# Plan

I chose to integrate a sustainability project into my Regulatory Policy and Administration (POL SCI 306) course. In many cases, sustainability often is discussed within the context of individual choices or perhaps the practices of certain businesses of nonprofits. However, less attention generally is given to the ways in which specific public policies or regulations either encourage or discourage sustainable practices of these individuals or organizations. When they occur, these types of conversations usually focus on renewable energy or resource conservation.

For this project, however, I wanted to focus on a topic slightly more applicable to the daily lives of students, regardless of their interest in policy or regulations—food. As a result, the objective of my project was to *highlight the ways in which regulations can either inhibit or encourage sustainable practices, particularly with regard to sustainable food practices and agriculture.* Given that a broader course objective is to illustrate ways in which individuals can participate in the regulatory process, a secondary objective was to highlight current opportunities for student participation in this issue area.

To meet these objectives, a project was developed and implement during the third week of the semester. The topic of the week was the history and theories of regulation. The lecture and course discussion focus on the ways the rulemaking process has changed over time and the impacts these changes have had on current public policies and regulations. During the second half of the three hour night class, students were assigned two tasks.

- 1. In groups of four, students were given a handout (Exhibit 1) that details the history of the Food and Drug Administration (FDA) with a particular emphasis on activities and regulations related to food. It should be noted that the history was written by the FDA and, as a result, largely details what the organization views as its key accomplishments throughout its history. Using the handout, the groups were asked to distinguish activities and regulations that encouraged sustainable practices from those that did not. Students also were asked to predict the future agenda for the FDA.
- 2. Following the assessment of the FDA timeline, students were asked to assess recently proposed regulations associated with the Food Safety Modernization Act. One particular regulation dealt with the safety of produce and included components related to small family farms and sustainable farming practices. Students were shown the position of the National Sustainable Agriculture Coalition (NSAC) and its efforts to encourage public comments in support of sustainable agriculture (Exhibit 2).

Following the group discussion, the class reconvened to discuss the evaluations of the FDA, the future of sustainable agriculture regulations, and the opportunities to participate in the process. In total, the group and class discussions were scheduled for approximately 45 minutes. No written component was required for the project.

# Evaluation

Overall, the course activity was one of the liveliest of the semester. Rather than the allotted 45 minutes, discussion extended beyond 90 minutes to the end of the class period. Although students were not required to complete a written assignment related to the activity, relatively insightful conclusions were developed by each group and many students saw the applicability of current regulatory efforts to their own lives. Related to the first task of examining the impact of FDA activities and regulations on sustainable food practices, general conclusions of the groups included:

- 1. Throughout its history, the FDA has created regulations that address many aspects of food and food safety in the United States. The detail of these activities and regulations was surprising to several students. Prior to the project, a number of students knew food is generally safe, but they were not aware of the processes and efforts required to reach the current level of safety.
- 2. Although the number of regulations has been significant, many of them have actually addressed processed foods, additives, artificial colors, and packaging. While the efforts were designed increase food safety and reduce the rate of illnesses such as cancer, complete prohibitions seemed limited (i.e., many "artificial" products can still be used as long as certain guidelines are met).
- 3. Only recently has the FDA directly promoted healthy eating while, at the same time, discouraged certain types of foods. For example, in 2003 labeling requirements were changed to include trans fat content.
- 4. Despite recent efforts to encourage healthy eating, regulations really have not addressed the sustainability of food and agricultural practices. Although the regulatory activity discussed in the second task clearly showed that sustainability has been the focus of certain regulations, several student were disappointed that the FDA did not consider them of enough importance to be included in the timeline.
- 5. Students were divided on the future of the agency's agenda. A number of students wanted greater attention to sustainably grown food to encourage the practices by producers of all sizes. Other students, however, felt that the limited government attention has allowed sustainable agriculture to expand and become popular among those who buy produce from farmers markets and small, family farms. Any additional regulations might force these farmers to stop producing because of greater costs or additional safety procedures that may not be needed.

With regard to the second task, students generally were pleased to see a current example of a regulation that addressed sustainable agriculture. Again, however, there was significant discussion about balancing the status quo with additional regulations to promote safety and consistency among small farmers. The greatest interest was in the efforts of the NSAC to promote these types of practices and encourage public participation in the rulemaking process— an opportunity that most people generally do not realize is available.

For students in the class who generally were supportive of regulations more broadly, they were excited to see that the NSAC has been pushing the FDA to address the potential impact of GMOs, pesticide use, and antibiotic resistance. By creating additional regulations to address

these potential concerns, the FDA could indirectly promote the use of the sustainable agriculture among producers and increase its value among consumers—efforts that generally were missing from the FDA timeline of significant dates.

In general, students appeared to enjoy the project and its focus on sustainable food. Several students in the class have been involved with the SLO Food Alliance on campus and they made particularly insightful comments. Other students, because of their appreciation for farmers markets in the area or small-scale agriculture, also were very interested throughout the discussion. For all of the students in class, however, I think the project illustrated the ways in which changes to public policy and regulations can impact food safety and sustainable agriculture, even if the policies and regulations do not directly address sustainability or even include the word "sustainable" in their materials. Given its success, I plan on using this project in subsequent semesters.

# Exhibit 1

# Significant Dates in U.S. Food and Drug Law History

**1880:** Peter Collier, chief chemist, U.S. Department of Agriculture, recommends passage of a national food and drug law, following his own food adulteration investigations. The bill was defeated, but during the next 25 years more than 100 food and drug bills were introduced in Congress.

**1897: Tea Importation Act** passed, providing for Customs inspection of all tea entering U.S. ports, at the expense of the importers.

**1898:** Association of Official Agricultural Chemists establishes a **Committee on Food Standards** headed by Dr. Wiley. States begin incorporating these standards into their food statutes.

**1906:** The original **Food and Drugs Act** is passed by Congress on June 30 and signed by President Theodore Roosevelt. It prohibits interstate commerce in misbranded and adulterated foods, drinks and drugs. **The Meat Inspection Act** is passed the same day. Shocking disclosures of insanitary conditions in meat-packing plants and the use of poisonous preservatives and dyes in foods were the major problems leading to the enactment of these laws.

**1907: First Certified Color Regulations**, requested by manufacturers and users, list seven colors found suitable for use in foods.

**1913: Gould Amendment** requires that food package contents be "plainly and conspicuously marked on the outside of the package in terms of weight, measure, or numerical count."

**1930:** McNary-Mapes Amendment authorizes FDA standards of quality and fill-of-container for canned food, excluding meat and milk products. The name of the Food, Drug, and Insecticide Administration is shortened to Food and Drug Administration (FDA) under an agricultural appropriations act.

1935: U.S. Government begins publication of the Federal Register.

**1938: The Federal Food, Drug, and Cosmetic (FDC) Act of 1938** is passed by Congress, containing new food-related provisions: authorizing standards of identity, quality, and fill-of-container for foods and authorizing factory inspections.

1939: First Food Standards issued (canned tomatoes, tomato purée, and tomato paste).

**1949:** FDA publishes **guidance to industry** for the first time. This guidance, "Procedures for the Appraisal of the Toxicity of Chemicals in Food," came to be known as the "black book."

**1950: Oleomargarine Act** requires prominent labeling of colored oleomargarine, to distinguish it from butter.

**1958: Food Additives Amendment** enacted, requiring manufacturers of new food additives to establish safety. The Delaney proviso prohibits the approval of any food additive shown to induce cancer in humans or animals.

**1960: Color Additive Amendment** enacted, requiring manufacturers to establish the safety of color additives in foods, drugs and cosmetics. The Delaney proviso prohibits the approval of any color additive shown to induce cancer in humans or animals. The **Fair Packaging and Labeling Act** requires all consumer products in interstate commerce to be honestly and informatively labeled, with FDA enforcing provisions on foods, drugs, cosmetics, and medical devices.

**1969:** FDA begins administering **Sanitation Programs** for milk, shellfish, food service, and interstate travel facilities, and for preventing poisoning and accidents. **Low-acid food processing** regulations issued, after botulism outbreaks from canned foods, to ensure that low-acid packaged foods have adequate heat treatment and are not hazardous.

**1977:** Saccharin Study and Labeling Act passed by Congress to stop FDA from banning the chemical sweetener but requiring a label warning that it has been found to cause cancer in laboratory animals.

**1980: Infant Formula Act** establishes special FDA controls to ensure necessary nutritional content and safety.

**1982:** FDA publishes first **Red Book** (successor to 1949 "black book"), officially known as Toxicological Principles for the Safety Assessment of Direct Food Additives and Color Additives Used in Food.

**1988: Food and Drug Administration Act** of 1988 officially establishes FDA as an agency of the Department of Health and Human Services.

**1990:** Nutrition Labeling and Education Act requires all packaged foods to bear nutrition labeling and all health claims for foods to be consistent with terms defined by the Secretary of Health and Human Services. The law preempts state requirements about food standards, nutrition labeling, and health claims and, for the first time, authorizes some health claims for foods. The food ingredient panel, serving sizes, and terms such as "low fat" and "light" are standardized.

**1992:** Nutrition facts, basic per-serving nutritional information, are required on foods under the Nutrition Labeling and Education Act of 1990. Based on the latest public health recommendations, FDA and the Food Safety and Inspection Service of the Department of Agriculture recreate the food label to list the most important nutrients in an easy-to-follow format.

**1997: Food and Drug Administration Modernization Act** reauthorizes the Prescription Drug User Fee Act of 1992 and mandates the most wide-ranging reforms in agency practices since 1938. Provisions include measures to accelerate review of devices, regulate advertising of unapproved uses of approved drugs and devices, and regulate health claims for foods.

**2003:** To help consumers choose heart-healthy foods, the Department of Health and Human Services announces that FDA will require **food labels to include trans fat content**, the first substantive change to the nutrition facts panel on foods since the label was changed in 1993. An obesity working group is established by the **Commissioner of Food and Drugs**, charged to develop an action plan to deal with the nation's obesity epidemic from the perspective of FDA.

**2004:** Passage of the **Food Allergy Labeling and Consumer Protection Act** requires the labeling of any food that contains a protein derived from any one of the following foods that, as a group, account for the vast majority of food allergies: peanuts, soybeans, cow's milk, eggs, fish, crustacean shellfish, tree nuts, and wheat.

**2011: FDA Food Safety and Modernization Act (FSMA)**. FSMA provides FDA with new enforcement authorities related to food safety standards, gives FDA tools to hold imported foods to the same standards as domestic foods, and directs FDA to build an integrated national food safety system in partnership with state and local authorities.

Source: Adapted from the FDA "Milestones in U.S. Food and Drug Law History" with special emphasis on food.

# Exhibit 2





