*, issued in May 2010 and funded in part by the National Farmers Union, detailing the benefits to agriculture from supporting efforts to limit deforestation in the rain forest, SHARI FRIEDMAN, FARMS HERE, FORESTS THERE: TROPICAL DEFORESTATIONS AND U.S. COMPETITIVENESS IN AGRICULTURE AND TIMBER 1 (2010), http://www.adpartners.org/pdf/ADP_Report_052410a.pdf).

21. Richard Cowan, *U.S. Sees Robust Climate Talks, No "Reparations,"* REUTERS (Dec. 10, 2009), http://www.reuters.com/article/idUSTRE5B82J220091210 ("We absolutely recognize our historic role in putting emissions in the atmosphere, up there, but the sense of guilt or culpability or reparations, I just categorically reject that." (quoting Todd Stern, the President's special envoy for climate change)).

22. *See* Edward Wong & Jonathan Ansfield, *China Insists that Its Steps on Climate Be Voluntary*, N.Y. TIMES, Jan. 30, 2010, at A5.

23. *See* John M. Broder & Elisabeth Rosenthal, *U.N. Official Says Climate Deal Is at Risk*, N.Y. TIMES, Jan. 21, 2010, at A8.

24. Neil MacFarquhar & John M. Broder, *U.N. Climate Chief Quits, Deepening Sense of Disarray*, N.Y. TIMES, Feb. 19, 2010, at A12.

scheduled for December meant 2009 presented the opportunity for action and the outlet to provide the world with much needed international leadership. Given the dominant role of the United States in contributing to greenhouse gas emissions through our profligate energy use, COP 15 was also designed to help the nation come to grips with our contributions to climate change and to seize the opportunity to steer a new course. Instead, this "marker" for needed action became a measure of how fleeting the moment for action was.

The year started with promise as the newly inaugurated President and congressional leaders identified a strategy for passing major climate legislation, first in the House and then with Senate action by fall. The opportunity was for legislation to address not just climate change and curb greenhouse gas emissions, but also to help create a marketplace for carbon and to develop a more well-rounded, robust, renewable energy policy. Doing so would lay the foundation for a broader marketplace for environmental services related to climate, like carbon offsets produced by U.S. farmers. The first half of 2009 was dominated by House consideration of the Waxman-Markey proposal or what became known as the "Cap and Trade" bill. In June, the House finally voted with the bill squeaking out a one-vote margin for passage.[25] But the road to the vote was paved with compromises, many necessitated by the multi-committee jurisdiction of such omnibus legislation. The ensuing debates unleashed torrents of opposition and resistance that made congressional action in 2010 uncertain at best.

The role of the agricultural sector in this process was a mixture of support and opposition, depending on the group or sector involved, and the process was marked by special pleading for legislative provisions most favorable to agricultural interests. For example, House Agriculture Committee Chairman Collin Peterson obtained concessions for biofuels including measures to address the highly controversial issue of the Environmental Protection Agency (EPA), including the impact of "indirect land use" when evaluating biofuels relative to other fuels for addressing greenhouse gas emissions.[26] The concessions for agriculture and other

25. *See* American Clean Energy and Security Act of 2009, H.R. 2454, 111th Cong. (2009), *available at* http://www.govtrack.us/congress/bill.xpd?bill=h111-2454.

26. Jacqui Fatka, *Vilsack Testifies that Agriculture Can Benefit from Climate Change Legislation*, WESTERN FARMER-STOCKMAN (July 22, 2009, 12:00 AM), http://westernfarmerstockman.com/blogs.aspx?ddlb=21&ddlc=1&ddls=6%2F24%2F2009+12%3A00%3A00+AM (describing the agricultural related concessions on USDA administering the carbon trading plans and delaying for five years any use of "indirect land use" in evaluating ethanol). But as times passed the potential support from Congressman Peterson waned. *See, e.g.*, Robin Bravender, *Cap-and-Trade Prospects Shaky in Lame Duck*, N.Y. TIMES (July 29, 2010), http://www.nytimes.com/cwire/2010/07/29/29climatewire-cap-and-trade-prospects-shaky-in-lame-duck-38854.html (quoting Congressman Peterson as saying he "would vote against cap and trade if it came back to the floor as part of a conference package"); *see also* Press Release, Congressman Collin Peterson, Peterson Sponsors Legislation to Restrict the EPA (Feb. 2, 2010), http://collinpeterson.house.gov/press/111th/Peterson%20sponsors%20legislation%20to%20restrict%20the%20EPA.html (concerning his opposition to the EPA regulatory action on greenhouse gases).

sectors meant some supporters of cap-and-trade had to accept a much-diluted piece of legislation as the price of passage. House Democrats were able to pass the legislation,[27] but it was accomplished in the face of mounting opposition from much of the agriculture and farm sector, led largely by the American Farm Bureau Federation and its "Don't Cap Our Future" campaign.

Many ironies reside in the congressional action. The bill was loaded with special concessions designed to benefit farmers, including extensive funding for carbon offsets and allocation of authority to the U.S. Department of Agriculture (USDA) rather than the EPA to develop these programs, as well as special protections for ethanol.[28] Even with these provisions, however, the largest U.S. farm group led the opposition.[29] As time passed and the fate of climate legislation moved to the Senate, growing opposition in the countryside led some Representatives who voted for it to disown the legislation if it returned to the House. The result is a series of ironies: we produced legislation designed to benefit farmers but not supported by most farm groups, the bill that first passed the House is unlikely to pass the House again—yet the legislation includes generous protections for biofuels, one of agriculture's most sacred and lucrative public subsidies. The scenario brings to mind the expression "go figure!"; but what must be recognized is how effectively industry, oil companies, and others were able to scare people about the possible costs and effects of cap-and-trade and how willing the Farm Bureau and others were to carry this message to their members.

After the House action in the summer of 2009, attention turned to the Senate but a combination of factors brought action to a near standstill. These included: the importance of other legislative priorities, notably health care; ineffective Senate leadership; a fractured jurisdictional fight among committees; and the growing vitriol of opponents to cap-and-trade who seized on the legislation, not just as a job-killing "national energy tax," but as a proxy for denying the very existence of climate change, human influenced or not.[30] The result? Fall 2009 passed without further congressional action, and President Obama and other

27. MARK HOLT & GENE WHITNEY, CONG. RESEARCH SERV., R40643, GREENHOUSE GAS LEGISLATION: SUMMARY AND ANALYSIS OF H.R. 2454 AS PASSED BY THE HOUSE OF REPRESENTATIVES 1 (2009), http://www.nationalaglawcenter.org/assets/crs/R40643-1.pdf.

28. *See* H.R. 2454 § 127.

29. Kate Galbraith, *Farm Bureau Aims to Kill Climate Bill*, GREEN: A BLOG ABOUT ENERGY AND THE ENVIRONMENT (Oct. 14, 2009, 4:49 PM), http://green.blogs.nytimes.com/2009/10/14/farm-bureau-targets-cap-and-trade; *see also Farmers v Greens: The Biggest Obstacle to a Climate-Change Bill Is Rural America*, THE ECONOMIST, Nov. 14, 2009, at 44; *Seeds of Discontent: America's Farmers Threaten to Block Climate Legislation*, THE ECONOMIST, Oct. 24, 2009, at 34; Bob Stallman, President, American Farm Bureau Federation, Statement Regarding Delay of Climate Change Legislation (Nov. 19, 2009), http://www.fb.org/index.php?file=nr1119.html&fuseaction=newsroom.newsfocus&year=2009.

30. Darren Samuelsohn, *Senate Climate Bill Faces Narrow Window for Action in 2010*, N.Y. TIMES (Nov. 16, 2009), http://www.nytimes.com/cwire/2009/11/16/16climatewire-senate-climate-bill-faces-narrow-window-for-82097.html.

administration officials traveled to Copenhagen with little more to offer than promises of future action.

One way to evaluate this period of congressional action, or inaction, is to identify the many lost opportunities. These include opportunities for:

(a) Developing a balanced renewable energy policy using climate change as a motivation to generate funding and incentives, such as a national renewable portfolio standard.

(b) Taking leadership in developing green technology (a regular theme of columns by Tom Friedman)[31] such as solar and wind. International leadership on this front is being taken by China as the U.S. level of investment in green technologies has continued to slip in comparison to other nations.[32]

(c) Creating a national market for carbon and using it to encourage practices that help to reduce energy use, sequester carbon, and reduce greenhouse gas emissions. Agriculture is poised to be a major arena for action in this regard, with opportunities including carbon offsets for changes in cropping practices, incentives to convert land to trees and other forms of biomass, inducements to control manure and limit fertilizer and chemical use, as well as efforts to control deforestation. The delays in implementing national and international policies to address climate change mean the focus will continue to shift from mitigation to adaptation, reflecting the view that impacts of climate change are unavoidable.

(d) Implementing a more balanced and thoughtful renewable energy policy for agriculture to include wind, solar, methane, biomass, and ethanol. The policy could help relieve some of the pressure to rely on corn-based ethanol, which is encumbered by policy concerns and hampered by the self-limiting economic reality that greater demand for ethanol from corn leads to higher corn prices, making increased ethanol production unprofitable.[33]

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31. *See, e.g.*, Thomas L. Friedman, Op-Ed., *Off to the Races*, N.Y. TIMES, Dec. 20, 2009, at WK7 (writing at the conclusion of the COP 15 talks and concerned with what he calls the "Earth Race" strategy in which nations compete to innovate and develop the green technologies that will address our energy and climate future).

32. *See* Jim Tankersley, *U.S. Trails China, 10 Others in Clean Energy Drive*, DES MOINES REG., Mar. 25, 2010, at 1A (discussing a new report from the Pew Charitable Trust documenting the level of investments made by nations in green technologies).

33. The Environmental Working Group has been the most consistent and perhaps effective critic of the United States' ethanol policies, issuing a series of studies and reports detailing the economic costs and environmental impacts of the product. *See, e.g.*, Craig Cox & Andrew Hug, ENVT'L WORKING GRP., DRIVING UNDER THE INFLUENCE: CORN ETHANOL AND ENERGY SECURITY (2010), http://www.ewg.org/files/EWG-corn-ethanol-energy-security.pdf. For the other side of the story, visit the web site of Growth Energy, one of the leading organizations supporting expansion of ethanol as the answer to the United States' energy needs, GROWTH ENERGY, http://www.growthenergy.org (last visited Jan. 25, 2011).

(e) Addressing several critical biofuel related policy issues, such as indirect land use, the blend wall, and the elusive potential for any significant production of "advanced biofuels." In reality today's "biofuels" policy, for all the talk about next generation biofuels, is essentially a "more corn" ethanol policy.[34]

(f) Increasing pressure on the domestic administrative system, such as the proposed EPA actions to regulate climate altering greenhouse gas emissions.[35]

V. THE SENATE AND THE ADMINISTRATION'S ACTIONS ON CLIMATE CHANGE IN 2010

By early July 2010, as this Article was being finished, the politics of climate change in the United States were no closer to resolution than the previous year. Congressional focus is now centered on two developments:

(a) Responding to the EPA's proposed use of administrative rules to control greenhouse gas emissions based on the finding these endanger public health and other proposed administrative steps, such as including greenhouse gas issues under the National Environmental Policy Act;[36] and

(b) Senate consideration of potential legislation across a range of related issues.

Competing proposals include some version of cap-and-trade, stand-alone energy legislation, and legislation to strip or limit the EPA's regulatory authority on the issue.

In terms of possible Senate action on cap-and-trade legislation, the starting point appears to be that there is no chance the House-passed Waxman-Markey legislation will be adopted by the Senate. Throughout the fall and winter, a wide range of Senators, including the new chair of the Agriculture Committee, Senator Blanche Lincoln of Arkansas, announced their opposition to this approach.[37] As the primary season be-

34. *See, e.g.*, Jessica Leber, *Biofuels Producers Warn They Are Going to Fall Far Short of Federal Mandates*, N.Y. TIMES (Oct. 5, 2009), http://www.nytimes.com/cwire/2009/10/05/05climatewire-biofuels-producers-warn-they-are-going-to-fa-82387.html (illustrating how the inability to produce significant quantities of advanced biofuels, such as cellulosic, means corn-based ethanol will continue to be the main form).

35. *See, e.g.*, *Beef Group Challenges U.S. EPA Climate Finding*, REUTERS (Dec. 24, 2009), http://www.reuters.com/article/idUSTRE5BN2GP20091224; Gabriel Nelson, *U.S. Chamber Sues EPA Over Greenhouse Gas 'Endangerment' Decision*, N.Y. TIMES (Aug. 16, 2010), http://www.nytimes.com/gwire/2010/08/16/16greenwire-us-chamber-sues-epa-over-greenhouse-gas-endang-81491.html.

36. *See* Memorandum from Nancy H. Sutley, Chair, Council on Envtl. Quality, to Heads of Fed. Depts. and Agencies (Feb. 18, 2010), http://ceq.hss.doe.gov/nepa/regs/Consideration_of_Effects_of_GHG_Draft_NEPA_Guidance_FINAL_02182010.pdf.

37. John M. Broder, *'Cap and Trade' Loses Its Standing as Energy Policy of Choice*, N.Y. TIMES, Mar. 26, 2010, at A13.

gan in spring 2010, declaring opposition to what is now labeled a "national energy tax" became a standard campaign promise for many.[38] The continuing erosion of public and political support for legislative action on climate change exacerbated an already laborious political process where the proponents of cap-and-trade (or at least some form of comprehensive climate legislation) struggled to forge a compromise or consensus bill.

Leadership on climate change was taken up by an unlikely troika of Senators: John Kerry, Joseph Lieberman, and Lindsey Graham, who argued that the United States must adopt legislation to limit carbon emissions and move toward a more comprehensive renewable energy system.[39] Their staffs worked throughout the spring of 2010 to develop a compromise bill around which they hoped to assemble the necessary sixty votes for Senate passage.[40] During March the Senators began a series of meetings with industry representatives and Senate colleagues to explain what would be in the legislation once the bill language was finally ready for release, expected then for mid-April.[41] While few details of the legislation emerged, the outline of the eight titles in the law included one on "America's Farmers,"[42] and the expectation was that it would incorporate the agricultural provisions of the bill offered by Michigan Senator Debbie Stabenow.[43] That legislation, labeled the Clean Energy Partnership Act and discussed in a press release issued by her office on November 4, 2009, includes developing a carbon offset plan under the leadership of the USDA[44] and several provisions favorable to biofuels production.[45]

In April 2010, however, the road to unveiling the Kerry-Lieberman bill, and potentially the future of any Senate action on comprehensive climate legislation, stumbled into the mire of Senate politics. First, the date for unveiling the legislation was moved back a week later in April to

38. *Senate Climate Bill Drops 'Cap and Trade' Term: Republicans Label It a 'Massive Energy Tax,'* CASPAR TRIBUNE (Oct. 1, 2009), http://trib.com/news/state-and-regional/article_6f3f0ad7-15e8-5bc4-a309-018ce8c331f5.html.

39. *See, e.g.*, Jessica Leber & Christa Marshall, *Murkowski Mayhem Highlights Uncertainties with Climate Bill*, N.Y. TIMES (Jan. 22, 2010), http://www.nytimes.com/cwire/2010/01/22/22climatewire-murkowski-mayhem-highlights-uncertainties-wit-5922.html.

40. *See* Perry Bacon, Jr., *Kerry's Lonely Push on Climate Change*, WASH. POST, July 27, 2010, at A15; Broder, *supra* note 37.

41. *See* Keith Good, *Climate Issues; Budget; Trade; Biofuels; School Nutrition Standards; and Ag Legislation Passes*, FARMPOLICY.COM (Mar. 19, 2010, 3:33 AM), http://www.farmpolicy.com/?p=2061 (discussing climate issues and possible use of Stabenow legislation to address agriculture in Kerry bill).

42. *See id.*

43. *See Summary of the Clean Energy Partnerships Act of 2009 (Stabenow)*, PEW CTR. ON GLOBAL CLIMATE CHANGE, http://www.pewclimate.org/federal/congress/111/stabenow-clean-energy-partnerships-act-2009 (last visited Jan. 25, 2011).

44. *See* Good, *supra* note 41. Title I of the bill details plans for an "Offset Credit Program for Domestic Emission Reductions" under USDA supervision. Clean Energy Partnership Act of 2009, S. 2729, 111th Cong. §§ 102–113 (2009).

45. Title III of the bill addresses "Rural Clean Energy Resources." S. 2729.

avoid any connection with annual Earth Day activities,[46] apparently to highlight that climate change is about the economy and not just an environmental issue. Then the situation became more surreal when Senator Graham withdrew from the effort and announced he would not support Senate action on climate change.[47] What caused this change of heart? Senate Majority Leader Reid made a statement that the Senate might take up action on comprehensive immigration reform, unleashing a whole new and somewhat separate wave of concerns and opposition.[48] The effect of Senator Graham's departure was to end any Republican involvement in the legislation, thus denying the Democrats a shot at the needed sixty votes as well as the cover of "bipartisan" action. This twist of fate led to a further delay in the release of the legislation until mid-May, but opposition continued to mount, the primary election season had arrived, and other competing ideas had begun to gain political traction.[49] As if the political twists were not enough of a complication, the nation experienced one of its largest environmental disasters in the form of the Gulf oil spill.[50] The spill brought new attention to the need for environmental protection and the risks associated with our petroleum based energy system. Yet the linkage between actions to address the Gulf oil spill and support for comprehensive climate and energy legislation is unclear. The risk of making this linkage became clear in the sharp criticisms President Obama received for his June Oval Office address to the nation in which he used the tragedy of the oil spill to urge support for comprehensive climate and energy legislation.[51]

Work is still underway in the Senate to develop cap-and-trade legislation and two main competing ideas have gained ground. The first is the comprehensive energy bill, S. 1462, sponsored by Energy and Natural Resources Committee Chair Senator Bingaman and Senator Dorgan.[52] This legislation passed the committee in July 2009[53] and is ready to be considered as an alternative or starting point for Senate action. A second "cap and dividend" approach is being promoted by Senator Ma-

46. Timing introduction of the bill became a political issue and it was delayed to not coincide with Earth Day. Senator Graham was quoted as saying, "We don't want to mix messages here, I'm all for protecting the Earth, but this is about energy independence." Darren Goode & Alexis Simendinger, *ETA For Climate Bill? Not on Earth Day*, NATIONALJOURNAL.COM (Apr. 14, 2010, 2:10 PM), http://energytopic.nationaljournal.com/2010/04/eta-for-climate-bill-not-on-ea.php.

47. John M. Broder, *Graham Pulls Support for Senate Climate Bill*, N.Y. TIMES, Apr. 25, 2010, at A19; Juliet Eilperin, *Climate Legislation Suffers Setback: Key Republican Drops Support*, WASH. POST, Apr. 25, 2010, at A3.

48. *See* Broder, *supra* note 47; Eilperin, *supra* note 47.

49. *See* John M. Broder, *Senate Gets a Climate and Energy Bill, Modified by a Gulf Spill That Still Grows*, N.Y. TIMES, May 13, 2010, at A18.

50. *See* John M. Broder, *White House Energy Session Changes No Minds*, N.Y. TIMES, June 30, 2010, at A21.

51. *See, e.g.*, John M. Broder, *Oil Spill May Spur Action on Energy, Probably Not on Climate*, N.Y. TIMES, June 13, 2010, at A23; *see also* Editorial, *The Spill and Energy Bill*, N.Y. TIMES, June 5, 2010, at A20 (commenting on President Obama's role in promoting a comprehensive energy bill).

52. American Clean Energy Leadership Act of 2009, S. 1462, 111th Cong. (2009).

53. *Id.*

ria Cantwell and Senator Susan Collins. It avoids establishing a new carbon trading market and instead uses most of the proceeds generated by taxes placed on carbon emissions as direct refunds to consumers.[54] The difficulty of finding a political strategy to move forward was on full display in June when Majority Leader Reid held two separate caucuses of Senate Democrats for the purpose of discussing legislative options, but with little progress on a strategy for action.[55] The President held a White House meeting in late June with over twenty senators from both parties in an effort to encourage a compromise, but election-year politics make this increasingly unlikely.[56]

A third climate change issue drawing considerable political attention from the opponents of U.S. action concerns legislative efforts to limit or remove the EPA's ability to enact rules relating to greenhouse gas emissions.[57] Two different efforts in the Senate aim to strip the EPA of the power to act without congressional guidance. The first proposal by Senator Rockefeller places a two-year freeze on the ability of the EPA to regulate greenhouse gases such as those from power plants.[58] The second and more extreme proposal is a "resolution of disapproval" originally sponsored by Senator Lisa Murkowski, a Republican from Alaska. The resolution, essentially a congressional action to overturn the EPA's finding of endangerment concerning greenhouse gas emissions, was seen by many as a test vote on Senate support for any action on climate change.[59] The resolution had strong political appeal both to the opponents of cap-and-trade and to those who doubt the reality of climate change. It became a convenient political tool for signaling opposition to climate change legislation or at least to EPA taking the lead and was endorsed by many agricultural leaders, including Senate Chair Lincoln, who signed the Murkowski resolution, and House Chair Peterson, who along with others introduced a similar measure in the House.[60] The political future of the Senate resolution faced a certain presidential veto, but the vote provided a rally point for proponents of eventual Senate action as well as those who oppose action—for whatever reason. In many ways the vote was also another in a series of tests for the Senate leadership on energy and climate issues. When the vote came, in early June, the Democrats

54. *See* Carbon Limits and Energy for America's Renewal (CLEAR) Act, S. 2877, 111th Cong. (2009) (introduced by Senators Cantwell and Collins).

55. *See* Evan Lehmann, *Senate Abandons Climate Effort, Dealing Blow to President*, N.Y. TIMES (July 23, 2010), http://www.nytimes.com/cwire/2010/07/23/23climatewire-senate-abandons-climate-effort-dealing-blow-88864.html.

56. *See* Broder, *supra* note 50.

57. *See* Juliet Eilperin & David A. Fahrenthold, *Lawmakers Move to Restrain EPA on Climate Change*, WASH. POST, Mar. 5, 2010, at A2.

58. Stationary Source Regulations Delay Act, S. 3072, 111th Cong. (2010).

59. S.J. Res. 26, 111th Cong. (2010); Carl Huse, *Senate Rejects Republican Effort to Thwart Carbon Limits*, N.Y. TIMES, June 11, 2010, at A22.

60. H.J. Res. 77, 111th Cong. (2010); S.J. Res. 26; Huse, *supra* note 59.

were able to defeat the resolution fifty-three to forty-seven, which means the path has been cleared of at least one hurdle.[61]

VI. LESSONS AND OBSERVATIONS FROM COP 15 AND U.S. POLITICS ON CLIMATE CHANGE

As of the summer of 2010, the next chapter, let alone the final chapter, in our nation's experiment to address climate change through national legislation remained to be written. Even so, there are a series of lessons and observations that can be drawn from the events of the first eighteen months of the Obama administration on this topic.

First, from the perspective of farm politics, the lesson from the American Farm Bureau Federation's "Don't Cap our Future" campaign is that early and uniform opposition to climate legislation appears to have been successful. Rather than consider possible compromises or how agriculture can help shape climate change legislation, the strategy of maintaining a uniform position against what was portrayed as a "national energy tax" appears to have worked, at least for now. One question will be whether agriculture is missing an important opportunity to create new carbon-based markets. A second question is whether by refusing to work with the environmental community on climate change, agriculture placed at greater risk its cherished public subsidies for corn-based ethanol.[62]

Second, from the perspective of the COP 15 talks and its limited outcome, the reality may be that some issues are too complex to address in comprehensive international treaties. The strategy of putting all the issues (deforestation, energy policy, mitigation, and adaptation) on the table at one time with all the players present so that a grand solution could be crafted did not work. The realities of statecraft, economics, and international politics, let alone the difficult decisions of how to fund and administer the treaty, may have doomed the effort from the start. But it is important to recognize that while COP 15 may not have resulted in a grand resolution, even assuming that such is possible, the years of work and study, the thousands of meetings, and the increased attention, both in the United States and abroad, have irreversibly changed public awareness of the issue. Climate change and its impacts on the world, perhaps most notably on the Arctic, are now woven into the political, economic, and social agendas of the world.[63]

Third, from the perspective of the Obama administration, one lesson learned is that the ability to make promises and commitments in international settings will not enhance leverage with the Senate if domestic

61. Huse, *supra* note 59.

62. *See, e.g.*, Philip Brasher, *Deficit Worries Stall Biofuel Incentives*, DES MOINES REG., July 4, 2010, at 1D (concerning the congressional delays in renewing subsidies for ethanol and how the increasingly complicated budget picture threatens their future).

63. *See generally* CHARLES EMMERSON, THE FUTURE HISTORY OF THE ARCTIC (2010).

politics are not supportive of the actions required. U.S. history reveals several major episodes where Senate opposition delayed or ended dreams of international action. Although President Obama could not leave Copenhagen without making some commitment for U.S. action on climate change, his ability to deliver on the promise depends on the Senate. The international economic implications of climate change are real, especially given the economic success of China and the potential of other "developing" nations like India. No U.S. politician can afford to be seen supporting legislation that is not only controversial at home, but that can be portrayed as giving unfair advantage to our competitors.

Fourth, from the perspective of the U.S. people, the resistance to action on climate change may reflect a decline in respect or understanding of science. The erosion of our faith in science may reflect a decline in our education system as well as the politicization of science. Consider the furor that opponents were able to whip up over the now largely discredited "climategate."[64] When the National Academy of Science issued a comprehensive report on climate change supporting the need for U.S. action, it was essentially a one-day story.[65]

Fifth, from the perspective of congressional politics, the Republicans have outplayed the Democrats so far. By combining a strong and popular message, in other words, "climate change legislation is a job killing national energy tax," and manipulation of the Senate rules requiring sixty votes for action, the Republicans have effectively controlled the debate. The political implications of the debate are significant, especially in rural areas where the message of the opponents has been focused. The result has sharply limited the number of politicians who want to be identified with any legislation that can be labeled as "climate change," as evidenced in Senator Lincoln's primary fight in Arkansas. The effect is that Senate leadership has had to re-label and position the legislation as addressing jobs and the economy, with any reference to the poisonous cap-and-trade issue removed.

Sixth, the difficulty in forging political support for climate change legislation indicates that for now progress in the United States will come primarily in connection with energy: improving energy efficiency in transportation and construction, expanding renewable energy sources, and developing clean energy technologies. The future of U.S. efforts to address climate change are inexorably linked to our ability to improve our energy policy. Until such time as the scientific or physical realities of a changing climate lead the public to better appreciate the issue, the topic will continue to be controversial and politically charged.

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64. *See, e.g.*, Justin Gillis, *Panel, in Report, Clears Scientists of Rigging Climate Change Data*, N.Y. TIMES, July 8, 2010, at A9.

65. *See* John M. Broder, *U.S. Science Body Urges Action on Climate*, N.Y. TIMES, May 20, 2010, at A19.

Food security and climate change are linked like two sides of the same coin. When we wake each day we should be thankful for living in the United States. No matter our circumstance, we are better off than most people living in the world. The one billion facing hunger and starvation and the second billion living on two dollars a day represent a third of the world's population.[66] The majority are farmers, mostly women and their children, who already face climate threats. Drought, spreading pests, increasing sea levels, and changing monsoons drive their demands for global action. The poor farmers of many nations are in the cross hairs, or the kill zone, of climate change. Fortunately our economy and farms are stronger, but our relative advantages should not delude us to believe we are immune or without responsibility. If climate change and food security are inexorably linked, then climate change and national security are as well.

We have a responsibility to help find the solutions to the world's food future. Our powerful economy and research system can make agriculture a more resilient and powerful engine for progress. Iowa farmers will be part of the solution. The farmers I grew up with in Adams County know about doing the right thing: caring for the land and trying to stay productive and profitable. Being part of the solution to climate change is doing the right thing. Agricultural leadership means embracing research on better farming practices to be more productive in a changing climate. Leadership also means constructive engagement in the processes our nation and world use to shape the future. Copenhagen was just one step on a long, challenging journey we are taking together.

Unfortunately, the political process on climate change legislation both before COP 15 and today appears to have become for many players largely a question of "what is in it for me?" Rather than focus on how agricultural practices may contribute to climate change or its control, many parties act as though responding to climate change is optional. But the scientific and international political realities indicate that climate change is real, as is the need to act. Although the efforts to cast doubt on the science of climate change have helped turn public opinion against the need for action, any errors and overstatements in the models used do not appear to change the underlying conclusions: the climate is warming and man is playing a role. Undoubtedly there will continue to be wide debate about whether the practices or policies being proposed will significantly reduce global temperatures, but disagreement about effectiveness should not obscure the fact that doing nothing ensures no progress.

From a legal perspective, U.S. action is not optional. If Congress fails to act, the EPA appears ready and willing to regulate greenhouse

66. Donna Bryson, *Report: Climate Change Means More Hungry Children*, BOS. GLOBE (Sept. 29, 2009), http://www.boston.com/news/world/africa/articles/2009/09/29/report_climate_change_means_more_hungry_children/ (reporting on International Food Policy Research Institute report on impacts of climate change).

gas emissions under the Clean Air Act. Legislative action may raise concern but it will be friendlier and more tailored to agriculture than EPA regulations. The rest of the world is going to address climate change and farmers and agriculture in other nations will lead in developing responses. For many, they have no choice to protect their land and futures. The COP 15 negotiations, just like the Senate deliberations, are stages on which the willingness of nations and individuals to act will be measured. U.S. agriculture is fond of congratulating itself for "feeding the world," even if the claim is far from true. The reality is that most of the world feeds itself, and the tragedy is that over one billion go hungry today with climate change threatening even more. We may not feed the world, but we have long claimed a central role in leading it. The climate change debate is an opportunity for the United States, as well as agriculture and farmers, to live up to our self-image as leaders. Some farms groups may find comfort in the belief that they have helped defeat comprehensive climate legislation in the United States. If we fail to act, however, we risk not just our future but being portrayed as a self-serving, declining nation, a portrait that our enemies and critics are all too happy to paint. My hope is that we have the vision, courage, and wisdom to rise to the occasion.