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DÉVÉLOPPEMENT SCIENTIFIQUE ET PRATIQUE DU DROIT RURAL DANS L'UE, DANS LES ÉTATS ET LES RÉGIONS ET DANS L'OMC – SCIENTIFIC AND PRACTICAL DEVELOPMENT OF RURAL LAW IN THE EU, IN STATES AND REGIONS AND IN THE WTO – WISSENSCHAFTLICHE UND PRAKTISCHE ENTWICKLUNG DES RECHTS DES LÄNDLICHEN RAUMS IN DER EU, IN DEN STAATEN UND REGIONEN SOWIE IN DER WTO

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1. Main Legal Developments

1.1. Rural Economic Law

Federal legislation providing incentives for biofuel production and the use of corn and soybeans for bioenergy has boosted the general farm economy in the United States. The positive economic consequences of bioenergy production are tempered by higher animal feed costs and state legislation requiring investments in more space for food animals being reared in confined areas.

1.1.1. Producing Biofuels for Energy

In the wake of concern about dependency on foreign oil, biofuels are expected to become more important as sources of energy. In the Energy Policy Act of 2005, the U.S. Congress provided the first federal mandate that liquid biofuels be purchased by motorists.¹ Section 211 of the Clean Air Act called for four billion gallons of renewable fuel to be used in gasoline in 2006 and the amount required was to increase in steps each year until 2022.² With refinements to federal regulations, encouragement is being given to biofuels that replace gasoline and diesel fuels to prevent the release of carbon stored over geologic time periods.

Renewable fuels are divided into "additional renewable fuels" and advanced biofuels.³ Additional renewable fuels are those produced from renewable biomass. Advanced biofuels are qualified to those that have at least 50 percent less than baseline lifecycle greenhouse gas emissions defined as

the aggregate quantity of greenhouse gas emissions (including direct emissions and significant indirect emissions such as significant emissions from land use changes) . . . related to the full fuel lifecycle, including all stages of fuel and feedstock production and distribution, from feedstock generation or extraction through the distribution and delivery and use of the finished fuel to the ultimate consumer, where the mass values for all greenhouse gases are adjusted to account for their relative global warming potential.⁴

Advanced biofuels may include:

(I) Ethanol derived from cellulose, hemicellulose, or lignin.

(II) Ethanol derived from sugar or starch (other than corn starch).

(III) Ethanol derived from waste material, including crop residue, other vegetative waste material, animal waste, and food waste and yard waste.

(IV) Biomass-based diesel.

(V) Biogas (including landfill gas and sewage waste treatment gas) produced through the conversion of organic matter from renewable biomass.

(VI) Butanol or other alcohols produced through the conversion of organic matter from renewable biomass.

(VII) Other fuel derived from cellulosic biomass.⁵

This means that the legislation for biofuels is differentiating between biofuels to offer more support for those that do more for reducing greenhouse gas emissions. The regulations set forth requirements for the Environmental Protection Agency (EPA) to administer a renewable fuel program with distinct production volumes for additional renewable fuel and advanced biofuel. There are changing provisions that provide tax credits, favorable loans, and subsidy programs concerning the encouragement of the production and refining of biofuel. Independent studies suggest that for the 2006 tax year, American subsidies for biofuels amounted to \$6.3 to \$8.6 billion.⁶

1.1.2. Limitations on Animal Confinement Space

During the past decade, ethical considerations have led several states in the United States to enact legislation concerning animal confinement that makes animal production more expensive.⁷ Florida had an initiative concerning sow gestation cages,⁸ and several years later California voters redefined acceptable dimensions for sow cages, chickens, and veal calves.⁹ More significant, the confinement limitations have led the industry to voluntarily make adjustments to animal production practices. Firms are altering their standards for confinement regardless of limitations placed on them by state action. Smithfield Foods, Inc. and Cargill, two large pork producers, have phased out pig gestation crates.¹⁰ New hog operations employ group sow housing. On the veal side of the industry, large producers are taking similar action. They are converting their operations to group housing systems. In April 2011, the Ohio Livestock Care Standards Board voted to adopt a standard that phases out individual veal crates that prevent calves from turning around.¹¹

This suggests that for hog and veal production, the state voter and legislative actions may not be an important factor for the location of future production facilities. Furthermore, the new animal confinement requirements suggest that the efficient and cheap production of animal food products may not be preferred by many citizens. Consumers, voters, and legislators have ethical concerns about the humane treatment of food animals and may exercise their choices in a number of venues. One is at the ballot box, in adopting referenda and electing state legislators to institute changes in the treatment of animals. Another is shopping for food products identified with qualities concerning its production.

1.2. Rural Environmental Law

Numerous issues regarding the environment continue to affect agricultural production and rural America. Many rural legislators are attempting to change federal law concerning the classification of greenhouse gases as a pollutant. Continued concern about pollution from animal production presents courts and regulators issues to address. Farmers are also requesting federal legislation so that their use of pesticides does not require a permit under the Clean Water Act. Finally, a request to market a genetically-modified fish poses an issue that may lead to legislative action.

1.2.1. Regulating Greenhouse Gases

A major environmental issue is whether greenhouse gases (GHGs) can be regulated by EPA under the Clean Air Act. Due to costs of pollution from motor vehicle emissions, Massachusetts and other states sued EPA in 2007 to classify CO_2 as an air pollutant.¹² Massachusetts was successful and the U.S. Supreme Court found that greenhouse gases (GHGs) were pollutants under the Clean Air Act. EPA therefore has the statutory authority to regulate GHGs from new motor vehicles.¹³ In a separate action, California petitioned EPA for a waiver from section 209(b) of the Clean Air Act so that the state could regulate greenhouse gas emissions from motor vehicles. California wanted to require reductions in fleet-average greenhouse gas emissions, including carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_20), and hydrofluorocarbons (HFCs) for most new passenger motor vehicles sold in California, beginning with the 2009 model year. The Bush administration denied California's waiver petition in 2008, but it was reversed under the Obama administration in 2009.

In September 2009, EPA, along with the National Highway Traffic Safety Administration (NHTSA), proposed joint rulemaking on new vehicle GHG and fuel economy standards.¹⁴ As part of that rulemaking effort, the Obama administration secured memoranda of understanding from California and automakers that federal standards be harmonized – to the extent possible – with California standards, and that California accept certain stipulations.¹⁵ On April 1, 2010, EPA and NHTSA finalized the new federal regulations, which apply to vehicle-model years 2012-2016.¹⁶ The determination that GHGs from automobiles endanger public health and welfare will affect regulations on other sectors. If motor vehicle carbon dioxide emissions are harmful, similar emissions from other sources (e.g., power plants) are also harmful.¹⁷ Therefore, EPA is moving forward with regulations for large, stationary sources as well as further emissions standards for automobiles and heavy trucks, and on mandatory emissions monitoring for various sectors.

However, Congress may not view these developments as an acceptable interpretation of the Clean Air Act. Several bills have been introduced in Congress, including the "Energy Tax Prevention Act of 2011," to amend the Clean Air Act to prohibit EPA from regulating GHGs.¹⁸

1.2.2. Discharge Permits for CAFOs

Concentrated animal feeding operations (CAFOs) remain controversial, and so do the efforts by EPA to regulate the largest of these businesses under the Clean Water Act. In addressing the issues of discharges that require National Pollutant Discharge Elimination System (NPDES) permits under the Clean Water Act, EPA revised its CAFO Rule in 2008. Three of the provisions of this Rule were challenged by agricultural groups in *National Pork Producers Council v. Environmental Protection Agency*.¹⁹ First, petitioners argued that the "duty to apply" requirement exceeded EPA's authority to regulate CAFO discharges. The second challenge was that EPA could not hold persons liable for failing to secure a permit. Third, the petitioners argued that EPA could not regulate the land application of manure.

The petitioners were successful with their first two arguments. Following an earlier ruling in *Waterkeeper Alliance Inc. v. Environmental Protection Agency*,²⁰ the *National Pork Producers Council* court found that the Clean Water Act only regulates actual discharges. EPA's regulation of persons who propose to discharge was *ultra vires* so could not be upheld. However, fourteen days later a Michigan state court held that under Michigan law, CAFOs without discharges may be required to secure discharge permits.²¹ To prevent water pollution, states can have more stringent requirements than exist under the federal Clean Water Act.

The *National Pork Producers* court also agreed with petitioners that EPA lacked authority to impose liability for failing to apply for a permit. The penalty provisions of the Clean Water Act delineate the actions that can be taken for violations involving discharges, and these do not include liability for failing to apply for a permit.²²

Concerning the third argument of the regulation of the land application of manure, the *National Pork Producers Council* court found that the appeal was time barred. The court noted that the *Waterkeeper* court had concluded that the Clean Water Act's definition of "effluent limitations" encompassed nutrient management plans and that a CAFO's site-specific nutrient management plan needed to be incorporated in its permit. Thus, the regulation of land application areas has been recognized as possible.

Another issue regarding the CAFO Rule involves its requirements for opportunities for citizen input during the NPDES permitting process.²³ Congress intended citizens to be able to participate in the "development, revision, and enforcement of any regulation, standard, effluent limitation, plan, or program" established under the Act.²⁴ Under this directive, citizens should be able to participate in the development of effluent limitations set forth in NPDES permits. Furthermore, if a permittee desires to modify a permit, the citizen participation provisions remain applicable. Any cease and desist order, consent order, compliance order, or other document that is intended to modify a permit should only be effective if the public receives notification and is provided an opportunity to participate.

1.2.3. Amending Pesticide Regulations

The U.S. Congress is considering H.R. 872 that would amend the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA).²⁵ Farmers want to amend federal law to provide an exception so that they do not incur liability for violation of the Clean Water Act. The legislation would amend FIFRA so that pesticide residues from authorized use of pesticides entering water do not require a discharge permit. The bill is opposed by environmental groups who are concerned about pesticides contaminating water supplies.

1.2.4. Genetically Engineered Atlantic Salmon

In 2010, the Food and Drug Administration (FDA) released a Briefing Packet from its Veterinary Medicine Advisory Committee on AquAdvantage Salmon, a genetically engineered Atlantic salmon intended to be used for food.²⁶ These salmon are expected to grow faster than conventionally bred Atlantic Salmon, and because they are genetically modified, FDA held public hearings and needs to determine labeling requirements. However, in March 2011, federal lawmakers expressed concern about the approval of genetically engineered fish and may take congressional action to change the law.²⁷

1.3. Rural Nutrition and Food Law

1.3.1 Food Safety in General

In January 2011, the United States adopted the Food Safety Modernization Act that updated numerous food safety provisions of the Federal Food, Drug, and Cosmetic Act.²⁸ This new legislation requires the Secretary of FDA to develop "science-based minimum standards for conducting a hazard analysis, documenting hazards, implementing preventive controls, and documenting the implementation of the preventive controls."²⁹ Persons and firms dealing with foods need to identify and evaluate known or reasonably foreseeable hazards that may be associated with their facility. Moreover, FDA is required to identify high-risk facilities, including foreign facilities, and allocate inspection resources to inspect such facilities.³⁰ The new legislation also encourages FDA to establish a program to provide for the expedited review and importation of food from importers.³¹ FDA was also granted authority to work with firms to cease distribution and to order recalls of food items that are adulterated or misbranded.³²

Governments and courts continue to make changes to rules that provide safe and wholesome food. FDA has revised its Reportable Food Registry for Industry for reporting situations where there is a reasonable probability that an article of food will cause serious adverse health consequences.³³ Under the Federal Food, Drug, and Cosmetic Act, facilities that manufacture, process, pack, or hold food for human or animal consumption are required to be registered and to report when there is a reasonable probability that a food item will cause serious adverse health consequences.³⁴ This allows FDA to do a better job in tracking patterns and targeting inspections, and for the government to take action to remove the item from the marketplace.³⁵

1.3.2. Raw Milk

Due to illnesses in the early 1900s when raw milk was a major source of human disease, Congress enacted a Pasteurized Milk Ordinance.³⁶ However, in the last few years, a movement to allow people to purchase raw milk has created a debate about health issues involving dairy products. People claim that raw milk tastes better and is more healthy.³⁷ In 2011, marshals from the Food and Drug Administration seized approximately 80,000 pounds of cheese made from raw milk in California.³⁸ Evidence suggested that cheese from the facility was linked to an E. coli 0157:H7 outbreak in 2010. In an earlier 2010 California lawsuit, the federal government had enjoined an organic dairy company and its managing member from labeling, selling, and distributing raw milk and raw milk products due to violations of the Federal Food, Drug, and Cosmetic Act.³⁹ The defendants had illegally marketed raw milk across state lines and had made health claims in violation of labeling requirements.

Although the pasteurization of milk slightly reduces the nutritional value of milk and diminishes a few of the vitamins found in milk (thiamine, vitamin B12, and vitamin C), the basis for pasteurization is to kill harmful bacteria that cause tuberculosis, diphtheria, severe streptococcal infections, typhoid fever, and other food-borne illnesses. Among dairy product-associated outbreaks reported to the Centers for Disease Control (CDC) between 1973 and 2008 in which the investigators reported whether the product was pasteurized or raw, 82 percent were due to raw milk or cheese.⁴⁰ For a ten-year period ending in 2008, 86 outbreaks due to consumption of raw milk or raw milk products were reported to CDC. These resulted in 1,676 illnesses, 191 hospitalizations, and two deaths. Most of these illnesses were caused by Brucella, Campylobacter, Listeria, or Salmonella. For every outbreak and every illness reported, many others occur, and most illnesses are not part of recognized outbreaks. Despite these documented problems, people continue to petition state legislatures to allow the sale of raw milk. Legislatures are deciding that personal choice to buy raw milk is more important than food safety concerns.

1.3.3. Biobased Product Labeling

In January 2011 the U.S. Department of Agriculture (USDA) adopted a final rule on the voluntary labeling of biobased products.⁴¹ The purpose of the new Biobased Markets Program is to identify and seek new markets for biobased products to reduce the amount of new fossil carbon being introduced into the atmosphere, to replace petroleum products, and create "green" jobs. The program consists of two major elements: a voluntary labeling program employing a USDA logo and federal procurement preferences for qualifying products.

Biobased products are composed of biological products including renewable domestic agricultural materials and forestry materials but excluding food or feed.⁴² Biobased products also exclude products containing vehicle fuels, heating oil, electricity produced from biomass, or any mature market products. The percentages of biobased content are set forth for various products in Part 2902 of the federal regulations.⁴³ For example, diesel fuel additives are required to have 90 percent biobased content to quality while bedding is required to have 12 percent.⁴⁴ If

a product is not in a category for which a minimum biobased content has been established, it must contain 25 percent biobased content.⁴⁵

By meeting the definition of a biobased product, the product qualifies as a "biopreferred product," may be certified by USDA, and may use a federal certification mark. Manufacturers or vendors apply to USDA and secure approval to affix the "USDA Certified Biobased Product" certification mark to their product. A certification mark may be used in advertisements, catalogs, procurement databases, Web sites, and promotional and educational materials.⁴⁶ Federal agencies are required to develop procurement programs that assure items composed of biobased products will be purchased to the maximum extent practicable.⁴⁷ Exceptions exist for products that are available only at an unreasonable price or are not available within a reasonable time.

1.3.5. Restaurant Labeling for Calories

In an attempt to help people control obesity, governments have adopted food labeling laws for restaurants. Under section 4205 of the Patient Protection and Affordable Care Act of 2010, FDA was directed to develop regulations on restaurant menu-labeling requirements concerning calories in items for sale.⁴⁸ The regulations will apply to restaurants, similar retail food establishments, and vending machine operators that are part of a chain with 20 or more locations or 20 or more vending machines.

In August of 2010, FDA released its draft guidance concerning the implementation of these menu-labeling provisions, which was subsequently withdrawn.⁴⁹ The federal regulations, when adopted, will preempt local and state regulations. In April 2011, FDA issued a proposed rule to be added to the food labeling rules.⁵⁰ One important pronouncement was that additional restaurants and vending machine operators could voluntarily elect to become subject to the federal regulations and thereby avoid having to comply with state and local regulations. Other information suggests the labeling information would be expensive for the industry.

1.3.6. Recombinant Bovine Somatotropin

The first genetically-engineered animal drug available for use was recombinant bovine somatotropin (rbST). FDA gave its approval for the product in November 1993 and decided that section 403(a) of the Federal Food, Drug, and Cosmetic Act precluded certain labeling claims. A food is misbranded if statements on its label or in its labeling are false or misleading. Moreover, the absence of information relevant to the issue may cause labeling to be misleading. Thus, misbranding precludes information that without further details might be expected to mislead. Due to the fact that natural bST is in all milk, FDA felt that truthful information means that labels cannot claim that milk is "bST free." Moreover, FDA maintained that a claim that milk is "rbST free" may convey the idea that there exists a meaningful distinction between milk from cows that have been treated with rbST and those that have not been treated. Although there is a distinction in the way milk is produced, FDA found no meaningful distinction in the milk. To prevent misleading information, differentiation between rbST and bST may be achieved by a statement that the milk comes "from cows not treated with rbST." Standing alone, however, a

statement that milk comes from cows not treated with rbST may be misleading by implying that such milk is safer or of higher quality than milk from treated cows. To avoid this problem, FDA suggested that such a statement be placed in a proper context with an accompanying notation that: "No significant difference has been shown between milk derived from rbST-treated and non-rbST-treated cows."

In 2010, a federal appellate court found some of the Ohio labeling restrictions of rbST to be unconstitutional in *International Dairy Foods Association v. Boggs.*⁵¹ Ohio's restrictions followed FDA's guidance by placing a prophylactic ban on milk composition claims including "rbST free."⁵² The plaintiffs argued this regulation violated their commercial free speech. A separate provision of the state labeling restrictions mandating contiguous information on a production claim was also challenged.

The *International Dairy Foods Association* court decided that there was a compositional difference between milk from untreated cows and conventional milk. By giving credence to evidence of elevated levels of insulin-like growth factor 1 and higher somatic cell counts, the court found a compositional difference.⁵³ With this distinction, milk from cows not treated with rbST is "rbST free." However, milk from cows treated with rbST might contain rbST, although there exists no way to determine whether this is the case. The court thereby decided that dairy processors should be able to make claims that the milk is "rbST free." With respect to the production claim that milk came from cows not supplemented with rbST, the court approved the requirement of a disclosure that the "FDA has determined that no significant difference has been shown between milk derived from rbST-supplemented and non-rbST-supplemented cows."⁵⁴ However, the disclosure did not need to be contiguous to the statement that milk is from cows not supplemented with rbST.

1.4. Rural Land Law

1.4.1. Locavore Movement

A movement to eat local foods has gained momentum over the past several years in the United States. Many consumers object to the globalization, industrialization, and standardization of what they are eating. Consumers enjoy feeling that they are in tune with nature when they consume produce that is in season, and that they are forming personal relationships with the farmers they purchase from. The locavore movement assumes that local foods use less energy and so being a locavore is helping the environment. Locavores support local economies, are able to eat produce that may be of higher quality, and claim food has a better taste. Local food is thought of as safer from tampering by bioterrorism and contamination.

The major justification involves "food miles," the distance from where food is produced to where it is consumed. Many food products involve considerable transport that creates an environmental burden in the form of air pollution and carbon dioxide emissions and a social burden in noise, accidents, and traffic congestion. Food miles generally only measure the distance the food has traveled from production to retailers which means it neglects energy costs employed in its production. Food miles do not consider what type of transportation was chosen or what type of fuel it uses.

Often, data on food miles fail to sort out the vessel's carbon emissions per unit of food, so that comparisons cannot evaluate the carbon emission per unit of produce. Food miles also may not consider the distance that the consumer drives to purchase their locally grown food. Finally, the cost of storing food locally until it is consumed cannot be ignored. When the cost of storage is included, local producers may consume more energy and be the source of higher carbon dioxide emissions than imported products, even after transportation. Transportation has been estimated to make up only 11 percent of food's life-cycle greenhouse gas emissions, and only 4 percent of emissions arise from delivery from the producer to the retailer.⁵⁶ These low levels mean that other costs and expenses may alter the result of which food involves fewer carbon costs.

Researchers in New Zealand have conducted several case studies that explore the potential problems with using food miles to judge the environmental impact of food.⁵⁷ New Zealand can show that when all of the energy and carbon emissions of production are considered, their products are the better choice in the United Kingdom than many local products. New Zealand farmers may use one-third the energy to produce apples in New Zealand than farmers in the United Kingdom. Turning to dairy solids, year-round grazing allows New Zealand farmers to use one-half the energy to produce dairy solids that are sold in the United Kingdom. It takes one-fourth the energy to produce lamb in New Zealand and export it as opposed to raising lamb in the United Kingdom.

From an international perspective, a locavore movement makes it difficult for developing countries to improve their conditions by exporting food.⁵⁸ Promoting local food in ways that discriminate against products from other markets may be contrary to international trade law.

1.5. Rural Tax Law

The major recent tax benefits for agricultural production center on support for energy production and continued payments under farm programs for agricultural commodities. Concerns exist whether these tax breaks might be deleted as Congress attempts to pare federal expenses.

1.6. Rural Social Law

1.6.1. Limiting Animal Husbandry Practices

A development in the United States involving rural social law is whether animal producers should use husbandry practices that cause their animals pain. Three animal husbandry practices are controversial due to the public's feeling that they cause animals to suffer: (1) tail docking, (2) castration without an anesthetic agent, and (3) beak trimming of poultry. Individual state legislatures are considering legislation to limit their use.

Tail docking is the partial amputation of a dairy cow's tail in order to improve udder health and cow hygiene by preventing the tail becoming soiled by manure. It is common in some areas and legal in all but one state: California.⁵⁹ Since California is the nation's top-producing dairy state, the adopted legislation prohibiting tail docking of cattle and horses is expected to be a topic considered by other state legislatures in the future.

A second animal management practice is castration of male cattle and swine to control aggression and enhance weight gain.⁶⁰ To reduce pain experienced by animals, many recommend the use of an anesthetic agent. Another consideration is the minimization of physiologic stress during this procedure. Anesthetic agents have been studied extensively and there has not been a clear conclusion as to their usefulness. While they can minimize or even eliminate pain, their use increases animal handling times and the stress related to the procedure. With respect to bulls, anesthetics have been shown to reduce acute pain but are less effective at alleviating the overall stress responses measured by plasma cortisol levels.⁶¹ It is suggested that cattle be castrated at a younger age because it has been shown that younger cattle exhibit less pain, stress, and distress in response to castration.⁶² Using anesthetic agents increases farmers' costs which may increase overall meat prices in grocery stores.

A third practice is beak trimming of poultry to prevent wasting feed and reduce excessive pecking and cannibalism. Behavioral studies on beak trimming have shown that this practice is effective in reducing feather pecking and cannibalism,⁶³ with decreases in mortality rates and feed usage of chickens housed in cages.⁶⁴ However, "scientific evidence has shown that acute and long-term pain is associated with the procedure."⁶⁵ Also, beak trimming results in some permanent loss of sensory input to the bird and can result in extreme feed reductions that can comprise the overall well being of the animal.⁶⁶

1.7. Other Areas

1.7.1. Developing Electricity from Wind

To harness more renewable energy, individuals and businesses are turning to the wind. Many areas of the United States have considerable wind energy that can be harnessed to generate electricity. Yet, the development of this energy source may be accompanied by environmental degradation and other problems.⁶⁷ Concern about their impacts on birds and nuisances have caused persons to oppose the development of wind farms.⁶⁸ With nuisance lawsuits against wind power projects becoming more frequent, one commentator noted in the evaluation of wind power that nuisance law has become a mechanism to undermine environmental progress.⁶⁹ State legislatures have responded with provisions to regulate the development of electricgenerating wind farms. Illinois decided that counties and municipalities should be able to establish standards and regulate the siting of devices and farms.⁷⁰ However, prior to approval, the government needs to hold a public hearing. Ohio has more detailed provisions and requires that a proposed wind farm be economically significant with approval from a state power siting board.⁷¹ State provisions may also set noise levels,⁷² attempt to determine what are unreasonable limitations,⁷³ address offshore projects and habitat damage,⁷⁴ or preempt local governments from unreasonably limiting their development.⁷⁵ Thus, states and communities are actively engaged in deciding how to regulate problems associated with the development of wind power resources.

1.7.2. Urban Egg Production

Some Americans are deciding they want to become more active in producing their food in their urban settings.⁷⁶ While gardening is generally acceptable under municipal zoning ordinances, raising farm animals is not. Therefore, communities have faced homeowner challenges to municipal ordinances that preclude homeowners from raising animals, especially poultry. A movement touting home-grown eggs has taken off, and many homeowners are making a space for chickens in their back yards.⁷⁷

Most cities have had zoning ordinances that preclude raising chickens, unless the homeowner has a lot of a certain size. With an increased citizen desire to raise chickens, governments are allowing property owners with sufficient area to raise chickens.⁷⁸ For example, a metro-Atlanta county adopted a proposal to allow property owners with at least one-half acre to raise chickens.⁷⁹ However, others are concerned what backyard chicken production may mean with respect to disease control and what happens when a chicken expires.

1.7.3. Controlling the Disease Citrus Canker

Recent efforts by the state of Florida to eradicate the disease citrus canker raised the issue of whether a government can destroy property in exposure zones to control a disease under its police power or whether such action effects a compensable taking.⁸⁰ The Florida legislature had declared citrus canker a public nuisance and the state had adopted a citrus canker eradication program under which trees near a known infestation were destroyed.⁸¹ Homeowners of destroyed citrus trees initiated a lawsuit for damages claiming the state should pay for the trees

destroyed under the takings clause of the Florida Constitution.⁸² The trial and appellate courts refused to recognize that citrus canker was a public nuisance and declined to follow federal jurisprudence concerning the differentiation of *per se* and regulatory takings.⁸³ Instead, the appellate court decided that if Florida wanted to eradicate citrus canker, it should pay for property destroyed.⁸⁴

The citrus canker case raises a number of questions about what other governmental actions regulating disease, prescribing land use activities, precluding nuisances, and protecting people from dangers might come under scrutiny and require compensation. Under American jurisprudence, while property owners have implied obligations not to use property in a manner injurious to the community, federal and state constitutions require governments to pay for property taken for public use.⁸⁵ In efforts to control a disease, should governments be able to exercise their police power to destroy property exposed to the disease without compensation or should the government pay for the property taken? Given recent occurrences of citrus greening, mad cow disease, avian influenza, H1N1 (swine) flu, E. coli, and salmonella enteritidis, governments and courts will receive requests for compensation from persons and businesses that are adversely affected by actions to control diseases.

While the citrus canker decision may herald a change in the balance between private property rights and exercises of the police power, it may not be a positive development. By granting greater compensation to property owners damaged by disease-control efforts, the decision introduces a moral hazard problem. With an implicit insurance policy, producers lack incentives to invest in disease-prevention measures. Absent disease prevention, more diseases will become established and disease costs will increase. This will result in more expensive agricultural production.

2.1. Successful Legal Developments

The food safety (1.3.1) and labeling legislation (1.3.4, 1.3.5, & 1.3.6) appear to be successful in furthering creditable goals. The safety regulations should reduce illnesses caused by contaminated food, and the labeling provisions allow consumers to make choices when purchasing food. Americans are becoming more concerned about where their food comes from and attributes so they can avoid products raised under disagreeable practices and with inputs that they prefer not be used. Inputs might include rbST, hormones, pesticides, and extensive transportation to market.

2.2. Unsuccessful Legal Developments

The developments of support for biofuel (1.1.1), expanding raw milk sales (1.3.2), and payments for property losses in eradicating a disease (1.7.3) seem to detract from social goals. Concerns exist that with so many funds going to support biofuels, the United States may be neglecting other green sources of energy.⁸⁶ Arguments also have been made that biofuel production is increasing food prices and causing pollution.⁸⁷ The sale of raw milk is seen by many to expose persons to unnecessary risks of disease. Payments to destroy disease-vector plants may reduce incentives to control disease, leading to the establishment of new diseases and increases in production costs in the long run.

3. New Trends

The raw milk and controlling citrus canker developments (1.3.2 & 1.7.3) suggest a trend of placing liberty interests above public health and social objectives. Some Americans want to have the freedom to assume risks and lack a sense of responsibility to society as existed in past centuries. A second trend is to provide more information on food products (1.3.4, 1.3.5, & 1.3.6) so that people have choices of what they buy and consume. Well-to-do Americans are willing to pay more for products with attributes they find laudable. A third trend is greater concern about the treatment of food animals (1.1.2 & 1.6.1). More Americans feel animals should receive better treatment and not be subjected to unnecessary pain or suffering.

3. *Id.* § 7545(o)(1).

4. Id. § 7545(o)(1)(B)(I).

5. Id. § 7545(o)(1)(B)(ii).

^{1.} Energy Policy Act of 2005, Pub. Law No. 109-58, §§ 1501, 1504; 119 Statutes 1076 (2006).

^{2. 42} U.S.C. § 7545(o).

6. Rick Mitchell, *EPA Administrator Says Biofuel Subsidies Not Chief Cause of Global Food Shortages*, 39 ENVIRONMENTAL REPORTS 870 (2008); Doug Koplow, "Biofuels - At What Cost? Government Support for Ethanol and Biodiesel in the United States; 2007 Update," Oct. 2007, available at http://www.globalsubsidies.org/files/assets/Brochure_-_US_Update.pdf

7. Terence J. Centner, *Limitations on the Confinement of Food Animals in the United States*, 23 JOURNAL OF AGRICULTURAL AND ENVIRONMENTAL ETHICS 469 (2010).

8. Florida Constitution, art. X, § 21 (2009).

9. California Health and Safety Code §§ 25990-25994 (2010).

10. Cargill, "Cargill Achieves Eight Critical Animal Welfare Assurance Goals," Minneapolis, Minnesota, April 2009, available at http://www.cargill.com/news-center/news-releases/2009/NA3011043.jsp; Smithfield Foods, Inc., "Smithfield Foods Makes Landmark Decision Regarding Animal Management," Smithfield, Virginia, Jan. 25, 2007. http://investors.smithfieldfoods.com/releasedetail.cfm?ReleaseID=295899 [assessed 30 April 2011].

11. Humane Society of the United States, "Ohio Livestock Care Standards Board Votes to Phase Out Veal Crates," April 5, 2011.

http://www.humanesociety.org/news/press_releases/2011/04/ohio_crates_04052011.html [assessed 30 April 2011].

12. Massachusetts v. Environmental Protection Agency, 549 U.S. 497 (2007); 42 U.S.C. § 7521(a) (2006).

13. Massachusetts, 549 U.S. at 532.

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