



# Putting Your Money Where Your Mouth Is: Perverse Food Subsidies, Social Responsibility & America's 2007 Farm Bill

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Today, American grocery stores are stocked full of diverse and affordable foods, no doubt a tribute to our country's labor and ingenuity. America, after all, is the land of the plentiful and our SUPER-markets are just an extension of America's abundance of food. Most Americans have never experienced food shortages, much less famine. Cheap prices and the availability of diverse food products in our supermarkets more than satiate our appetites and, for that matter, any interest we may have in addressing U.S. farm policy. Our lives are so busy already with work and family that food producers are literally banking on the fact that most Americans just do not have time to fix their own meals, much less ponder the nature of our nation's food supply. However, as we take a closer look at the health, vitality and sustainability of our nation's food supply, we learn that the food in our supermarkets is not as diverse or cheap as it appears and, even more surprisingly, that our nation's food supply may in fact be on a collision course with itself.<sup>1</sup>

No other economic sector affects society more than agriculture — agricultural practices affect the food we eat, the land we live on, the air we breathe, and the water we drink.<sup>2</sup> U.S. agriculture accounts for almost fifteen percent of America's total economic activity and provides almost eighteen percent of the country's jobs.<sup>3</sup> U.S. farming and ranching creates the foundation for a \$1 trillion food and fiber business with almost \$60 billion attributable to annual exports.

Congress acknowledges agriculture's fundamental importance to society by passing a farm bill every five to seven years.<sup>4</sup> Among other things, the farm bills establish farm programs and provide subsidies for America's food production. The 2002 Farm Bill authorized \$248.6 billion worth of spending over six years, including \$89.7 billion for commodity subsidies, \$20.8 billion for conservation subsidies, and \$137.2 billion for food stamps and nutrition

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<sup>1</sup> See RANDAL S. BEEMAN & JAMES A. PRITCHARD, A GREEN AND PERMANENT LAND: ECOLOGY AND AGRICULTURE IN THE TWENTIETH CENTURY 92-93 (2001) (explaining that Rachel Carson's 1962 book *Silent Spring* "forced the American public to seriously consider the wide environmental effects of mechanized, chemically intensive production-oriented agriculture.").

<sup>2</sup> See Report to the President and Congress from The Commission on 21<sup>st</sup> Century Production Agriculture, *Directions for Future Farm Policy: The Role of Government in Support of Production Agriculture* 1 (Jan. 2001), available at [http://agriculture.senate.gov/Hearings/Hearings\\_2001/January\\_30\\_2001/com21.pdf](http://agriculture.senate.gov/Hearings/Hearings_2001/January_30_2001/com21.pdf) (last visited Nov. 26, 2007) [hereinafter *Future Farm Policy*] (noting that food and fiber sectors of economy account for more than 15% of total annual U.S. Gross Domestic Product, net value added to national economy by agricultural sector through production of goods and services averages, over past five years, about \$90 billion annually, and agricultural jobs account for about 18 percent of U.S. civilian employment).

<sup>3</sup> National Conference of State Legislatures, *2006-2007 Policies for the Jurisdiction of the: Agriculture and Rural Development Committee*, <http://www.ncsl.org/statefed/agtrade.htm> (last visited Nov. 26, 2007).

<sup>4</sup> See David Hosansky, *Farm Subsidies: Do They Favor Large Farming Operations?*, 12 CQ RESEARCHER 433, 435 (May 17, 2002).

programs for schools and the elderly.<sup>5</sup> By comparison, federal oil subsidies and tax breaks are estimated to cost Congress only between \$60 and \$102 billion over a six-year period.<sup>6</sup> U.S. agribusiness is arguably America's largest corporate welfare recipient.<sup>7</sup>

The 2002 Farm Bill is up for renewal in 2007.<sup>8</sup> Supporters of the status quo say: "The [Farm Bill] programs have been designed to encourage a safe, nutritious and plentiful supply of food."<sup>9</sup> Today approximately ninety-eight percent of America's food supply is produced by agribusinesses that rely heavily on agricultural chemicals and factory style production methods to achieve economies of scale and maximization of profit ("industrial farming" or "industrial agriculture").<sup>10</sup> As will be explained, America's agricultural policies and subsidies have systematically and financially favored industrial agriculture for over half a century to the exclusion of other more socially responsible methods of farming, such as organic.

While the industrial model may work well in other economic sectors, the industrial farming model is arguably causing society more harm than good. Farm Bill critics assert that while American agriculture is the most productive agricultural system in history, it is also one of the most polluting and environmentally destructive forms of farming ever practiced.<sup>11</sup> In addition, an increasing number of studies are starting to link various health disorders, such as breast cancer, prostate cancer, aggressiveness, and reduced motor skill ability, to

<sup>5</sup> See *id.* at 448.

<sup>6</sup> See TERRY TAMMINEN, LIVES PER GALLON: THE TRUE COST OF OUR OIL PRODUCTION 60 (2006) (stating that U.S. Department of Defense programs to protect oil, such as Iraq War, run additional \$55-96 billion annually).

<sup>7</sup> See Brian M. Riedl, *Another Year at the Federal Trough: Farm Subsidies for the Rich, Famous, and Elected Jumped Again in 2002*, 2004 HERITAGE FOUNDATION BACKGROUNDER NO. 1763, at 1, <http://www.heritage.org/Research/Budget/bg1763.cfm>. "Farm subsidies are not distributed to the small, struggling family farmers whom lawmakers typically mention when defending [farm subsidies]." *Id.*

<sup>8</sup> See Press Release, Environmental Defense, Environmental Defense Praises Introduction of First Major Agriculture Bill Prior to 2007 Farm Bill (Sept. 13, 2006), <http://www.environmentaldefense.org/pressrelease.cfm?ContentID=5473> (last visited Nov. 26, 2007); see also Mike Johanns, Sec. Of Agric., Remarks As He Unveiled USDA's 2007 Farm Bill Proposals in Washington, D.C., Release No. 0021.07 (Jan. 31, 2007), available at <http://usda.gov> (enter "Release No. 0021.07" into search box; follow first link) (noting that if Congress fails to pass new farm bill by end of 2007, America will revert back to 1949 Farm Bill).

<sup>9</sup> Hosansky, *supra* note 4, at 436 (quoting Terri Franci, senior economist for American Farm Bureau Federation, a powerful lobbying organization).

<sup>10</sup> See Jean M. Rawson, *Organic Agriculture in the U.S.: Program and Policy Issues*, CRS Report for Congress (Nov. 3, 2005), available at <http://www.ncseonline.org/NLE/CRSReports/07May/RL31595.pdf>.

<sup>11</sup> See JEREMY RIFKIN & CAROL GRUNEWALD RIFKIN, VOTING GREEN: YOUR COMPLETE ENVIRONMENTAL GUIDE TO MAKING POLITICAL CHOICES IN THE 1990S, at 149 (1992).

the use of agricultural chemicals.<sup>12</sup>

The effect industrial agricultural practices have on society and the environment is causing a growing number of people to become concerned and they are expressing their concern through their purchases. As will be discussed in Part III, organic food sales have skyrocketed over the past decade and many consumers are choosing to opt out of the industrial food chain and into a more socially responsible system of food production for a variety of reasons, ranging from objection to the use of agricultural chemicals and genetically altered food to promoting locally produced food and animal rights. While the reasons for purchasing organic may vary, one thing is clear — consumers are choosing to reward socially responsible behavior with their checkbook, often paying twice as much for organic food as for its industrial counterpart.<sup>13</sup>

This Article addresses the impact perverse U.S. farm subsidies and programs have on America's agribusinesses and how these policies prevent America's conscientious consumers from rewarding socially responsible behavior in U.S. agriculture. Part I discusses the history of U.S. farm policy and its connection to the rise and dominance of industrial farming in America. Part II demonstrates that industrial agriculture is the true beneficiary of U.S. commodity subsidies and describes how America's current agricultural policies prevent non-industrial farmers from receiving the benefits provided to industrial farmers. Part III points out the impact industrial agricultural methods have on society and the environment. Part IV illustrates that consumers are actually making it profitable for companies to be socially responsible, but that U.S. farm subsidies are preventing this trend from taking full effect in the agricultural sector. Part V advocates restructuring America's agricultural policies to achieve a more equitable result for socially responsible behavior in agriculture and discusses the proposed 2007 Farm Bill. Part VI summarizes the arguments in this Article and explains how recent trends and events may be setting the stage for a more balanced approach to socially responsible behavior in U.S. agriculture.

# I. THE RISE & DOMINANCE OF INDUSTRIAL FARMING UNDER AMERICA'S AGRICULTURAL POLICIES & PROGRAMS

## OVERPRODUCTION, OVERPRODUCTION, OVERPRODUCTION.<sup>14</sup>

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<sup>12</sup> See generally David Hosansky, *Regulating Pesticides: Does the New Crackdown Go Far Enough — or Too Far?*, 9 CQ RESEARCHER 665, 665-88 (Aug. 6, 1999).

<sup>13</sup> See discussion *infra* Part IV.B.

<sup>14</sup> See David P. Ernstes et al., *Southern Representation in Congress and U.S. Agricultural Legislation* (AFPC Policy Issues Paper 97-3) (Sept. 1997), <http://www.afpc.tamu.edu/pubs/1/144/ip97-3.htm> (last visited Nov. 26, 2007). The "[d]ebate on the direction of agricultural policy continued into the 1960s as surpluses continued to build. Willard Cochrane and Secretary Freeman convinced President Kennedy that the farm problem was one of chronic surpluses . . ." *Id.*

While other countries are concerned about how to feed their citizens, America — to its detriment — is almost always in a state of agricultural overproduction.<sup>15</sup> While the impact of this overproduction is not always felt directly, we are definitely paying a lot more for this overproduction than our grocery bill at the checkout counter leads us to believe.<sup>16</sup> Each year billions of our tax dollars go to subsidize the overproduction and storage of America's surplus farm products and billions more will go to clean up the environmental waste and damage caused by the overproduction.<sup>17</sup> This Part explains the rise and dominance of industrial agriculture in connection to America's agricultural policies.

### A. *The Rise of Industrial Agriculture*

Technological advancements, such as the mechanical reaper, combine, railroads, and refrigerated train, opened up large areas of more productive Midwestern farm land in the early 1900s, setting the stage for the age of industrial agriculture. The number of American farmers declined from approximately fifty percent of the population in the late 1800s to twenty percent in the 1920s.<sup>18</sup> At the same time, farm production increased even though the number of American farmers decreased.<sup>19</sup> Farm products eventually flooded the market and drove down the prices farmers received for their crops.<sup>20</sup> In response to the Great Depression and low commodity prices, the U.S. government, as part of the New Deal, established a system of "non-recourse loans" for *storable* farm products, such as corn, wheat, rice, and cotton ("Commodity Crops").<sup>21</sup>

Farm programs under the New Deal established a target price based on the

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<sup>15</sup> See CLIVE POTTER, *AGAINST THE GRAIN: AGRI-ENVIRONMENTAL REFORM IN THE UNITED STATES AND THE EUROPEAN UNION* 10 (1998).

<sup>16</sup> See generally Brian M. Riedl, *The Cost of America's Farm Subsidy Binge: An Average of \$1 Million Per Farm*, 2001 HERITAGE FOUNDATION BACKGROUNDER NO. 1510, available at <http://www.heritage.org/research/agriculture/BG1510.cfm>.

<sup>17</sup> See *id.*; see also Stacey Willemsen Person, Note, *International Trade: Pushing United States Agriculture Toward a Greener Future?*, 17 GEO.INT'L. L. REV. 307, 308 (Winter 2005).

<sup>18</sup> See generally DON PAARLBERG & PHILIP PAARLBERG, *THE AGRICULTURAL REVOLUTION OF THE 20<sup>TH</sup> CENTURY* 1-29 (2000).

<sup>19</sup> See, e.g., Nick Kotz, *Can We Preserve America's Family Farm?*, WASH. POST, Dec. 2, 1979, at D1.

<sup>20</sup> See Hosansky, *supra* note 4, at 444.

<sup>21</sup> See John H. Davidson, *The Federal Farm Bill and the Environment*, 18 NAT. RESOURCES & ENV'T 3, 4 (Summer 2003). Boom and bust cycles in agriculture are nothing new. The Bible addressed these cycles by establishing a grain reserve that provided food to eat when drought or pestilence ruined a harvest. The grain reserve also kept farmers whole by taking food off the market when the harvest was bountiful. See MICHAEL POLLAN, *THE OMNIVORE'S DILEMMA: A NATURAL HISTORY OF FOUR MEALS* 49 (2006).

cost of production for each of the covered commodities.<sup>22</sup> If the market price dropped below the target price, the farmer could use his crop as collateral and take out a loan from the government, instead of dumping the commodity onto an already weak market and thereby weakening it further.<sup>23</sup> The loan allowed the farmer to store his grain until prices recovered.<sup>24</sup> Then he could sell it for a profit and pay back the government loan plus accrued interest.<sup>25</sup> If, on the other hand, the commodity price remained low, the farmer could elect to keep the borrowed money and tender the collateral (i.e., his crop) to the government's federal granary in repayment of the loan.<sup>26</sup> Whenever American farmers experienced bad harvests, the federal granary would sell its stored surpluses to the marketplace to insure Americans had food to eat and that the food prices stayed relatively stable.<sup>27</sup> On the whole, the New Deal farm policies and the "non-recourse loans" they promoted cost the government relatively little and were quite effective in stabilizing the nation's food prices and supply despite America's rapid gain in farm yields in the first half of the twentieth century.<sup>28</sup>

By 1950, machines had finally replaced the farm's horses and mules and, with the use of chemical fertilizers, farm production shot up again.<sup>29</sup> While the ability to make fertilizers had been around since 1909, it was not economically feasible to produce them until World War II.<sup>30</sup> During the war, the chemical industry expanded to fill military requirements and this produced byproducts that could be used advantageously in manufacturing chemical fertilizers.<sup>31</sup> The government permitted farmers to use these byproducts during the war to the extent it did not interfere with wartime operations.<sup>32</sup> After the war, as the government converted its wartime chemical factories and supplies into peacetime purposes, the Department of Agriculture began promoting the use of America's stockpiled ammonium nitrate (an ingredient used to make explosives)

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<sup>22</sup> See POLLAN, *supra* note 21, at 49.

<sup>23</sup> See *id.*

<sup>24</sup> See *id.*

<sup>25</sup> See *id.*

<sup>26</sup> See *id.*

<sup>27</sup> See *id.* at 49-50; see also Hosansky, *supra* note 4, at 444 (stating Agricultural Adjustment Act of 1933 authorizes payments to farmers to idle acreage and allows USDA to purchase and store commodities).

<sup>28</sup> See POLLAN, *supra* note 21, at 50.

<sup>29</sup> See Hosansky, *supra* note 4, at 445.

<sup>30</sup> See VACLAV SMIL, ENRICHING THE EARTH: FRITZ HABER, CARL BOSCH, AND THE TRANSFORMATION OF WORLD FOOD PRODUCTION 84-107 (2001).

<sup>31</sup> See CENTENNIAL COMMITTEE, CENTURY OF SERVICE: THE FIRST 100 YEARS OF THE UNITED STATES DEPARTMENT OF AGRICULTURE 307 (U.S. Dep't of Agric., Washington, 1963).

<sup>32</sup> See *id.* The government was concerned about America's ability to secure an adequate supply of food during war and so the government stepped up chemical fertilizer production to address this concern. See *id.*

as fertilizer for America's farmland.<sup>33</sup> These events ushered in the age of industrial agriculture.<sup>34</sup>

Industrial farming is different from other methods of farming in that it breaks down a rather complex naturally occurring phenomenon based on sun power and biodiversity into a fossil-fueled mechanical process that relies on chemical fertilizer.<sup>35</sup> Chemical fertilizers circumvent the naturally occurring process of "fixing" nitrogen to the soil by combining nitrogen and hydrogen gases under immense heat and pressure in the presence of a catalyst.<sup>36</sup> This process requires fossil fuels to supply the hydrogen and an enormous amount of electricity to supply the heat and pressure.<sup>37</sup> As Vaclav Smil explained it in *Enriching the Earth: Fritz Haber, Carl Bosch, and the Transformation of World Food Production*:

Liberated from the old biological constraints, the farm could now be managed on industrial principles, as a factory transforming inputs of raw material — chemical fertilizer — into outputs of [crops]. Since the farm no longer needs to generate and conserve its own fertility by maintaining a diversity of species, synthetic fertilizer opens the way to monoculture, allowing the farmer to bring the factory's economies of scale and mechanical efficiency to nature.<sup>38</sup>

In the factory, time is money and chemical fertilizer helped cut out nature's time consuming process of maintaining soil fertility all together. Because fertilizers made traditional crop rotation and biodiversity unnecessary the new factory farm's monoculture crops were soon plagued with pests, insects, and weeds.<sup>39</sup> Farmers turned once again to chemicals to solve the problem: poison gases that were produced for the war, such as napalm and Agent Orange, were converted into chemical pesticides.<sup>40</sup> With the help of World War II's chemical

<sup>33</sup> See POLLAN, *supra* note 21, at 41.

<sup>34</sup> See Bernard E. Rollin, *Factory Farming is Unethical*, in ANIMAL RIGHTS (Shasta Gaughen ed., Green Haven Press Contemporary Issues Companion Series 2d ed. 2005) ("Overall fertilizer consumption increased 50 percent for the country as a whole, and rose by more than 350 percent in the North Central States" during the war).

<sup>35</sup> See generally POLLAN, *supra* note 21, at 41-47.

<sup>36</sup> See generally, SMIL, *supra* note 30, cited with approval in POLLAN, *supra* note 21.

<sup>37</sup> See SMIL, *supra* note 30. Soil requires nitrogen, among other things, to maintain its fertility. The amount of crops the earth can produce, and thereby the population size the earth can support, is limited by the amount of usable nitrogen in the soil. Although nitrogen makes up 80 percent of our atmosphere, the supply of usable nitrogen in the soil is limited. Usable nitrogen is created naturally through a "fixing" process by soil bacteria living on the roots of leguminous plants or by lightening. See POLLAN, *supra* note 21, at 41-47.

<sup>38</sup> POLLAN, *supra* note 21, at 45.

<sup>39</sup> See *id.* at 40; see also POTTER, *supra* note 15, at 22.

<sup>40</sup> See Hosansky, *supra* note 12, at 665.



factories and supplies, American farms quickly started to transition from biological farming systems into factory farms.<sup>41</sup> Soon, American farmers were producing more than anyone ever imagined possible. The problem was what to do with all this overproduction.

Savvy American businessmen and the federal government were quick to capitalize on the overproduction by selling it to foreign markets for a profit. In the fall of 1972, the Republican Party was instrumental in arranging the sale of thirty million tons of American grain to Russia, which was suffering from a series of disastrous harvests.<sup>42</sup> The deal helped boost crop prices and win pivotal farm votes for Richard Nixon in the 1972 presidential election.<sup>43</sup> As luck would have it, though, the enormous surge in demand coincided with "a spell of bad weather in the farm belt" and grain prices reached an historic high.<sup>44</sup> While the increased farm prices helped Nixon win in 1972, by the spring of 1973 the increased farm prices were starting to hit the supermarket.<sup>45</sup> Grocery prices were increasing dramatically and housewives were protesting.<sup>46</sup> Middle-class Americans had become accustomed to consuming meat and the "price of beef was slipping beyond the reach of the middle-class consumers."<sup>47</sup> With a consumer revolt on their hands, the American farm system was re-engineered to drive down prices and encourage farmers to vastly increase their output.<sup>48</sup> The goal was to provide plenty of cheap food for Americans to eat at home while permitting America to capitalize on the food surpluses by selling abroad.

### B. *The Dominance of Industrial Agriculture*

While most other New Deal programs were abolished or scaled back between 1975 and 1985 in a bipartisan wave of deregulation, agricultural subsidies survived as politicians tried to reconcile America's export opportunities with the consumption demands of American consumers.<sup>49</sup> It was clear that with the help of fertilizers America could do both. Under the leadership of Earl Butz, the second secretary of agriculture for Richard Nixon, the U.S. farm policies shifted from a system designed to prop up food prices and stabilize farmers' income to a

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<sup>41</sup> See POTTER, *supra* note 15, at 19.

<sup>42</sup> See Wayne D. Rasmussen & Gladys L. Baker, *Price Support and Adjustment Programs From 1933 through 1978. A Short History*, U.S. DEP'T OF AGRIC., AGRIC. INFO. BULLETIN NO. 424 (Feb. 1979), *cited with approval* in POLLAN, *supra* note 21.

<sup>43</sup> See Rasmussen & Baker, *supra* note 42.

<sup>44</sup> See *id.*

<sup>45</sup> See *id.*

<sup>46</sup> See *id.*

<sup>47</sup> POLLAN, *supra* note 21, at 51-52.

<sup>48</sup> See *id.*

<sup>49</sup> See *id.* at 41-42, 50-51 (noting that campaign to dismantle New Deal farm programs actually started in 1950s, but came to fruition in 1970s).

system designed to encourage overproduction and drive down the cost of food.  
<sup>50</sup>

The 1973 Farm Bill rolled out a revolutionary system of deficiency payments.<sup>51</sup> Instead of keeping Commodity Crops out of a falling market, as the “non-recourse loans” had done, the new deficiency payments were paid directly to the farmers and this encouraged farmers to sell their grain at any price because the government would make up the difference.<sup>52</sup> The payment amount farmers received was directly linked to the farmer’s yield so the more the farmer produced the more subsidies he received. The new system of deficiency payments gave farmers “little incentive to rotate subsidized crops with grass, alfalfa, or other soil-conserving uses; rather they are strongly encouraged to maintain their ‘base acreage’ of cropland on which their eligibility for future payments is calculated.”<sup>53</sup>

Earl Butz believed bigger farms were more productive and efficient so he pushed farmers to consolidate.<sup>54</sup> He would tell farmers “to get big or get out,” “to plant their fields fencerow to fencerow,” and to regard themselves not as farmers but as “agribusinessmen.”<sup>55</sup>

Grain is the closest thing in nature to an industrial commodity: storable, portable, fungible, ever the same today as it was yesterday and will be tomorrow. Since it can be accumulated and traded, grain is a form of wealth. It is a weapon, too, as Earl Butz once had the bad taste to mention in public; the nations with the biggest surpluses of grain have always exerted power over the ones in short supply. Throughout history governments have encouraged their farmers to grow more than enough grain, to protect against famine, to free up labor for other purposes, to

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<sup>50</sup> See Ernestes, *supra* note 14. “It was the first time in the 20th Century, outside of the two war periods, that concern developed about the availability of an adequate supply of food. With high farm prices brought on by the scarcity conditions, USDA and Congress could change policy with relatively little scrutiny by farmers and their organizations.” *Id.*

<sup>51</sup> See POLLAN, *supra* note 21, at 52.

<sup>52</sup> See Jerel Brandenburg, *Postmodern America: Death of the Family Farm* (May 15, 1997), <http://www.accd.edu/sac/honors/main/Ejerel.htm> (last visited Nov. 26, 2007); Ernestes, *supra* note 14 (stating that Earl Butz “began a strategy of selling government-owned storage facilities in the hope that it would keep USDA from getting back into the business of commodity acquisition.”).

<sup>53</sup> See POTTER, *supra* note 15, at 22. “Given that over two-thirds of all cropland was enrolled in commodity programmes by the late 1980s, this bureaucratic requirement had a decisive land use effect, preserving the area of cropland and preventing farmers putting land to fallow or into a non-subsidized break crop.” *Id.*

<sup>54</sup> See BEEMAN & PRITCHARD, *supra* note 1, at 90-91 (stating that from 1970 until 1981 U.S. grain production rose by 20 percent).

<sup>55</sup> Julius Duscha, *Up, Up, Up: Butz Makes Hay Down on the Farm*, N.Y. TIMES, April 16, 1972, § 6 (Magazine), at 34.

improve trade balance, and generally to augment their power.<sup>56</sup>

While a number of farmers had already converted to industrial farming, America's new farm policy encouraged an even greater number of farmers to begin transitioning their biologically diverse farms into factory farms.<sup>57</sup> Chemical fertilizers and machines turned the once full-time job of running a complex biologically diverse farming system into a simple process of inputs and outputs that permitted farming to become a part-time/seasonal operation.<sup>58</sup>

With world markets buying up America's surplus in the 1970s, commodity prices were holding strong and providing a good profit to farmers.<sup>59</sup> With times being so good, American farmers began taking out large debts to buy more farmland and machinery.<sup>60</sup>

In the 1980s, though, a world recession and double digit interest rates combined with favorable weather conditions to produce an enormous food surplus that could not be absorbed by American consumers or the world market.<sup>61</sup> Commodity prices plummeted and many farmers who had taken on large debts during the boom of the 1970s were forced into foreclosure.<sup>62</sup> U.S. farm subsidies were becoming outrageously expensive. Direct payments to farmers went from an average of \$3 billion a year in the 1970s to \$26 billion a year by 1986.<sup>63</sup>

Republicans responded to the dilemma by advocating eliminating farm subsidies and moving toward market-oriented farm policies.<sup>64</sup> Democrats, on the other hand, supported stricter supply controls.<sup>65</sup> Much to the disappointment of Republicans and Democrats alike, the Food Security Act of 1985<sup>66</sup> continued all the basic farm programs without any significant free-market reforms or

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<sup>56</sup> See POLLAN, *supra* note 21, at 201. See generally MICHAEL E. PORTER, *THE COMPETITIVE ADVANTAGE OF NATIONS* (1990).

<sup>57</sup> See e.g., Kotz, *supra* note 19.

<sup>58</sup> E.g., U.S. Dep't of Agric., *Risk Management: 2007 Farm Bill Theme Paper* (May 2006), available at <http://www.usda.gov/documents/Farmbill07riskmgmtrev.pdf> [hereinafter *Risk Management*] (stating working off-farm is very common among farm households, especially small farms whose farm earnings account for only 10 percent of their total household income, compared to large operations whose farm earnings account for 80 percent of total household income).

<sup>59</sup> See Wayne D. Rasmussen, *Farmers, Cooperatives, & USDA: A History of Agricultural Cooperative Service*, U.S. DEPT OF AGRIC., AGRIC. INFO. BULLETIN NO. 621, at 170 (July 1991).

<sup>60</sup> See BEEMAN & PRITCHARD, *supra* note 1, at 91.

<sup>61</sup> See Rasmussen, *supra* note 59, at 250. Congress responded by introducing emergency payments in the form of USDA-owned surplus crops in exchange for farmers agreeing to retire their land. Farmers could then turn around and sell the USDA surplus crops for a profit. *Id.*; see also BEEMAN & PRITCHARD, *supra* note 1, at 91, 136; Hosansky, *supra* note 4, at 444.

<sup>62</sup> See Hosansky, *supra* note 4, at 444.

<sup>63</sup> See Davidson, *supra* note 21, at 3.

<sup>64</sup> See Hosansky, *supra* note 4, at 444.

<sup>65</sup> See *id.*

<sup>66</sup> Pub. L. No. 99-198, 99 Stat 1354 (1985).

mandatory supply controls.<sup>67</sup>

In 1994, Republicans captured both chambers of Congress.<sup>68</sup> With a \$200 billion national deficit weighing on their minds, Congress rode the wave of pro-globalization, anti-subsidy, free-market sentiment stemming from recent world trade negotiations and high commodity prices to pass the Freedom to Farm Act of 1996.<sup>69</sup> The 1996 Farm Bill was designed to wean farmers off subsidies and save Congress a projected \$56.6 billion over seven years by providing farmers fixed income support payments that would be phased out over the life of the bill.<sup>70</sup> When commodity prices fell soon after the bill became law, however, farmers panicked and Congress abandoned its plans to deregulate the agricultural economy.<sup>71</sup> Farmers urged Congress to return to traditional U.S. farming policies and Congress increased existing farm payments by fifty percent in 1998 and doubled the farm payments from 1999 to 2001.<sup>72</sup> In addition, Congress approved \$30.5 billion in emergency agricultural assistance.<sup>73</sup> The "Freedom to Farm" Act ultimately became known as the "Freedom to Fail" Act.<sup>74</sup>

The 2002 Farm Bill repositioned U.S. Agribusiness as America's largest corporate welfare recipient and officially discarded any attempt to deregulate the agricultural economy.<sup>75</sup> In accordance with our current agricultural policy that promotes overproduction to capitalize on agricultural export opportunities, industrial agriculture will receive an allocated \$89.7 billion in commodity subsidies.<sup>76</sup> The 2002 Farm Bill also significantly increased funding for the conservation programs by eighty percent and addressed some free-trade concerns regarding America's obligations under the World Trade Organization by decoupling commodity payments from the farmer's current production and basing the payments instead on the farmer's historical production of Commodity

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<sup>67</sup> See Hosansky, *supra* note 4, at 444.

<sup>68</sup> See David M. Shribman, *GOP Captures Congress; Weld and Kennedy Romp Angry Voters Give Clinton, Democrats a Drubbing*, BOSTON GLOBE, Nov. 9, 1994, at A1.

<sup>69</sup> See Hosansky, *supra* note 4, at 444-45. The passage of the Freedom to Farm Act of 1996 coincided with the U.S. entering into the Agreement on Agriculture through the World Trade Organization, which agreed to reduce subsidized commodity exports, import protections and domestic farm supports which were believed to distort world trade. See *id.*

<sup>70</sup> See Riedl, *supra* note 16.

<sup>71</sup> See Hosansky, *supra* note 4, at 435. Economists forecasted that opening up world trade would increase the demand for U.S. farm products, which would reduce the need for price and income-support programs. See *id.*

<sup>72</sup> See *id.*

<sup>73</sup> See *id.*

<sup>74</sup> See Riedl, *supra* note 16.

<sup>75</sup> See Riedl, *supra* note 7, at 1.

<sup>76</sup> See *id.*

Crops.<sup>77</sup>

America's agricultural landscape has changed dramatically since the inception of America's farm programs in the late 1920s. In the 1930s, the total number of farms in the U.S. was more than six million and farmers accounted for approximately twenty-five percent of the population.<sup>78</sup> Today, there are 2.2 million farms and farmers make up only about two percent of the population.<sup>79</sup> Farms today also tend to be much larger in size, as one would expect under industrial agricultural practices, averaging 435 acres in 1999, compared with only 155 acres in 1935.<sup>80</sup>

## II. INDUSTRIAL & ORGANIC AGRICULTURE UNDER AMERICA'S CURRENT FARM POLICY

### A. Industrial Agriculture – The True Beneficiary of U.S. Farm Commodity Subsidies

Until recently, most of the public, including the majority of farmers and politicians, did not know who was actually receiving the bulk of America's farm subsidies, much less understand the objectives behind the current U.S. farm policy.<sup>81</sup> Most assumed these payments were divided up equally among small family farmers.<sup>82</sup> For the last several years, though, an organization known as the "Environmental Working Group" published a list of farm subsidy recipients and the amounts each of them received.<sup>83</sup> Appendix A of this Article contains a chart listing the top ten recipients in 2005 (Figure 2) and a chart listing the top ten recipients from 1995-2005 (Figure 1). Almost all of the top ten percent of farm subsidy recipients are implementing industrial agricultural practices.

The United States Department of Agriculture confirms that over two-thirds of the farm subsidy payments go to the top ten percent of the subsidy recipients. Recipients in the top ten percent averaged \$34,190 in annual payments between 1995 and 2005, but the average can be deceiving.<sup>84</sup> Riceland Foods was the top

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<sup>77</sup> See *id.*

<sup>78</sup> See *Future Farm Policy*, *supra* note 2.

<sup>79</sup> See USDA *Agricultural Statistics 2000*, Nat'l Agric. Statistical Serv., *cited with approval in Future Farm Policy*, *supra* note 2. "A farm is defined as any establishment from which \$1,000 or more of agricultural products were sold or could normally be sold during the year." *Id.*

<sup>80</sup> See *Future Farm Policy*, *supra* note 2.

<sup>81</sup> See John Ikerd, *New Farm Bill and U.S. Trade Policy: Implications for Family Farms and Rural Communities*, (Nov. 10, 2006), <http://www.ssu.missouri.edu/faculty/jikerd/papers/FarmBill.html> (last visited Nov. 26, 2007).

<sup>82</sup> See *id.*

<sup>83</sup> See ENVIRONMENTAL WORKING Group, FARM SUBSIDY DATABASE, <http://www.ewg.org/farm/region.php?fips=00000> (last visited Nov. 26, 2007) [hereinafter *Farm Subsidy Database*].

<sup>84</sup> See *id.*

recipient from 1995 to 2005 and received a little over half-a-billion dollars in U.S. farm subsidy payments, none of which were for conservation.<sup>85</sup> In 2000, 154 farms got checks from Uncle Sam for more than \$1 million.<sup>86</sup> Fifteen Fortune 500 companies, including Chevron, Dupont, John Hancock Mutual Life Insurance, and Westvaco, were among the million dollar jackpot winners.<sup>87</sup> Other recipients included David Rockefeller, Charles Schwab, and Ted Turner.<sup>88</sup>

The bottom eighty percent of subsidy recipients saw only \$704 on average per year.<sup>89</sup> While the bulk of the money goes to enormous, politically savvy and powerful agricultural operations, sixty percent of all farmers receive no aid at all.<sup>90</sup> Fruit and vegetable producers, as well as most organic farmers, are not eligible for commodity subsidies under the 2002 Farm Bill.<sup>91</sup> Ranchers are also not eligible for commodity subsidies, but they receive a tremendous financial benefit from the heavily subsidized commodity grains that they feed to animals in Confined Animal Feeding Operations ("CAFOs").<sup>92</sup>

In addition to farm subsidies being heavily concentrated into the hands of only ten percent of the farm subsidy recipients, these payments are also heavily concentrated in terms of crop recipients. From 2002 to 2005, corn, upland cotton, rice, wheat and soybeans received ninety-three percent of the commodity subsidies, but accounted for only twenty-one percent of the total farm cash receipts in 2005.<sup>93</sup> Corn farmers, which have historically used more fertilizer on their crops than the other types of commodity farmers, received the most support, \$21.6 billion or forty-six percent of the total commodity subsidies from 2002-2005, and upland cotton came in second with twenty-three percent.<sup>94</sup>

### B. *Exclusion of Organic Farming From U.S. Farm Programs*

The emergence of industrial agriculture in the 1950s and 1960s was greeted

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<sup>85</sup> See *id.*

<sup>86</sup> See *id.*

<sup>87</sup> See *id.*

<sup>88</sup> See ARIANNA HUFFINGTON, *PIGS AT THE TROUGH: HOW CORPORATE GREED AND POLITICAL CORRUPTION ARE UNDERMINING AMERICA* 146 (Crown Publishers, New York, 2003).

<sup>89</sup> See *Farm Subsidy Database*, *supra* note 83.

<sup>90</sup> See Hosansky, *supra* note 4, at 436.

<sup>91</sup> See *Risk Management*, *supra* note 58.

<sup>92</sup> See Timothy A. Wise, *Identifying the Real Winners from U.S. Agricultural Policies* 2 (Global Development and Environment Institute Working Paper No. 05-07, Dec. 2005), available at <http://ase.tufts.edu/gdae>.

<sup>93</sup> See *Risk Management*, *supra* note 58, at 8-9 (noting commodity subsidies totaled approximately \$47 billion from 2002-2005). The USDA projects that the cost of all farm subsidies will remain above \$20 billion in 2006 and 2007, "as large production has continued to pressure prices for major crops, increasing counter-cyclical payments and marketing loan benefits." *Id.*

<sup>94</sup> See *id.* at 9.

by as much anticipation and excitement as one would expect of any new technological breakthrough. Industrial agriculture benefited significantly from America's wartime operations, which made it economically advantageous to adopt an otherwise cost-prohibitive method of farming on a grand scale and in a relatively short amount of time. In the 1970s, America's decision to promote industrial agricultural production in order to achieve maximization of agricultural export opportunities also happened to coincide with the rise of Milton Friedman's Nobel Prize winning socio-economic theory that was sweeping across the country during this time.<sup>95</sup> Friedman's theory advocated that the social responsibility of business is to maximize its profits for the benefit of stockholders without regard to the impact such actions have on other stakeholders (such as employees, consumers, suppliers, society or the environment).<sup>96</sup> Most people, including the government, assumed that maximization of farm production and therefore maximization of farm profit could only be achieved with the help of agricultural chemicals. The government's promotion of industrial agriculture as a means of achieving greater production in the 1970s was viewed as a "win-win" situation for America — it provided cheap food at home while allowing America to sell the surplus abroad for a substantial profit. With the excitement of a relatively new technological breakthrough and Friedman's popular socio-economic theory in the background, no other alternative methods of farming were ever really seriously considered.

Until recently, "no one had ever systemically analyzed whether in fact a widespread shift to organic farming would run up against a shortage of nutrients or lack of yields."<sup>97</sup> Except for a brief period of time between 1978 and 1981, the USDA did not conduct any activities in support of organic agriculture until the Organic Foods Production Act of 1990 required it to do so.<sup>98</sup> "In fact, the USDA was actively hostile to organic agriculture until recently, viewing it —

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<sup>95</sup> Milton Friedman, *A Friedman Doctrine: The Social Responsibility of Business Is to Increase Its Profits*, N.Y. TIMES, Sept. 13, 1970 (Magazine), at 17.

<sup>96</sup> See *id*; see also *Dodge v. Ford Motor Co.*, 170 N.W. 668 (Mich. 1919) (ruling that corporations are legally required to maximize profits for benefit of shareholders without regard to other stakeholders).

<sup>97</sup> Brian Halweil, *Can Organic Feed Us All?*, WORLD WATCH, May/June 2006, at 18. "But the long-standing argument that organic farming would yield just one-third or one-half of conventional farming was based on biased assumptions and lack of data. For example, the often-cited statistic that switching to organic farming in the United States would only yield one-quarter of the food currently produced, there is based on a [USDA] study showing that all the manure in the United States could only meet one-quarter of the nation's fertilizer needs — even though organic farmers depend on much more than just manure." *Id*.

<sup>98</sup> Pub. L. No. 101-624, §§ 2101-2123, 104 Stat. 3359 (codified at 7 U.S.C. §§ 6501-6522 (2006)) (authorizing a National Organic Program to be administered by USDA's Agricultural Marketing Service and establishing a 15-member National Organic Standards Board to "assist in the development of standards for substances to be used in organic production"); Rawson, *supra* note 10, at 1.

quite rightly — as a critique of the industrialized agriculture the USDA was promoting.”<sup>99</sup>

While it is true that farmers converting from industrial production to organic production often experience lower yields in the first few years as the soil and surrounding biodiversity recover from the use of chemicals and farmers learn how to grow organic, recent studies show that over time organic farms produce almost equal if not greater yields than industrial farms.<sup>100</sup> In developed countries, organic yields range anywhere from ninety to one hundred percent of industrial yields.<sup>101</sup> In developing countries, however, organic farming produces up to twenty percent *higher* yields than industrial farming.<sup>102</sup>

The question is, “If organic is as productive as industrial agriculture, then why are industrial farmers receiving billions in farm subsidies while organic farmers are not?” Most people are surprised to learn that the answer centers on “EXPORTS” and historical happenstance. The original decision to focus only on Commodity Crops (thereby excluding vegetables, fruits and meats) was probably attributable to the societal needs and technological limitations of the time that made it difficult for vegetables, fruits and meat to be included. The New Deal farm programs were designed to stabilize food prices through “non-recourse loans” and a federal granary that cost the government relatively little to implement. Once established, though, the commodity programs of the farm bill took on a life of their own. The commodity programs have continued to dominate the farm bill ever since, even after technological advancements in shipping, transportation and packaging made it economically feasible to export

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<sup>99</sup> POLLAN, *supra* note 21, at 145. The USDA took over a decade to put a USDA Organic Certification Program in place. See Michelle Friedland, *You Call That Organic? The USDA's Misleading Food Regulations*, 13 N.Y.U. ENVTL. L.J. 379, 383 (2005) (explaining problems with new USDA certified organic program).

<sup>100</sup> Halweil, *supra* note 97, at 18-19 (citing numerous recent scientific studies supporting that organic is just as productive and sometimes even more productive than industrial agricultural farming methods). “A seven-year study from Maikaal District in central India involving 1,000 farmers cultivating 3,200 hectares found that average yields for cotton, wheat, chili, and soy were as much as 20 percent higher on the organic farms than on nearby conventionally managed ones.” *Id.* at 19. “A study from Kenya found that while organic farmers in ‘high-potential areas’ (those with above-average rainfall and high soil quality) had lower maize yields than non-organic farmers, organic farmers in areas with poorer resource endowments consistently out yielded conventional growers.” *Id.*

<sup>101</sup> See *id.* “Reviewing 154 growing seasons’ worth of data on various crops grown on rain-fed and irrigated land in the United States, University of California — Davis agricultural scientist Bill Liebhardt found that organic corn yields were 94 percent of conventional yields, organic wheat yields were 97 percent, and organic soybean yields were 94 percent. Organic tomatoes showed no yield difference.” *Id.* at 19.

<sup>102</sup> See *id.* A University of Essex study looked at over 200 agricultural projects involving nine million farms on nearly 30 million hectares in the developing world that converted to organic and ecological approaches, and found that for all the projects yields increased an average of 93 percent. See *id.* at 19; see also *supra* note 100 and accompanying text.



fruits, vegetables and meats. When America's farm policy shifted from one of income support and price stabilization to export maximization in the 1970s, Commodity Crops were positioned to receive the windfall.

Today, the bulk of farm subsidy payments go to farmers based off the farmer's yield of eligible Commodity Crops.<sup>103</sup> Industrial farmers can continuously produce the same Commodity Crop on the same acre of land year after year with the help of fertilizers and pesticides. Organic farmers, on the other hand, are required biologically to rotate their crops with nitrogen-fixing legumes (such as peas, alfalfa, locust trees, etc.) or they will bankrupt the soil's fertility. Thus, although, an organic farmer can produce the same amount of corn on one acre in any given year as the industrial farmer, the organic farmer will not be able to produce corn on that same acre for another four years. The commodity subsidies reward only commodity production — not overall farm productivity. Put differently, organic farming requires a balance of animals, grasses, vegetables, fruits and trees to achieve maximization of profit, while industrial agriculture relies on hyper-specialization and economies of scale to achieve maximization of profit.

Organic farmers have been excluded from receiving adequate attention for a number of reasons. The most significant one, and the basis for excluding organics from receiving its share of farm subsidies, is that organics did not achieve the primary goal that America's agricultural policy was designed to achieve in the 1970s — maximizing agricultural exports, while providing sufficiently affordable food for domestic consumption. As a result, industrial agriculture capitalized on billions of dollars worth of farm subsidies and numerous USDA training and marketing resources to establish itself as America's dominant agricultural system.

It should be noted that although Congress allocated \$20.8 billion of the 2002 Farm Bill's \$248.6 billion in funding to conservation programs, this does not correct the problems created by the disparate financial treatment industrial agriculture receives under current and past commodity programs. Under conservation programs, farmers receive payments in return for idling large portions of their farmland from production and this benefits neither organic nor industrial farm production. The conflicting conservation and commodity subsidies result in America's farm policy having, "one foot on the accelerator and one foot on the brake," because we are paying a substantial amount to idle land and then turning around and paying four-times as much to encourage the overproduction that makes the conservation payments necessary in the first place.<sup>104</sup> Studies show that set-aside programs, such as those promoted by the

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<sup>103</sup> See *Risk Management*, *supra* note 58, at 4-7. Subsidy payments shifted from "current" yield to "historical" yield under the 2002 Farm Bill to address possible trade violations under the WTO. See *id.*

<sup>104</sup> Riedl, *supra* note 16.

conservation subsidies, intensify the pressure on farmers to maximize yields from the land which remains in production. This, in turn, encourages farmers to adopt high yield/high input systems of agricultural production, such as industrial agriculture.<sup>105</sup> The 2002 Farm Bill's eighty percent increase in conservation funding, however, indicates Congress' awareness of a growing policy concern over the role social responsibility plays in America's agricultural system.<sup>106</sup>

The 2002 Farm Bill provided \$444 million in funding to the Environmental Quality Incentives Program ("EQIP").<sup>107</sup> EQIP is a unique conservation program in that it offers *active farm operations*, and not just land-idlers, financial incentives to address erosion, at-risk species habitat, air quality, water quality and conservation concerns.<sup>108</sup> Although current statutes require EQIP funds to be devoted primarily to address pollution created by CAFOs, President Bush's proposed 2007 Farm Bill recommends increasing EQIP funding to \$4.2 billion and redesigning EQIP to "increase simplicity and accessibility of conservation programs and provide program flexibility that increases environmental benefits."<sup>109</sup> It will be interesting to see whether Congress does in fact increase EQIP's funding and, if it does, whether the new EQIP will open the door to significant financial assistance to non-industrial farmers.

Today, America is facing a different set of challenges and we are equipped with greater knowledge about the benefits and detriments that go along with both industrial and organic agriculture. While maximizing our agricultural export opportunities is a factor to be considered in developing our future agricultural policies, it should no longer be our primary objective. Today, our primary objective should be to create an agricultural system that provides a safe, secure, and sustainable supply of food for our nation. To be clear, this Article is not proposing a complete abandonment of industrial agricultural methods, but rather an elimination of the completely one-sided approach America's

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<sup>105</sup> See generally JARED R. CREASON & C. FORD RUNGE, AGRICULTURAL COMPETITIVENESS AND ENVIRONMENTAL QUALITY: WHAT MIX OF POLICIES WILL ACCOMPLISH BOTH GOALS? (University of Minnesota 1990); Thomas W. Hertel, *Ten Truths About Supply Control*, in AGRICULTURAL POLICIES IN A NEW DECADE 153-69 (Kristen Allen ed., 1990) cited with approval in POTTER, *supra* note 15, at 22-23.

<sup>106</sup> See Rawson, *supra* note 10. But see *supra* notes 95-96 and accompanying text (stating that corporations are legally required to maximize profit for shareholders without regard to stakeholders).

<sup>107</sup> See U.S. Dep't. Agric., *Conservation and the Environment: 2007 Farm Bill Theme Paper*, at 6, 37 (June 2006), available at <http://www.usda.gov/documents/FarmBill07consenv.pdf> (last visited Nov. 26, 2007).

<sup>108</sup> See *id.* at 37 (explaining that "Ground and Surface Water Conservation" and "Klamath Basin" programs also apply to agricultural producers, but they receive an insignificant level of funding in comparison to EQIP).

<sup>109</sup> See *id.*; U.S. Dep't Agric. USDA's 2007 Farm Bill Proposals — Fact Sheet: A Commitment to Rural America, Release No. 0019.07. "This program will fill a void in the Federal government's conservation delivery system by facilitating a cost-share program to coordinate large-scale water conservation projects." *Id.*

agricultural policies currently take in favor of industrial agriculture. Part III below addresses the true cost and efficiency of industrial agriculture in comparison to organic agriculture.

### III. CALCULATING THE TRUE COST AND EFFICIENCY OF INDUSTRIAL AGRICULTURE

The Environmental Protection Agency says more than half of the pollution fouling our nation's rivers and streams come from fertilizers, pesticides and manure contamination resulting from farm runoff.<sup>110</sup> Agricultural runoff disperses into the surrounding ecosystem, seeps into the groundwater, and contaminates freshwater wells and reservoirs.<sup>111</sup> Runoff of agricultural chemicals is estimated to cause approximately nine billion dollars worth of damage to surface waters in the United States each year.<sup>112</sup> Oil pollution, on the other hand, is estimated to only cause between \$400 million and \$1.5 billion worth of water damage.<sup>113</sup> Perhaps the most dramatic example of the destruction agricultural pollution causes is a "dead zone" that extends from the mouth of the Mississippi River thousands of square miles into the Gulf of Mexico. Agricultural chemicals washed into the Mississippi flow into the gulf creating an oxygen-deprived area where deadly algae blooms occur.<sup>114</sup> Other "dead zones" can be found in Maryland's Chesapeake Bay and Coastal Bays.<sup>115</sup>

The use of agricultural chemicals has increased steadily since their mass production began in the 1950s. By 1960 farmers were using seven million tons of fertilizer a year and nearly twenty million tons of fertilizer a year by 1989.<sup>116</sup> "Today farmers apply 119 pounds of fertilizer per acre of cropland — that's 157 pounds of fertilizer for every man, woman, and child in the United States."<sup>117</sup>

Once farmers start using agricultural chemicals, they find themselves on a chemical treadmill. Fertilizers and the monoculture crops that they support

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<sup>110</sup> See Hosansky, *supra* note 4, at 442.

<sup>111</sup> RIFKIN & RIFKIN, *supra* note 11, at 150.

<sup>112</sup> JENNIFER KENT & NORMAN MYERS, PERVERSE SUBSIDIES: HOW TAX DOLLARS CAN UNDER CUT THE ENVIRONMENT & THE ECONOMY 53 (2001) (citing A. DINAR, POLICY REFORMS FOR SUSTAINABLE WATER RESOURCES (1998)).

<sup>113</sup> See TAMMINEN, *supra* note 6, at 62.

<sup>114</sup> See Hosansky, *supra* note 4, at 442.

<sup>115</sup> E.g., *Fact Sheet: The Chesapeake's Dead Zone*, Chesapeake Bay Foundation, [http://www.cbf.org/site/DocServer/DeadZoneFactSheet\\_May06.pdf?docID=5583](http://www.cbf.org/site/DocServer/DeadZoneFactSheet_May06.pdf?docID=5583) (last visited Nov. 26, 2007).

<sup>116</sup> See *id.* at 444; ETHICAL DILEMMAS IN U.S. AGRICULTURAL POLICY: PERVERSE SUBSIDIES & MARKETPLACE ECONOMICS 62 (citing CAPLOW ET AL., THE FIRST MEASURED CENTURY: AN ILLUSTRATED GUIDE TO TRENDS IN AMERICA, 1900-2000 (American Enterprise Institute Press 2001)) (noting that fertilizer accounted for five percent of production costs in 1950 and 20 percent in 2000).

<sup>117</sup> RIFKIN & RIFKIN, *supra* note 11, at 149-50; see also BEEMAN & PRITCHARD, *supra* note 1, at 134 (quoting figure of 160 pounds of fertilizer each year for every American).

destroy the soil's natural fertility process by disrupting the "cycle of life," so each year the farmer is required to use more and more "fertility in a bag" to do what nature would have done for him, if he was using a biological farming system.

The chemical treadmill is even more disturbing when you look at the vicious cycle pesticides create. Pesticides do not eliminate all pests and insects; in fact each year there are some insects and pests that are biologically resistant to the pesticide being used. The ones that survive then reproduce and create an entire population of insects and pests that are now biologically resistant to that pesticide. The farmer must now use ever more lethal chemicals to protect his crop.<sup>118</sup> Over 800 million pounds of pesticides are applied to crops each year at a cost exceeding seven billion dollars.<sup>119</sup> Ironically, each year farmers still lose over thirty-seven percent of their crop to pests, in part because the pests and insects are becoming more resistant to chemical pesticides and in part because much of the pesticides never reach the plants.<sup>120</sup> Instead, it runs off into our water supply where society is then exposed to these more lethal pesticides.

In 1987 the National Academy of Sciences warned American consumers that ninety percent of all fungicides, sixty percent of all herbicides, and thirty percent of all insecticides may cause cancer.<sup>121</sup> In 1998, the United States spent more than six billion dollars to kill weeds with herbicides.<sup>122</sup> The long-term effects of this exposure are unknown.<sup>123</sup> However, medical experts acknowledge that infants and young children are most at risk from the long-term effects of agricultural chemicals because of their body weight and metabolic characteristics.<sup>124</sup> When spring rains wash the nitrogen rich fertilizers used on Iowa corn crops into downstream rivers, cities like Des Moines are forced to issue "blue baby alerts" that warn parents it is unsafe to give their children water from the tap.<sup>125</sup> "The nitrates in the water bind to hemoglobin, compromising the blood's ability to carry oxygen to the brain."<sup>126</sup> Numerous studies increasingly link breast cancer, prostate cancer, brain and nervous system

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<sup>118</sup> See KENT, *supra* note 112, at 54.

<sup>119</sup> See *id.* at 53; see also Hosansky, *supra* note 12, at 667.

<sup>120</sup> See RIFKIN & RIFKIN, *supra* note 11, at 150.

<sup>121</sup> See *id.* at 150-51.

<sup>122</sup> See Hosansky, *supra* note 12, at 669 (noting that 10 to 15 percent of total was for residential and other non-agricultural uses).

<sup>123</sup> See *id.* at 667 (quoting Mary H. Cooper, *Regulating Pesticides: Do Americans need more protection from toxic chemicals?*, 4 CQ RESEARCHER 73-96 (Jan. 28, 1994)). "In 1991, a train carrying 13,000 gallons of metam sodium derailed in California, dumping its lethal cargo into the Sacramento River and destroying all animals and plant life in the river for 40 miles." *Id.*

<sup>124</sup> See *id.*

<sup>125</sup> See POLLAN, *supra* note 21, at 46-47.

<sup>126</sup> *Id.*

disorders, and other immune system disruptions to the use of pesticides.<sup>127</sup>

The problem with breaking down an environmentally benign biological system into a mechanical system of parts is that the mechanical system creates unintended consequences. A prime example of this are today's CAFOs, where as many as 25,000 cattle are kept in a maze of outdoor corrals on a piece of land the size of a city block.<sup>128</sup> CAFOs "transform what at the proper scale would be a precious source of fertility—cow manure—into toxic waste."<sup>129</sup> With farmers now able to supply fertilizer from a bag, it no longer makes sense to keep the livestock on the farm. Instead, farmers hyper-specialize by using agricultural chemicals to plant monoculture crops fencerow to fencerow. They then sell their crops to the commodities market where CAFOs buy the cheap grain to feed to livestock, which then proceed to dump tons of toxic manure into an extremely confined spot. Farmers refuse to recycle CAFOs manure onto their crops because the nitrogen and phosphorous levels are so high that it would kill the farmers' crops.<sup>130</sup> In addition, the manure also contains heavy metals and hormone residues.<sup>131</sup> When the rain comes, this mass of toxic liquid manure slowly gets washed downstream into our rivers and aquifers. For example, in 2006, Wisconsin was forced to declare a "state of emergency" when manure run-off contaminated well-water in Brown County.<sup>132</sup> A "boiled water" advisory was issued and residents were supplied with free bottled water for six-months.<sup>133</sup>

The loss of topsoil is also a major external cost of agricultural production. While traditional farming methods can also cause the loss of topsoil, industrial agriculture tends to exacerbate the problem by encouraging overproduction and allowing the soil to remain without a cover crop.

Over 4.8 billion tons of topsoil are blown or washed away every year. The U.S. is now losing one inch of topsoil on its agricultural lands every nineteen years . . . . The National Academy of Sciences estimates that over one third of the agricultural topsoil in the United States is already gone, much of it lost in the last four decades. The loss of topsoil costs American farmers and the economy over \$44 billion a year.<sup>134</sup>

In terms of natural resources, the industrial model is tremendously inefficient

<sup>127</sup> See Hosansky, *supra* note 12.

<sup>128</sup> See Andrew Nikiforuk, *Factory Farming in Polluting the Water Supply*, in CURRENT CONTROVERSIES: POLLUTION (James Haley ed., Greenhaven Press 2002).

<sup>129</sup> See POLLAN, *supra* note 21, at 79.

<sup>130</sup> See *id.*

<sup>131</sup> See *id.* at 81.

<sup>132</sup> See *DNR Investigating Brown County Well Contamination*, WFRV.com (Aug. 26, 2006), [http://wfrv.com/topstories/local\\_story\\_238160656.html](http://wfrv.com/topstories/local_story_238160656.html) (last visited Feb. 28, 2007).

<sup>133</sup> See *id.*

<sup>134</sup> See RIFKIN & RIFKIN, *supra* note 11, at 149.

because its mechanical system requires fossil fuel, whereas organic farming is sun-powered. Industrial farming uses at least fifty gallons of oil to produce one acre of corn.<sup>135</sup> Before chemical fertilizers, the farm produced more than two calories of food energy for every calorie of energy invested.<sup>136</sup> Today, it takes industrial farmers more than a calorie of fossil fuel energy to produce a calorie of food.<sup>137</sup> As Michael Pollan puts it, "From the standpoint of industrial efficiency, it's too bad we can't simply drink the petroleum directly."<sup>138</sup> Others authors that promote organic farming over chemical farming explain that:

Organic farming uses no petrochemical fertilizers or pesticides but, rather, relies on natural organic manuring, nitrogen-fixing crop rotation, and natural pest management practices. Studies over the past decade have shown that, once established, organic-based agriculture and chemical-based agriculture provide roughly the same yield per acre. Organic farming, however, uses two-thirds less energy to produce the same output, giving it a cost-competitive advantage over higher input chemical farming. Organic farms use 6,800 BTUs of energy to produce a dollar of output, whereas chemical farms use over 18,000 BTUs. One study found that highly mechanized chemical farming costs approximately \$47 per acre, while low-input farming costs only \$31 per acre, giving it a decisive edge.<sup>139</sup>

U.S. farm subsidies promote industrial agriculture because it is perceived as achieving the most "efficient production," but this depends on how we define "efficient production." If the objective is to achieve maximization of export profits, then industrial agriculture wins because it can use agricultural chemicals to produce more of a single crop while pushing the external costs of production off onto society. If, on the other hand, the objective is to achieve a sustainable, secure supply of food, then organic appears to be the winner, because, although it takes more effort on the farmer's part, it can produce as much food as industrial farming without pushing the external costs of production off onto society.

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<sup>135</sup> David Pimentel et al., *Environmental, Energetic, and Economic Comparisons of Organic and Conventional Farming Systems*, 55 BIOSCIENCE 573, 575 (2005), cited with approval in POLLAN, *supra* note 21 (stating figure of .33 gallons of oil per bushel of corn).

<sup>136</sup> See POLLAN, *supra*, 45 note 21.

<sup>137</sup> See *id.* at 46.

<sup>138</sup> See *id.* at 46.

<sup>139</sup> See RIFKIN & RIFKIN, *supra* note 11, at 155.

## IV. ACHIEVING SOCIAL RESPONSIBILITY IN U.S. AGRICULTURE

## A. General Trends in Corporate Responsibility

Financial analysts are uncovering a surprising trend — corporate social responsibility can actually be profitable. Recent meta-studies (studies that examine other studies) show that socially responsible businesses are actually outperforming other businesses on the S&P 500. For example, the Winslow Green Growth Fund that holds stock in firms with high environmental standards soared more than ninety percent in 2003 (versus 28.2 percent for the top firms in the S&P 500).<sup>140</sup> Another study discovered that companies listed on Marjorie Kelly's "100 Best Corporate Citizens" outperformed the S&P 500 by a stunning ten percentile points.<sup>141</sup> Companies on the "100 Best Corporate Citizens" list are devoted to promoting socially responsible behavior towards stakeholders (such as society, employees and the environment), and not just stockholders.<sup>142</sup> Patricia Aburdene states that the profitability of corporate social responsibility is being driven by conscientious consumers and investors that are choosing to vote in favor of socially responsible behavior with their checkbooks. She calls this phenomenon the "rise of conscious capitalism."<sup>143</sup>

The public has been bombarded recently with business scandals — Enron, Worldcom, Nike, and the list goes on.<sup>144</sup> The media's attention to these business scandals has increased consumers' awareness of the damage socially irresponsible companies can cause and companies realize their reputation can affect the bottom-line. A "reputation for corporate responsibility enhances the company's brand, while being deemed 'socially irresponsible' damages it."<sup>145</sup> This has led many businesses to rally "round the banner of corporate responsibility."<sup>146</sup> Companies are acknowledging their commitment to society in a number of ways: joining organizations that promote socially responsible behavior; voluntarily reporting environmental and economic aspects of their operations; adopting codes of business ethics; purchasing from socially responsible suppliers; and marketing socially responsible products.

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<sup>140</sup> See PATRICIA ABURDENE, MEGATRENDS 2010: THE RISE OF CONSCIOUS CAPITALISM, at xxiii (2005).

<sup>141</sup> See *id.*

<sup>142</sup> See Business-Ethics.Com, 100 Best Corporate Citizens for 2004, [http://www.business-ethics.com/BE100\\_2004](http://www.business-ethics.com/BE100_2004) (last visited Nov. 26, 2007).

<sup>143</sup> JOHN NAISBITT & PATRICIA ABURDENE, MEGATRENDS 2000: NEW DIRECTIONS FOR TOMORROW (1991).

<sup>144</sup> See ROBERT PRENTICE, STUDENT GUIDE TO THE SARBANES-OXLEY ACT 10-11 (2005) (stating that "stock wealth collapsed by six trillion dollars with the collapse of the dot.com bubble" and fraudulent accounting disclosures).

<sup>145</sup> ABURDENE, *supra* note 141, at 26.

<sup>146</sup> *Id.*

Business for Social Responsibility (“BSR”) is a San Francisco based non-profit firm founded in 1992.<sup>147</sup> Its membership originally consisted of just a few members; today it has over 400 member organizations, half of which are Fortune 500 companies.<sup>148</sup> BSR promotes corporate social responsibility as a “comprehensive set of policies, practices and programs” that earns financial success in ways that “honor ethical values, and respect people, communities and the natural environment.”<sup>149</sup>

Global Reporting Initiative (“GRI”) issues uniform guidelines for corporations that choose to report on social, environmental and economic aspects of their operations. More than 600 organizations have adopted GRI guidelines.<sup>150</sup>

CERES (Coalition for Environmentally Responsible Companies) is another indication that free enterprise is responding to the growing number of conscious consumers and investors.<sup>151</sup> CERES created a ten point code of corporate conduct including: protection of the biosphere, sustainable use of natural resources, reduction and disposal of waste, energy conservation, risk reduction, safe products and services, environmental restoration, informing the public, management commitment, and audits and reports.<sup>152</sup> Today, companies like Body Shop, Bank of America, Coca Cola, and Nike endorse CERES principles.<sup>153</sup>

Starbucks is a great example of the lengths successful businesses are going to in order to be more socially responsible throughout the various stages of production. On its website Starbucks explains that it practices socially responsible behavior from “bean to cup.” Starbucks partnered with Conservation International (“CI”) in 1998 to encourage the use of ecologically sound growing practices that help protect biodiversity and provide economic opportunities for coffee farmers. Starbucks rewards farmers who meet strict environmental, social, economic and quality standards by paying top dollar for their products. Starbucks recycles the burlap bags used to transport unroasted coffee from origin countries. In 2003, Starbucks recycled more than 1.37 million pounds of burlap bags that were reused in the agricultural, furniture and carpet

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<sup>147</sup> See Business for Social Responsibility, BSR History, <http://www.bsr.org/Meta/about/BSRHistory.cfm> (last visited Nov. 26, 2007).

<sup>148</sup> See ABURDENE, *supra* note 141.

<sup>149</sup> *Id.*

<sup>150</sup> See Global Reporting Initiative, About GRI, [http://www.globalreporting.org/About GRI/](http://www.globalreporting.org/About%20GRI/) (last visited Nov. 26, 2007).

<sup>151</sup> See CERES, Stakeholder Engagement and Assurance: History of Ceres' Stakeholder Engagement, [http://www.ceres.org/sustreporting/stakeholder\\_engagement.php](http://www.ceres.org/sustreporting/stakeholder_engagement.php) (last visited Nov. 26, 2007).

<sup>152</sup> See *id.*

<sup>153</sup> See *id.*



pad manufacturing industries. Starbucks offers a \$0.10 discount to customers who bring in their own mugs to its stores. In 2003, Starbucks' customers used their own mugs 13.5 million times, preventing 586,800 pounds of paper waste from reaching landfills. Another measure Starbucks takes to reduce waste is donating spent coffee grounds to customers, parks, schools and nurseries as nitrogen-rich garden compost.<sup>154</sup>

The Natural Marketing Institute, a market research firm, estimates that sixty-three million Americans, or thirty percent of the adult population, are LOHAS (Lifestyles of Health and Sustainability) customers. The *New York Times* reported that the market for values-driven commerce, from organic food and eco-tourism to Earth-friendly appliances and alternative medicine, had reached \$230 billion by 2000. "Natural products, from food to personal care items, were a \$36 billion market by 2002—up from \$15 billion five years earlier."<sup>155</sup> While corporate responsibility is getting more and more attention across all the various economic sectors, the next section discusses how consumers are making it financially advantageous to be socially responsible in agriculture.

### B. Organic Foods — Social Responsibility in Agriculture

Organic food sales illustrate the enlightenment of today's consumers in regards to the impact current agricultural practices have on the environment, society and their health. According to the USDA, consumer "demand for organically produced goods has risen for over a decade, providing *market incentives* for U.S. farmers across a broad range of products."<sup>156</sup> Organic food sales currently exceed ten billion dollars a year and are growing at an estimated seventeen to twenty percent a year according to the USDA.<sup>157</sup> "According to USDA's Agricultural Marketing Service, the number of farmer's markets in the United States jumped from 1,755 markets in 1994 to 2,863 in 2000. And the number of farmers and consumers using these markets *tripled* during this period, to 66,700 farmers serving 2.7 million consumers in 2000."<sup>158</sup> The organic movement is "forcing everyone involved at every stage in the food chain to rethink the basic assumptions of the last 50 years."<sup>159</sup>

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<sup>154</sup> Starbucks, Environmental Activities from Bean to Cup, <http://www.starbucks.com/aboutus/beantocup.asp> (last visited Nov. 26, 2007).

<sup>155</sup> See ABURDENE, *supra* note 141, at 93 (quoting Boston-based investment bank Adams, Harkness & Hill).

<sup>156</sup> See Catherine Greene & Amy Kremen, *U.S. Organic Farming 2000-2001: Adoption of Certified Systems*, (USDA/ECONOMIC RESEARCH SERVICE, AIB-780, 2 Feb. 2003) (emphasis added).

<sup>157</sup> See *id.*

<sup>158</sup> See *id.* at 18. "Organic producers capture a much higher share of the consumer food dollar when they market their produce directly to the consumers . . . ." *Id.*

<sup>159</sup> Jonathan Dimbleby, *Organic Farming Protects the Environment and Sustains Human Life*, in GLOBAL RESOURCES: OPPOSING VIEWPOINTS 77-78 (Helen Cothran ed., Greenhaven Press 2004).

Certified USDA Organic food products prohibit the use of most synthetic materials to control pests and weeds, genetic engineering, sewage sludge, irradiation, and a national list of non-synthetic substances (including arsenic and tobacco dust).<sup>160</sup> Certified USDA Organic products are now available in over 20,000 natural food stores and nearly three out of four conventional grocery stores.<sup>161</sup>

Studies show that consumers are concerned about health and nutrition, taste, food safety, and the environment.<sup>162</sup> A 2005 Earth Day survey conducted by Natural Foods Institute found that nearly six in ten Americans are concerned about pesticides. Most grocery stores today have a section specifically designated as organic to capitalize on the spending power of these conscientious consumers. "A 17-member retail coalition, including Kroger, City Market, Food Lion and Giant Eagle, participated in the 2005 'Go Organic for Earth Day' campaign" to show their support for responsibly produced food.<sup>163</sup>

The growth of organic food sales demonstrates that a growing number of consumers are willing to pay a substantial premium for organic food. This is leading many industrial farming operations to voluntarily devote portions of their farm acreage to organic in order to capitalize on the greater profit margins.<sup>164</sup> According to the USDA, in 2001, there were 2.3 million acres of cropland and pasture under organic management in forty-eight states. Half of that amount was added between 1997 and 2001.<sup>165</sup> According to the 2002 U.S. Census, today there are 2.1 million farms and 941.5 million acres in total U.S. farmland.<sup>166</sup>

Despite the surge in organic food sales, organic only accounted for two percent of the total U.S. food sales. Certified organic cropland and pasture accounted for only 0.3 percent of all U.S. cropland and pasture in 2001.<sup>167</sup> Organics' relatively low market share is due in large part to our nation's past

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<sup>160</sup> See generally Friedland, *supra* note 99, at 388-90.

<sup>161</sup> Catherine Greene, *AREI Chapter 4.9: U.S. Organic Agriculture*, U.S. Dep't. of Agric., Econ. Research Serv., <http://www.ers.usda.gov/publications/arei/eib16/Chapter4/4.9/> (last visited Nov. 26, 2007); see also Greene & Kremen, *supra* note 156, at 2 (stating fresh produce remains top selling organic category, followed by nondairy beverages, breads and grains, packaged foods — frozen and dried prepared foods, baby food, soups, and deserts — and dairy products).

<sup>162</sup> See Rawson, *supra* note 10.

<sup>163</sup> See Green & Kremen, *supra* note 156, at 104.

<sup>164</sup> See Greene & Kremen, *supra* note 156, at 2.

<sup>165</sup> *Id.* at 1.

<sup>166</sup> See U.S. Dep't. of Agric., Nat'l Agric. Stat. Serv., *Census, US-Highlights* (2002) available at [http://151.121.3.33:8080/Census/Pull\\_Data\\_Census](http://151.121.3.33:8080/Census/Pull_Data_Census) (noting that approximately 75 million acres are in corn).

<sup>167</sup> Greene & Kremen, *supra* note 156, at 1 (noting that EU has highest conversion rate to organic and many EU countries have set targets to have organic achieve 10-20 percent of countries' farm land area by 2010).

and current agricultural policies that have led a disproportionate number of farmers to implement industrial farming methods over organic. U.S. food processors and grocery stores are already starting to realize that demand for organic food items is outpacing America's organic supply, so they are forced to import organic ingredients and food from abroad to fill the gap.<sup>168</sup> While the U.S. was once a net exporter of organic products, it "now spends more than \$1 billion a year to import organic food, according to the USDA, and the ration of imported to exported products is now about 8 to 1."<sup>169</sup>

With demand for organic products growing and the number of farmers and land under organic management relatively limited, the price for organic food is only likely to increase. While a price disparity between organic and industrial food items may be inevitable as American farmers transition to meet consumer demands, the next section explains how farm subsidies create an *artificial* price disparity and how this prevents more consumers from rewarding socially responsible agricultural practices.

*C. Ethical Dilemma — When U.S. Farm Subsidies Create Artificially Low Prices for Industrial Food Products*

In *Megatrends 2010: The Rise of Conscious Capitalism*, Patricia Aburdene breaks consumers down into three concentric circles or groups with the hard-core conscious consumers at the core of conscious consumption.<sup>170</sup> The hard-core conscious consumers include the environmentalists, organic food buyers, hybrid car enthusiast, and green-home lovers. Their values determine the majority of their purchases. Studies estimate that this group accounts for between sixteen and thirty-six percent of the population.<sup>171</sup> A second group, which includes the "hard-core conscious consumers," accounts for approximately forty-nine percent of the population.<sup>172</sup> This second group is becoming more interested in organics and/or environmentalism and exercises their values in a growing percentage, but not all, of their purchases. This second group can be persuaded to make purchases based on their values despite disparities in price, quality, and convenience.<sup>173</sup> The third group, which includes the first two groups, is estimated to be seventy-nine percent of the population.<sup>174</sup>

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<sup>168</sup> See Scott Faber, *Demand for Organic Food Growing Faster Than Domestic Supply: Many Farmers Find Initial Costs of Converting to Organic Practices Intimidating Despite Higher Profits Later On*, 16 BAY JOURNAL (Alliance for the Chesapeake Bay Mar. 2006), available at <http://www.bayjournal.com/article.cfm?article=2760>.

<sup>169</sup> *Id.*

<sup>170</sup> See ABURDENE, *supra* note 141, at 94-95.

<sup>171</sup> See *id.* at 94.

<sup>172</sup> See *id.*

<sup>173</sup> See *id.* at 95 (quoting *The New York Times*).

<sup>174</sup> See *id.*

This group considers the moral implication of their choices, but their values only influence their behavior some of the time. Studies show that this group will buy from companies they deem socially responsible, but only when price, quality and convenience are equal. Price disparity will prevent this group from rewarding companies that practice socially responsible behavior.

This is where U.S. farm policies create an ethical dilemma for consumers. U.S. farm subsidies help industrial food makers present an artificially low sticker price to consumers in the grocery store. While a growing number of consumers will pay the extra cost for socially responsible organic food, most consumers still look at the price to dictate their decision. If organic food items carry a significantly higher price than industrial food items, then a majority of consumers will purchase the industrial food item.

The sticker price for industrial food is artificially low for two reasons: First, government subsidies systematically favor industrial agriculture by offsetting the cost of industrial food production by as much as thirty billion dollars a year.<sup>175</sup> Second, industrial food makers are not required to account for the cost of pollution and health hazards caused by their use of agricultural chemicals in the sticker price.

Organic food prices represent more accurately the true cost of food, because organic farmers do not use agricultural chemicals or receive government subsidies. By financially propping up industrial agriculture each year with billions of dollars in subsidies, the government is tricking many consumers into believing that the industrial food they are purchasing is actually the more affordable choice. The reality, though, is the consumer is paying a hefty price for the industrially produced food; the consumer just does not realize it because the costs are not apparent at the checkout counter. Instead the consumer pays for the expense of our nation's industrial food products through their current and future taxes.

While the decision to exclude alternative, more socially responsible farming methods from America's agricultural policies was never *officially* made, the disparate result of these policies is nonetheless problematic. It is unclear whether America's organic farms will be able to keep pace with the growing demands of current conscientious consumers after having been systematically and financially excluded from government support for over half a century. To the extent demand for organic outpaces supply, America will experience a true price disparity between organic and industrial food. This Article, however, takes issue with the *artificial* price disparity that current U.S. agricultural policy promulgates by providing billions of dollars worth of funding to industrial

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<sup>175</sup> See Press Release, Analyst: Farm Policy Now America's Biggest Corporate Welfare Program, The Heritage Found., <http://www.heritage.org/Press/NewsReleases/NR030602.cfm> (last visited Nov. 26, 2007).

farmers while excluding organic and other alternative farmers.

V. RESTRUCTURING U.S. AGRICULTURAL POLICY TO ADDRESS SOCIAL RESPONSIBILITY CONCERNS AND THE PROPOSED 2007 FARM BILL

The need to reform America's farm policies is evident. Some scholars and economists propose eliminating farm subsidies altogether and there is much to be said in support of such an action. President Bush, himself, has spoken out in favor of eliminating farm subsidies. New Zealand, a primarily agricultural nation that relies heavily on agricultural exports, deregulated its agricultural economy by eliminating farm subsidies back in 1984.<sup>176</sup> "The New Zealand farm sector before 1984 had a productivity increase of 1 percent a year. Since the reform, it's been nearly 4 percent per year."<sup>177</sup> The U.S. also attempted such an approach with the Freedom to Farm Act in 1996, but quickly aborted its plan to deregulate the agricultural economy when commodity prices plummeted soon after the Act passed. While eliminating farm subsidies would address the disparate financial treatment that organic and other alternative farmers experience under the current agricultural policy, it does not seem to be a likely option at this point in light of America's relatively recent abandonment of the Freedom to Farm Act initiatives.

The Bush administration is now proposing that the current price-based subsidy payments be converted to revenue-based payments under the 2007 Farm Bill.<sup>178</sup> The current price-based subsidy payments substantially favor high-yield, large farming operations over low-yield, small family farm operations. The result is that small family farm operations, as well as most organic operations, are often under-compensated when market prices are low, while large commercial, industrial farming operations are often over-compensated.

The conversion to revenue-based payments would most likely result in a more equitable allocation of farm subsidy payments among large and small farming operations. It remains to be seen, though, how these payments would be structured. If the payments are based off a farm's entire revenue, then non-industrial farmers will receive a more equitable portion of the funding. On the other hand, if the revenue-based payments are structured to address only Commodity Crop revenues, then organic farmers will continue to be under-compensated even though small family farms implementing industrial methods of farming will be placed in parity with larger industrial operations.

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<sup>176</sup> Thomas Lambie, *Miracle Down Under: How New Zealand Farmers Prosper without Subsidies or Protection*, 16 FREE TRADE BULLETIN (Ctr. for Trade Policy, CATO Inst., Washington, D.C.), Feb. 7, 2005, at 1, <http://www.freetrade.org/pubs/FTBs/FTB-016.pdf> (last visited Nov. 26, 2007).

<sup>177</sup> *Id.*

<sup>178</sup> Elaine Morris Roberts, *Subsidy Changes on Horizon*, SPRINGFIELD NEWS-SUN (Ohio, Feb. 18, 2007).

Commodity Crops constitute only a small portion of the organic farmer's total farm production, but constitute a majority (if not all) of an industrial farmer's production. A farm bill that provides income support in regards to Commodity Crop revenue will result once again in industrial farmers receiving an inequitable share of the farm subsidies and it will continue to perpetuate an *artificial* price disparity between organic and industrial food products.

President Bush's proposed 2007 Farm Bill also plans to increase conservation funding by an additional \$7.8 billion; reduce the adjusted gross income cap (which is currently set at \$2.5 million) to \$200,000; increase funding for purchasing fruits and vegetables for schools; and set aside money for beginning farmers and those classified as "socially disadvantaged" (such as women and minority farmers).<sup>179</sup> As previously noted in Part II, Section B of this Article, President Bush's proposed 2007 Farm Bill advocates increasing EQIP funding to \$4.2 billion and redesigning the EQIP program to address broader environmental concerns.<sup>180</sup>

CONCLUSION — PERVERSE GOVERNMENT SUBSIDIES AND PROGRAMS PREVENT  
CONSUMERS FROM REWARDING SOCIALLY RESPONSIBLE BEHAVIOR IN AGRI-  
BUSINESS

Industrial agriculture may very well serve a purpose in America's agricultural system, but it should not be financially supported to the exclusion of other more socially responsible alternatives. Given the extent to which government subsidies have favored industrial agriculture, it is amazing that alternative farming methods have even survived, much less achieved the growth that organic farming is experiencing today. Reforming America's agricultural policy will no doubt be difficult because industrial agriculture has come to feel a sense of entitlement when it comes to government subsidies. However, there are several new reasons to believe that today's perverse farm subsidies may soon be a thing of the past.

First and foremost, a growing number of American consumers are voting with their checkbooks to make socially responsible agriculture profitable and politicians are getting the message loud and clear. In an effort to respond to this group, Congress passed the Organic Food Act of 1990 and, for the first time in history, substantially funded the conservation programs under the 2002 Farm Bill to the tune of \$20.8 billion over six years (an 80% increase). While conservation subsidies have problems of their own that are beyond the scope of this Article, the increased funding to conservation programs demonstrates Congressional awareness of a growing and conflicting policy concern in the

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<sup>179</sup> See *id.*

<sup>180</sup> See *supra* text accompanying notes 108-110.

agricultural arena. With the nation's deficit forecasted to be anywhere from \$250 to 400 billion over the next few years, Congress will be looking for ways to cut its spending and farm subsidies may be a target.<sup>181</sup> It will be interesting to see how Congress allocates funding under the 2007 Farm Bill, which is due out the latter part of this year. If conservation subsidies continue to increase in comparison to commodity subsidies, it is a good indication that commodity subsidies (which tend to be the most perverse) will soon be on their way out and that America's agricultural policy will start to take on a much more tempered approach to industrial agriculture.

Free trade obligations under the World Trade Organization's Agreement on Agriculture may also cause Congress to reform America's current agricultural policy, since some current U.S. farm subsidies are in violation of that agreement.<sup>182</sup> Issues in this regard focus on decreasing subsidies that interfere with free trade. Finally, there is an increasing number of organized political action groups looking to get a percentage of the subsidy funding in 2007. Traditionally, corn, wheat, cotton, soybean and rice growers dominated when it came to dividing up the commodity subsidies.<sup>183</sup> New emerging contenders include Specialty Crop Farm Bill Alliance, American Farmland Trust, American Heart Association, Renewable Fuels Association, Oxfam America, American Trucking Association, Humane Society of the United States and Vaccine Makers.<sup>184</sup> These new contenders will make it increasingly difficult for the traditional recipients to hold on to the significantly large portion of entitlements that they have become accustomed to receiving over the past several decades. In the end, commodity subsidies may be brought down on a divide and conquer basis. Up until now politicians have been unwilling or unable to deregulate the agricultural sector.<sup>185</sup>

Ultimately, consumers are the ones who determine the desired quality of food and how much they are willing to pay for it. But in order for them to make such a choice, the price at the grocery store cannot be distorted by billion-dollar farm subsidies that go almost entirely to industrial agricultural producers. When government subsidies create artificially low prices for industrial food products, we force the socially responsible farmer to compete with one hand tied behind

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<sup>181</sup> *Budget Deficit Shows Improvement*, CBS NEWS.COM, (June 12, 2006), <http://www.cbsnews.com/stories/2006/06/12/national/printable1703804.shtml> (last visited Nov. 26, 2007).

<sup>182</sup> See generally Stephen J. Powell & Andrew Schmitz, *The Cotton and Sugar Subsidies Decisions: WTO's Dispute Settlement System Rebalances the Agreement on Agriculture*, 10 DRAKE J. AGRIC. L. 287 (Summer 2005).

<sup>183</sup> Catharine Richert, *Reshaping the Farm Agenda*, CQ WEEKLY, Jan. 8, 2007, at 115, 118-119.

<sup>184</sup> See *id.*

<sup>185</sup> See Maureen Groppe, *Farmers, Falling in Number, Gain Clout in Washington*, GANNETT NEWS SERVICE (July 21, 2002) (on file with author), available at <http://www.sdarws.com/SD%20NEWS/2002/July/farmers.htm>.

his back. It is time to level the playing field and stop promoting a food system that is not only costly to society and the environment but is also unsustainable. It is time to let consumers decide the victor. In order for them to do so, we need to eliminate perverse subsidies that disguise the true affordability of their food options.



## APPENDIX

**Figure 1****USDA Farm Subsidy Recipients  
1995-2005<sup>186</sup>**

Farm Subsidy Recipient	Total USDA Subsidies 1995-2005
Riceland Foods Inc.	\$541,061,667
Producers Rice Mill Inc.	\$308,013,630
Farmers Rice Coop.	\$145,530,214
CHS Inc.	\$49,037,456
Tyler Farms	\$37,009,744
DNRC Trust Land Management—EXEM	\$35,314,692
1 <sup>st</sup> National Bank Sioux Falls-SEP	\$28,871,163
Ducks Unlimited Inc. <sup>188</sup>	\$28,338,088
Pilgrim's Pride Corporation	\$26,461,206
Missouri Delta	\$25,280,578
<b>Total USDA Subsidies 1995-2005</b>	<b>\$164,709,000,000</b>

**Figure 2****USDA Farm Subsidy Recipients  
2005<sup>187</sup>**

Farm Subsidy Recipient	Total USDA Subsidies 1995-2005
Riceland Foods Inc.	\$15,815,471
Producers Rice Mill Inc.	\$14,039,518
Evans Properties Inc.	\$13,077,311
Fellsmere Joint Venture LLP	\$7,943,655
Farmers Rice Coop.	\$5,171,362
CHS Inc.	\$4,871,696
Bernard A Egans Grove Inc.	\$4,453,745
Balmoral Farming Partnership	\$3,385,236
DNRC Trust Land Management-EXEM	\$3,374,846
Due West	\$3,199,673
<b>Total USDA Subsidies 2005</b>	<b>\$21,057,000,000</b>

<sup>186</sup> *Farm Subsidy Database*, *supra* note 83.<sup>187</sup> *Id.*<sup>188</sup> Over 80 percent of the payments listed for Ducks Unlimited are 'cost share' reimbursements for technical assistance to restore wetlands at many locations on private lands not owned by D.U. The technical assistance is provided to private landowners under contractual agreement through USDA's Natural Resources Conservation Service. *Id.*

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