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The Role of the Law in Shaping the Future of American Agriculture

by

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THE ROLE OF THE LAW IN SHAPING THE FUTURE OF AMERICAN AGRICULTURE

*Neil D. Hamilton**

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I. INTRODUCTION

The development of American agriculture has been a function of the availability of extensive natural resources of soil and water; a generous climate; the skill and hard work of millions of farm families; a robust agricultural education and service sector that has researched, developed, and marketed significant improvements in the technology of food production; and government policies which have served to assist and protect the agricultural community.¹ The results of this combination can be seen in the vibrant and productive food and fiber industry in the United States, which even in light of temporary setbacks (such as the drought of 1988 or the financial crisis of the early 1980s) shows a resilience and efficiency that makes the agricultural economy surprisingly stable.

One component of the historical development of American agriculture and a major factor in its success is the role that the legal system plays in its operation and performance. Without the existence of legal and institutional arrangements which provide farmers with access to the inputs necessary to produce and market their products, American agriculture would be beset with many of the organizational inadequacies and inefficiencies which hinder food production in developing nations and non-market economies. A brief review of the main contributions of the American legal system to agriculture demonstrates the significance of this relationship. More importantly,

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1. For a detailed review of this topic see W. COCHRANE, *THE DEVELOPMENT OF AMERICAN AGRICULTURE: A HISTORICAL ANALYSIS* (1979).

a recognition of the role of the law in American agriculture sets the stage for considering the increasing importance of the law in shaping the future of American agriculture.

II. LEGAL CONTRIBUTIONS TO AMERICAN AGRICULTURE

With respect to the private dimension of agricultural production (that is, the legal arrangements that allow an individual farmer to engage in the efficient production of food) the American legal system makes possible the following:

1. *Access to credit and financing*—agriculture could not operate without a system whereby producers could borrow money to acquire land, production inputs, and animals. The legal system provides a mechanism for lending money, securing repayment of loans through mortgages on land and security interests in personal property, and enforcing debts upon default. At the same time, the legal system protects the equitable interests of the borrower and society.

2. *Land transfers and acquisition*—farmers must have access to land for production of crops and animals. The American system of property ownership provides the mechanism for acquiring and transferring land titles and recording those interests.

3. *Farm tenancy*—over one half of the land in the United States is farmed by someone other than the owner. The development of landlord-tenant laws provides for the temporary use of land by another, with assurances of rent being paid, as well as the extensive use of leases.

4. *Marketing of commodities*—farmers cannot continue to produce unless they have income, which comes most directly from the sale of food and fiber raised on the farm. The United States marketing system, which is essentially a system of contract development and enforcement, allows farmers to take advantage of available marketing mechanisms to maximize farm income. Special marketing structures such as the futures market, forward contracting, and the cooperative system help facilitate this process.

5. *Transfers of farm operations*—because most farms are a special form of small business, they have a natural life span that reflects the life and interests of the owners. The legal system provides a process which allows farm operations to be transferred to others as continuing businesses, either through intergenerational transfers to the heirs of the farm operator or through the outright sale of the farm and its assets.

6. *Buying and selling necessary inputs*—American agriculture has grown increasingly capital intensive in recent decades as the use of purchased seed, feed, fertilizer, chemicals, and equipment has become a larger factor in the level of production. The marketing of these inputs to the agricultural sector and the assurance that the inputs are safe and effective are facilitated by contract negotiations and warranties. Systems for developing different payment methods and securing indebtedness are also important

considerations to the agricultural service industry.

7. *Facilitating the formation of businesses*—while much of American agriculture operates in the sole proprietorship form, many farms and farm businesses are organized as partnerships or corporations. The ability to utilize various legal entities to form and operate agriculturally-related businesses gives the sector access to the financing, liability, and operational benefits provided by flexibility in business form.

As relates to the public dimension of American agriculture, that is, how the sector operates in relation to the interests of the public as reflected through state and federal policies, the legal system makes possible the enforcement of various forms of legislation within agriculture, including:

8. *Operation of federal farm programs*—since the 1930s, the federal government has aggressively implemented a series of price supports and production controls within the agriculture sector. These programs aim to stabilize prices and maintain agricultural incomes. They operate through a system of short-term loans, direct income transfers, and production controls (all of which are delivered through specific legal agreements between individual producers and the government).

9. *Protection of the nation's soil and water resources*—a major thrust of federal and state farm policy has been to ensure the continued viability and health of the nation's agricultural resources. Examples include laws promoting soil conservation and the limitation of the use and pollution of water. In addition, recent enactments regulate the use of pesticides and other agricultural chemicals.

10. *Protection of the health and safety of the nation's farms*—federal and state programs also protect the agricultural sector from adverse forces. Examples of such programs include extensive efforts designed to protect plants and animals from disease and pestilence, and regulatory standards concerning the development and sale of important agricultural inputs including seed, feed, fertilizer, and agricultural chemicals.

11. *Protection of the nation's food supply*—the most important function of the agricultural sector is producing wholesome, reasonably-priced food to feed our own people, to export to other nations, and to use in food assistance programs both at home and abroad. The American legal system plays an important role in this regard. Congress has passed laws specifically designed to protect the quality and availability of the food supply. Examples include Food and Drug Administration approval of food additives and Food Safety and Inspection Service inspection of meats and vegetables for chemical contamination.

III. THE LEGITIMIZATION OF "AGRICULTURAL LAW"

The foregoing discussion illustrates the role that the American legal system plays in the operation of American agriculture. The recognition of this important interrelationship is, in large part, responsible for the development

of the field of agricultural law in the United States in this decade. As the impact of the law on the operation of agriculture became more evident, a growing number of academics and lawyers have begun to work extensively with legal issues affecting agriculture. The work of these individuals led to the development of the American Agricultural Law Association and agricultural law groups within the American Bar Association, state bar associations, and the American Association of Law Schools. Legal scholars and agricultural economists with legal training regularly publish articles on agricultural law topics. New journals and books devoted entirely to agricultural law have been published.² Library shelves, once void of legal materials devoted to agriculture, have begun to fill with such works. The work of these groups and individuals, and the recognition of the fact that numerous attorneys were, in fact, practicing "agricultural law," has given the subject academic credibility as a legitimate topic for study and discourse.³ As a result, many of the nation's law schools have added classes on agricultural law topics,⁴ legal texts have been published on these subjects,⁵ and students have begun to seek out opportunities to study the interplay of law and agriculture.

The financial crisis that American agriculture experienced in the early 1980s helped fuel the development and recognition of agricultural law. This is true for two reasons. First, the legal system was necessarily involved in the private agreements through which the financial crisis was resolved. Second, state legislatures and Congress turned to legal rules and procedures when looking for policy responses to relieve the suffering caused by the farm crisis. The proliferation of state and federal enactments related to financing and land transfers forced large numbers of attorneys to stay abreast of new developments that might be applicable to their clients (whether farmers, lenders, or agricultural suppliers).⁶ These developments also brought home to farmers the significance of the legal documents which they had signed as a matter of course and the value of new laws in addressing unforeseen cir-

2. See, e.g., *THE JOURNAL OF AGRICULTURAL LAW AND TAXATION*, published by Warren, Gorham & Lamont, which was formerly published as the *AGRICULTURAL LAW JOURNAL*, beginning in 1979; N. HARL, *AGRICULTURAL LAW* (1981).

3. Hamilton, *The Importance of Agricultural Law in the Law School Curriculum*, 2 *AG. LAW J.* 31 (1980).

4. In 1981 the University of Arkansas at Fayetteville added an LL.M. degree program in agricultural law. In 1983 the Drake University School of Law created the Agricultural Law Center. See Hamilton, *A Blueprint for Successfully Developing Agricultural Law Studies: The Drake University Agricultural Law Center After Three Years*, 38 *ALA. L. REV.* 547 (1987).

5. K. MEYER, D. PEDERSEN, N. THORSON & J. DAVIDSON, *AGRICULTURAL LAW: CASES AND MATERIALS* (1985).

6. In several states legal publications were developed to help keep lawyers abreast of recent agricultural law developments. See, e.g., *MINNESOTA FAMILY FARM UPDATE* (published by the Minnesota Family Farm Law Project, St. Paul); *IOWA AGRIC. L. REP.*, (published by the Drake University Agricultural Law Center). The American Agricultural Law Association also developed a monthly newsletter, *The Agricultural Law Update*, for its members.

cumstances. The experience also demonstrated to legislators the power of new laws concerning traditional agricultural arrangements—a lesson that legislators can look to in future policy debates.

The cumulative effect of these developments is the legitimization of agricultural law and the integration of American agriculture into the legal system. In the future the legal impacts of agri-business decisions are more likely to be considered by the farmer. Legal advice will be sought before the contract is signed. In addition, the possibility of new legislation changing the status quo is more likely to be considered by the lawmaker seeking to alter the way in which agriculture functions. Another ramification is that when the attorney or the legislator asks for assistance in understanding the law affecting agriculture, expert legal assistance will more likely be available.

IV. AGRICULTURAL ISSUES ON THE HORIZON

With this backdrop of the development of agricultural law, it is possible to identify issues which will largely shape the future of American agriculture in the next decade and predict the role that the law will play in the resolution of these issues in our society.

The national policy agenda concerning agriculture has traditionally involved such issues as federal farm assistance programs and export trade policy. These issues will continue to be the subject of debate. In fact, the ongoing Uruguay round of General Agreement on Tariffs and Trade talks, and the festering trade dispute between the European Community and the United States, guarantee that agricultural trade will be one of the hottest agricultural policy issues of the early 1990s. Similarly, the need for Congress to enact a new farm bill ensures that proposals to decouple farm program payments from production, and to integrate efforts to protect groundwater, will be the subject of extensive debate.

The last decade has witnessed the addition of a number of significant new issues to the public policy agenda—what Paarlberg refers to as the “new agenda” concerning agriculture.⁷ Issues such as food safety, environmental concerns, and farm worker health and welfare arose during the late 1970s and 1980s. These issues injected groups who were not traditionally involved in agricultural policy into the public debate. While these developments were resisted by the traditional farm organizations (such as the United States Department of Agriculture and the land grant colleges), many of these efforts resulted in significant legal⁸ and legislative reforms.⁹

7. D. PAARLBERG, *FARM AND FOOD POLICY: ISSUES OF THE 1980s* 59-64 (1980) [hereinafter PAARLBERG].

8. In many of the important areas of agricultural policy development in the 1970s and 1980s, there often was a lawsuit or new statute that helped stimulate the policy debate and development in the area. For example, the lending activities of the Farmers Home Administration (hereinafter FmHA) have been extensively litigated in the last seven years, and Congress has passed three separate acts since 1985 implementing major reforms of FmHA practices and

As one considers the issues of the 1990s, two things are obvious. First, another "new agenda" of issues facing agriculture will undoubtedly be added to the traditional debate. Second, much of society's debate on these issues will focus on the use of legislative or judicial processes to forward policy initiatives and goals.

The following ten areas, both traditional and nontraditional, will be the most significant components of the agricultural policy debate and legal development over the next decade:

1. *Structure of American agriculture*—the continued existence of the family farm, the role of corporate farming, and concentration in agricultural and food processing industries.

2. *Agricultural credit*—the availability of farm finance, the enforcement of agricultural land mortgages and security agreements, farm debtor relief laws, and agricultural lender liability.

3. *Government farm programs*—the role of price supports and production controls, decoupling government support from production, and the relation between domestic farm policy and foreign trade.

4. *Foreign agricultural trade*—the role of agricultural exports in the United States economy, the use of export subsidies, development of markets for value-added products, food aid and agricultural assistance programs, access to foreign markets, bilateral trade agreements, and the resolution of trade disputes.

5. *Soil conservation and land preservation*—continuation of federal and state soil conservation programs, and the development and refinement of local, private, and state initiatives to preserve agricultural land through methods such as conservation easements and private land trusts.

6. *Water quality and related environmental considerations*—limitations on the use of chemicals and pesticides, groundwater quality protection, farm health issues, climatic concerns, and crop monocultures.

7. *Food safety and availability concerns*—pesticide residues and contamination of meat and food products, health and diet-related concerns, the marketing of "natural foods," food labeling, the development of artificial

borrower rights. The legal system would not have been as deeply involved in the development of the law affecting the FmHA had it not been for the case of *Curry v. Block*, 541 F. Supp. 506 (S.D. Ga. 1982). In that case, a court interpreted statutory protections to require that borrowers receive certain substantive rights and held that FmHA lending programs were, in part, a social welfare program. *Id.* at 524. The post-*Curry* legal developments forever changed the shape of the FmHA and significantly altered debtor-creditor relations in agriculture. For a discussion of *Curry*, see Note, *Mandatory or Permissive: Borrowers' Statutory Right to Notice of Deferral Relief for Farmers Home Administration Loans*, 33 *DRAKE L. REV.* 407 (1984). For a discussion of the legislative reforms that were stimulated by *Curry*, see Note, *FmHA Loan Servicing: Alternatives to Foreclosure*, 35 *DRAKE L. REV.* 561 (1986).

9. For example, in late 1987 Congress passed the Agricultural Credit Act of 1987, Pub. L. 100-233, which significantly amends the law concerning the operation of the Farm Credit System (12 U.S.C. § 2001 (1980)) and the Farmers Home Administration (7 U.S.C. § 1921 (1988)).

foods, the use of irradiation, and improving government food inspection programs.

8. *Biotechnology and genetic engineering*—the potential for new technologies, public concerns over using genetically engineered products, patenting of life forms; protection of seed supplies and germ plasm diversity, development of growth hormones, and health, economic, and ethical issues in biotechnology research.

9. *Animal rights and animal welfare*—concerns over intensive production methods for livestock, regulation of animal welfare, animal rights, the role of vegetarianism in society, and European experience on these issues.

10. *Sustainable agriculture*—the development of production methods that reduce adverse environmental and societal impacts of agricultural production and improve returns, diversification of production and marketing, and reduced reliance on chemical inputs such as nitrogen fertilizers and pesticides.

The range and significance of these issues illustrates the extensive linkage between agricultural law and agricultural policy. Each of the areas has been and will continue to be the subject of legislative and regulatory development or litigation designed to forward a particular policy goal.

The linkage between law and agricultural policy is amply demonstrated by the history of the legislation directed toward the delivery of federal farm programs in the 1980s. Such legislation includes the development of binding participation contracts,¹⁰ generic payment-in-kind certificates,¹¹ Congressional reform of the payment limitation,¹² and development of new soil conservation initiatives such as the long-term Conservation Reserve Program, conservation cross compliance and the sodbuster-swampbuster provisions.¹³

The extensive reliance on the legal system during the farm financial crisis is evidenced by the passage of new farm debtor relief legislation at the state and federal level. Legislation in this area includes mandatory farmer-creditor mediation,¹⁴ Chapter 12 of the Bankruptcy Code,¹⁵ debt restructur-

10. For example, the standard participation contract for federal price supports and production controls for feedgrains, form CCC-477, is accompanied by an eight-page appendix, CCC-477 (Appendix), that is single spaced and is in what lawyers would refer to as "fine print." See Hamilton, *Legal Issues Arising in Federal Court Appeals of ASCS Decisions Administering Federal Farm Programs*, — HAMLINE L. REV. — (1989).

11. Hamilton, *Preserving Creditor Interests in Federal Farm Program Payments*, 33 S.D. L. REV. 1 (1988); Turner & Callahan, *The Nature, Treatment and Classification of Security Interests in Government Farm Payment Programs and Related Issues*, 10 J. AG. TAX. & L. 195 (1988).

12. The Omnibus Budget Reconciliation Act of 1987 (Pub. L. 99-203), tit. I, subtit. C (amending 7 U.S.C. § 1308 (1988); 7 C.F.R. § 1497 Payment Limitation (1988)).

13. Malone, *A Historical Essay on the Conservation Provisions of the 1985 Farm Bill: Sodusting, Swampusting and the Conservation Reserve*, 34 KAN. L. REV. 577 (1986).

14. IOWA CODE, ch. 654A (1987) (entitled Farm Mediation).

15. Pub. L. 99-554, 100 Stat. 3088 (1986). See, e.g., Faiferlick & Harl, *The Chapter 12 Bankruptcy Experience in Iowa*, 9 J. AG. TAX. & L. 302 (1988).

ing requirements,¹⁶ and expanded redemption¹⁷ and homestead protection laws. This area has also experienced increased reliance on judicial proceedings either to enforce debt agreements (such as mortgage foreclosures, debt collections, and land contract forfeitures) or to defend against enforcement of such agreements (through arguments based on theories of lender liability).¹⁸

The 1990s will unquestionably experience an accelerated trend of the active use of the legal system to shape American agriculture. For example, biotechnology and environmental concerns over pesticides are issues that are the focal point of much debate. Lawsuits have already been tried on issues such as the patenting of new life forms¹⁹ and the release of genetically engineered materials into the natural environment.²⁰ One of the central challenges in the development and application of these new technologies will be resolving the gap between the views of science and those of the public. The scientific attitude can be summarized as follows: the development of such new technologies and the resulting products hold significant potential for our society and any health or environmental fears over the use of such technologies are either unsubstantiated or can be avoided.²¹ On the other hand, the public view reflects a natural skepticism (which has escalated in the last twenty years²²) which questions whether all new scientific and technological developments are worthwhile to society.²³ This skepticism is, in

16. See, e.g., N. HAMILTON, *BORROWERS' RIGHTS AND THE AGRICULTURAL CREDIT ACT OF 1987: A GUIDE FOR FARMERS HOME ADMINISTRATION AND FARM CREDIT SYSTEM BORROWERS AND THEIR ATTORNEYS* (1988).

17. See, e.g., IOWA CODE § 654.16 (1987) (providing for a two-year separate right to redeem an agricultural homestead at fair market value).

18. For a discussion of the legal theories arising in the area of agricultural lender liability, see S. Bahls, *Termination of Credit for the Farm or Ranch: Theories of Lender Liability*, 48 MONT. L. REV. 213 (1987). The most widely publicized case in this area is *Jewell v. Bank of America*, No. 112439, slip op. at ____ (Cal. Super. Ct. ____, 1985), in which a jury awarded an apple grower \$22 million in damages based on the termination of credit. The case, which was overturned on appeal (in *Kruse v. Bank of America*, 201 Cal. App. 3d 354, 248 Cal. Rptr. 217 (1988)), illustrates the type of factual disputes that can arise when an agricultural lending relationship deteriorates and the borrower believes the bank has illegally impaired the farming operation. One common theory of liability in this area is the breach of a fiduciary duty between the bank and the borrower. This issue was the subject of a recent Iowa Supreme Court case. See *Kurth v. Van Horn*, 380 N.W.2d 693 (Iowa 1986), which is analyzed in Note, *Trust and Confidence and the Fiduciary Duty of Banks in Iowa*, 35 DRAKE L. REV. 611 (1986).

19. *Diamond v. Chakabarty*, 447 U.S. 303 (1980).

20. See, e.g., *Foundation of Economic Trends v. Heckler*, 756 F.2d 143 (D.C. Cir. 1985).

21. For a discussion of many of the issues facing the nation in this regard, see NATIONAL RESEARCH COUNCIL, BOARD ON AGRICULTURE, COMMITTEE ON A NATIONAL STRATEGY FOR BIOTECHNOLOGY IN AGRICULTURE, *AGRICULTURAL BIOTECHNOLOGY: STRATEGIES FOR NATIONAL COMPETITIVENESS* (1987).

22. For a discussion of the public perceptions concerning the adoption of biotechnology, see Office of Technology Assessment, *NEW DEVELOPMENTS IN BIOTECHNOLOGY: BACKGROUND PAPER: PUBLIC PERCEPTIONS OF BIOTECHNOLOGY* (1987).

23. A good example of public skepticism is the lawsuit filed by a group representing the

part, a response to increasing environmental consciousness and concerns about existing health and safety issues (such as hazardous waste disposal, pesticide use and nuclear energy). As a result, the public has increasingly come to realize that just because science and industry can develop new products and technologies, it does not naturally follow that they are either safe or should be adopted in our economy.²⁴

Public skepticism and a more discerning attitude toward scientific developments will shape such issues as the development and adoption of genetically engineered products. This is exemplified by the public debate over the use of bovine growth hormone, which can double a cow's milk production, but it raises health concerns among consumers and economic concerns among dairy farmers.²⁵ Another example is irradiation of food as a method of preservation, a technology that is well-developed scientifically but which has met with considerable public opposition in its adoption.²⁶ This resistance is due, in part, to the fact that the technology will be applied in the food industry.²⁷ While the debate will rage over these and other products (such as artificial foods designed to replace fats now on the drawing boards²⁸), the bottom line may be that if the public does not believe the product is safe, no assurances of safety from science and industry will change the course of events.

The public resistance to the development of new agricultural products and technologies is clearly predictable and understandable. It reflects the

interests of small and medium sized farm families in California. This group argued that the universities' research agenda on items such as mechanized harvesters for tomatoes did not adequately address the social and economic impacts that such technologies would have on the family farms that the land grant colleges were designed to promote. The plaintiffs were successful at the trial level but the issue was reversed on appeal. See *California Agrarian Action Project, Inc. v. Regents of the University of California*, 210 Cal. App. 3d 1245, 258 Cal. Rptr. 769 (1989), *rev'd* No. A041277, slip op. (Cal. Ct. App., May 25, 1989). For a discussion of this case and the issues it presents, see Mooney, *Court Says U. of California Must Show Agricultural Studies Aid Family Farms*, *CHRON. OF HIGHER EDUC.*, at A19 (November 25, 1987). For a critical view of the case, see London, *Ruling by California Judge Casts a Cloud Over All University Agricultural Research*, *CHRON. OF HIGHER EDUC.*, at B1 (March 16, 1988).

24. For an excellent discussion of an issue that promises to be central in the future development of American agriculture and the troubling legal and scientific issues that it raises, see J. DOYLE, *ALTERED HARVEST: AGRICULTURE, GENETICS, AND THE FATE OF THE WORLD'S FOOD SUPPLY* (1985).

25. See, e.g., Brown, *BOVINE GROWTH HORMONE AND THE POLITICS OF UNCERTAINTY: FEAR AND LOATHING IN A TRANSITIONAL AGRICULTURE*, *AGRIC. & HUMAN VALUES*, Winter 1987, at 75.

26. Lochhead, *The High-Tech Food Process Foes Find Hard to Swallow*, *INSIGHT*, November 7, 1988, at 42-45.

27. For a discussion of many of the scientific issues facing the meat industry, see NATIONAL RESEARCH COUNCIL, BOARD ON AGRICULTURE, COMMITTEE ON TECHNOLOGICAL OPTIONS TO IMPROVE THE NUTRITIONAL ATTRIBUTES OF ANIMAL PRODUCTS, *DESIGNING FOODS: ANIMAL PRODUCT OPTIONS IN THE MARKETPLACE* (1988).

28. Wall, *NutraSweet's Fat Substitute Seen Beating P&G to Market, Promises Diet Revolution*, *Wall Street Journal*, Jan. 28, 1988, at 25.

uncertainty inherent in the application of new scientific developments and the particular sensitivity involved when new developments are applied to food and food products. In recent years the consuming public has developed a much greater concern and awareness of the impact of diet on health²⁹ and the presence of additives and chemical residues in our food supply.³⁰ Two significant trends in food marketing in recent years reflect the consumer's desire to obtain fresher produce.³¹ First, the increasing popularity of products such as range chickens, organic vegetables, and other "natural" foods, which are marketed as free of chemical inputs and residues.³² Several recent government studies indicate that the nation can do a better job of protecting the quality of our food supply³³ and guarantee that the issue will be a primary policy consideration in the years ahead.

The European Community's recently imposed ban on the importation of meat products produced with the use of artificial growth hormones is an excellent example of public concern in action. While such growth stimulants are used widely and regulated in American agriculture, European consumer and environmental groups were able to obtain a legal ban on these products through political efforts. While the United States government argues that the ban is not scientifically legitimate, European consumers voted to ban the use of such products.³⁴ This supremacy of consumer health concerns over science, regardless of scientific legitimacy, may provide many lessons for the United States food industry, consumers, farmers, and legislators in the years to come.

Another significant component of future debate will be the appropriate role of agriculture in our society and the special protections or programs that farmers should receive. Early development of United States agricultural policy consisted of exceptions or special protections (including early exemptions from labor laws, social security, and the draft).³⁵ In recent decades

29. See NATIONAL RESEARCH COUNCIL, ASSEMBLY OF LIFE SCIENCES, DIVISION OF BIOLOGICAL SCIENCES, FOOD AND NUTRITION BOARD, COMMITTEE ON DIETARY ALLOWANCES, RECOMMENDED DIETARY ALLOWANCES (9th ed. 1980).

30. See, e.g., CALIFORNIA ASSEMBLY OFFICE OF RESEARCH, THE INVISIBLE DIET: GAPS IN CALIFORNIA'S PESTICIDE RESIDUE DETECTION PROGRAM (1988); NATIONAL RESEARCH COUNCIL BOARD ON AGRICULTURE, REGULATING PESTICIDES IN FOOD: THE DELANEY PARADOX (1987).

31. See, e.g., FOOD MARKETING INSTITUTE TRENDS: CONSUMER ATTITUDES AND THE SUPERMARKET: 1988 UPDATE (1988).

32. In recent years several states have passed laws which create standards for the production of "organic foods" and for the use of terms such as "organic" and "natural" in labels and advertisements used to market such products. See, e.g., IOWA CODE ch. 190B (1989).

33. GENERAL ACCOUNTING OFFICE, PESTICIDES: BETTER SAMPLING AND ENFORCEMENT NEEDED ON IMPORTED FOODS (1986); GENERAL ACCOUNTING OFFICE, SEAFOOD SAFETY: SERIOUSNESS OF PROBLEMS AND EFFORTS TO PROTECT CONSUMERS (1988).

34. Montgomery, *U.S. and Europe Near Trade War Over Hormone Use in Beef Cattle*, *New York Times*, Nov. 20, 1988, at 8A.

35. PAARLBERG, *supra* note 7, at 5-7.

agriculture has lost many of its early protections,³⁶ but some protection remains, such as the exemption from anti-trust laws for agricultural cooperatives.³⁷ Other new exemptions are being added. The best example of new legal exemptions accorded to agriculture are the right-to-farm laws that forty-nine states have passed in the last fifteen years.³⁸ The laws are designed to protect farm operations from nuisance suits brought by people who move onto lands adjacent to agricultural operations and then bring lawsuits to limit agricultural activities.³⁹ The laws are viewed as a means to prevent the conversion of agricultural land to non-farm uses, since they give agricultural operations (particularly livestock operations, which have many nuisance-like characteristics) a land use priority.⁴⁰ Experience with these laws is limited, but they make a positive statement for the role of agriculture in our economy.⁴¹

The "right to farm" approach—which creates a legal protection for agriculture—is also being applied in many states to the use of fertilizers and pesticides.⁴² Under these laws, farmers are protected from potential legal

36. One such special provision applicable to agriculture has been the "farm products rule." See Uniform Commercial Code § 9-307(1). Under this rule the buyers of farm products do not take such goods free of the security interests of the farmer-seller and thus must take efforts to ensure that such products were free of others claims to acquire clear title. The operation and justification of this clause have been long debated. In the early 1980s several states began modifying the provision to provide more protection to sellers. For example, Iowa amended the section for three consecutive years, from 1985 to 1987. In the 1985 farm bill, Congress preempted the issue by federalizing the rule of law and giving states one year in which to choose between two options they could follow. See Food Security Act of 1985, Pub. L. 99-198, 99 Stat. 1354, 1535-40 (1985). For a discussion of these developments, see Note, *The Federalization of the Farm Products Exception Rule of U.C.C. 9-307(1): Anomaly or Opening Salvo?*, 36 *DRAKE L. REV.* 115 (1987).

37. See, e.g., The Capper-Volstead Act, 7 U.S.C. §§ 291, 292 (1982). For a discussion of many of the legal issues facing American cooperatives, see Centner, *Legislative Provisions for Agricultural Cooperatives: Adjusting to Changed Circumstances*, 33 *DRAKE L. REV.* 325 (1984).

38. Hamilton & Bolte, *Nuisance Law and Livestock Production in the United States: A Fifty-State Analysis*, 10 *J. AG. TAX. & LAW* 99 (1988).

39. For a discussion of the operation of one of these statutes, see Note, *Chapter 93A: Right-to-Farm Protection for Iowa*, 35 *DRAKE L. REV.* 633 (1986) (the Iowa statute under consideration in the article is now found at IOWA CODE, ch. 176B (1989)).

40. The protection of agricultural land from conversion to non-farm uses has been a significant issue in the national agricultural policy debate for over a decade. The Carter Administration created the National Agricultural Land Study which researched the issue and published several studies, including COUGHLIN & KEENE, *THE PROTECTION OF FARMLAND: A REFERENCE GUIDEBOOK FOR STATE AND LOCAL GOVERNMENTS* (1980).

41. There have only been a few cases decided interpreting right to farm laws. See, e.g., *Herrin v. Opatut*, 248 Ga. 140, 281 S.E.2d 575 (1981); *Shatto v. McNulty*, No. 40A01-8609-CV244, slip. op. (Ind. Ct. App., July 9, 1987); *Cline v. Franklin Pork, Inc.*, 219 Neb. 234, 361 N.W.2d 566 (1985). Even though the laws may be on the books, courts can still find agricultural operations to be nuisances where the complaining land owner was there prior to the agricultural operation or if the statute is not applicable. See, e.g., *Valasek v. Baer*, 401 N.W.2d 33 (Iowa 1987).

42. See, e.g., IOWA CODE § 455E.6 (1989) (entitled "Legal effects—liability").

liability for the cost of cleaning up contaminated water supplies if the chemicals are applied according to the label directions or if the fertilizers are used pursuant to soil tests that demonstrate that fertilizers are needed. While these laws attempt to create a standard of conduct which shields a farmer from liability, the broader question for society is whether protection from liability is appropriate. Policy debates over the use of chemicals and fertilizers and the allocation of legal responsibility for water contamination and other damage that might result from such use will undoubtedly produce tension. Part of that debate will focus on what deference should be given to agriculture and, if so, what amount and to whom.

It is not idle to inquire who should have the advantage of special benefits or legal protections. Around this issue revolves the essential policy debate concerning the structure of American agriculture and the preservation of the family farm.⁴³ While to many the "family farm" may be an empty rhetorical vessel into which politicians pour campaign speeches, the concept of the family farm is deeply ingrained in American society. The creation and preservation of a family farm system of agriculture is largely the result of the law. The family farm originated with the homestead act and the creation of the land grant colleges, and its existence continues today because of laws such as the limitation on farm program payments,⁴⁴ FmHA⁴⁵ and beginning farmer loan programs,⁴⁶ restrictions on corporate⁴⁷ and alien ownership of farmland,⁴⁸ and special tax and estate planning laws designed to ensure that farm units can be passed on intact to the next generation.⁴⁹

American agriculture is changing; farm numbers are becoming smaller and farm sizes larger. The political and cultural environment in which the policy debate over laws such as these which protect the "family farm" has become open to concerns over the necessity for such laws. Agriculture's image has been tarnished by public concerns over such things as groundwater contamination and pesticide use, and public fears over the safety of our food supply.⁵⁰ As a result, some of the good will which created the political coali-

43. A new book has been published which provides a thorough discussion of the role of the family farm in American agriculture and the impact that future policies will play in the preservation of the system. See M. STRANGE, *FAMILY FARMING: A NEW ECONOMIC VISION* (1988).

44. See note 12, *supra*.

45. See note 8, *supra*.

46. IOWA CODE ch. 175 (1987) (Agricultural Development).

47. IOWA CODE ch. 172C (1987) (Corporate or Partnership Farming).

48. IOWA CODE ch. 567 (1987) (Nonresident Aliens—Land Ownership).

49. See, e.g., I.R.C. § 2032A (1988) (concerning special use valuation of agricultural land); I.R.C. § 6166 (1988) (providing for deferred payment of estate taxes over a fifteen year period). For a discussion of these provisions, see Becker, *Decedent's Rental of Real Estate: Application of Internal Revenue Code Sections 2032A and 6166*, 33 *DRAKE L. REV.* 371 (1984).

50. A recent report by the National Academy of Sciences indicates that the public does not have a firm understanding of the science and operation of modern agriculture and that enhanced educational efforts are needed so that our society understands what is involved in the production of food. See NATIONAL RESEARCH COUNCIL, BOARD OF AGRICULTURE, COMMITTEE ON

tions and power needed to obtain policies which benefit agriculture may have been lost. For this reason, if no other, those involved in agriculture will have to be cognizant of and responsive to the concerns of non-agricultural groups over agricultural activities that have a significant effect on the public.

A significant development that has begun sweeping across American agriculture in the last few years is the concept of sustainable or alternative agriculture.⁵¹ While this concept is hard to define and goes by many names, its essence involves an agricultural production system that attempts to reduce societal and environmental costs while improving the economic return to the individual farmer. Sustainable agriculture evidences a concern about the health of the land and water by promoting sound soil conservation methods. It uses crop rotation, increased tillage, livestock manure, and biologic controls to reduce reliance on chemicals and fertilizer. These production methods have the effect of lowering input costs to increase economic returns, but they also limit the environmental risks associated with crop production. The goal of sustainable agriculture is to ensure the long-term viability of American agriculture in terms of both profitability and productivity.⁵²

Many states have initiated research programs designed to study the potential for sustainable agriculture,⁵³ and the federal government has begun to pour considerable amounts of research money into low input agriculture. The development of sustainable agriculture will result not only from economic benefits to the farmer but also from policy initiatives responding to environmental and societal concerns. The promotion of sustainable agriculture will involve legal incentives⁵⁴ and restrictions. Examples include the new conservation cross compliance law, which conditions continued eligibility for federal farm program benefits for those farming highly erodible land on the adoption and implementation of a conservation plan designed to reduce soil losses to acceptable levels.⁵⁵ At the same time, laws such as those which protect farmers who use chemicals from liability will reduce any in-

AGRICULTURAL EDUCATION IN SECONDARY SCHOOLS, UNDERSTANDING AGRICULTURE: NEW DIRECTIONS FOR EDUCATION, (1988).

51. For a discussion of the issues presented by sustainable agriculture, see W. JACKSON, W. BERRY & B. COLEMAN, *MEETING THE EXPECTATIONS OF THE LAND: ESSAYS IN SUSTAINABLE AGRICULTURE AND STEWARDSHIP* (1984).

52. For a recent study which focuses on this issue, see COUNCIL FOR AGRICULTURAL SCIENCE AND TECHNOLOGY, *LONG-TERM VIABILITY OF U.S. AGRICULTURE*, REPORT NO. 114 (1988).

53. See, e.g., IOWA CODE § 266.39 (1987), which creates the Leopold Center for Sustainable Agriculture at Iowa State University.

54. Senator Wyche Fowler, Jr., of Georgia has recently introduced S.790, 101st Cong., 1st Sess., titled the Farm Conservation and Water Protection Act of 1989, which is designed to promote sustainable agricultural policies at the national level. See 135 CONG. REC. S.970 (daily ed. May 11, 1989).

55. 16 U.S.C. § 3811 (1988). See the rules for implementing cross compliance at 7 C.F.R. §§ 12.1-12.33 (1988).

centive that the risk of liability may have created to limit use of such chemicals. Where society decides to strike the balance between such approaches will largely depend on how the public perceives agriculture. Sustainable agriculture could prove to be one of the most significant developments in American agriculture in this century. The role that the law can play in hindering or promoting its development vividly demonstrates the integral relationship which exists between the law and agriculture in America today.

Another issue which promises to test both the public's appreciation and understanding of agriculture and the limits on the use of public policy to influence agricultural production methods is animal rights. While animal welfare, which regulates the manner in which humans can treat animals, has traditionally been an issue considered subject to regulation,⁵⁶ "animal rights" is a different issue. The difference is that animal rights advocates believe that animals are entitled to certain inalienable rights (existing separate from their relationship with man), including the ultimate right not to be killed to produce food, products, or research findings for humans.⁵⁷ Because one of the basic goals of the animal rights movement is "the total dissolution of commercial animal agriculture,"⁵⁸ the movement is seen as a significant threat to American agriculture. Recent experience in Europe has shown that animal rights activists are capable of achieving significant regulatory reforms that affect the manner in which animals can be raised and the legal relation between humans and animals.⁵⁹ Recently, an animal rights group called CEASE, the Coalition to End Animal Suffering and Exploitation, was successful in putting a referendum (which would have regulated the production of livestock) on the ballot in Massachusetts; but the initiative failed badly in the 1988 election, receiving only twenty-nine percent support.⁶⁰ While the animal rights movement has experienced little success in the United States to date, the issue will undoubtedly be on the agenda in the decades to come, and agricultural groups, lawmakers, and the public will be asked to consider the appropriate balance in the relationship between humans and animals.

56. See, e.g., IOWA CODE ch. 717 (1987) (Injury to Animals).

57. The animal rights issue has been very controversial in recent years. The animal rights movement consists of many different organizations and individuals who have different perspectives on what animal rights means and how it may differ from animal welfare. A number of books have been published which attempt to set out the intellectual foundation for the movement, including P. SINGER, *IN DEFENSE OF ANIMALS* (1985) [hereinafter SINGER]; J. MASON & P. SINGER, *ANIMAL FACTORIES* (1980); T. REGAN, *THE CASE FOR ANIMAL RIGHTS* (1983). The magazine *THE ANIMALS AGENDA*, published by the Animal Rights Network, serves as the main source for communication and dissemination of information about the movement.

58. SINGER, *supra* note 57, at 13.

59. See, e.g., Lohr, *Swedish Farm Animals Get a Bill of Rights*, *New York Times*, Oct. 25, 1988, at 1; Phelps, *U.K. Challenges EC Laying Cage Welfare Order*, *Feedstuffs*, Dec. 15, 1986 at 5.

60. Smith, *Animal Welfare Issue Fails in Massachusetts*, *Feedstuffs*, Nov. 14, 1988 at 1.

V. CONCLUSION

American agriculture involves many controversial issues which will engender extensive debate and new laws, restrictions, and regulations; but it also presents opportunities. Exciting developments beckon concerning the adoption of new biological methods to control crop pests and new techniques to enhance production. The traditional goal of the agricultural sector has always been to make two stems grow where one grew before, and that goal will continue to drive the nation's farm sector.⁶¹ New scientific developments and the promise of sustainable agriculture may help to create exciting opportunities for those involved in the indispensable role of producing the nation's food supply, and to ensure the continued viability of the nation's agricultural production capability.

Diversification of agricultural production and the use which we make of that production also promises new economic opportunities for the nation's farmers. There is an increasing interest in the production of industrial crops and development of new products. Examples include alcohol fuels, biodegradable plastics made with corn starch, and new sources of fiber for use in paper production. In recent years scientists have shown an increasing interest in exploring the medical and chemical properties of plants to discover what solutions they may provide for serious societal problems of disease and hunger. Exciting discoveries such as a cure for cancer or AIDS may await the plant geneticist who unlocks the potential stored in seeds.⁶² Whatever the future may be for American agriculture, the legal system will play a fundamental role in shaping it and making it possible.

61. The subject of the role of agriculture in shaping the development of human civilization is a fascinating topic that is the subject of two excellent books. See E. KAHN, *THE STAFFS OF LIFE* (1985); H. HOBHOUSE, *SEEDS OF CHANGE: FIVE PLANTS THAT TRANSFORMED MANKIND* (1986).

62. See, e.g., Montgomery, *Amazon Apothecary*, OMNI, Sept. 1988, at 42, which discusses a recent \$2.6 million grant from the National Cancer Institute to three institutions: the Missouri Botanical Garden to collect tropical plants in Africa; the New York Botanical Garden to collect plants in the Amazon; and the University of Illinois, in Chicago, which is seeking plants in the jungles of Southeast Asia. The purpose of the grants is to search for plants that have the potential of providing new tools for cancer research. The work of this new generation of plant collectors recalls the early work of botanists who worked for the United States and who scoured the world looking for plant varieties that had an economic value to our country. For a review of the work of one of these individuals, see CUNNINGHAM, FRANK MEYER: *PLANT HUNTER IN ASIA* (1984).