

# THE FUTURE OF AGRICULTURAL LAW: A GENERATIONAL SHIFT

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## I. INTRODUCTION

*“Nothing endures but change.” – Heraclitus (540–480 B.C.)*

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The observation “farmin’ ain’t what it used to be” is so commonplace as to be cliché, as agriculturalists likely have been making it since the first humans began cultivating soils to grow selected plants approximately ten to fifteen thousand years ago. Those making it in recent years, however, may be more accurate in that assessment than any of their predecessors. Economic, demographic, environmental, and regulatory trends point to a convergence of factors that will likely result in significant structural changes in America’s production agriculture sector in both the near future and for decades to come. These changes will not only affect the way production agriculture does business; they will also impact the legal needs of producers and, indeed, may impact the policy environment as a whole. This will trigger a host of needed adaptations for practitioners, scholars, and policy-makers operating within the realm of agricultural law.

This article first examines the current and projected trends facing the American agricultural industry. It then examines the implications of these changes for agriculture and its legal environment. Finally, it suggests adaptations that practitioners in agricultural law can make to better serve their clients and aid in preparations for the new agricultural industry of the twenty-first (and twenty-second) century.

## II. TRENDS IN THE EVOLUTION OF AMERICAN AGRICULTURE

### A. *Agricultural Product and Input Demand Trends*

U.S. and global agricultural markets have changed dramatically in recent years. The combination of increased industrial demand for grain along with growing global food demand created overall increases in demand and prices for agricultural inputs, as well as higher crop and livestock prices. Beginning in late 2006, these factors resulted in sharply higher and more volatile crop prices.<sup>1</sup> This new demand for corn and accelerating global food demand resulted in dramatic price increases from the 2005 crop year to the 2011 crop year for all major crops, from corn (up 210%) and grain sorghum (up 227%); to wheat (up 106%), soybeans (up 107%), barley (up 113%), and oats (up 109%); to rice (up 86%), cotton

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1. See, e.g., AGRIC. MARKETING SERV., USDA, WORLD AGRICULTURAL SUPPLY AND DEMAND ESTIMATES (2013) [hereinafter WORLD AGRICULTURAL SUPPLY AND DEMAND ESTIMATES], available at <http://www.usda.gov/oce/commodity/wasde/latest.pdf>; NAT’L AGRIC. STATISTICS SERV., USDA, AGRICULTURAL STATISTICS 2012, at I-1 tbl.1-2, VII-1 tbl.7-1 (2012) [hereinafter AGRICULTURAL STATISTICS 2012], available at [http://www.nass.usda.gov/Publications/Ag\\_Statistics/2011/2011\\_Final.pdf](http://www.nass.usda.gov/Publications/Ag_Statistics/2011/2011_Final.pdf); WORLD BANK, RESPONDING TO HIGHER AND MORE VOLATILE WORLD FOOD PRICES I, 7 (2012), available at [http://www.wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2012/06/10/0003333037\\_20120610235753/Rendered/PDF/684200REVISED00olatality0Web0Final2.pdf](http://www.wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2012/06/10/0003333037_20120610235753/Rendered/PDF/684200REVISED00olatality0Web0Final2.pdf).

(up 94%), and alfalfa hay (up 78%).<sup>2</sup> Many crop producers have enjoyed good profitability despite the fact that input prices have also jumped sharply, including large increases in fuel, fertilizer, and other input expenses.<sup>3</sup>

Livestock industries have endured enormous shocks to adjust to feed prices that are double to triple historical levels.<sup>4</sup> These shocks spawned adjustments in the beef, pork, dairy, and poultry industries that continue to this day, and have precipitated long-term structural change in the beef sector, and perhaps other livestock sectors, that will take many years to complete. The desire to produce the most profitable harvest not only results in reallocation of land among crops (the projected numbers for the 2012–2013 growing season indicate corn acreage has increased over 20% since 2006, while most other crops are down in acreage),<sup>5</sup> but also induces regional shifts of pasture and hay production out of major cropping areas of the Midwest and surrounding regions.<sup>6</sup> The result is a measurable shift of beef cattle production out of the Midwest and to the Great Plains and further west into areas of rangeland and more marginal cropland.<sup>7</sup>

While these near-term factors have already impacted some aspects of American agriculture's structure and geographic configuration, they may eventually pale in comparison to the global macroeconomic factors driven by world population. Tremendous growth in agricultural production will be needed to feed a global population anticipated to peak at 9.22 billion in 2075.<sup>8</sup> To feed this population, global food production must increase by 70% (net of any agricultural products used for biofuel production), with a more than 40% increase in cereal grain production and a 74% increase in meat production.<sup>9</sup> Meeting these de-

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2. AGRICULTURAL STATISTICS 2012, *supra* note 1, at I-2 tbl.1-3, I-14 tbl.1-21, I-21 tbl.1-35, I-28 tbl.1-45, I-32 tbl.1-53, I-36 tbl.1-62, II-1 tbl.2-1, III-13 tbl.3-27, VI-2 tbl.6-2.

3. RANDY SCHNEPF, CONG. RESEARCH SERV., R40152, U.S. FARM INCOME 2, 16, 27 tbl.3 (2013).

4. *See generally* AGRICULTURAL STATISTICS 2012, *supra* note 1, at I-43 tbl.1-78 (2012); NAT'L AGRIC. STATISTICS SERV., USDA, AGRICULTURAL STATISTICS 1994, at 48 tbl.75 (1994), *available at* [http://www.nass.usda.gov/Publications/Ag\\_Statistics/agr4all.pdf](http://www.nass.usda.gov/Publications/Ag_Statistics/agr4all.pdf) (together, showing changes in feed prices from 1983–1992 and 2002–2012).

5. *See* AGRICULTURAL STATISTICS 2012, *supra* note 1, at I-1 tbl.1-2, I-14 tbl.1-21, I-21 tbl.1-35, I-28 tbl.1-45, I-32 tbl.1-53, I-36 tbl.1-62, II-1 tbl.2-1; WORLD AGRICULTURAL SUPPLY AND DEMAND ESTIMATES, *supra* note 1, at 12.

6. *See* AGRICULTURAL STATISTICS 2012, *supra* note 1, at VI-2 tbl.6-3.

7. NAT'L AGRIC. STATISTICS SERV., USDA, CATTLE, at 5 (2013), *available at* <http://www.usda.gov/nass/PUBS/TODAYRPT/cat10213.pdf> (calculated from the change in beef cow inventories from 2012–2013 in selected states).

8. DEP'T OF ECON. & SOC. AFFAIRS, U.N., WORLD POPULATION TO 2300, at 12 (2004), *available at* <http://www.un.org/esa/population/publications/longrange2/WorldPop2300final.pdf>.

9. FOOD & AGRIC. ORG. OF THE U.N., HOW TO FEED THE WORLD IN 2050, at 8, 11 (2009), *available at* [http://www.fao.org/fileadmin/templates/wsfs/docs/expert\\_paper/How\\_to\\_Feed\\_the\\_World\\_in\\_2050.pdf](http://www.fao.org/fileadmin/templates/wsfs/docs/expert_paper/How_to_Feed_the_World_in_2050.pdf).

mands will require an expansion of land used for agricultural production at a time when agriculture will have to compete more aggressively with other uses.<sup>10</sup> It will also mean increasing reliance on biotechnology to reverse the decline of growth in cereal crop yields, which, according to the Food and Agriculture Organization of the United Nations (FAO), have “dropped from 3.2 percent per year in 1960 to 1.5 percent [per year] in 2000.”<sup>11</sup> At the same time, the United Nations (UN) anticipates that virtually all of the world’s population growth within this time frame will come from urban centers with increasing out-migration from rural areas and transitions to non-agricultural employment, meaning the needed increases in global agricultural production must take place with fewer farmers in the world.<sup>12</sup>

These factors are being reflected in increased cropland rental rates and land values.<sup>13</sup> The jump in land values is most pronounced and widespread in the Midwest,<sup>14</sup> which is the epicenter of increased crop production, but is spreading to other regions of the country and will eventually affect all agricultural land, including rangeland in the western United States. High grain prices result in increased forage value and will pose implications for how and where cattle production will take place.

How will these macroeconomic elements affect the future of American agriculture? First, some analysts and scholars argue the new higher plateau for agricultural product values appears to be permanent (though there is not complete consensus on this point).<sup>15</sup> While drought and a number of other short-term factors are part of the current agricultural market situation, the increased global food and industrial demand for agricultural products is more fundamental.<sup>16</sup> U.S. agriculture evolved over the last fifty years in an environment of cheap energy, the effects of which deeply affected the structure and function of agriculture. Agri-

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10. *Id.* at 4.

11. *Id.* at 19. Note that cereal grain *yields* are not decreasing, but rather the *growth* in those yields is decreasing. *Id.*

12. *Id.* at 6.

13. See Cynthia Nickerson et al., *Farmland Values on the Rise: 2000–2010*, USDA (Sept. 20, 2012), <http://www.ers.usda.gov/amber-waves/2012-september/farmland-values.aspx>.

14. See NAT’L AGRIC. STATISTIC SERV., USDA, LAND VALUES: 2012 SUMMARY, at 6 (2012), available at <http://usda01.library.cornell.edu/usda/current/AgriLandVa/AgriLandVa-08-03-2012.pdf>.

15. See, e.g., DARREL GOOD & SCOTT IRWIN, DEP’T OF AGRIC. & CONSUMER ECON., UNIV. OF ILL. AT URBANA-CHAMPAIGN, THE NEW ERA OF CORN, SOYBEAN, AND WHEAT PRICES (2008), available at [http://www.farmdoc.illinois.edu/marketing/mobr/mobr\\_08-04/mobr\\_08-04.pdf](http://www.farmdoc.illinois.edu/marketing/mobr/mobr_08-04/mobr_08-04.pdf).

16. See Clemens Höges et al., *The Cost of Hunger: Drought Only One Factor Behind High Food Prices*, SPIEGEL ONLINE, Aug. 21, 2012, <http://www.spiegel.de/international/business/drought-not-the-only-factor-driving-up-agricultural-prices-a-851068.html>.

culture in the future will adjust to operate in a higher energy cost economy that is significantly different than the past. While biofuel demand is the latest catalyst for change, and will continue to be part of the agricultural market landscape, growing global food demand will likely eclipse it in the long run.<sup>17</sup> Emerging economic powers in several developing countries, especially China and India, will likely ensure that agricultural product values will remain elevated.<sup>18</sup>

Resource demands from emerging economies will not only place upward pressure on agricultural product values, but will also continually push up input values. Energy, fertilizer, feed, and other agricultural inputs will experience increased global demand.<sup>19</sup> Increased volatility of product and input prices, and the risk associated with this volatility, is another major factor that makes future agricultural markets fundamentally different from the past.<sup>20</sup> While expanding global agricultural markets and high product values represent new opportunities, the associated risk implies new approaches to business and new challenges for agricultural producers. Agricultural markets are increasingly subject to greater impacts and shocks from external macroeconomic and global market factors compared to the past when internal market fundamentals were the biggest drivers of product prices.

It should be noted that another important element of change in markets for agricultural products and inputs is the structure of those markets themselves. Increasingly, both products and inputs are being bought and sold through contractual arrangements rather than on the open market.<sup>21</sup> In 2008 (the most recent year for which data is available), contract production accounted for 39% of the value of all U.S. agricultural production.<sup>22</sup> After a period of rapid expansion of contract use, this growth has somewhat slowed in recent years,<sup>23</sup> although a number of factors indicate it is poised for significant expansion in the near future. Contract use appears to increase when spot prices are subject to high volatility as

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17. *See id.*

18. *See id.* (examining how “new eating habits are magnifying the supply problem” in China).

19. *See* FOOD & AGRIC. ORG. OF THE U.N., THE STATE OF FOOD INSECURITY IN THE WORLD: ECONOMIC GROWTH IS NECESSARY BUT NOT SUFFICIENT TO ACCELERATE REDUCTION OF HUNGER AND MALNUTRITION 35 (2012), *available at* <http://www.fao.org/publications/sofi/en/>.

20. FOOD & AGRIC. ORG. OF THE U.N., THE STATE OF FOOD INSECURITY IN THE WORLD: HOW DOES INTERNATIONAL PRICE VOLATILITY AFFECT DOMESTIC ECONOMIES AND FOOD SECURITY? 11 (2011), *available at* <http://www.fao.org/publications/sofi-2011/en/>.

21. JAMES M. MACDONALD & PENNI KORB, ECON. RESEARCH SERV., USDA, AGRICULTURAL CONTRACTING UPDATE: CONTRACTS IN 2008, at 8 (2011), *available at* <http://www.ers.usda.gov/media/104365/eib72.pdf>.

22. *Id.* at 31.

23. *Id.* at 8. Contracts covered 36% of U.S. agricultural production value in 2001, 28% in 1991, and 11% in 1969. *Id.*

illustrated by the increase in contracting for corn, soybean, and wheat production in 2008—a year when prices for these commodities were quite high, but also quite volatile.<sup>24</sup> Contract use also appears to increase when the withdrawal of government programs increases market and income risks for a commodity,<sup>25</sup> and the prospect of significant farm program change seems ever-present in the current political environment. Proper use of these contracting arrangements appears to have a positive correlation to farm profitability for beginning farmers.<sup>26</sup>

### B. Trends in Agricultural Asset Ownership and Control

Economists have long observed a shift in the composition of American production agriculture. As farmers and ranchers seek economies of size, the industry has moved toward larger operations.<sup>27</sup> With minor aberrations, this trend has continued unabated since World War II.<sup>28</sup> Simultaneously, there has been an increase in very small farms, as those with rural roots seek to “keep one foot in farming” and new entrepreneurs start small farming enterprises.<sup>29</sup> The net effect of these changes is to move an ever-increasing amount of farmland and production out of the middle, and to the extremes of operational size (both large and small).<sup>30</sup>

At the same time, the demographics of agricultural producers continue to shift. With each passing five-year Census of Agriculture, there is an increase of approximately one year in the average age of the American farmer, with the av-

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24. See *id.* at 16, 31. Together these crops, in addition to rice, accounted for 41% of all marketing contract revenue in 2008, but note that some of these gains reflect increased commodity prices. *Id.*

25. *Id.* at 16, 31.

26. See TIMOTHY PARK ET AL., ECON. RESEARCH SERV., USDA, AGRICULTURAL INCOME AND FINANCE OUTLOOK 28 (2011), available at <http://usda01.library.cornell.edu/usda/current/AIS/AIS-12-14-2011.pdf>. For beginning farmers, production or marketing contracts have resulted in positive farm income about five times as often as they have resulted in farm earnings losses. *Id.*

27. ROBERT A. HOPPE ET AL., ECON. RESEARCH SERV., USDA, STRUCTURE AND FINANCES OF U.S. FARMS: FAMILY FARM REPORT, 2007 EDITION 29–36 (2007), available at [http://www.ers.usda.gov/media/201475/eib24\\_1\\_.pdf](http://www.ers.usda.gov/media/201475/eib24_1_.pdf).

28. NAT'L AGRIC. STATISTICS SERV., USDA, AC-07-A-51, 2007 CENSUS OF AGRICULTURE: UNITED STATES SUMMARY AND STATE DATA 7 tbl.1 (2009) [hereinafter 2007 CENSUS OF AGRICULTURE], available at [http://www.agcensus.usda.gov/Publications/2007/Full\\_Report/usv1.pdf](http://www.agcensus.usda.gov/Publications/2007/Full_Report/usv1.pdf); NAT'L AGRIC. STATISTICS SERV., USDA, 2007 CENSUS OF AGRICULTURE: FARM NUMBERS 1, 4 (2007), available at [http://www.agcensus.usda.gov/Publications/2007/Online\\_Highlights/Fact\\_Sheets/Farm\\_Numbers/farm\\_numbers.pdf](http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/Fact_Sheets/Farm_Numbers/farm_numbers.pdf).

29. 2007 CENSUS OF AGRICULTURE, *supra* note 28, at 7 tbl.1.

30. See *id.*

erage age calculated at fifty-seven years in the 2007 Census.<sup>31</sup> This trend has accelerated as of late, though, with the fastest growing demographic between the 2002 and 2007 Census being the sixty-five years and older group (expanding by 22%).<sup>32</sup> In some regions of the country and in some types of agricultural production, these demographic trends are much more pronounced. For example, the proportion of older producers is higher in the South and West and among beef cattle producers.<sup>33</sup> The concentration of production and assets may be greatly compounded by what is anticipated to be the largest generational transfer of wealth in American history, as a recent study estimates that the so-called “traditional” or “greatest” generation will transfer \$8.4 trillion in assets to Baby Boomers in the relatively near future.<sup>34</sup>

The question of transitioning agricultural assets from older producers to a new generation is reaching a critical point. As of 2007, over 374,000 farms (17% of all farms) were operated by producers over sixty-five years of age.<sup>35</sup> These farmers represent more than 200 million acres of agricultural land (22% of all agricultural land), which faces transition in the near future.<sup>36</sup> The situation does not improve in the coming years. Another 260,000 farms (12% of all farms) and 190 million acres (21% of agricultural land) are operated by farmers aged fifty-five to sixty-four years.<sup>37</sup> In contrast, less than 51,000 farms (2.3% of all farms) and 27.6 million acres (3% of all agricultural land) is operated by farmers less than thirty-four years of age.<sup>38</sup>

While older producers tend to own a great deal of their agricultural land (77% of producers over sixty-five own all the land they farm),<sup>39</sup> they often decrease production or switch to less-intensive enterprises as they age. The average value of sales per farm for producers over sixty-five years of age is 73% lower compared to farmers forty-five to sixty-four years old, despite that their farm size is only 7% smaller.<sup>40</sup> Older producers tend have greater equity and be more financially secure; thus, they can afford to decrease production as labor and other

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31. NAT'L AGRIC. STATISTICS SERV., USDA, 2007 CENSUS OF AGRICULTURE: FARMERS BY AGE 1 (2007) [hereinafter 2007 CENSUS: FARMERS BY AGE], available at [http://www.agcensus.usda.gov/Publications/2007/Online\\_Highlights/Fact\\_Sheets/Demographics/farmer\\_age.pdf](http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/Fact_Sheets/Demographics/farmer_age.pdf).

32. *Id.*

33. *Id.* at 3–4.

34. ALICIA H. MUNNELL ET AL., CTR. FOR RET. RESEARCH AT BOS. COLL., HOW IMPORTANT ARE INTERGENERATIONAL TRANSFERS FOR BABY BOOMERS?, at 4 (2011), available at [http://crr.bc.edu/wp-content/uploads/2011/01/wp\\_2011-1\\_508.pdf](http://crr.bc.edu/wp-content/uploads/2011/01/wp_2011-1_508.pdf).

35. 2007 CENSUS OF AGRICULTURE, *supra* note 28, at 206 tbl.63.

36. *Id.*

37. *Id.*

38. *Id.*

39. 2007 CENSUS: FARMERS BY AGE, *supra* note 31, at 2.

40. *See id.*

issues become a more significant challenge for them. This has implications for total agricultural production, however, not to mention the material legacy they leave to their heirs.

The effect of these trends seems to be an ever-increasing “concentration” of the industry. Indeed, census data indicates that there are nearly two million fewer farm owners now than in 1945.<sup>41</sup> At a minimum, these changes indicate that a growing proportion of production assets (and perhaps management control) will be controlled by a smaller number of individuals and/or organizations. The growing proportion of farm assets owned by non-operating landowners also suggests significant growth in the ownership and control of productive assets by individuals and/or organizations with no direct agricultural experience, whether this means city-dwelling heirs or institutional investors.<sup>42</sup> Such conditions could require producers to engage in a number of new commercial relationships to secure the productive assets needed for their operations.

Amidst this shift in agricultural assets comes a relatively new player in the industry: the institutional investor. To be sure, corporations have been investing in agricultural assets for centuries. Indeed, institutional investors owned nearly 12% of Iowa farmland in 1939, largely as a result of mortgage defaults in the Great Depression rather than a conscious, intentional strategy of investment in agricultural assets.<sup>43</sup> A backlash against this trend led to the passage of statutory prohibitions on corporate ownership of certain agricultural assets in a number of states.<sup>44</sup> A desire for economic development, however, has led many states to relinquish these restrictions, with only nine states now retaining any such restrictions.<sup>45</sup> This has opened the door for significant increases in institutional investment in agriculture. These investors view agricultural assets (primarily land) as an important piece of their portfolio for value growth and as an inflation hedge.<sup>46</sup> As just one example, investment company TIAA-CREF has already

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41. BUREAU OF THE CENSUS, U.S. DEP'T OF COMMERCE, SB/93-10, WHO OWNS AMERICA'S FARMLAND? 1 (1993), available at [http://www.census.gov/prod/1/statbrief/sb93\\_10.pdf](http://www.census.gov/prod/1/statbrief/sb93_10.pdf).

42. See NAT'L AGRIC. STATISTICS SERV., USDA, 1999 AGRICULTURAL ECONOMICS AND LAND OWNERSHIP SURVEY, at tbl.1 (1999) [hereinafter OWNERSHIP SURVEY], available at [http://www.agcensus.usda.gov/Publications/1997/Agricultural\\_Economics\\_and\\_Land\\_Ownership/tbl01.pdf](http://www.agcensus.usda.gov/Publications/1997/Agricultural_Economics_and_Land_Ownership/tbl01.pdf).

43. Neil E. Harl, *The Farm and Ranch Corporation—Business Organizational Form of the Future*, 43 NEB. L. REV. 365, 366 (1964).

44. *Id.*

45. *Corporate Farming Laws – An Overview*, NAT'L AGRIC. LAW CTR., <http://www.nationalaglawcenter.org/assets/overviews/corpfarming.html> (last visited May 11, 2013).

46. HIGHQUEST PARTNERS, ORG. FOR ECON. CO-OPERATION & DEV., NO. 33, PRIVATE FINANCIAL SECTOR INVESTMENT IN FARMLAND AND AGRICULTURAL INFRASTRUCTURE 5 (2010),



invested \$2.5 billion in farmland with commitments to invest \$2 billion more.<sup>47</sup> Some forecasters estimate the current level of institutional investment in agriculture will double or triple in the foreseeable future.<sup>48</sup>

### C. Agricultural Regulation

Environmental regulation tends to be the focus of most commentators' assertions about agriculture and over-regulation. The last four decades saw the enactment of several landmark pieces of environmental legislation in the United States, most notably the Resource Conservation and Recovery Act (RCRA),<sup>49</sup> the Clean Water Act (CWA),<sup>50</sup> and the Clean Air Act (CAA).<sup>51</sup> These Acts are credited with significant reductions in the amount of pollution in the soil, water, and air, with their primary focus on high volume, "point-source" emissions of pollutants.<sup>52</sup> While the efforts undertaken through each of these statutory systems involved significant cost and effort, in some way, they also represented the "low hanging fruit" in pollution reduction. Such sources are relatively easy to identify and are susceptible to the direct application of control technologies for pollutant reduction. Making further gains in pollution reduction means addressing smaller, lower volume, and more dispersed pollutant sources that may be "fugitive" or "non-point" source emitters.

Agriculture can, in some cases, represent significant amounts of these emissions. The 2000 National Water Quality Inventory indicated agricultural non-point source pollution as the leading source of water quality impacts to the rivers and lakes examined in the survey.<sup>53</sup> Additionally, EPA's greenhouse gas emissions inventory lists agriculture as the economic sector with the fourth largest quantity of greenhouse gas emissions, behind the electric power, transportation, and manufacturing industry sectors.<sup>54</sup> This leads to the ongoing trend of

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available at <http://www.oecd.org/tad/oecdfoodagricultureandfisheriesworkingpapers.htm> (follow "33 – Private Financial Sector Investment in Farmland and Agricultural Infrastructure" hyperlink).

47. Press release, TIAA-CREF, TIAA-CREF Announces \$2 Billion Global Agriculture Company (May 14, 2012), available at [https://www.tiaa-cref.org/public/about/press/about\\_us/releases/articles/pressrelease422.html](https://www.tiaa-cref.org/public/about/press/about_us/releases/articles/pressrelease422.html).

48. HIGHQUEST PARTNERS, *supra* note 46, at 27.

49. 42 U.S.C. §§ 6901–6992k (2006).

50. 33 U.S.C. §§ 1251–1387 (2006).

51. 42 U.S.C. §§ 7401–7671q.

52. See, e.g., 33 U.S.C. § 1362(14) (defining "point source" under CWA).

53. *Water: Polluted Runoff, Agriculture*, U.S. ENVTL. PROT. AGENCY, <http://water.epa.gov/polwaste/nps/agriculture.cfm> (last updated Oct. 3, 2012).

54. U.S. ENVTL. PROT. AGENCY, TRENDS IN GREENHOUSE GAS EMISSIONS, at 2-16–2-17 tbl.2-12 (2012), available at <http://www.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2012-Chapter-2-Trends.pdf>. It should be noted that agriculture contributed only

increasing environmental regulation in agriculture. Having regulated many other industry segments, “many in the environmental community have come to view agriculture as ‘unfinished business.’”<sup>55</sup>

Attempts to regulate agriculture’s environmental impacts have been fraught with challenges, from both legal and technical perspectives. Perhaps the best example of the legal challenges involved comes from the changes made to EPA’s rules governing the discharge of pollutants from Concentrated Animal Feeding Operations (CAFOs) to water under the CWA.<sup>56</sup> CAFOs had been regulated under the CWA since 1976, but industry changes and litigation over the rule led EPA to propose revisions to those regulations.<sup>57</sup> EPA began the process of updating the rules governing CAFOs by creating what it called a “Unified National Strategy for Animal Feeding Operations” in 1999<sup>58</sup> and subsequently announcing a proposed rule in early 2001.<sup>59</sup> After extensive comment and public debate, a final CAFO rule was published in 2003.<sup>60</sup> Almost immediately though, the final rule was challenged by both environmental and industry groups, with each charging that the rule violated the requirements of the CWA in *Waterkeeper Alliance, Inc. v. United States Environmental Protection Agency*.<sup>61</sup> Responding to the Second Circuit’s partial vacature of the CAFO rule, EPA proposed revisions to the rule in 2006<sup>62</sup> and again in 2008.<sup>63</sup> Another final rule was announced

7.3% of greenhouse gas (GHG) emissions in 2010, with the electric power industry contributing 33.8%, the transportation industry contributing 26.9%, and industry contributing 20.4%. *Id.*

55. Neil Hamilton, *Trends in Environmental Regulation of Agriculture*, in INCREASING UNDERSTANDING OF PUBLIC PROBLEMS AND POLICIES 108, 108 (Farm Found. ed. 1994), available at <http://ageconsearch.umn.edu/bitstream/17502/1/ar940108.pdf>.

56. 33 U.S.C. § 1362; 40 C.F.R. §§ 122, 123, 412 (2012). “[A] CAFO must seek coverage under an NPDES permit if the CAFO discharges or proposes to discharge.” *Id.* at § 22.23(d)(1).

57. See OHIO ENVTL. PROT. AGENCY, CAFO NPDES PERMIT – GENERAL OVERVIEW OF FEDERAL REGULATIONS (2010), available at <http://www.epa.ohio.gov/portals/35/cafo/NPDES PartI.pdf>.

58. U.S. ENVTL. PROT. AGENCY & USDA, UNIFIED NATIONAL STRATEGY FOR ANIMAL FEEDING OPERATIONS I (Mar. 9, 1999), available at <http://www.epa.gov/npdes/pubs/finafost.pdf>.

59. National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines and Standards for Concentrated Animal Feeding Operations, 66 Fed. Reg. 2960 (proposed Jan. 12, 2001) (to be codified at 40 C.F.R. pts. 122, 412).

60. 68 Fed. Reg. 7176 (Feb. 12, 2003) (to be codified at 40 C.F.R. pts. 122, 123, 412).

61. 399 F.3d 486, 490 (2d Cir. 2005).

62. *Waterkeeper Alliance*, 399 F.3d at 524; Revised National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines for Concentrated Animal Feeding Operations in Response to Waterkeeper Decision, 71 Fed. Reg. 37,744 (proposed June 30, 2006) (to be codified at 40 C.F.R. pts. 122, 412).

63. Revised National Pollutant Discharge Elimination System Permit Regulations for Concentrated Animal Feeding Operations; Supplemental Notice of Proposed Rulemaking, 73 Fed. Reg. 12,321 (proposed Mar. 7, 2008) (to be codified at 40 C.F.R. pt. 122).

in late 2008,<sup>64</sup> which was immediately contested in *National Pork Producers Council v. United States Environmental Protection Agency*, this time primarily by industry advocates arguing that the rule overreached the authority of the CWA.<sup>65</sup> EPA then issued a final rule in response to the *National Pork Producers Council* litigation, in July of 2012.<sup>66</sup>

One could argue the primary problem in EPA's attempt to regulate CAFOs was the lack of legal authority; CAFOs and their pollutant emission profiles did not readily fit the scheme envisioned by the CWA and outlined in the enabling statute. Alternatively, attempts to deal with air pollution in agriculture have met a number of difficulties that are primarily technical in nature. One example is the ongoing effort to devise a regulatory scheme that effectively deals with greenhouse gas (GHG) emissions. In the 2007 case *Massachusetts v. United States Environmental Protection Agency*, the U.S. Supreme Court ruled that GHGs fit within the CAA's definition of an "air pollutant,"<sup>67</sup> and therefore, were within the jurisdiction of EPA.<sup>68</sup> Responding to the Court's decision, EPA issued an Advance Notice of Proposed Rulemaking (ANPR) in which it outlined a possible regulatory system dealing with GHGs in the framework provided by the CAA.<sup>69</sup> EPA and a number of commentators observed that the CAA was never intended to encompass an issue as ubiquitous as GHG emissions.<sup>70</sup> Perhaps the

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64. Revised National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitations Guidelines for Concentrated Animal Feeding Operations in Response to the Waterkeeper Decision, 73 Fed. Reg. 70,418 (Nov. 20, 2008) (to be codified at 40 C.F.R. pts. 9, 122, 412).

65. 635 F.3d 738, 741 (5th Cir. 2011).

66. National Pollutant Discharge Elimination System Permit Regulation for Concentrated Animal Feeding Operations: Removal of Vacated Elements in Response to 2011 Court Decision, 77 Fed. Reg. 44,494 (July 30, 2012) (to be codified at 40 C.F.R. pt. 122).

67. The CAA defines "air pollutant" as

any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive (including source material, special nuclear material, and byproduct material) substance or matter which is emitted into or otherwise enters the ambient air. Such term includes any precursors to the formation of any air pollutant, to the extent the Administrator has identified such precursor or precursors for the particular purpose for which the term "air pollutant" is used.

42 U.S.C. § 7602(g) (2006).

68. 549 U.S. 497, 532 (2007).

69. Regulating Greenhouse Gas Emissions Under the Clean Air Act, 73 Fed. Reg. 44,354 (July 30, 2008) (to be codified at 40 C.F.R. ch. 1).

70. See, e.g., *id.* at 44,366 (noting that the proposed regulation of GHGs under the CAA would result in regulations "imposed on entities that have never before been subject to direct regulation under the CAA").

best statement regarding the difficulties in controlling agricultural GHG emissions came from then-Secretary of Agriculture, Ed Schafer, who in USDA's comments to EPA's Advance Notice of Proposed Rulemaking observed: "For instance, technology does not currently exist to prevent the methane produced by enteric fermentation associated with the digestive processes in cows . . . ."<sup>71</sup> In other words, it is nearly impossible to equip cattle with catalytic converters or gas flares. Secretary Schafer expressed concern that EPA's proposed regulatory scheme would require CAA Title V permits for emissions emitted by agricultural operations, that fees for such permits are based on the mass of emissions emitted, and that permits would be required for operations as small as twenty-five dairy cows, fifty beef cattle, or 200 hogs.<sup>72</sup> The American Farm Bureau Federation (AFBF) estimated that the required permitting fees would equal \$175 per dairy cow, \$87.50 per head for beef cattle, and \$21.87 per head for hogs.<sup>73</sup> The release of the AFBF numbers led many to believe that EPA was proposing a "cow tax" for methane emissions.<sup>74</sup> EPA would eventually promulgate a variation on the rules contemplated in the ANPR, called the GHG "Tailoring Rule," aiming to narrow the scope of GHG regulation to the largest emitters, specifically those emitting 75,000 tons or more per year of carbon dioxide equivalents.<sup>75</sup> This threshold would exclude almost all agricultural sources from regulation, although EPA noted it expected to reduce this threshold in 2013.<sup>76</sup> Congress, however, has passed appropriation limits every year since, which prohibit EPA from enacting any emissions limits that would apply to GHG emissions from livestock operations.<sup>77</sup>

The story of CAFO regulations and GHG issues in agriculture do not suggest the environmental regulation of agriculture proceeds quickly. They do, however, suggest a continuing trend of increasing regulatory scrutiny leveled at the agricultural sector. Recent regulations that could affect particulate emissions

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71. *Id.* at 44,377.

72. *Id.*

73. AM. FARM BUREAU FED'N, GREEN HOUSE GAS REGULATION, THE CLEAN AIR ACT AND POTENTIAL IMPLICATIONS FOR PRODUCTION LIVESTOCK 2 (2008), available at [http://www.fb.org/newsroom/nr/nr2008/11-20-08/ANPR\\_Title\\_V\\_Justification\\_Final.pdf](http://www.fb.org/newsroom/nr/nr2008/11-20-08/ANPR_Title_V_Justification_Final.pdf).

74. MEGAN STUBBS, CONG. RESEARCH SERV., R41622, ENVIRONMENTAL REGULATION AND AGRICULTURE 8 (2013), available at <http://www.fas.org/sgp/crs/misc/R41622.pdf>.

75. Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, 75 Fed. Reg. 31,514, 31,523 (June 3, 2010) (to be codified at 40 C.F.R. pts. 51, 52, 70, 71).

76. 40 C.F.R. § 70.12(b)(1) (2012).

77. STUBBS, *supra* note 74, at 9; see, e.g., Pub. L. No. 111-88, § 424, 123 Stat. 2904, 2961 (2009).

from agriculture,<sup>78</sup> the continuing debate over the scope of the CWA under the *Rapanos v. United States Army Corps of Engineers* decision,<sup>79</sup> air emissions reporting for CAFOs,<sup>80</sup> changing emissions requirements for stationary gas and diesel engines,<sup>81</sup> and others suggest that agricultural producers of all sizes will face increasing levels of environmental scrutiny and regulation.

Environmental impacts are far from the only element of agricultural production under increasing regulatory scrutiny. The most recent and vivid example of non-environmental regulations stirring controversy in the industry is the Department of Labor's (DOL) efforts to tighten restrictions on children under the age of eighteen working in agriculture. Children working on farms, for parties other than their parents, already faced a number of restrictions pursuant to OSHA regulations;<sup>82</sup> the proposed regulations would have added a number of additional prohibited activities.<sup>83</sup> The proposed regulations were met with tremendous backlash from a wide range of agricultural groups, and the proposed rule received over 10,000 comments.<sup>84</sup> DOL announced intentions to revise and resubmit the rule in February of 2012,<sup>85</sup> but instead permanently withdrew the rule in May of 2012, going so far as to state in its official press release: "To be clear, this regulation will not be pursued for the duration of the Obama administration."<sup>86</sup>

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78. See National Ambient Air Quality Standards for Particulate Matter, 78 Fed. Reg. 3086 (Jan. 15, 2013) (to be codified at 40 C.F.R. pts. 50, 51, 52, 53, 58) (lowering PM<sub>2.5</sub> standards to 12 micrograms per cubic meter).

79. 547 U.S. 715, 722 (2006) (discussing the scope of "navigable waters of the U.S.>").

80. *E.g.*, 40 C.F.R. § 302.6(e)(3) (exempting from the Comprehensive Environmental Response, Compensation, and Liability Act "[r]eleases to the air of any hazardous substances from animal waste at farms").

81. See National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines, 75 Fed. Reg. 9648, 9651 (Mar. 3, 2010) (to be codified at 40 C.F.R. pt. 63).

82. See 29 C.F.R. §§ 570.70–72 (2012) (regulating employment of children under the age of sixteen in agricultural endeavors that are particularly dangerous).

83. See Child Labor Regulations, Orders and Statements of Interpretation, 76 Fed. Reg. 54,836 (proposed Sept. 2, 2011) (to be codified at 29 C.F.R. pts. 570, 579).

84. Child Labor Regulations, Orders and Statements of Interpretation, 77 Fed. Reg. 31549, 31550 (May 29, 2012).

85. Press Release, U.S. Dep't of Labor, U.S. Labor Department to Re-Propose "Parental Exemption" of Child Labor in Agriculture Rule (Feb. 1, 2012), available at <http://www.dol.gov/opa/media/press/whd/WHD20120203.htm#UHW3rhU8CS0>.

86. Press Release, U.S. Dep't of Labor, Labor Department Statement on Withdrawal of Proposed Rule Dealing with Children Who Work in Agricultural Vocations (Apr. 26, 2012), available at <http://www.dol.gov/whd/media/press/whdpressVB3.asp?pressdoc=national/20120426.xml#UHW5IRU8CS0>; see also 77 Fed. Reg. 31549–31551 (withdrawing proposed rules).

A number of legislators have responded to these and other regulations by proposing bills purporting to limit the imposition of additional regulations in agriculture, including the Freeing Agriculture to Reap More (FARM) Act<sup>87</sup> and the Reducing Regulatory Burdens Act of 2011.<sup>88</sup> Neither measure has yet passed, nor are there any indications that regulatory pressure on the industry is likely to ease anytime in the near future.

### III. IMPLICATIONS FOR AGRICULTURE AND ITS LEGAL ENVIRONMENT

Given the trends discussed above, what can agriculturalists and the attorneys that represent them expect in both the short and long-term? Any answer is necessarily speculative, but a number of likely paths suggest themselves.

#### A. *Increased Importance of Farm Transition Management*

The marked concentration of agricultural land in the hands of an increasingly aged class of both operating and non-operating farmers poses a number of layered questions that must be confronted within a relatively short timeframe. In the case of farm owners that also operate their farms, is there a child or other family successor standing by ready to take the reins? If not, will the land be divided among non-farming heirs? Will those heirs have the knowledge and management ability to deploy those farm assets at the level needed to satisfy global demand for food, fiber, and fuel? What if the farm is put up for sale on the open market? High farm values suggest an appetite for farmland among a variety of purchasers, but will the significant turnover in the coming years lower those prices?

Will older landowners' farms simply be sold to only slightly-younger owners, "kicking the can down the road" with respect to the transitions issue? As average life expectancy steadily increases (standing at 78.7 years for the most recent U.S. data),<sup>89</sup> so too does the age of the "next generation" of the farm family. Consider the example of one farm-owning family. The father, Philip, is ninety-one and the mother, Elizabeth is eighty-six. They are still active and wish to maintain control of the farm, reluctant to turn control over to the heir most likely to take over the farm business, Charles, who at sixty-four, is almost at retirement age himself. Would he even be willing to take over control of the opera-

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87. Freeing Agriculture to Reap More Act, H.R. 3323, 112th Cong. (2011).

88. Reducing Regulatory Burdens Act of 2011, H.R. 872, 112th Cong. (2011).

89. Donna L. Hoyert & Jiaquan Xu, *Deaths: Preliminary Data for 2011*, 61 NAT'L

VITAL STATISTICS REPORTS, no. 6, 2012 at 1, 2, [http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61\\_06.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr61/nvsr61_06.pdf).

tion, or would he seek either “retirement in place” (still maintaining the operation but significantly reducing the level of labor and/or management inputs) or complete retirement himself shortly after receiving the farm’s assets? If so, does the succeeding generation represented by William, at age thirty, have the knowledge and experience to take over the operation?<sup>90</sup>

Why should agriculturalists, legal practitioners, scholars, and policy-makers even care? This last question may be more succinctly phrased as: “so what?” Many wonder why there appears to be so much concern about asset concentration, new farmer entry, and off-farm ownership of farm assets. There is not one answer, but a number of concerns could arise if current trends continue. Research suggests that non-operating landowners tend to be less likely to live on the farm (with other studies also suggesting they are increasingly less likely to live in the community) and are less likely to participate in conservation programs.<sup>91</sup> This can lead to further losses of rural population and the “export” of returns to land ownership outside the community, which exacerbates the negative economic impact of this outmigration.<sup>92</sup> Owners living away from their communities may be less likely to take an active role in the issues that impact rural communities, or alternatively, may be actively opposed to initiatives such as property tax increases or bond issues that impose costs on landowners but the benefits of which accrue to those living in the community.<sup>93</sup> All of these issues point to the fact that who owns our farms and ranches does matter.

Thus, the issue turns to facilitating the entry of beginning farmers—whether they come from within or outside the family—into the industry, which

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90. Philip, Elizabeth, Charles, and William are more commonly known as Prince Philip, Duke of Edinburgh; Her Majesty Queen Elizabeth II; Charles Philip Arthur George, Prince of Wales; and Prince William, Duke of Cambridge. Though they are not an American farm family, they do in fact own a significant amount of farmland and have faced a number of succession issues. See generally *Our Portfolio*, THE CROWN ESTATE, <http://www.thecrownestate.co.uk/rural/our-portfolio/> (last visited May 11, 2013) (providing a list of the Crown Estate’s farm holdings).

91. See CYNTHIA NICKERSON ET AL., ECON. RESEARCH SERV., USDA, TRENDS IN U.S. FARMLAND VALUES AND OWNERSHIP 31 (2012), available at [http://www.ers.usda.gov/media/377487/eib92\\_2\\_.pdf](http://www.ers.usda.gov/media/377487/eib92_2_.pdf).

92. See OWNERSHIP SURVEY, *supra* note 42, at tbl.1; see also DWIGHT W. ADAMSON & ANDREW WAUGH, FARM OPERATOR ENTRY AND EXIT BEHAVIOR: A LONGITUDINAL ANALYSIS 6 (2012), available at <http://ageconsearch.umn.edu/bitstream/124053/2/AAEA%20Farm%20Operator%20Entry%20and%20Exit%20Behavior.May12.Preliminary.pdf> (providing statistical analysis of government payments becoming concentrated in large operations and a correlation to rural populations declining); NICKERSON ET AL., *supra* note 91, at 32 (interpreting survey data to show a large percentage of farm landlords living in urban areas).

93. See WILLIAM A. FISCHER, THE HOMEVOTER HYPOTHESIS: HOW HOME VALUES INFLUENCE LOCAL GOVERNMENT TAXATION, SCHOOL FINANCE, AND LAND-USE POLICIES (2001) (providing an explanation of the “homevoter hypothesis” and the community stakes held by homeowners compared to renters).

has long been a policy priority of both federal and many state governments. The question of how the current generation of older farm owners and operators will handle the disposition of assets under their control is directly linked to the issue of how new farmers will enter the industry.

The challenges for beginning farmers are significant. The economies of size, the trend toward larger farms, and high volume-low margin commodity production systems present significant barriers to entry for beginning farmers. The recent escalation in asset values has magnified this situation and increased the capital requirements enormously. Increased restrictions on banks in the wake of the 2008 financial crisis, including the requirements of the Dodd-Frank bill,<sup>94</sup> are cited as one factor leading to the increased consolidation of small banks that serve rural and agricultural customers.<sup>95</sup> Increased capital requirements, combined with increasingly stringent lending requirements, have made the traditional model of asset ownership virtually infeasible for many beginning farmers.<sup>96</sup> Even when access to financing is possible, the enhanced risk due to higher product and input volatility makes the business far more vulnerable in the early, highly leveraged years.<sup>97</sup> In many cases, beginning farmers cannot get financing and, even if they can, the risk may outweigh potential benefits. It seems increasingly apparent that beginning farmers must be encouraged to focus on asset control rather than asset ownership when considering an extended entry strategy.

Certain sectors of agriculture offer opportunities for beginning farmers. There is a growing demand for specialized, niche products in a low-volume, high-margin business environment.<sup>98</sup> This segment includes mostly vegetable and fruit production and possibly specialized livestock, dairy, and egg markets. Markets may be targeted toward any of several market demands, such as locally grown or organic products. They may also include a variety of marketing models

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94. Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).

95. See U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-12-881, COMMUNITY BANKS AND CREDIT UNIONS: IMPACT OF THE DODD-FRANK ACT DEPENDS LARGELY ON FUTURE RULE MAKINGS 7, 9 (2012), available at <http://www.gao.gov/assets/650/648210.pdf> (suggesting that the removal of regulatory barriers related to geographic and membership expansion is one factor that may lead to the consolidation of such banks, but is not the only such factor; economies of scale are also cited as an important factor driving such consolidation).

96. See Letter from Maryann F. Hunter, Deputy Dir., Division of Banking Supervision and Regulation, Board of Governors of the Federal Reserve System, to the Officer in Charge of Supervision at Each Federal Reserve Bank (Oct. 26, 2011), available at <http://www.federalreserve.gov/bankinforeg/srletters/sr11114.pdf> (an example of the bank requirements regarding risk management, which include guidelines for assessing borrower creditworthiness).

97. See *id.*

98. *Strategy #3: Niche Marketing*, CTR. FOR RURAL AFFAIRS, <http://www.cfra.org/renewrural/s/niche-markets> (last visited May 11, 2013).



ranging from direct marketing on the farm or in farmers markets to “u-pick” farms to community supported agriculture formats. Increasingly, there are opportunities to market through major retailers that include sections devoted to specialty or local food production.<sup>99</sup> Changes in farm ownership patterns have also created new opportunities for beginning farmers to engage in custom farming operations.<sup>100</sup>

### B. *Changes in Farm Asset Control and Management*

Agriculture encompasses a wide array of production sectors and a wide diversity of producers throughout different regions of the country. Though characteristics such as independence and perseverance can be used to describe a majority of agricultural producers, the social and business culture of agriculture varies widely around the country and across agricultural industries. Across this variability, the social and business culture of agriculture contributes, in many cases, to the challenges of farmer transition.

Agriculture is a way of life for many producers, and very often, the thought of exiting the business for retirement is not even a consideration. Couple that fact with the realities that the farm is also the primary residence and retirement investment vehicle for many producers and the predicament grows even worse. Farmers often abhor the thought of having neighbors right next door, but are nevertheless strongly attached to close-knit, if widely spaced, rural communities. Living anywhere else and doing anything else is unthinkable for many farmers. Consequently, the challenge of separating the home and lifestyle from the business is very great indeed.

Agriculture is often characterized by a somewhat unique business culture as well. About 87% of all farms are operated as sole proprietorships.<sup>101</sup> Less than 8% are partnerships, with only about half of those registered under state law.<sup>102</sup> Just over 4% are corporations, while almost 90% of corporate farms are

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99. See generally Michael Connor, *National Supermarket Chains Source More Local Foods*, BUSINESS ETHICS (Aug. 2, 2010), <http://business-ethics.com/2010/08/02/1754-national-food-chains-source-more-local-foods/> (discussing how the Whole Foods model is to prioritize local producers).

100. See, e.g., Jodie Wehrspann, *Wanted: Custom Farmers*, FARM INDUSTRY NEWS, Jan. 1, 2005, <http://farministrynews.com/wanted-custom-farmers> (discussing modern custom farming enterprises and describing “a new generation of landowners who are focused on the financial side of the [farming] business”).

101. 2007 CENSUS OF AGRICULTURE, *supra* note 28, at 150 tbl.61. This issue has significant implications for the legal risk held by farms, as discussed in section VI.A below.

102. *Id.*

family corporations with ten or fewer stockholders.<sup>103</sup> Most agricultural producers place a very high value on owning the assets they use for production. Indeed, asset ownership is very often viewed as a principal measure of success for farmers and their peers. For many producers, the idea of “being your own boss” equates to ownership of most, if not all, of their production assets. For this reason, farmers are willing to incur large amounts of debt, accept the associated financial risk, and spend many years accumulating wealth in the form of assets—principally land.

The desire to be your own boss manifests itself in a number of ways for agricultural producers, both individually and in regional “norms” of operation. For many, the notion of leasing or using non-ownership means of accessing assets is unpalatable. Leasing is sometimes accepted as a “necessary evil” on the way to ownership, but many producers do not prefer it as a primary business strategy. Notable exceptions exist, however, and one can discover significant regional variation regarding attitudes toward leasing.<sup>104</sup> Even less common is the use of outside investors or partners to help finance agricultural operations. Other alternatives, such as machinery leasing or custom service usage in lieu of machinery ownership, are often not considered or not preferred by many farmers. In some instances, and perhaps more so in particular geographic regions, agricultural lenders may encourage this business culture by encouraging ownership over other alternatives for controlling assets. Similarly, the use of contracts for production, marketing, or other alliances or strategic partnerships that may increase access to product value relative to commodity markets are very often viewed as an unacceptable loss of independence for the producer.<sup>105</sup> Nevertheless, the magnitude of capital requirements for agricultural production and the increasingly stringent lending requirements are likely to be at odds more and more with this traditional agricultural business culture.

Data from two of the nation’s most extensive farm-management databases suggests that, for operations supported primarily by on-farm income (as opposed to operations where the majority of income comes from off-farm employment), approximately \$600,000 to \$750,000 of gross sales are needed to support each full-time equivalent (FTE) worker on the farm.<sup>106</sup> Assuming an

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103. *Id.* at 151 tbl.61.

104. See NICKERSON ET AL., *supra* note 91, at 29–30.

105. See DOUG O’BRIEN ET AL., THE FARMER’S LEGAL GUIDE TO PRODUCER MARKETING ASSOCIATIONS 22 (2005), available at [http://www.nationalaglawcenter.org/assets/articles/obrien\\_producermarketing\\_book.pdf](http://www.nationalaglawcenter.org/assets/articles/obrien_producermarketing_book.pdf).

106. These statistics were calculated by the authors using data available at ILL. FARM BUS. FARM MGMT. ASS’N, available at <http://fbfm.ace.uiuc.edu/> (last visited May 11, 2013) and KAN. FARM MGMT. ASS’N, available at <http://www.agmanager.info/kfma/> (last visited May 11, 2013).

average asset turnover ratio of 30%, this level of sales, in turn, requires on the order of \$2 million of assets under management.<sup>107</sup> It seems increasingly unlikely that a young farmer or rancher could qualify for the amount of credit needed to purchase this amount of assets, even at elevated agricultural commodity prices. This dilemma dictates that such producers must either rely on off-farm income to supplement their cash flow for the debt service on asset purchases or must find an alternative means to secure the control of a sufficient amount of agricultural assets.

Increasing agricultural land values and concentration of ownership of agricultural assets would seem to place the industry at risk of a “bottleneck.” Increasing prices mean that purchasing an asset base sufficient enough to support a new farmer poses significant hazards; the debt levels that would be needed would place the farmer at risk if inflationary pressures trigger an increase in interest rates (a lesson learned at great expense by the U.S. agricultural industry during the farm crisis of the 1980s).<sup>108</sup> New farmers would have to lease their assets until they could build sufficient equity to purchase an asset base. If the apparent cultural shift toward greater acceptance of leasing or other non-ownership means of asset control continues, a myriad of possibilities could emerge for the re-deployment of agricultural assets in new and innovative commercial relationships between both operating and non-operating asset owners. Alternatively, if a large amount of agricultural assets wind up in the hands of non-farming heirs, they may choose to sell those assets rather than hold them. It is possible that large volumes of such sales could ease upward price pressures on farm assets, but it is impossible to determine if this occurrence would be sufficient to make purchasing the more affordable option vis-à-vis leasing.

If new farmers cannot purchase farm assets made available through the disposition of those assets as the Baby Boomer generation passes, institutional investors may take advantage of the opportunity to increase the size of their holdings. It then becomes a question of how investors will deploy those holdings. Presently, most institutional investors choose to hire managers to operate their agricultural lands rather than doing so themselves.<sup>109</sup> Could those new farmers looking to enter farming become operators for an institutionally-owned farm? Would such an arrangement be preferable to a leasing arrangement?

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107. Shannon L. Ferrell & Rodney Jones, Estate Planning for Farmers and Ranchers: Overview of Legal Issues and Concepts 1 (May 20, 2010) (unpublished manuscript), available at <http://agecon.okstate.edu/faculty/publications/3950.pdf>.

108. See Barry J. Barnett, *The U.S. Farm Financial Crisis of the 1980s*, 74 AGRIC. HIST. 366, 375 (2000).

109. HIGHQUEST PARTNERS, *supra* note 46, at 10.

The ownership and control of land through leasing or other ownership structures is not the only issue facing the industry. As farms grow in size, they may have sufficient financial assets to buy and hold a variety of machinery needed to service their needs. Beginning farmers and farmers working to cross that threshold, however, may increasingly rely on custom machinery operators and/or machinery leasing arrangements until they reach such a point.<sup>110</sup> Alternatively, those beginning farmers looking to break into the industry could put the horse and cart before the farm, so to speak. While modern agricultural equipment is by no means inexpensive, it might be easier for a young farmer to secure financing for a \$300,000 tractor and implements than for a \$3 million farm. Custom farming operations can also allow for lower-risk returns for these young farmers, further facilitating financing and perhaps creating a pathway to wealth-building that would allow for the purchase of land and other assets.<sup>111</sup> Successful custom farming services can also build the experience level, management capabilities, and relationships that could eventually open doors for cooperative ventures with, or ownership in, existing operations.

### C. *Environmental and Resource Management*

Beyond the challenges future agriculturalists will face in securing land and equipment, other vital resources may present just as many acquisition challenges. Primary among them is water. Farmers may be well aware of how important water is to their particular operation, but they may not realize how important their water use is to everyone else. Water for irrigation accounted for 37% of all freshwater use in the United States in 2005.<sup>112</sup> As the 2012 drought highlighted, ample water for all uses is not always assured and choices among uses may be necessary. Agriculturalists have long had to fight for water priorities when withdrawing from the same source as a municipal user, and courts are often predisposed to population centers over crops and livestock when all other factors are equal.<sup>113</sup> Too add to the problem, agricultural producers face a growing num-

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110. See TROY J. DUMLER ET AL., DEP'T OF AGRIC. ECON., KAN. STATE UNIV., LEASING VS. BUYING FARM MACHINERY (2010), available at <http://agmanager.info/farmmgt/machinery/MF2953.pdf> (providing framework for considering the costs and benefits of leasing, purchasing, or custom contracting).

111. See Michael D. Boehlje et al., *Farming in the 21st Century* 24–29 (Dep't of Agric. Econ., Purdue Univ., Staff Paper No. 99-9, 1999), available at [http://www.centrec.com/Articles/21stCentury/farming\\_21\\_century.pdf](http://www.centrec.com/Articles/21stCentury/farming_21_century.pdf).

112. *Irrigation Water Use*, U.S. GEOLOGICAL SURVEY, <http://ga.water.usgs.gov/edu/wuir.html> (last modified Jan. 10, 2013). The quantity used for irrigation increases to 62% if you exclude freshwater drawn for thermoelectric power usage. *Id.*

113. See, e.g., *City of Thornton v. Bijou Irrigation Co.*, 926 P.2d 1, 99–100 (Colo. 1996).

ber of competing water users above and beyond thirsty cities. It is estimated that energy production in the United States uses 20% of the water not used by agriculture.<sup>114</sup> The 2012 drought put oil producers—particularly those using hydraulic fracturing processes—in the market for water, sometimes competing with farmers for water supplies and in other cases buying water from the farmers themselves.<sup>115</sup> Additionally, biofuels produced from crops such as corn and soy can consume substantially more water than processing conventional petroleum.<sup>116</sup>

Beyond municipal and industrial uses, agriculture is also facing water competition from emerging policy-based issues. One such issue is “environmental flows,” or volumes of stream water that must be maintained to preserve the biological, chemical, or physical integrity of a surface water body, or to preserve aesthetic or recreational features of the water body.<sup>117</sup> Water devoted to environmental flows cannot be granted to other uses, such as agriculture, and, although environmental flows may provide important environmental and economic services, they still represent a competing water use. Additionally, more and more jurisdictions show signs of embracing “conjunctive use” as a guiding policy in water allocation systems.<sup>118</sup> Conjunctive use, in its simplest terms, recognizes that surface water and groundwater are in many cases linked and that withdrawals from one source may impact users of the other.<sup>119</sup> Conjunctive use is not in and of itself a negative for agriculture and in some cases may help preserve some water resources used for farm purposes. It does represent a shift in water allocation policy, however, that may change “the order of things” and complicate or lengthen the water allocation process.

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114. DIANA GLASSMAN ET AL., THE WORLD POLICY INST., THE WATER-ENERGY NEXUS: ADDING WATER TO THE ENERGY AGENDA 6 (2011), available at [http://www.worldpolicy.org/sites/default/files/policy\\_papers/THE%20WATER-ENERGY%20NEXUS\\_0.pdf](http://www.worldpolicy.org/sites/default/files/policy_papers/THE%20WATER-ENERGY%20NEXUS_0.pdf).

115. See Blake Ellis, *Oil Companies Desperately Seek Water Amid Kansas Drought*, CNN MONEY, Aug. 10, 2012, [http://money.cnn.com/2012/08/10/news/economy/kansas-oil-boom-drought/index.html?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed:+rss/money\\_latest+\(Latest+News\)](http://money.cnn.com/2012/08/10/news/economy/kansas-oil-boom-drought/index.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed:+rss/money_latest+(Latest+News)).

116. GLASSMAN ET AL., *supra* note 114, at 10–12.

117. See *Water: Environmental Flows*, WORLD BANK, <http://water.worldbank.org/topics/environmental-services/environmental-flows> (last visited May 11, 2013).

118. See, e.g., OKLA. WATER RES. BD., OKLAHOMA COMPREHENSIVE WATER PLAN 2011 UPDATE: CONJUNCTIVE WATER MANAGEMENT IN OKLAHOMA AND OTHER STATES 3–18 (2010), available at <http://www.digitalprairie.ok.gov/cdm/singleitem/collection/stgovpub/id/24528/rec/15> (discussing use of conjunctive management in Oklahoma, Texas, Kansas, Nebraska, Oregon, Colorado, Utah, and California).

119. See H. Ramesh & A. Mahesha, *Conjunctive Use of Surface Water and Groundwater for Sustainable Water Management*, in SUSTAINABLE DEVELOPMENT: ENERGY, ENGINEERING AND TECHNOLOGIES – MANUFACTURING AND ENVIRONMENT 171, 189 (Chaouki Ghenai ed., 2012), available at [http://cdn.intechopen.com/pdfs/29936/InTech-Conjunctive\\_use\\_of\\_surface\\_water\\_and\\_groundwater\\_for\\_sustainable\\_water\\_management.pdf](http://cdn.intechopen.com/pdfs/29936/InTech-Conjunctive_use_of_surface_water_and_groundwater_for_sustainable_water_management.pdf).

Farmers have long regarded water and soil as resources that must be treated with the utmost stewardship and conservation; now air has entered that model as well. As recent regulatory trends indicate, the agriculture industry's impact on the environment is under ever-more watchful eyes.<sup>120</sup> Although most operations currently have no or few emissions reporting requirements, there is growing pressure for more and better data about farm emissions,<sup>121</sup> and environmental groups may eventually prevail in enacting regulations that require emissions reporting. The data to facilitate that reporting will have to come from intensive and expensive studies of a broad range of operations that can then be used to derive emissions factors that producers can use to estimate emissions. The alternative is to require the same kind of direct-measurement emissions reporting used for point-source emitters, such as electrical generation facilities and manufacturing plants. The systems used for such measurements can be tremendously expensive and are designed to be used for point-source emissions like smokestacks, not dispersed, fugitive emissions like those associated with manure lagoons or open-sided barns.<sup>122</sup> If federal or state governments decide that particulate matter emissions from agriculture are an issue of concern, farms will likely have to look at implementing best management practices (BMPs) for dust management, like those used to deal with particulate matter nonattainment issues in portions of Arizona.<sup>123</sup> This, in turn, will require farmers to work with environmental regulators to craft BMPs that can accommodate the practicalities of agricultural operations in dealing with timing issues occasioned by crop and livestock needs, as well as the weather, while still accomplishing emissions reduction goals.

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120. See generally David A. Fahrenthold, *Reining in the Rumor About EPA 'Drones,'* WASH. POST, June 16, 2012, [http://www.washingtonpost.com/politics/reining-in-the-rumors-about-epa-drones/2012/06/16/gJQAwWjkhV\\_story.html](http://www.washingtonpost.com/politics/reining-in-the-rumors-about-epa-drones/2012/06/16/gJQAwWjkhV_story.html) (clarifying that suspected "predator drones" are actually EPA inspectors flying over farmland in passenger planes looking for clean-water violations).

121. See *EPA Releases Emissions Data from Animal Feeding Operations Study*, W. FARM PRESS (Jan. 13, 2011), <http://westernfarmpress.com/epa-releases-emissions-data-animal-feeding-operations-study> (discussing pressure on the EPA from the agriculture industry to provide more data on AFO emissions).

122. See generally OFFICE OF AIR & RADIATION, ENVTL. PROT. AGENCY, THE BENEFITS AND COSTS OF THE CLEAN AIR ACT FROM 1990 TO 2020, at 3-1 to -19 (2011), available at <http://www.epa.gov/oar/sect812/feb11/fullreport.pdf> (discussing the compliance costs for the various elements of the Clean Air Act, including costs incurred by point source emitters, mobile sources, and area sources).

123. See ARIZ. REV. STAT. ANN. § 49-457 (West 2012); see also GOVERNOR'S AGRIC. BEST MGMT. PRACTICES COMM., GUIDE TO AGRICULTURAL PM10 BEST MANAGEMENT PRACTICES 24-26 (2d ed. 2008), available at <http://www.azdeq.gov/environ/air/plan/download/webguide.pdf>.

Farmers recognize that they must share the water and air with others, but rarely have they thought about having to share their own soil with anyone else. In a world where global energy consumption is expected to grow 53% by 2035,<sup>124</sup> however, farmers may increasingly be requested (or be made) to share their land with companies seeking to develop energy resources in the form of fossil or renewable fuels. While the production of renewable energy in the form of ethanol has increased crop prices and land values in some regions,<sup>125</sup> development of fossil resources is, in some ways, directly competitive with agriculture. In the oil and gas industry, surface area must be used for drilling pads, construction areas, and roads, although new technologies such as horizontal drilling show the promise of reducing these impacts by allowing multiple wells to be drilled from a single site.<sup>126</sup> Ownership of the rights for exploration and production of oil and gas may be severed from ownership of surface rights, though, leaving the farmer who holds only surface rights little power to negotiate how the development of the surface can impact his or her operations.<sup>127</sup> As oil and gas development increase, a better balance may be necessary to ensure the development of our fossil resources *and* provide the levels of agricultural production needed for a hungry world. It should also be noted that development of renewable resources, such as wind, can also have an impact on agricultural lands, and must be similarly balanced.

#### D. *The New Agricultural Policy Environment*

The failure to pass a Farm Bill prior to September 30, 2012 (upon the expiration of the 2008 Farm Bill) is troubling for farmers on several levels. To be sure, the expiration of a Farm Bill creates an uncertain policy environment that makes the already-arduous task of farm planning and decision-making even more difficult.<sup>128</sup> The more worrisome issue, though, is that the agricultural sec-

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124. U.S. ENERGY INFOR. ADMIN., INTERNATIONAL ENERGY OUTLOOK 2011, at 9 (2011), available at [http://www.eia.gov/forecasts/ieo/pdf/0484\(2011\).pdf](http://www.eia.gov/forecasts/ieo/pdf/0484(2011).pdf).

125. See discussion *supra* Part II.A.

126. OFFICE OF FOSSIL ENERGY & NAT'L ENERGY TECH. LAB., U.S. DEP'T OF ENERGY, MODERN SHALE GAS DEVELOPMENT IN THE UNITED STATES: A PRIMER, 46–48 (2009), available at [http://www.netl.doe.gov/technologies/oil-gas/publications/epreports/shale\\_gas\\_primer\\_2009.pdf](http://www.netl.doe.gov/technologies/oil-gas/publications/epreports/shale_gas_primer_2009.pdf).

127. See, e.g., *Hunt Oil Co. v. Kerbaugh*, 283 N.W.2d 131, 139–40 (N.D. 1979) (holding landowner failed to meet their burden to show exploration activities by holder of mineral rights were not reasonably necessary as to warrant a temporary injunction); David Saxowsky, *Surface Owner's Rights*, N.D. STATE UNIV., <http://www.ag.ndsu.edu/ndoilandgaslaw/surfaceowners/surfaceownersrights> (last visited May 11, 2013).

128. See Christine Stebbins, *Farm Law to Expire but Many Programs Funded Through March*, REUTERS (Sept. 28, 2012), <http://www.reuters.com/article/2012/09/28/us-usa-farmbill-expiration-idUSBRE88R1DI20120928>.

tor was not capable of exerting sufficient political pressure to force an already-crafted Farm Bill (passed with strong support by the House Agriculture Committee, passed by the entire Senate, and with broad bi-partisan and industry support) to a vote on the House floor.<sup>129</sup> Since the 2012 Farm Bill was not passed in the lame-duck session of the 112th Congress, it took the unprecedented step of having to be re-introduced in a subsequent Congress.<sup>130</sup> While the tumultuous path of the current Farm Bill may be, in part, a symptom of the current partisan climate, one must ask—is it also indicative of an agriculture industry that is losing its legislative voice? Demographic trends have long indicated an inexorable shift of population from rural areas to urban centers, with the most recent census data indicating only 19% of the U.S. population lives in rural areas.<sup>131</sup> Rural and agriculturally dependent legislative districts increasingly find themselves including urban areas to satisfy a population-balancing requirement, which means legislators from even “rural” or “agricultural” districts must answer to voices that may have no experience or knowledge of the agriculture industry.

#### IV. THE FUTURE OF AGRICULTURAL LAW

How will the legal landscape affecting agriculture adapt to these trends, and how can agricultural attorneys (and the bar) prepare for them? Three primary challenges and opportunities arise: (1) the formidable task of handling the huge impending asset shift, (2) adapting to the new technical landscape of agriculture, and (3) advocating not only for our clients, but also for our industry in what seems to be an increasingly hostile policy environment.

##### A. *Transferring Asset Ownership and Control to the Next Generation*

The growing concentration of farm assets in a small number of older owners foreshadows a massive transfer, in one form or another, of those assets. The market will eventually put these assets to their highest and best use. But how can the agricultural bar facilitate this transition in a more orderly fashion that, hopefully, provides better economic opportunities for all those involved?

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129. See Christopher Doering, *Congress Passes Extension of Expired Farm Bill*, DES MOINES REG. (Jan. 1, 2013, 8:59 AM), <http://blogs.desmoinesregister.com/dmr/index.php/2013/01/01/senate-passes-extension-of-expired-farm-bill-house-vote-awaits/article>.

130. Agriculture Reform, Food, and Jobs Act of 2013, S. 10, 113th Cong. (2013).

131. See U.S. Census Bureau, *2010 Census Urban and Rural Classification and Urban Area Criteria*, U.S. DEP'T OF COMMERCE, <http://www.census.gov/geo/reference/ua/urban-rural-2010.html> (last visited May 11, 2013) (follow “Urban, Urbanized Area, Urban Cluster, and Rural Population, 2010 and 2000: United States” hyperlink) (data from 2010 census).



Volumes (literally) have been written about the traditional estate planning tools such as wills, trusts, joint tenancies, and the like.<sup>132</sup> The potential limitation of these traditional tools, however, is that they tend to focus on moving control of an asset from one owner to another. Conversely, the factors discussed above indicate that farm families looking to either transition the farm to a new operating generation or to an outside party should not focus solely on asset transfer. The Family Business Institute estimates only thirty percent of small businesses survive their transition to the next generation,<sup>133</sup> and many examinations of small business transitions list communications problems between the primary and successor generations, coupled with a lack of opportunities for successors to “grow into” their roles, as critical factors in transition failures.<sup>134</sup> To improve their odds of a successful transition, farm families need to create a true “business succession” plan—a vehicle that can transfer *both* ownership *and* control of a viable business gradually over time *before* the death of the farmer. True succession planning is a combination of traditional estate planning and business planning.<sup>135</sup> It combines the client’s wishes for transfer of property and assets, tax planning, asset protection, business continuity, and management succession.<sup>136</sup> Both types of planning go hand-in-hand for a farm or ranch owner and each can be just as important as the other. Personal decisions regarding the division of assets can affect the business, and vice-versa.

One can argue that the tools to meet the demands of farm transitions in the near future are already at hand. Tools such as installment sales, private annuities, buy-sell agreements, and long-term leases have been available for some time, but may have seen limited use in the agricultural context.<sup>137</sup> Agricultural lawyers and their farm clients may find these tools worth a second look when trying to address farm succession issues, ranging from bringing in a successor from outside the family to ramping-down the older generation’s involvement in the farm while still providing that generation a stable income.

Another existing tool that may see increased use in the new farm environment is the business entity. While corporations have been with us for centuries and limited liability companies (LLCs) have now become a mainstay, there

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132. See, e.g., NEIL E. HARL, *FARM ESTATE AND BUSINESS PLANNING* (16th ed. 2011).

133. *Succession Planning*, FAMILY BUSINESS INSTITUTE, <http://www.familybusinessinstitute.com/index.php/Succession-Planning/> (last visited May 11, 2013).

134. See, e.g., Michael H. Morris et al., *Correlates of Success in Family Business Transitions*, 12 J. BUS. VENTURING 385, 390–91 (1997).

135. See HARL, *supra* note 132, at 6–10.

136. See *id.* at 2–5.

137. See DONALD H. KELLEY ET AL., *ESTATE PLANNING FOR FARMERS AND RANCHERS: A GUIDE TO FAMILY BUSINESSES WITH AGRICULTURAL HOLDINGS* §§ 10:1–:59 (3d ed. 2002 & Supp. 2012) (discussing the application of each of these tools in detail).

are yet newer forms including the limited liability partnership (LLP), the statutory business trust, and the family limited partnership (FLP).<sup>138</sup> More recently, the “series LLC” has emerged<sup>139</sup> and may eventually prove to be a flexible tool for farmers and ranchers specifically looking to give some heirs greater control over operating decisions while still affording uninvolved heirs the opportunity to participate in the revenues generated by the farm, all under one overarching entity.<sup>140</sup> These various business entities have unique traits and thus unique consequences when applied to specific farm transitions—consequences beyond the scope of this article.

Clearly, the future of agricultural law involves a healthy dose of business, estate, and transition planning practice. But beyond these issues, a host of other matters closely related to the business planning practice are poised to grow in importance. Business formation and counseling in particular stands out as an area for potential expansion, since, as discussed above, 87% of all farms are operated as sole proprietorships.<sup>141</sup> This means that these operations have no liability limitations; a risky prospect in today’s business environment.<sup>142</sup> Beyond their liability exposure, sole proprietorships are also highly inflexible, making them ill-suited to participate in the growing variety of transition options that have been discussed in this article.<sup>143</sup> Over time, it seems likely that the sole proprietorship will become less and less viable as a business form for commercial agricultural operations. Consequently, all agricultural lawyers will likely need to have a growing level of expertise in other entity forms and their application. Further, the potential growth of custom farming and other arrangements for beginning farmers and/or less traditional operating models holds other implications for agricultural attorneys. Grave risks await those who enter such arrangements without the clarity, transparency, and assurances provided by a written agreement governing the venture. Thus, opportunity abounds for attorneys to play a much more important role for their clients in managing legal risk, as producers may find themselves involved in a number of these new contractual relationships.

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138. See Carol R. Goforth, *The Series LLC, and a Series of Difficult Questions*, 60 ARK. L. REV. 385, 385–86 (2007).

139. Series LLCs are sometimes called “Delaware Series LLCs,” as Delaware was the first state to authorize the formation of such entities. *Id.* at 386–87; see also DEL. CODE ANN. tit. 6, § 18-215 (2005).

140. See generally Goforth, *supra* note 138 (providing an in-depth discussion of the series LLC’s attributes and the current questions surrounding how they may be deployed).

141. 2007 CENSUS OF AGRICULTURE, *supra* note 28, at 150 tbl.61.

142. See Kenneth D. Esch & Pamela L. Spaccarotella, *Limited Liability Companies as an Alternative Choice of Entity for Farming and Ranching Operations in the State of Nebraska*, 28 CREIGHTON L. REV. 19, 21 (1994).

143. *Id.*

### B. *The “New Normal” of Technical and Legal Competency*

Attorneys in rural areas are, often by necessity, general practitioners who find themselves confronted by a wide array of matters on any given day—ranging from basic criminal defense to commercial litigation. As illustrated throughout this paper, however, the agricultural industry of the future will present farmers with evermore intricate technical issues of biotechnology, engineering, hydrology, and environmental management. As seen in other segments of the economy, this leads to an increasing prevalence of technocratic regulation. Thus, these factors can combine to present a deficiency of technical knowledge that can become an ethical problem for the uninformed practitioner. A separate article (or series thereof) could be written on the ethical issues that can arise when an attorney enters an area of law with which he or she is unfamiliar; many attorneys are aware of this hazard and take appropriate precautions.

Attorneys may be less likely, however, to see the hazard of not understanding the fundamentals of a new industry or technology. Rule 1.1 of the Model Rules of Professional Conduct states: “A lawyer shall provide competent representation to a client. Competent representation requires the legal knowledge, skill, thoroughness and preparation reasonably necessary for the representation.”<sup>144</sup> Many attorneys wrongly assume that by graduating from law school, passing the bar exam, and keeping up their continuing legal education requirements, they are “competent.”<sup>145</sup> In the rapidly evolving technical world of agriculture, however, this is a dangerous assumption. The particular danger of assuming that one “knows enough” about a biotechnology licensing agreement, a joint-venture charter, or a managed machinery lease is highlighted in comment two: “Perhaps the most fundamental legal skill consists of determining what kind of legal problems a situation may involve, a skill that necessarily transcends any particular specialized knowledge.”<sup>146</sup> The comment may more succinctly state the problem better than the rule. Attorneys unfamiliar with a particular technical issue may be in that most dangerous position where not only do they not know, but also do not know that they do not know. Attorneys have an affirmative ethical obligation to identify their blind spots and must either acquire the needed expertise, associate with someone who already has such expertise, or decline the representation and defer it to someone else.<sup>147</sup> This may mean that

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144. MODEL RULES OF PROF'L CONDUCT R. 1.1 (2009).

145. *See id.* at R. 1.1 cmts. 1–6.

146. *Id.* at R. 1.1 cmt. 2.

147. *See* Attorney Grievance Comm'n v. Brown, 517 A.2d 1111, 1117 (Md. Ct. App. 1986) (“[A] general practitioner ‘who wades into that thicket . . . without associating with an expert, does so at his peril.’”); *In re* Richmond’s Case, 872 A.2d 1023, 1028 (N.H. 2005) (citing MODEL RULES OF PROF'L CONDUCT R. 1.1) (“Rule 1.1 mandates that a general practitioner must

agricultural attorneys of the near future need to (1) devote significant efforts (perhaps even—shockingly—“off the clock”) to improving not only their legal knowledge, but also to improving their technical knowledge within the agricultural industry, and (2) create robust networks with other attorneys that enable them to quickly and competently address highly technical issues presented by their clients.<sup>148</sup>

### C. *The Agricultural Attorney as Advocate for an Industry*

As one of AALA’s most distinguished members stated:

Historically, our legal system has treated agriculture differently than other industries, providing it with its own specific laws and with exceptions to many general laws. Thus, many of the special rules governing food and agriculture are not covered in the typical law school curriculum. This in itself represents [] an important reason to study agricultural law—both to learn the laws that apply and to debate the validity of the separate treatment of the agricultural industry.<sup>149</sup>

Professor Schneider most astutely observed agriculture has historically been treated differently from other industries for four primary reasons: (1) its production of food, a fundamental necessity of human existence; (2) the inextricable connection of agriculture and nature and the inherent unpredictability occasioned by that connection; (3) its extensive use of an immobile, non-fungible resource in land; and (4) a historic and cultural regard for agriculture.<sup>150</sup> The first three of these factors are nigh immutable, but the fourth is perhaps the greatest question we presently face. How is agriculture regarded by our society today? Do we consider it an industry that provides not only food, fiber, and fuel, but also virtue; or instead as an industry, period, no different from any other? Does society still view us as depicted in “County Agent” by Norman Rockwell or as a gestation crate in a Humane Society of the United States advertisement? Is our industry comprised of farms from *Charlotte’s Webb* or from *Food, Inc.*?

Though it is difficult to quantify society’s degree of reverence, or at least deference, to agriculture, anecdotal evidence indicates many of the loudest

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identify areas in which the lawyer is not competent and acquire sufficient knowledge about the specific area of law in which the lawyer is practicing in order to avoid harm to the client.”).

148. See Shannon L. Ferrell, *The Technical and Ethical Challenges for Lawyers in Evaluating Wind Energy Development Agreements*, 17 DRAKE J. AGRIC. L. 55 (2012) (discussing the ethical issues raised by a new industry or technology in the specific context of the rapid growth of wind energy in rural America).

149. Susan A. Schneider, *What is Agricultural Law?*, 26 AGRIC. L. UPDATE (Am. Agric. L. Ass’n, Brownsville, Or.), Jan. 2009, at 1, 2, available at [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1331422](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1331422).

150. *Id.*

(though some might instead say, shrill) voices in society view agriculture as no different than any other industry. Others would go further and say it is worse by virtue of its exemption from many of the requirements imposed on other industries,<sup>151</sup> and thus “it’s time for agriculture to get what’s coming to it.”

To be certain, agriculture will be held accountable for its impacts on resources and the environment like any other industry; it is in agriculture’s best interest to do so. Indeed, our industry stands in position to embrace this charge, for stewardship has been a part of farming for as long as we have been a nation of farmers. That stewardship must now become proactive, and we must also show our work to society.

Further, agriculture must learn to speak with one voice. No one can deny that farmers are fiercely independent people, and that what we refer to holistically as the agricultural industry is an amalgam of numerous independent segments with unique needs and objectives. While most of us treasure this feature, an honest and objective evaluation must also recognize that this independence does us no favors from the perspective of those outside our industry. As stated in testimony at a USDA hearing, “we should not be circling the wagons and shooting inward.”<sup>152</sup> It is now time, as observed in the musical *Oklahoma!*, for the farmer and the cowman to be friends,<sup>153</sup> and for all parties involved in agriculture to start looking at their commonalities before their differences.

Before all of agriculture can speak with one voice, though, we must learn to use our individual voice more effectively. Whether a producer, agribusinessman, or attorney, every one of us has a story to tell about the industry we cherish and to which we have devoted our lives. We must improve our advocacy—rather, our “ag”vocacy— skills to tell that story in a way that will resonate with the diverse audiences we encounter every day. If we can embrace our role as “ag”vocates, we may yet win the hearts and minds of those we feed and clothe.

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151. See, e.g., 29 U.S.C. § 213(a)(6) (2006) (agricultural exemption to minimum wage and maximum hours requirements); 33 U.S.C. § 1362(14) (2006) (agricultural exemption in Clean Water Act for “agricultural stormwater discharges and return flows from irrigated agriculture”); IOWA CODE § 352.11 (2013) (nuisance exemption for farm or farm operation in declared “agricultural areas”).

152. Robbie LeValley, Farmer, Remarks During a Public Workshop, A Dialogue on Competition Issues Facing Farmers in Today’s Agricultural Marketplaces, at 100 (August 27, 2010), available at <http://www.justice.gov/atr/public/workshops/ag2010/colorado-agworkshop-transcript.pdf>.

153. OKLAHOMA! (Rogers & Hammerstein Pictures, Inc. 1955).

## V. CONCLUSIONS

The challenges to be faced by agriculture in the coming century are unlike any ever encountered: our farmers must do more with less, in a manner that has fewer impacts on the world. However daunting that challenge may seem, the attendant opportunities are every bit as exciting. Those willing to change may see prosperity unlike we have ever seen.

The same holds true for those attorneys who represent agricultural interests. Not only are things going to change, but they will change at an ever-accelerating rate. Those attorneys willing to adapt to new business models, new technical challenges, and new societal attitudes, and to do so rapidly, will have great success. Those who do not adapt will find themselves left behind, victims of the one universal constant: change.