1997

Family farming | the path not taken

Thomas Joseph Antonick

The University of Montana

Let us know how access to this document benefits you.
Follow this and additional works at: https://scholarworks.umt.edu/etd

Recommended Citation
Antonick, Thomas Joseph, "Family farming | the path not taken" (1997). Graduate Student Theses, Dissertations, & Professional Papers. 2321.
https://scholarworks.umt.edu/etd/2321

This Thesis is brought to you for free and open access by the Graduate School at ScholarWorks at University of Montana. It has been accepted for inclusion in Graduate Student Theses, Dissertations, & Professional Papers by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact scholarworks@mso.umt.edu.
The University of MONTANA

Permission is granted by the author to reproduce this material in its entirety, provided that this material is used for scholarly purposes and is properly cited in published works and reports.

** Please check "Yes" or "No" and provide signature **

Yes, I grant permission  X
No, I do not grant permission

Author's Signature  [Signature]
Date  7/28/97

Any copying for commercial purposes or financial gain may be undertaken only with the author's explicit consent.
FAMILY FARMING: THE PATH NOT TAKEN

by

Thomas Joseph Antonick
B.A. The University of Montana
Presented in partial fulfillment of the requirements
for the degree of
Master of Arts
The University of Montana
1997

Approved by:

[Signatures]

Chairperson
Dean, Graduate School

Date 7-29-97
Family Farming: The Path not Taken
(85 pp.)

Director: William Chaloupka

Family farming had been an integral component of United States agricultural policy from the Revolutionary period through the latter part of the twentieth century. The role of the U.S. government increased tremendously following the Great Depression. However, the family farm began to be replaced by industrial agribusiness by the late 1970s.

In 1981 the Department of Agriculture published a report stating that government policies would have to be revamped in order to reverse the trend towards industrial agribusiness. By the end of the 1980s it had become apparent that family farming occupied a diminished role in overall agricultural production. Thus, a choice had been made to replace family farms with industrial agribusiness as the major component in terms of overall U.S. agricultural production.

The 1995 farm bill made tremendous changes in U.S. farm policy. The stated intent is to end government involvement in agricultural policy. There are many implications associated with this action. The transition from family farming to industrial agribusiness has led to tremendous concentration in both production and marketing. Additionally, agribusiness farming practices have far greater ecological impacts than the methods employed by family farmers.

As a result of these developments at the federal level, state governments, and elements in the private sector, have intervened. Consequently, there have been attempts to bolster opportunities for potential family farmers. However, entry into farming still requires an enormous amount of capital. This is a situation that is quite a contrast to the predicament faced by farmers of previous generations.

Family farmers, and the opportunity to be one, have become almost non-existent. This development ushers in a new era in agriculture. Many of the consequences have been predicted, and others will evolve as the end of government involvement in agriculture moves closer. Regardless, for present and future generations, a freedom has been lost which dates back to the Revolutionary Period, the freedom to farm.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>ABSTRACT</th>
<th>ii</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHAPTER ONE - INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>CHAPTER TWO - SETTING THE BACKGROUND</td>
<td>8</td>
</tr>
<tr>
<td>The Seventies</td>
<td>8</td>
</tr>
<tr>
<td>The Eighties</td>
<td>16</td>
</tr>
<tr>
<td>CHAPTER THREE - AN OVERVIEW OF TWO CRITICAL POLICIES</td>
<td>27</td>
</tr>
<tr>
<td>Subsidy Policy</td>
<td>28</td>
</tr>
<tr>
<td>Tax Policy</td>
<td>33</td>
</tr>
<tr>
<td>CHAPTER FOUR - THE 1995 FARM BILL</td>
<td>36</td>
</tr>
<tr>
<td>The Early Nineties</td>
<td>36</td>
</tr>
<tr>
<td>The 1995 Farm Bill</td>
<td>38</td>
</tr>
<tr>
<td>The CRP and Soil Erosion</td>
<td>40</td>
</tr>
<tr>
<td>CHAPTER FIVE - CULTURAL AND SOCIOECONOMIC IMPLICATIONS</td>
<td>48</td>
</tr>
<tr>
<td>The Current Situation</td>
<td>48</td>
</tr>
<tr>
<td>Historical Analysis</td>
<td>51</td>
</tr>
<tr>
<td>Implications of Concentration</td>
<td>54</td>
</tr>
<tr>
<td>Ecological Implications</td>
<td>60</td>
</tr>
<tr>
<td>CHAPTER SIX - OPTIONS FOR THE FUTURE</td>
<td>65</td>
</tr>
<tr>
<td>Sustainable Farming</td>
<td>65</td>
</tr>
<tr>
<td>Alternatives Generated by the State and Private Sector</td>
<td>69</td>
</tr>
<tr>
<td>CHAPTER SEVEN - CONCLUSIONS</td>
<td>73</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>80</td>
</tr>
</tbody>
</table>
CHAPTER ONE
INTRODUCTION

Historians tell us that when Thomas Jefferson penned the words "life, liberty, and the pursuit of happiness." (Brodie 1974, p.122) he had in mind a nation of farmer-artisans owning land and profiting from it in an environment that afforded economic opportunity to the common man and not just the landed gentry. Jefferson believed that America was best represented as a country of yeoman farmers. "Those who labour in the earth are the chosen people of God, if ever he had a chosen people" (Ibid. p.156). Jefferson felt that it was in the best interests of democracy for citizens to be able to obtain farmland. Throughout Jefferson's time, one of his great concerns was how this issue would be handled in the future (Ibid. p.116).

By the latter part of the twentieth century the federal government had become heavily involved in agricultural policy. This thesis examines U.S. agricultural policy regarding the family farm during the 1980s and 1990s. The point of this project is to study the policy choices that were made and examine the ramifications of these choices, as it relates to the family farm. Furthermore, this study explores the choices that were made that ultimately spelled doom for the family farm.

The idea that the Government has encouraged the notion of small independent farmers can be traced back to the
revolutionary era. From the Ordinance of 1787 through the Homestead Act of 1862 and culminating in the Reclamation Act of 1902, the principal federal role was to make land easily accessible to would-be farmers. Throughout this period, the policy of the nation was more or less well-understood: disperse publicly owned lands to small and modest-sized landowners who would operate the nation's farms as yeoman farmers-owner-operators (Strange 1988, p.14). As a result, the United States accomplished the largest transfer of national resources to the common citizens the world has ever known (Farm Journal 1995, p.32).

The Great Depression was responsible for expanding the role of the federal government in agricultural policy. In 1933, direct government intervention in agricultural markets was accomplished with the passage of the Agriculture Adjustment Act. Through the "Triple A," as it is sometimes called, the government sought to help farmers survive through difficult times (Kilborn 1984, p.23[A]).

The passage of the Act benefited family farms in a new manner because, as one scholar of the period puts it, "an overwhelming majority of the country's six million farms were still family operations.... A central ambition in the Roosevelt program was to keep as many families on the land as possible" (Worster 1979, p.155).

Following the 1930s, farm sizes increased and ownership concentrated in fewer hands. Through the 1970s the majority of farms were owned and operated by family farmers. In
1978, non-family farms accounted for only 7 percent of total agricultural sales (Krause 1983, p.22). However, a mere decade later, over half the food in the U.S. was produced on 4 percent of non-family farms (Strange 1988, p.41).

This transition from family farming to industrial agribusiness occurred in a decade. A 1981 United States Department of Agriculture (USDA) report, entitled *A Time to Choose*, predicted such a transformation. It offered direction to policymakers who were to decide the future of American agriculture.

It has become increasingly evident that the gains to the Nation that remain to be captured from the continued shift to larger and larger farming operations have become smaller over time. We have passed the point where any net gain to society can be claimed from policies that encourage large farms to become larger (U.S.D.A. 1981, p.142).

At the same time, several studies demonstrated widespread public support for the concept of the family farm. According to a Lou Harris poll taken in the late 1970s, the public’s preference was for a ‘‘country which has a relatively large number of small farms.’’ Significantly, there is a broad-based consensus on this issue, with strong support for the family farm in evidence in every region of the country and in every significant demographic subgroup of the population’’ (U.S.D.A. 1981, p.16).

Approximately a decade later, another nationwide survey showed continued support for family farming. The authors of this study operated from the premise that ‘‘because
agricultural policies represent significant cost to the consumers and taxpayers, the issue was how far the public was willing to support special policies to save the family farm" (Epperson, Jordan, and Variyam 1990, p.257). Nearly 53 percent of the public thought saving the family farm was more important than obtaining greater efficiency in food production. Only 26.3 percent stated a preference for greater efficiency. Over 57 percent thought that the government should have a special policy to preserve family farms (Ibid. p.259).

It appears that government policy, at least until the late 1970s, was in agreement with public sentiment. Yet in 1994 it was predicted that by the year 2010 only 360,000 farms would account for four-fifths of farm output. Additionally, the operators and families on those farms would account for only 0.5 percent of the nation's population (Tweeten 1994, p.24[C]). This situation paints a picture that is quite a contrast to the Jeffersonian vision of American agriculture. Thus the question becomes, how did agriculture policy change so dramatically despite a public preference for family farms and, at the same time, against the recommendations of the government's own experts who stated in A Time to Choose that it seemed fairly certain that the (then) future economic climate, combined with a continuation of past policies and programs, would continue, and even accelerate, the shift to large and super-large farms. Therefore, the study concluded, unless policies and
programs are changed so that they counter, instead of reinforce and accelerate the trends towards ever-larger farming operations, the result will be a few large farms controlling food production (U.S.D.A 1981, p.142).

Chapter Two begins the process of explaining this situation. However, before turning to that chapter, it would be useful to define a number of the terms used in this thesis. Perhaps the most difficult and confusing problem within this thesis, and agricultural policy, is to render precise the term "family farm."

The term is a broad label.... Over the years, policy-makers, economists, sociologists, and many others have attempted to define the family farm to use it as a program-directing tool. The testimony at public meetings reaffirmed previous findings that broad agreement on a definition of family farm—by acreage, income, sales, legal form, or any other readily available measurement is impossible for the purpose of economic and policy analysis and perhaps for program implementation also.... But the ideas behind the symbol, the values attached to it, reflect many, if not most, of the goals Americans of all occupations and backgrounds seek in food and agricultural policy (U.S.D.A. 1981, p.16).

However, despite the obvious difficulties, A Time to Choose identified three major types of farms: rural residences, primary farms, and megafarms. It should be noted that officially, a farm is defined as a place that sells at least $1,000 worth of agricultural products a year (King 1984, p.12[A]).

"Rural residences" are made up of farms that make less than $40,000 a year. These are operations with little
production and high off-farm incomes. In 1981 these "rural residences" made up 44.4 percent of all places counted as farms. Most of these farms produce too little to be able to rely fully or primarily on farming for a livelihood; they must depend on supplemental, nonfarm income. It is not until a farm achieves around $40,000 in gross sales that farm income alone begins to approach an amount considered adequate for an acceptable standard of living (U.S.D.A. 1981, p.44).

"Primary farms" generate more than $40,000 in gross sales and their operators depend primarily upon farming for their incomes (U.S.D.A. 1981, p.46). About seven eighths of all farm output is produced on farms which market over $40,000 in sales (Strange 1988, p.82).

The third group, "mega farms," constitutes the farms with sales over $200,000 yearly. Since A Time to Choose was written, this group is sometimes divided into two groups: those with sales over $200,000 yearly, and with sales over $500,000 yearly.

Defining farms by income is a simple way to answer the problem of identifying farm groups. In order to better define the terms the following illustrates what might be described as the extremes of the types of farms found in the United States.

Family farming (primary farming) tends to be owner-operated, entrepreneurial, dispersed, diversified, at equal advantage in open markets, family centered, technologically progressive, striving for production processes in harmony with nature, resource
conserving, farming as a way of life (Strange 1988, p.34).

Industrial agribusiness (megafarms) tends to be industrially organized, financed for growth, large scale, concentrated, specialized, management centered, capital-intensive, at an advantage in controlled markets, standardized in production processes, resource consumptive, farmed as a business (Ibid, p.38).

The issue here is the character of rural life and the organization of a major sector of the economy—a sector that resonates to the very basis of American life. Agriculture constitutes the last vestige of small-scale enterprise and widespread ownership of productive assets in American society (Ibid, p.251). The family farm has long held a central place in American politics and society. It is more than one interest among many; it is a special commitment Americans made, dating back to the founders.

In order to better understand the family farm situation, in the 1980s and 1990s, it is helpful to set the background by analyzing the early 1970s. Chapter Two examines this time period.
CHAPTER TWO
SETTING THE BACKGROUND

The Seventies

The events that lead to the farm crisis of the 1980s were set in motion in 1973. Several events had combined to produce a decrease in overall world food production. In 1971 and 1972 there was a severe drought in Africa and a rice crop failure in Korea and other parts of Asia (Morgan 1980, p.213).

At the same time, President Richard Nixon was pursuing new foreign markets for U.S. agricultural commodities. In 1972 Nixon went to China on his historic mission. Concurrently, Japan began to buy American agricultural products, especially grains. By 1981 Japan purchased over three-fourths of its corn from the United States (Strange 1988, p.18). U.S. grain shipments increased from 34 million tons in 1971 to 82 million tons by 1975. In addition, U.S. earnings from its agricultural exports grew from $7.7 billion to $21.3 billion (Morgan 1980, p.39).

The American wheat inventory (the average amount of wheat stored for future sale throughout the year) stood at a comfortable 23.5 million tons in 1972. Just over a year later, that inventory had slipped to under 7 million tons (Ibid, p.214). In turn, the price of U.S. farm products increased due to the declining inventory. From 1972 to 1974 the price of wheat went up 132 percent, from $1.76 to $4.09
a bushel. Corn was up 92 percent and soybeans 52 percent in the same period (USDA 1984, p.18).

From the Depression through the 1960s farming was mostly a domestic matter. Exports to foreign markets never exceeded $7 billion, so American farmers were largely insulated from the buffetings of world markets. Agricultural exports, only $7.3 billion in 1970, grew to $43.8 billion by 1981 (Kilborn 1984, p.22[A]).

Between 1950 and 1970, U.S. wheat exports increased from 10 to almost 20 million tons, and corn exports from 2.5 to 12.5 million tons. Then between 1971 and 1975, the increase in the international trade nearly equaled the growth in the whole previous postwar period. Global trade in wheat, corn, rice, sorghum, barley, oats, and rye grew by 50 percent (from 114 to 157 million tons), and America supplied most of the increase (Morgan 1980, p.214).

Nixon's 1971 devaluation of the dollar also encouraged the export of agricultural commodities (Ibid, p.213). The decision to let the dollar "float" in foreign exchange markets effectively lowered the price of U.S. products and made American exports more competitive at precisely the same time foreign demand increased dramatically (U.S.D.A. 1981, p.24).

In 1974, as export demand boomed, crops failed in many regions throughout the world. Agricultural experts turned from the old problems of trying to restrain production and manage surpluses, to worrying about how to feed a hungry
world (Robbins 1985, p.21[A]). For example, the Soviet Union began to buy large amounts of U.S. grain.

Farmers, at the urging of the Department of Agriculture, planted fields hardly broken from the great dust bowl of the thirties (Gussow 1981, p.128). Seeking to maximize U.S. farm output in the face of a strong export market, the federal government did away with acreage set-asides for major crops. In 1974 four million acres of former grassland in the Great Plains had been plowed up and seeded to grain following the massive Russian wheat purchase of 1972, when the per bushel price shot up to almost $6.00. Secretary of Agriculture Earl Butz urged farmers to plant fence row to fence row (Worster 1980, p.231). Between 1973 and 1981, the number of acres planted to crops on U.S. farms increased by 12 percent, from 316 million to 353 million acres (USDA 1984, p.2).

This increase in acreage was accompanied by another development—farmland prices increased. The value of farmland more than quadrupled, from $176 billion in 1970 to $715 billion in 1981, but the debt borrowed against it rose almost as fast, from $29 billion to $96 billion (Strange 1988, p.22).

Ever-present experts in government, the universities, and the farm trade publications were advising farmers to expand their operations (Strange, 1988 p.19). The practice of borrowing against what one already owns in order to buy more is called leverage. Leveraged buying became the hallmark of excellence in the 1970s. Consultants recommended it, farm magazines touted its virtues, agricultural colleges wrote
fine reports demonstrating its wisdom. A progressive farmer was a highly leveraged farmer who knew how to manage money (Ibid. p.20).

This situation was acceptable as long as farm production kept its balance with the rapidly expanding demand for the U.S. export market.

However the agricultural outlook began to dim in the late 1970s. Farm production had already outstripped foreign demand so much so that by 1977 the falling prices of key export crops, especially wheat, corn, and cotton, were creating significant problems for farmers (Ibid, p.99). In addition, some U.S. trading partners were increasing their production, partially because of the introduction of green revolution technology, or because Lesser Developed Countries (LDC’s) were burdened by debts that made an increase in their domestic production a necessary priority. As the dollar strengthened, and federal price supports remained in place, U.S. crops became too expensive for many potential customers, further intensifying the impact of each of these factors (Miller 1988, p.256).

The cumulative effect of this chain of events was created as a result of policies that overstimulated investments through the 1970s, and other governmental actions that then brought on a credit squeeze. For farmers, the groundwork was laid through financial policies of government institutions, such as the Federal Reserve Board and the Farmers Home Administration, which permitted
borrowing at interest rates that were lower than the rate of inflation through the 1970s (Robbins 1985, p.20[A]). This public subsidy predictably increased farm borrowing— to its highest level ever— precisely at a time when subsidies should have been falling (Riemenschneider 1985, p.3[A]).

In response to these developments, the Carter administration implemented several policy changes, but none of these satisfactorily addressed the major structural problems. In the judgment of one scholar, "no overall change in federal policy came. Instead the government responded with a temporary program to pay farmers not to plant a portion of their fields, and an expanded program of federal credit. The latter was exactly what wasn't needed" (Strange 1988, p.23).

Another development emerged during the 1970s. A period of rapid centralization was underway in an industry that had resisted such a move much more successfully than most other American industries. Most farm failures mean another farm's growth: two out of every three farmland purchases expanded existing farms. Sped up by the farm depression, this process doubled the average farm size in just three decades (Lappe 1985, p.19[A]).

Whereas previous decades had seen larger family farms consolidate smaller operations, this transition brought agriculture into the era of agribusiness. In addition, the Department of Agriculture projected that by the year 2000,
half the farm products would come from the top 1 percent of U.S. farms (Lin, Coffman, and Penn 1980, p.13).

But even if the crucial transition, from family farming to industrial agribusiness, occurred in the 1980s, the conditions that drove it had begun to emerge long before. Following the Great Depression, the emphasis in agriculture has been to 'get big or get out' (Berry 1977, p.41). Proponents of the new agricultural technology argued that increased productivity would produce rural depopulation as a positive result. For example, it was argued that a retooling of federal policy would have as one of its accomplishments a reduction in the number of people needed to feed the nation and produce exports. This viewpoint seemed particularly strong during the 1970s. Nixon's Secretary of Agriculture, Earl Butz, often espoused the principle of concentrated farming among large holders. "Each American farmer now feeds himself and fifty-six others.... 96 percent of America's manpower is freed from food production" (Ibid, p.32). For example, between 1950 and 1955 more than a million workers migrated out of the agricultural sector and into other sectors of the economy (Ibid, p.162).

The concept of 'get big or get out' was slowly altering the makeup of U.S. farms. Since the early 1960s, the basic structure of American agriculture has been changing. Family-owned farms have grown larger and larger, and the total area under cultivation expanded. The costs of
operating these spreads have grown proportionately, and farmers became some of the country's largest individual borrowers (King 1985, p.7[A]).

By 1978, there were 2.5 million farms occupied by less than four percent of the country's population. The largest 20 percent of those farms, by sales, accounted for four out of every five dollars produced. Observers, however, were pointing to pressures on the "disappearing middle," the group of medium-sized places between the big operations and the part-time farms (U.S.D.A. 1981, p.6).

As a result of the growing farm problem, President Carter's Secretary of Agriculture, Bob Bergland, commissioned a study to examine the situation. In 1981 the United States Department of Agriculture (USDA) published its report, A Time to Choose.

The study examined how much net farm income varied by farm size during selected periods since 1960. It found that farms with sales over $100,000 had 50 percent greater variability in income during the period 1962-72 than any group of smaller farms, and twice as much variability in the period 1973-78. They concluded that overall instability in farm income was increasing in American agriculture. The problem was particularly acute for larger farms because of their greater reliance on purchased inputs and higher fixed costs (Strange 1988, p.116).

The study argued that mega farms trade labor for capital, with no improvement in production efficiencies.
They contributed to rural unemployment, while producing no corresponding decrease in food costs. The study concluded: "We have passed the point where any net gain to society can be claimed from policies that encourage large farms to become larger" (Brown 1983. p.30[A]).

The study reworked existing calculations on economies of scale in agriculture and reconfirmed their findings: by the time a farm is large enough to produce $45,000 worth of farm goods per year, it is already 90 percent efficient. When it grows to the level of $133,000 in production (still a modestly sized farm), it has attained as much efficiency gain as it will achieve, even if it grows much larger (Ibid, p 30[A]).

As a result of the greatly changed mix of farm firms and their economic characteristics, continuation of past programs and policies would likely promote future problems. Examples included the continued concentration of economic power, inflation in land prices, and unwise use of resources, all of this without apparent benefit to the rest of society (U.S.D.A. 1981. p.41).

_A Time to Choose_ argued that the United States was at a crossroads. Federal agricultural policy would need to be changed in order to encourage the continued existence of the family farm. The report stated that powerful forces underlied the trends toward concentration, and to slow those trends would require major changes in agricultural policies. More than a single change in a policy or program would be
necessary. Instead, it would require numerous changes across several areas, all of which must be more carefully coordinated and harmonized. But, if the recommended changes in the tax code, commodity, credit, resource-conservation, research and other programs were made, there would be a slowing of the trend towards greater concentration. Slowing this trend would be beneficial to farmers and consumers, and in the best long-term interests of the U.S. (Ibid. p.152).

The study demonstrated that federal choices faced in the 1980s would determine the future of family farming, given the significant pressures facing the industry. One of the major factors influencing the authors was the understanding that in 1978 about 70 percent of those who owned farmland were over 50 years old. That land would be changing hands in the next 20 or 30 years (Ibid. p.6). This large group of aging farmers would likely sell their holdings. The question was who would buy it, corporations or family farmers?

The Eighties

Implementing the changes recommended in the report would be up to the incoming President, Ronald Reagan, who had been elected in 1980. An indication of the approach his Administration would take was hinted when he named John Block Secretary of Agriculture. Block exemplified industrial agribusiness. As the New York Times described, Block "is a member of an exclusive circle, the 5 percent of
the country's farmers who produce half of its agricultural output. He is also one of a still smaller group, the 1 percent that earns nearly two-thirds of all farm income'' (Robbins 1981, p.1[A]).

The Block farm demonstrated the opposite of the Jeffersonian agrarian model, instead it represented corporate agribusiness. This operation had two managers overseeing five employees. Mr. Block said his holding was representative of the large grain and livestock farms, although his sales were somewhat higher than the $500,000 figure commonly used to describe the largest U.S. farms (Ibid. p.1[A]).

Very early on in the Reagan Administration, problems began to appear in the agricultural sector of the economy. The growth in the export market halted, and then began to decline. Perhaps for political reasons, some loudly blamed Carter's 1979 embargo of grain sales to the Soviet Union after its intervention in Afghanistan, but that measure was far outdone by other factors. Eventually the Reagan administration admitted that the embargo was not a prime factor in the collapse of exports (Strange 1988, p.26).

As exports increased in the 1970s, American farmers had become more dependent on export markets. By the 1980s, farmers were reliant on exports for half to two-thirds of the major grain crops. Without these exports, surpluses quickly piled up, prices fell, and farm incomes declined (King 1985, p.7[A]).
The most immediate problem facing the Reagan Administration was the ever growing stockpile of agricultural commodities. From 1973 until 1982, corn in storage increased from 484 to 3,120 million bushels. Wheat stocks bloated from 340 to 1,515 million bushels (Strange 1988, p.23). To cushion the effect of declining exports, Congress followed the Depression-born formula of controlling production. In order to decrease production, subsidies were tied to reductions in tilled acreage (King 1985, p.7[A]).

In order to better understand these first years under Reagan, a comparison of statistics from 1979 through 1983 illustrates the effects of the Administration's agricultural policies. In 1979, the largest 1 percent of farms (mega farms) earned 42.1 percent of all profits. In 1981 the top 1 percent of all farms took in 66.3 percent of all farm profits. In addition, the only farm group averaging losses in 1979 was the group (rural residences) with sales under $5,000 (Robbins 1983, p.8[A]).

In 1983 there were 380,000 farmers, representing 16 percent of all farmers, with sales between $40,000 and $100,000. The average income from farming for this group was below the poverty level, about $5,500. In addition, those with sales between $20,000 and $40,000 earned an average $505 (Robbins 1983, p.12[B]). At the same time, there were 24,000 farms with sales exceeding $500,000 annually. Representing 1 percent of all farms, they accounted for 29 percent of all sales. In addition, they
received nearly half of all the profits earned (Kilborn 1984, p.22[A]).

A special report from the Office of Technology Assessment stated that at the beginning of 1983, 86.6 percent of the 2.2 million farms were classified as small with annual gross sales ranging from $5,000 to $19,900. Large farms, with sales from $200,000 to $499,999, made up only 4.2 percent of the total and very large farms, those with sales of $500,00 or more made up only 1.2 percent. But the large and very large farms took in 53.5 percent of the total cash receipts of all 2.2 million farms, while the middle-sized ones received only 19.1 percent (King 1985, p.25[A]).

The Reagan Administration implemented a novel approach in agricultural policy in 1983. In order to reduce the growing stockpiles of surplus crops, the Administration proposed the Payment-In-Kind (PIK) program. Under this program, farmers were paid in commodities from existing stockpiles. At a cost of nearly $10 billion dollars, the program took nearly 80 million acres out of production (Kilborn 1984, p.22[A].) In addition, Block, with the support of Budget Director David A. Stockman, unsuccessfully attempted to eliminate subsidies. Furthermore, Block refused to use some of the special farm aid funds Congress had appropriated in 1981. In 1983 a federal court ordered Mr. Block to spend the money (King 1983, p.16[B]).
In 1984, the Reagan Administration proposed legislation to sharply curtail government price supports for farmers. The primary proposal was that the Government would help farmers only when their commodities fell below 75 percent of the average open-market price of the previous five years. But the 75 percent support price for each year would be established on the basis of the open world market of the previous five years. Prices rarely fall to such a level, so the system would protect farmers only in periods of the sharpest declines (Kilborn 1984, p.4[A]). Critics of the Reagan Administration plan stated that a wide open, free-market policy would force many farmers off the land, leading to oligopolies of superfarmers and the collapse of thousands of farming communities. Instead, they suggested policies to help the primary farmers (Kilborn 1984, p.23[A]). At the same time, legislative remedies that nearly all farmers favored, including emergency credit, a moratorium on foreclosures, and more stimulation of farm exports were not being implemented (King 1983, p.11[A]).

By July of 1984, farm income was the lowest ever recorded in the United States. Total annual net income from farming in the previous four years, adjusted for inflation, averaged less than one-third that of ten years before, and less than half of 1979's (Lewis 1983, p.23[A]). In September of 1984 the Reagan Administration instituted a $650 million credit relief package. However, by February of 1985, only 21 loans had been approved using $44 million of
the $650 million authorized (Boyd 1985, p.26[A]). By the end of 1984, farms were failing at a rate of 36 per 1,000, more than triple the rate of failure for other businesses (Kilborn 1984, p.22[A]).

In a 1985 special report, the Office of Technology Assessment found that price support loan programs, which the Reagan Administration said pushed up American farm commodity prices to uncompetitive levels, tended to provide more wealth and growth benefits to farms with sales over $200,000 a year. In contrast, income supports in the form of subsidies, which the Administration wanted to phase out, were more help to farmers with sales from $40,000 to $200,000. "Directing income supports to middle-sized farms could be an effective policy for prolonging their survival," the report stated (King 1985, p.25[A]).

In 1985 many agricultural experts argued that the government should act to ease the hardships resulting from its changes in economic strategy. Since 1983 many Government economists had explained that the problems for farmers were primarily concentrated among middle size farms with annual sales of over $40,000. The largest, those with sales over $500,000 were relatively untouched by the farm depression (Robbins 1985, p.26[A]). The full-time, primary farmers had been hurt the most by the way the farm law and the budget deficit had worked to depress the farm economy (Kilborn 1985, p.9[A]).
The original 1985 budget proposal called for $29 billion in cuts in farm-support programs over three years. As a result of wide criticism that proposal was scaled down to $16 billion. Democrats and some Republicans contended that the Administration's proposals would shut down many medium-sized farms already squeezed by the worst farm crisis since the Depression. Despite the expense involved, they said, farm-subsidy programs must be saved if tens of thousands of mid-sized farmers were to survive (Shenon 1985, p.11[A]).

President Reagan vetoed legislation that would have provided Federal loan guarantees and other financial help to farmers in the spring of 1985. According to Reagan, farmers "in need of immediate help are less than 4 percent, or around 4 percent at best, of all farmers in the United States." Agriculture Secretary John Block, challenged at a Senate Agricultural Committee hearing, stated that the President "misspoke." Agriculture Department figures indicated that one-third of all family-size commercial farms faced financial difficulty in 1985. This group included 679,000 farms, and 229,000 of these farms faced problems ranging from difficulty in servicing debts to technical insolvency. According to the New York Times, this report was described as not being widely available. and Michael Masterson, a special assistant to Mr. Block, said it was his understanding that it had not been scheduled for release (Farnsworth 1985, p.15[A]).
To better understand the implications of Reagan's actions, it is necessary to depict the predicament faced by U.S. farmers in 1985. Reagan's high deficit, high interest rate policies had so strengthened the dollar that American agriculture was in a trap. Those two factors had a tremendous impact on farming: high interest rates because farmers are heavy borrowers, and the strong dollar because American farm goods were thus more expensive to foreign purchasers (Kilborn 1984, p.1[A]). The high dollar of 1985 brought Canadian hogs into Iowa, and filled Minnesota grain elevators with Argentine and Australian wheat. Concurrently a longer-term problem loomed on the horizon. Third World nations like India, China and Brazil were no longer U.S. agricultural export markets; buoyed by high U.S. prices, they had become competitors (Phillips 1990, p.143).

The Reagan Administration's proposals in 1986 formed a two part strategy. The first part called for the gradual elimination of the farm price support system in place since the Great Depression. The second part removed the Agriculture Department from the emergency loan business and replace it with already existing commercial banks (King 1985, p.7[B]).

John R. Block defended Reagan's plan to eliminate most farm price supports and subsidies. Responding to questions from reporters regarding the reduction of supports at a time when many farmers were perilously close to foreclosure, Block stated "any farm program we write won't make a whit
of difference in how many farmers fail or succeed' (King 1985, p. 8[A]).

By 1987 speculators and other absentee investors accounted for about 31 percent of farm transactions, up from 23 percent in 1983. As landholdings concentrated, thousands of farmhouses were torn down, thousands of miles of fences ripped out (Phillips 1990, p. 194).

In autumn 1987 Don Paarlberg, a former senior official in the Eisenhower, Nixon and Ford agricultural departments, feared a social revolution as he saw outside capital flooding in to buy up agricultural holdings. "We are drifting toward a structure of agriculture which approaches what we twice (after the Revolution and in the Civil War) previously rejected—a wealthy, hereditary landowning class, with new entrants almost ruled out unless they are well-to-do (Ibid. p. 194).

In the Farm Belt the 1981-87 collapse in commodity and land prices was worse than in the 1920s. Huge amounts of wealth vanished in the farm states. Estimates indicated that farmland values declined from $712 billion in 1980 to $392 billion in 1986 (Ibid. p. 193). From 1972 to 1981, the value of farmland had increased from an average of $219 to $823 per acre. By early 1986, it had fallen to $596. Adjusted for inflation since 1972, it had fallen all the way back to $232 (Strange 1988, p. 28).

In 1988 farm prices were beginning to recover. In 1987-88, farmland values bounced back somewhat (Phillips
1990, p.144). However, by 1988 fewer farmers could benefit from this recovery as many had left their farms, voluntarily or through foreclosure (Ibid, p.193). Between 1980 and 1986 several hundred thousand part-time and full-time U.S. farmers quit farming or went bankrupt (Miller 1988, p.256). Additionally, between 1982 and 1987 the nation lost more than 50,000 farms (Nelson 1992, p.475).

The 1980s transformed agricultural structure more forcefully than any previous decade. The face of agriculture was changed from the Jeffersonian vision of farmer-entrepreneurs to industrial agribusiness. This metamorphosis was, for the most part, predicted in *A Time to Choose*.

The Reagan Administration could not argue that their actions were the unintended consequences of a failure to understand the policy choices they made. Although the authors of the *A Time to Choose* failed to predict the high dollar and the high interest rates of the 1980s, the Reagan Administration would still have to be held accountable for those developments as well. The Administration shared in the responsibility for the farm recession. Farm credit rates were higher because Washington had to borrow heavily to cover its own deficits (*New York Times* 1985, p.26[A]). For example, farmers debts were $80 billion in 1973. In 1980, that debt had risen to $155 billion. Just three years after Reagan took office, in 1983, that debt had jumped to $214 billion (Kilborn 1984, p.22[A]).
In order to better understand the ramifications of Reagan's agricultural policy decision making, an examination of two important policies will be undertaken in Chapter Three.
CHAPTER THREE
AN OVERVIEW OF TWO CRITICAL POLICIES

Introduction

The Reagan years demonstrated that the authors of *A Time to Choose* had accurately predicted changes affecting agriculture. The report had identified the farm commodity programs and federal tax policy as two of the most influential policies affecting the structure of agriculture:

The (then) present tax policies are having significant effect on farm structure—on balance, they are biased toward the larger farmers and wealthy investors (U.S.D.A. 1981, p.142).

Our studies find that tax policy has significantly affected the structure, largely by reinforcing and supporting the consequences of other economic forces and policies (Ibid. p.149).

The commodity programs have succeeded to some extent in supporting prices received by all farmers—both participants and nonparticipants. But the evidence clearly suggests the programs have distributed income to the largest farmers, not necessarily on the basis of need (Ibid. p.103).

The authors also offered advice for future policymakers. Policies and programs should be carefully modified, with farm structure clearly in mind, so that they no longer encourage short-sighted exploitation of agricultural resources with no thought for their use over the longer term. Future policymakers must recognize the costs to society of unnecessary concentration. Procedures should be modified to make financial and technical assistance available for those who would otherwise be
adversely affected by economic forces and policies (Ibid, p.143). The "who" referred to in the preceding sentences, turned out to be the primary farmers in the 1980s.

Subsidy Policy

There are two principal aims behind agricultural subsidies. One is to protect farmers against the inherent instability of the markets. Market prices tend to vary from year to year and even season to season. Even greater instability has been introduced since the early 1970s with the increasing proportions of U.S. commodities that are sold in foreign markets, where demand varies widely. The second purpose is to stabilize prices and supplies for consumers (Robbins 1983, p.1[A]).

As mentioned in Chapter Two, the Reagan Administration repeatedly attempted to phase out subsidies. Unable to persuade Congress to go along it seems ironic that during the last year of Reagan's tenure, agricultural subsidy policy staved off potential disaster. The 1988 drought provided one of the best examples of how a government-financed farm program can pay big dividends for the consumer. The government spent 15 billion dollars to ensure a stable stockpile of commodities from 1986 to 1990. However, if taxpayers had not invested that money, it would have cost them--the consumers--an additional $40 billion at the grocery store just because of the inflation caused by the 1988 drought. Because the U.S. had ample supplies of
commodities, the effect on food prices was never felt by consumers (Cubbage 1994, p.10).

There were two basic devices for farm income support in the early 1980s. Price support loans guarantee farmers against disastrous price declines. For example, in 1982 when corn was selling for about $2 a bushel, a participating farmer could take advantage of low interest government loans to help him wait for better prices. He could have borrowed $2.55 a bushel. Aided by the loan, he could wait and sell his corn for $3.80 price which the market saw in 1983. At this point the farmer would sell his corn and pay off the loan. If the price of corn had not gone higher than the $2.55 a bushel he borrowed, he could forfeit the corn and keep the money.

The second device was a deficiency payment. If the average market prices fall below a certain point, called a target price, the government steps in with a payment. There is a maximum 15 cents a bushel ceiling under this program. In 1982, that price was $2.70, 15 cents higher than the loan rate of $2.55 per bushel.

In order to participate in these programs, farmers have to cooperate in programs aimed at controlling production. In 1982 farmers had to idle 20 percent of their normal acreage. In addition they were paid $1.50 per bushel for the yields they would normally get from the set aside acreage (Robbins 1983, p.12[B]).
The expense of these programs was becoming one of the Reagan Administration's biggest problems. According to a *New York Times* article, agricultural policy was the Reagan Administration's largest domestic failure. Federal spending for agricultural price supports soared sevenfold between 1980 and 1983. The total cost of farm programs exceeded $50 billion in 1983, yet farm bankruptcies were near record highs, farmland value was falling and farm income was 20 percent below 1979 levels. The more the Government spent, the worse off farmers had become (Bovard 1986, p.23[A]).

As a result, various approaches were explored in an attempt to reduce expenditures. One way to reduce agricultural subsidies is to limit the annual amount each farmer can receive. In 1971 Congress enacted a $10,000 limit on payments per farm. However, it was raised during subsequent legislative negotiation to $20,000. It was again later raised to $30,000 and by 1983 it was $50,000 (*New York Times* 1983, p.3[C]).

Despite the payment limitation, the biggest farms still received most of the payments the government made directly to farmers. For example, the largest 10 percent of the wheat farms got about 43 percent of the government payments in 1982 while the smallest 10 percent received but 1.4 percent. The top 10 percent of the cotton farms the same year got about 40 percent of the payments, the bottom 10 percent, 1.2 percent. For corn the largest 10 percent got
over a third of the payments, while the smallest 10 percent got only 1.2 percent (Strange 1988, p.129).

According to a 1985 study by the Agriculture Department, just 24 percent of the direct aid went to farmers who were badly stressed, but fully a third went to farmers with annual revenues greater than $250,000 (New York Times 1985, p.18[A]). Consequently, the Reagan Administration proposed a plan for reducing the limits on the subsidies an individual farm could receive. The limit would drop from $50,000 to $20,000 annually. In addition, a cap was proposed on price support loans. A $200,000 cap was suggested, where previously there had been no limit (King 1985, p.1[A]). But those limits were soon evaded when big farmers learned how to divide ownership of their acreage into smaller units, each of which qualified for the maximum amount. For example, in 1986 the Crown Prince of Liechtenstein, a Texas landowner, received more than $2 million in federal subsidies (Miller 1988, p.258).

The subsidy policies had another unintended effect. The aforementioned loan rates become the world price and, in turn, foreign competitors know what they can expect to get for crops which vie with American crops. As a result, the element of risk is removed from planting decisions since the Americans had inadvertently set a minimum world price. In turn, this situation allows foreign competitors to undercut American farmers in bidding for world markets (Kilborn 1984, p.22[A]).
Thus the 1985 farm bill deviated from previous policy. A new program using an old strategy, the Conservation Reserve Program (CRP) was a long term, voluntary land retirement program. It allowed producers to bid to enroll land in the CRP if they had: 1) an appropriate cropping history and 2) croplands considered highly erodible or environmentally sensitive. Most contract holders got annual payments for 10 years in exchange for converting and maintaining those lands in conserving uses (Clark, Johnson, and Amosson 1994, p.1415).

The combination of a recovering economy and the reduction of output, as a result the CRP, helped put an end to the problems for Reagan. According to Kevin Phillips, in his book *The Politics of the Rich and Poor*, the farm subsidies of the Reagan Administration years were anything but a 'from the beginning' strategy. Farm income support outlays did mushroom during the 1980s (up from $11 billion in 1981 to $25 billion in 1985 and a peak of $31 billion in 1986), but that was because farmers had been devastated during the mid-1980s by tight money and by the international trade impact of the overpriced dollar. Stepped-up federal support payments were less a reward than a form of reparations (Phillips 1990, p.89).

In 1983 one analyst noted that even though they are no more efficient, it is the large corporate producers who stay in business, while family operations go bankrupt. This situation was the result of the commodity programs, the
Federal loan programs and the tax laws which favor the biggest producers. At the same time, the biggest producers were usually conglomerates with other sources of income (Brown 1983, p.30[A]). Once again, family farmers were devastated by Reagan’s farm policy. This situation almost exactly duplicates what A Time to Choose had predicted, which was that a decision not to implement the changes recommended within the report would lead to an increase of corporate owned megafarms.

In the case of commodity policy, analyst Marty Strange explains it best. The dilemma is this: when government sets commodity prices, it is not fixing a minimum standard of living for farm families. Instead, it is establishing a minimum return on investments in farmland. The benefits of such a program fall squarely to those who own land and in direct proportion to the amount they own (Strange 1988, p. 199).

The effects of the 1985 farm bill, which finally created a solution to the commodity problem, were not really felt until the very end of the Reagan years. It was a case of too little, too late for hundreds of thousands of primary farmers.

**Tax Policy**

Tax policy affected agriculture in much the same way as commodity policy in the 1980s. A Time to Choose warned of the effects of unchanged agricultural tax policy for primary
Those firms with considerable wealth or in high income tax brackets have the greatest ability to utilize the tax rules to their benefit. Research results are consistent on one point: the direction of change caused by tax policies has been towards increased concentration of farms and wealth (U.S.D.A. 1981, p.91).

In the early 1980s the United States tax code sheltered high tax bracket individuals who invested in farming enterprises. Yet, at the same time, many primary farmers were in the zero tax bracket because they lacked the necessary income. Income from farming denied the I.R.S. by tax shelters was almost twice the amount generated. As this continued the economic consequences were speeding up the trends to deny ownership of farmland to those who were really farming it (Breimyer 1984, p.2(C)).

Prior to 1986, tax breaks were distributed in proportion to the capital-intensity of the operation. Assuming that the corporation was in the 46 percent tax bracket, the established farmer in the 30 percent tax bracket, and the beginning farmer in the 20 percent bracket, the corporation would receive nearly twice the tax subsidy per animal produced as the established farmer ($189 per sow versus $104). Likewise, the established farmer would reap nearly twice the subsidy per sow as the beginning farmer ($104 versus $56). Thus, the corporate farm got nearly three and a half times as much tax subsidy as the beginning farmer (Strange 1988, p.158).
In 1984 the Economic Research Service of the Department of Agriculture reported that 50 percent of direct Government subsidies in 1983 went to the farms with the top 10 percent in gross annual sales (megafarms). The first recommendation within the report suggested changing tax policies that encouraged investment in farming solely to shelter nonfarm income, and to end special tax deductions that encouraged farm inefficiencies (Carpenter 1985, p.34[D]). But it would not be until 1986 before this advice was heeded.

Once again, it was not until the end of the second Reagan term that policy changed to benefit primary farmers. The 1986 Tax Reform Act eliminated the investment tax credit. It allowed the use of cash accounting by investors only if they were directly involved in the management of the farm. It also prohibited those investors not directly involved in the management of the farm from using farm losses to shelter other income from taxation, and it limited the use of prepaid expenses. Perhaps most importantly, it provided that capital gains be taxed as regular income (Strange 1988, p.163).

Although the tax and subsidy changes recommended by A Time to Choose were finally implemented, the delay involved sped up the transition from family farming to industrial agribusiness. Chapter Four explores the 1990s to determine whether the trends established in the previous decade continued, and discusses significant policy changes that were implemented in 1995.
CHAPTER FOUR
THE 1995 FARM BILL

Introduction

The concern, depicted in *A Time to Choose*, was that the ever increasing concentration of farm ownership would continue until only a few huge farms controlled nearly all agricultural production. The eighties unfolded much as the authors had predicted. However, the nineties might be an opportunity for change, this chapter explores this possibility.

The Early Nineties

Examining the average size of a farm at various points throughout this century demonstrates that agriculture is still in the process of moving towards ever larger farms. Farms in the 1930s averaged about 150 acres (Kilborn 1984, p.1[A]). In the 1940s they had grown to an average of 195 acres. Moving ahead to the 1970s, the average farm was 390 acres (Berry 1977, p.34). By the mid 1980s farms averaged more than 400 acres (Kilborn 1984, p.1[A]). Between 1987 and 1992, average farm size increased from 462 to 491 acres (*The Prairie Star* 1995, p.37[C]).

Following the trend established in the 1980s, by 1992 there were 333,865 farms with sales of $100,000 or more. While they accounted for only 17 percent of all farms, these superfarms were responsible for 83 percent of total sales.
By 1994, farms with over $100,000 in sales still only represented 17% of all farms, yet they had increased their percentage of total sales to 87 percent of all sales (Rightmire 1994, p.1). In 1987 there were 32,023 farms with sales of $500,000 or more. By 1992, farms of this size had increased in number to 46,914 (The Prairie Star 1995, p.37[C]). Between 1987 and 1992, average sales from all farms grew from $65,165 to $84,459. At the same time average expenses per farm increased from $51,797 to $67,928 (Ibid, p.37[C]).

Thus, not surprisingly, there has been a decrease in small and medium-sized farms and an increase in large farms. Future projections indicate that in approximately 15 years there will be only 360,000 farms with sales of $100,000 or more and they will account for almost all agricultural production. What little other production there is will be represented by a large number of very small farms which will be basically hobby farms (Margolis 1994, p.1[A]).

An examination of early 1990s subsidy policies shows that government subsidies to farmers follow the same pattern which exemplified the 1980s. A 1995 report by the President’s Council on Economic Advisors notes that “two thirds of payments go to the largest 18 percent of farms—even though the average income of these recipients is triple that of the average U.S. household” (The Amicus Journal 1995, p.50).
These statistics demonstrate that the direction in agriculture continued to follow the pattern established in the 1980s. However, 1995 was a year that presented an opportunity for possible change. By Congressional tradition, a Farm Bill is generated at five year intervals, and 1995 was the year which forced Congress to examine agricultural policy. The question was would the result be a continuation of past policy, or perhaps a change in a new direction?

**The 1995 Farm Bill**

The 1995 farm bill was made into law in April of 1996. Billed as "Freedom to Farm," the Federal Agricultural Improvement and Reform (FAIR) Act was passed and signed by President Clinton. This law made tremendous changes in agricultural policy. The old system of transfer payments was to be abandoned. Under the FAIR Act, transfer payments through the year 2002 are scheduled and do not depend on market prices or prespecified target prices. The stated intent is to move to a more market oriented agriculture and phase out government transfer payments (Baquet 1996, p.22).

In conjunction with FAIR another law was instituted. Entitled the Environmental Quality Incentive Program (EQIP), this act lumped together the Conservation Reserve Program (CRP) with earlier conservation legislation. EQIP had an additional far-reaching effect on family farms that will be discussed in the final section of this chapter.
However, in terms of subsidy policy, the goal of EQIP is to reduce government involvement in overall production. Agriculture Secretary Dan Glickman was quoted as saying, "gone will be the days of using the CRP as a method of controlling how much of a particular crop is grown" (Brasher 1996, p.1).

Consequently, the combination of FAIR and EQIP have drastically altered the outlook for U.S. agriculture. These acts are viewed as a radical departure from the price supports and land set-aside provisions of the farm bills of the last 60 years. Some experts say the farm bill is aimed at commercial agriculture, and it ignores small farms and rural life. A more liberal farm organization, the Farmers Union, is concerned that farmers are losing their safety net (Stevens 1996, p.3).

However, regardless of the standpoint from which this farm bill is viewed, it is clear that the federal government will no longer attempt to intervene on behalf of the family farm or any other farm for that matter, since the governmental role will be almost nonexistent after 2002. It seems safe to conclude that the further consolidation of agriculture will continue and that farm sizes will continue to grow and farm numbers will continue to decline.

The consequences of the 1995 farm bill do not give much hope to family farmers. The fact that the government is in the process of reducing its role in agricultural policy could certainly be viewed as the culmination of 80s policy.
In fact, Reagan was unable to achieve his goal of making agriculture a "market oriented" industry, which is exactly what FAIR accomplished.

The 1995 farm bill altered another facet of agricultural policy which dates back to the 1930s. The issue at stake was the renewal of the Conservation Reserve Program (CRP). As mentioned earlier, the CRP was created during the mid 1980s. This program was, up until 1995, the most recent government policy concerning soil erosion. The conclusion of this chapter examines this in greater detail.

**The CRP and Soil Erosion**

At first glance the link between soils and farming might not be obvious, but the topic should not be underestimated. The greatest dilemma facing agricultural production (whether by family farmers or agribusiness), both historically and currently, is soil erosion. To understand the ramifications of soil erosion, one only has to look at the 1930s. During that period, commonly referred to as the Dust Bowl, the United States was involved in one of the three greatest, manmade, ecological disasters in the history of the world (Worster 1979, p.4). Since the introduction of mechanized agriculture, which occurred just before the Dust Bowl, soil surveys by the Soil Conservation Service indicated that about one-third of the original topsoil on U.S. croplands, in use as of the mid-1980s, had already been washed or blown into rivers, lakes, and oceans. Some of the
country's richest agricultural lands, such as those in Iowa, have lost about half their topsoil (Miller 1988, p.198). Most importantly, soil erosion is greatly increased as a direct result of agribusiness farming methods. Using these methods projected soil erosion, over the next 50 years, may destroy productivity on U.S. cropland acreage equal to the combined areas of the states of New York, New Jersey, Maine, New Hampshire, Massachusetts, and Connecticut (Ibid. p.198).

One of the reasons that soil erosion has not been a high priority government policy is that it usually occurs at such a slow rate that its cumulative effects take decades to become apparent. For example, the removal of 1 millimeter (1/254 inch) of soil, an amount easily lost during a rain or wind storm, is so small that it goes undetected; but the accumulated soil loss at this rate over a 25-year period would amount to 25 mm (1 inch)—an amount that would take about 500 years to replace by natural processes. If the average rate of topsoil erosion exceeds the rate of topsoil formation, the topsoil on that land becomes a nonrenewable resource that is being depleted (Ibid. p.205).

During the late 1970s, soil erosion rates were considered to be very high. According to a 1982 federal survey, 44 percent of the crop land in the United States was losing topsoil at "excessive rates," with 1.7 billion tons permanently lost each year. Studies in the United States Corn Belt show that for each inch of topsoil lost, average
yields are reduced by 6 percent (*New York Times* 1984, p.20[A]).

Since 1975, nearly 70 million acres of new farmland had been brought into production. A large percentage of this new farmland was highly erodible land, much of it former grasslands and wetlands (Schneider 1985, p.16[A]).

In 1984 government policy reversed direction, from the policies of the 1970s when farmers were encouraged to plant "fence post to fence post," and 82 million acres were idled. However, these kinds of inconsistent government policies can contribute mightily to soil erosion as a *New York Times* article explained, "In the 1970s, urged to grow all they could, farmers planted crops on lands that never should have been plowed. When paid to desist, the hard-pressed farmers lacked the money or time to reseed the idle land" (*New York Times* 1984, p.16[A]).

Thus, a response to the dual problems of soil erosion and the reintroduction of farming of former grasslands was addressed in the 1985 farm bill. It contained stipulations making farmers who destroyed fragile land ineligible for Government benefits. Additionally, provisions were made to take 40 million acres, 10 percent of U.S. farmland, out of production to become part of a new national land inventory. Only grass or trees could be grown on this land (Schneider 1985, p.16[A]).

The program created by the 1985 farm bill came to be known as the CRP. The CRP developed as part of two farm
bills. Congress enacted the program in Title XII of the Food Security Act of 1985 (FSA) and amended it in the Food, Agriculture, Conservation and Trade Act of 1990 (FACTA). In order to put cropland into the CRP, farmers were required to sign ten-year contracts with the government. Congress' original objective for the CRP was to reduce cropland erosion. Secondary objectives were to: 1) protect the nation's long-term capacity to produce food and fiber, 2) reduce sedimentation, 3) improve water quality, 4) create fish and wildlife habitat, 5) curb production of surplus commodities, and 6) provide farm income support (Furrow 1995, p.30).

In addition, the CRP recognized that conservation required attention not only of public lands, but on private lands as well. Since three quarters of all land in the lower 48 states is private land the inclusion of farmers, the principal landowners, was obvious.

By 1995, a decade after its inception, some conclusions concerning the overall effectiveness of the CRP had become apparent. One of the consequences had been that soil erosion had been reduced on cropland by one-third (Johnson 1995, p.22). On average, the rate of soil erosion on land that went into CRP was reduced from more than 20 tons per acre annually to less than two tons (Cubbage 1994, p.40). Eventually, 36,500,000 total acres were enrolled in the Conservation Reserve Program (Farm Journal 1995, p.36). The U.S.D.A.'s Economic Research Service (ERS) estimates soil
erosion reduction on the 36.5 million acres enrolled in CRP at 700 million tons annually. In turn, this cut in soil erosion spawned major improvements in water and air quality. ERS figures sediment flow into waterways had been cut by 100 million tons a year (Mooney 1994, p.28).

Another facet of the CRP has been a rebirth of native habitats for wildlife (Ibid. p.28). A North Dakota study found that over 70 species of wild birds make their home on CRP land (Cubbage 1994, p.40). Wildlife biologists say things will only get better as CRP wetlands restorations and 2 million-plus acres of tree planting come into full bloom. In fact, the ERS estimated in 1990 that society stand to glean as much as $13 billion worth of environmental benefits from the life of the CRP program (Mooney 1994, p.28).

But the first of the program's 10-year contracts expired Oct. 1, 1995. The contracts that ended in 1995 covered just over 2 million acres enrolled in the CRP. Furthermore, contractual commitments that ended in 1996 covered more that 13 million acres or about 36 percent of all CRP land (Furrow 1995, p.30). In addition, nearly two-thirds of the 36.5 million acres in CRP will come out of the program in 1997 and 1998 (Cubbage 1994, p.40).

The 1995 farm bill forced Congress to decide if it was going to continue appropriating money to extend the contracts or, perhaps, purchase easements to maintain the retired lands in conservation use (Furrow 1995, p.30). But even if Congress had decided to offer to extend some or all
of these contracts, producers would have to decide about their CRP land's future use (Ibid, p.30). However, several studies indicate that farmers intend to put 40 percent or more of CRP land back into production. That means that 14.6 million acres of erosive land was targeted to once again begin producing crops (Horstmeier 1994, p.12).

At the same time, as of 1995, not including the land taken out of production by the CRP, soil erosion still impaired one out of four acres (The Amicus Journal 1995, p.50). Allowing the environmentally sensitive land, enrolled in the CRP, to re-enter production would further worsen soil erosion and water quality problems. Additionally, a great number of wildlife habitat acres would be lost (Cubbage 1994, p.40).

Therefore, many argued that the effects of potentially ending the CRP would have profound ramifications for the future of the U.S. soil inventory. Additionally, some experts contended that discontinuing the CRP would likely cost the government more than if it had been continued. If CRP land re-entered production, it could mean bigger grain surpluses and lower commodity prices which in turn translates into larger government commodity price deficiency payments to farmers (Ibid, p.40).

With the passage of EQIP, the CRP was abandoned. The new conservation program uses five and ten year contracts which pay for up to 75 percent of the cost of conservation practices. Additionally, total cost-share payments to any
person are limited to $10,000 annual and $50,000 for the life of the contract (Ranchland Review 1996, p.7).

Moreover, it is estimated that more than 40 percent of CRP land is not vulnerable enough to qualify under the new rules (Ibid. p.1). According to another estimate this will amount to at least 14 million acres of land re-entering production as CRP contracts expire (Stevens 1996, p.3). Additionally, another facet of EQIP allows producers who have CRP contracts which are five years old or older the option to request an early release (Johnson, Zidack, and Stauber 1996, p.21).

The result is that the government policy concerning soil erosion, once again, reversed course. Rather than keeping the highly erodable lands protected by CRP contracts out of production, the 1995 farm bill allows for much of these lands to, again, be brought under cultivation. Thus the soil erosion policy of the 1980s will be significantly diminished. As a result, soil erosion rates are likely to become the problem they were in the 1970s. However, there is one key difference, as a result of the aforementioned expansion in farm sizes, and the increase in soil erosion associated with agribusiness farming techniques, the possibility of greatly increased soil erosion exists. Unfortunately, soil is a non-renewable resource, and the latest government policy does not appear to address the issue.
Now that the future of agriculture appears fairly clear, at least in terms of government policy, an obvious question would be what are the effects of this transition from family farming to industrial agribusiness. Chapter Five begins by describing the situation facing agriculture at the present time.
CHAPTER FIVE
CULTURAL AND SOCIOECONOMIC IMPLICATIONS

The Current Situation

One of the problems identified in *A Time to Choose* was the aging of the average U.S. farmer. An analysis of the intervening time period reveals a number of findings. Dr. Robert Soileau, extension rural sociologist with Louisiana State University, notes that a recurring concern in agricultural circles is the advancing age of U.S. farmers. The census of agriculture has shown a rise in their average age for several decades, from 48.0 years in 1940 to 52.0 in 1987. The most damaging change, however, appears to be the percentage of farmers younger than 35. For example, those under 25 rose from 57,000 in 1970 to 101,000 by 1984. By 1990, their number had fallen to 52,000, largely due to the agricultural crisis of the 80’s. As a percentage of all farmers, those under 35 dropped from 20.3 percent to 13.3 percent in that same time span (*Landhandler* 1994 p.2).

A coexisting situation has appeared. It is very possible that 75 percent of all farm assets will change hands in the next 20 years. The reason is that thirty-four percent of all agricultural assets are held by individuals over the age of 65 (Kohl, 1993 p.6).

Furthermore, to gain entry into agriculture, economic farming units typically will require $2 million or more of assets. Because the family farm must be refinanced each
generation, it is burdened in generating net worth to form an economic unit. Strategies such as aid from parents and off-farm work help, but difficulties will intensify especially when competing with corporations not facing life cycle problems (Tweeten 1994, p.24[C]).

At the same time, as of the mid 1990’s, off-farm income is deemed critical for those with sales under $200,000 annually, the cutoff point for primary farms. This large income is recommended to enable these producers to maintain their standard of living (Kohl, 1993 p.6). When A Time to Chase was written, rural residences were described as the operations that required off farm income. This category of farms generated less than $40,000 a year.

However, as these statistics demonstrate, young farmers are the least likely to be able to purchase farms. This situation, coupled with the understanding that the basic premise of family farming is that one has the opportunity to obtain land and pay for it through farming, makes for a dubious future. In addition, as of 1993, forty-seven percent of all young farmers’ assets were rented, leased, or jointly owned (Ibid, p.6). In other words, these people, who if they belonged to their parents generation, would have bought farms, instead, as of the mid 1990s are dependent on other methods to gain entry into agriculture.

Throughout this discussion one question begs to be answered. Why is it necessary to have young farmers? One expert, Wendell Berry, responds in a New York Times article.
The first issue was whether or not farming can be understood as an industry. Berry argued that it cannot for two primary reasons: First, farming depends upon living creatures and biological processes, whereas the materials of industry are not alive. Except of course, the workers, and the processes are mechanical; and, second, a factory is, and is expected to be, temporary, whereas a farm, if well farmed, will last forever, and if poorly farmed destroyed forever.

In turn, a second question is whether or not the most productive agriculture is necessarily the best. Berry argued that it is not, for good agriculture requires soil conservation and other forms of maintenance as well as productivity. U.S. soil erosion rates, which are expected to increase as a result of EQIP, suggest that agricultural yields are coming at an enormous cost, which sooner or later must be paid (Berry 1985, p.27[A]).

As Berry explains, it is based on factors more cultural than technocratic. The basic methods have been available for hundreds of years, but they can be used only by farmers who know how to use them and who have the desire to use them. The only known way to get these farmers in substantial numbers is to rear them on farms, in farming families that are not too strapped for time or money to farm well. In America, because of the belief in private ownership of property, this means that farmland must be divided and owned in small parcels and that farms, farmers, and farm communities must thrive (Ibid, p.27[A]).
comparison, during the Great Depression, over one-fourth of the American people were farmers and many more had grown up on farms or knew parents who had been farmers (Strange 1988, p.15).

Thus, the current situation facing potential family farmers cannot be viewed as very promising. However there have been times when policymakers addressed the implications of the reduced role of the family farm. The following is provided as an example of such a time.

**Historical Analysis**

Nineteenth century American history offers examples demonstrating the effects of large farms and the problems they created. According to Don Piasani, in his book *From the Family Farm to Agribusiness*, the most distressing aspect of large scale farming in the 1870s, was the way in which it stifled the family farm. Small farms were anathema to the land baron. Most large farmers opposed small farming. In turn, critics of large scale farming charged that the large farms retarded the development of rural communities and degraded the status of labor. The vast farms were all but deserted except in the late fall and spring. Since field hands were needed only during planting and harvesting, they became a transient work force. Agricultural wealth depended on a permanent class of dispossessed who worked for "starvation wages" (Pisani 1984, p.11).
The greatest danger posed by large scale farming was its tendency to perpetuate, if not create, land monopoly. A special committee of the California Legislature, one of several formed in the 1870s to study land problems in the state, argued that these types of land monopolies created a vast class of renters similar to conditions at that time of land tenure in Europe (Ibid, p.14).

In the nineteenth century, many Californians viewed the future with alarm. In 1871, Henry George warned that California might suffer the same fate as Rome:

In the land policy of Rome may be traced the secret of her rise, the cause of her fall. The (Roman) Senate granted away the public domain in large tracts, just as our Senate is doing now; and the fusion of the little farms into large estates by purchase, by force, and by fraud went on, until whole provinces were owned by two or three proprietors, and chained slaves had taken the place of the sturdy peasantry of Italy. The small farmers who had given her strength to Rome were driven to the cities, to swell the ranks of the proletarians, and become clients of the great families, or abroad to perish in the wars. There came to be but two classes---the enormously rich and their dependents as slaves; society thus constituted bred its destroying monsters; the old virtues vanished, population declined, art sank, the old conquering race actually died out, and Rome perished.....Centuries ago this happened, but the laws of the universe are to-day what they were then (Ibid. p.12).

The vision these leaders had in California, foreseeing the effects of large scale farming, demonstrates that there has been a historical concern for the future of small-scale family farms. Moving into the 20th century, a number of
studies have examined another consequence associated with industrial agribusiness. In this case, the effects of poverty associated with large scale farming will be analyzed.

In the late 1930s, a government study was conducted comparing the consequences of family farming versus industrialized agriculture in terms of rural impact. The central hypothesis was that the key factors influencing community development was the percentage of hired workers in the farm-occupation mix: the higher the proportion, the lower the quality of life in the community. The findings supported the hypothesis. In 1977, the Small Farm Viability Project provided a follow-up study. Again, the evidence supported the earlier findings (U.S.D.A. 1981, p.38).

A 1986 University of California-Davis study found that as farm size increases, so does poverty (U.S. Congress 1986, p.27). "In rural communities dominated by very large (agribusiness) firms, the settlement and housing patterns reflect the increasingly transient nature of the labor force. The symbol of the large corporate farm becomes the trailer house" (Berry 1977, p.172).

Moving ahead into the 1990s, the average employee at the National Farms hog operation, a typical corporate hog farm, earns $15,000 per year. Considering that the salaries of managers are above those of the average worker, it's easy to conclude that working for a corporate-owned hog facility is a poor substitute for an entrepreneurial farming
operation. Yet, such jobs may be the only alternatives available for hog producers unable to compete with the factory farms' cheap pork chops (Carter 1994, p.3).

It seems fair to conclude that the situation facing aspiring farmers, currently, does not look very promising. However, the combination of that predicament, in conjunction with the diminished role of the family farm, has other consequences as well. The following section investigates some of these developments.

Implications of Concentration

Another disturbing trend has come to light in the 1990s. The following example indicates that further concentration in agriculture, predicted in A Time to Choose, is fast becoming a reality. Nebraska-based IBP and ConAgra and Minneapolis-based Cargill control about 80 percent of all beef packaged in the United States. In 1994 cattle auction prices were 95 cents; in 1995 prices plunged to 64 cents. Agricultural economists state that this is the worst downturn in 25 years (McGrory 1996, p.7[A]). At the same time, several signs point to anything but disaster in the cattle industry. The cattle supply was up only 3 percent over 1993; consumer meat prices have failed to drop with the cattle prices; and years of declining meat consumption seems to have leveled off and show signs of rebounding. As a result, the U.S.D.A. has started a study of market conditions and the U.S. Senate has approved a bill calling
for an executive branch task force to analyze the situation (Ibid. p.7[A]).

Although other facets of agricultural production have not been affected as dramatically as the beef industry, there is growing evidence that other commodities may soon be similarly affected. In order to demonstrate this contention, an profile of the industrialization of agriculture will be undertaken.

The term for this process, the movement of food processors and input suppliers into food production, is vertical integration. It is best described as ownership control of more than one stage moving up and down the chain between production and consumption. Agricultural commodities that are produced as a result of the vertical integration process have a number of characteristics that distinguish them from commodities traded in the traditional markets found at the farm level. Meanwhile, commodities that depend primarily on traditional markets tend to be those produced by typical, independent family-farm operations (U.S.D.A. 1981, p.62).

The vertically integrated livestock industry sprouted in the 1950s when Don Tyson and a handful of others perfected the contract poultry system. Under a typical contracting system, Tyson would provide the chicks, feed, medication, and instructions on how to raise the chickens. The farmer was asked to provide the land, "grower house" and the labor. At the end of each growing cycle, the
company would pay the growers a set fee for each chick produced (Carter, 1994 p.14).

As the contract system took root, fully one third of the nation's poultry farms disappeared between 1954 and 1964. Profits for the contracting companies soared, and according to Successful Farming magazine's periodic survey of the largest farms in the country, four out of the five largest farms specialized in poultry production (Ibid. p.3). In poultry markets the discovery of significant economies of scale in both selling and processing, as a result of technological developments, led to high concentration at the first-handler level. This in turn created incentives for backward integration into production by processors of broilers and turkeys, and forward integration into processing and production by feed suppliers, to insure full-capacity operation. A handful of contractors control most of the poultry production and small or moderate sized growers have no access to the market (U.S.D.A. 1981. p.61).

Vertical integration streamlined the poultry industry. Some producers have found a niche within this enterprise as contractors. The contracting producer provides the poultry for giant corporations such as Tyson Foods. However, these contracts require large capital investments in very specialized buildings. Because of the nature of the contracts many argue that there really are not many choices for producers because of the large investment in the buildings (Johnson 1994, p.15). As Professor Neil Hamilton
of Drake University explains, "Contract production makes farmers employees of their own land, with limited control over the production or marketing of crops, and little opportunity to profit from rising markets" (Carter 1994, p.3).

At this point one issue needs to be addressed. It would appear that "bigger is better," meaning that these larger farms will necessarily have lower per unit production costs. However, studies conducted by the Department of Agriculture show that the peak of farming efficiency was reached on farms that could be tended by one family with good equipment and only occasional help from hired labor (Robbins 1985, p.27[A]).

Additionally, one of the reasons that these large farms appear more efficient is attributable to two factors. First, because there are so few, there is little competition among them. With less competition, they are relatively immune from the discipline of the free market. Beyond this market concentration, these companies have another potential advantage. Their sheer size and financial might permits input suppliers and processors to compete with farms in the actual production of food, even if they are less efficient than farmers. The reason is simple. They have the advantage of providing their own inputs and securing their own markets under favorable terms. In fact, because they are engaged in more than one stage of production and processing of a product firms with market power at one of
those stages can dominate competition in another stage (Strange 1988, p.281).

Corporate hog facilities have begun to operate in the same fashion except that they do not contract for the hogs, they produce their own. Since 1980, as a result of vertical integration, 65 percent of independent hog producers have gone out of business (Smith 1995, p.18).

The reason processors and suppliers are rapidly moving into food production is profit. This profit is especially attractive when integration limits the risk of loss, as in contract production. In poultry and swine contract production, corporations shift more than half of the investment in the system—the cost of the facilities—onto producers. Contracts typically place the mortality and environmental risks on producers. Short-term contracts allow companies to decrease or end production when profits drop, while the producer remain responsible for paying the cost of the facility (Hamilton 1994, p.29).

The beef industry is undergoing a similar transition. The top five beef packers slaughtered nearly 90 percent of all fed cattle in 1994. That's nearly 4 percent more than 1993, and 13 percent more than in 1988. These top five include IBP inc., Conagra, Excel, National Beef Packing Co., and BeefAmerica Operating Co (Kay 1994, p.9). An examination of the top packer, IBP Inc., indicates that it is the most highly focused in the business. In May of 1994 it completed its acquisition of a cooked-meats business. It
already owns a variety of further-processed ventures. It is moving rapidly toward producing nearly all close-trim fresh beef. In addition, it has plans to expand its hides business (Ibid p.9).

It is not only the livestock industry that is expanding. Every other aspect of the farming business is also growing, and some observers have suggested that these concentrations, too, pose potential problems. Dan Morgan, in his book Merchants of Grain, demonstrates that five major companies control the U. S. grain trade. An example demonstrating the power of one of these companies dates back to 1973. An Interstate Commerce Commission investigation of Continental Grain questioned why some small grain elevators were unable to obtain grain boxcars. The ICC found that when Continental Grain shipped grain by railroad cars 'the costs were passed back to farmers and small elevator managers, who paid for a transportation shortage that was not of their making' (Morgan 1980, p.418).

Despite the many problems associated with the rapid transformation of the agricultural enterprise, most indications are that the changes will continue. Upon further investigation, more problems have been identified as a consequence of the further concentration within agriculture.
Ecological Implications

Another ramification of the transition from family farms to industrial agribusiness involves the ecological costs associated with this transformation. One observer noted the inevitability of this problem: "The great irony is that the technologies that are the most environmentally destructive are also those that best accommodate industrial farming systems" (Strange 1988, p. 8). Industrialized agriculture can feed large numbers of people using relatively little human labor to produce high yields on a relatively small percentage of cropland. However, this form of agriculture has a greater overall environmental impact on the air, soil, and water than any other system in modern industrialized societies (Miller 1988, p. 247).

Industrial agriculture is based on deliberately keeping ecosystems in early stages of succession, where net primary productivity of one or a few plant species (such as corn or wheat) is high. But such simplified ecosystems are highly vulnerable. A major problem is the continual invasion of crop fields by unwanted pioneer species.... Weeds, pests, or disease can wipe out an entire crop unless it is artificially protected with pesticides, herbicides, and insecticides (Ibid, p. 127). Consequently, insecticide use in the United States increased tenfold between 1940 and 1980 (Ibid, p. 522).

These large farms also tend to produce more water pollution, since large scale monoculture farming uses more
petrochemicals. According to the Nebraska Department of Health, eighty-one municipal wells in Nebraska—about one in five—are near or above tolerable levels of contamination from nitrate-nitrogen. The principal sources of nitrate pollution in groundwater in that state are agricultural chemicals and livestock wastes (Strange 1988, p.41). In Iowa, 'environmental officials reckon that up to half of that state’s municipal water supplies are contaminated with pesticides or other synthetic organic chemicals' (Bullard, 1986 p.11). One facet of this problem results from the concentration of animals in livestock feedlots: 'manure has become a waste-disposal problem and a pollutant instead of the fertilizer resource it was when animals were scattered widely on thousands of farm' (Strange 1988, p.205). For example, the hogs produced inside the National Farms' confinement buildings generate yearly the amount of waste that would be produced by a city of 250,000 people. National Farms' system of disposing of the liquid waste by sprinkling it on the fertile topsoil adjoining the Pawnee National Grasslands prompted a warning from County health officials three years ago. Health officials at that time detected a steadily increasing nitrite level 48 inches below the surface (Carter 1994, p.3).

In conjunction with this, the effects of industrial agriculture upon drinking water is compounded because it is estimated that only 1% of pesticides applied to crops reaches the target pests. The remaining 99% ends up in the
air, water, and other nontarget organisms, including people. In 1986 the Environmental Protection Agency (EPA) reported that traces of 17 different pesticides were found in groundwater supplies in 23 states. Water from almost 1,500 wells in California's Central Valley cannot be used for drinking, bathing, or cooking because of pesticide contamination (Miller 1988, p.523). The problem has become even greater in the 90s. The Environmental Protection Agency cites agriculture as the number one pollutant in a 1992 National Water Quality Inventory. At issue is agriculture's contribution to nonpoint-source pollution, the generic name for rain-driven runoff (Klintberg 1994, p.10). Additionally it was found that agricultural runoff is the source of 72 percent of the contaminates in polluted rivers (The Amicus Journal, 1995 p.50).

A study released by the Environmental Working Group stated that 14.1 million people routinely drink water contaminated with five major agricultural pesticides--atrazine, cyanazine, simazine, alachlor and metolachlor. The information for the study, which focused on the midwestern states using these pesticides on their corn and soybeans, was collected from 20,000 water tests conducted by the U.S. Environmental Protection Agency and the U.S. Department of Agriculture (Cohn, 1994 p.6[A]).

Another problem surfaces within the context of a discussion of the petrochemicals so essential to industrialized agriculture. Considering that the most vital
inputs for industrialized agriculture are oil and gas, it is hard to exaggerate the extent of the continuing dependence on these fuels to power machinery, to create and distribute herbicides, insecticides, and pesticides. In addition, oil is a primary ingredient of fertilizers used on soils stressed by repeated planting of the same crops. It is also used to dry those crops after harvest, as well as heating animal factories (Strange 1988, p.221). Of concern is possible future shortages of key inputs, such as fossil fuels and phosphate. Years of low world oil prices have invited complacency and low investment in new energy capacity. In turn, that makes agriculture vulnerable to an oil shock similar to the mid-seventies (Tweeten 1994, p.24[C]). Moreover there have been many studies estimating the amounts of world oil reserves and, while, the estimates vary widely, they agree that oil is a finite resource. Obviously, then, one of the consequences of the transition from family farming to industrial agribusiness has been to put all of the eggs in one basket, so to speak, a basket based on a finite resource.

Another finite resource that affects agricultural production is land. Obviously, land is the most important component in farming. Industrialized farming affects the U.S. land inventory in a number of ways. For example, soil compaction, which results from the use of the heavy equipment utilized by industrial agribusiness, reduces the capacity of soil to absorb water, reducing yield and
increasing erosion due to runoff of rainfall (Strange 1988, p.204). Concurrently, the U.S. is also losing the equivalent of about 3 million acres a year due to soil degradation, and salt buildup in irrigated soil. In conjunction this, the United States has been losing annually about 3 million more acres of rural land, one-third of its prime agricultural land, due to the spread of housing developments, highways, and shopping malls (Miller 1988, p.21).

Clearly, the implications of the continued expansion of agribusiness carries with it many effects. Thus, with a better understanding of these consequences, an obvious question would be, what does the future hold? Chapter Six investigates a number of different possibilities.
CHAPTER SIX
OPTIONS FOR THE FUTURE

Sustainable Farming

As a reaction to agricultural production shifting from family farming to industrial agribusiness, in the United States, some experts have looked to other countries' agricultural practices for direction. Many of the world's countries have implemented very different agricultural policies. For example, Japan has found ways to feed its population without relying on agribusiness. Vernon Ruttan demonstrates the differences between United States and Japanese methods of farming in his book *Agricultural Research Policy*. The Japanese have managed to feed their population, despite a very small amount of agricultural land, through techniques completely different than those employed by American agribusiness. Instead the Japanese have rejected large industrial agribusiness methods because they are viewed as inefficient.

A more specific example, in the dairy industry, can be found in New Zealand. One efficiency measure is pounds of milk solids produced per acre or per farmer. New Zealand cows give half as much milk as American cows, but one New Zealand farmer produces twice the number of pounds per man. A typical New Zealand dairy consists of a husband-wife team that milks 160 cows on 160 acres. Meanwhile, the American focus on pounds of milk per cow is achieved by purchasing
high-powered feed ingredients. In the end, there are fewer cows, fewer farmers, and more money spent on inputs from off the farm (Lehnert 1994, p.52).

Using techniques from the aforementioned examples, some American researchers have been focusing their efforts on different types of agricultural production in the United States. Perhaps the most promising possibility is called sustainable farming. The goal of sustainable agriculture is to produce food in ways that can be continued indefinitely. It usually involves substituting renewable resources generated on the farm for purchased nonrenewable resources. It focuses on reducing pesticides, chemical fertilizer, and energy use. It also makes use of ecological practices such as crop rotation, landscape management, and livestock waste management (The Prairie Star 1995, p.26[A]).

In 1995, the results of a $4.5 million seven-state study about sustainable farming were released by the St. Paul-based Northwest Area Foundation. Research activities were conducted by multi-disciplinary teams of academic researchers at land-grant universities working in cooperation with farm groups and farmers in Minnesota, Iowa, North Dakota, South Dakota, Montana, Washington, and Oregon. The study was coordinated by the Center for Rural Affairs, Walthill, Nebraska (Ibid. p.24[A]).

According to this largest ever multi-state study, sustainable farming is better for the environment and can be economically competitive with conventional agriculture.
This was determined by comparing the economic, environmental, and social impacts of sustainable agriculture to conventional agriculture. Additionally, this emerging farm management technology can contribute to the economic revitalization of rural communities while preserving the environment. However, the study reports, these potential benefits will not be realized without changes in policy (Ibid, p.24[A]).

Among the measurable environmental benefits of sustainable agriculture are reduced toxins in soil and water, less erosion, enhanced wildlife habitat, and lower energy use. Instead of relying on purchased inputs, sustainable farmers rotate crops, recycle plant nutrients and manure, and plant more soil-burning crops than do conventional farmers. They also use more cover crops, strip crops, contour grass waterways, and field windbreaks to conserve moisture for crop production and reduce soil erosion. As a result these farms use less commercial fertilizer, pesticides, and energy.

Socioeconomic research conducted as part of the study indicates that sustainable agriculture can provide new farming and business opportunities for people in rural communities. But to take advantage of many of these opportunities, local business infrastructure must respond to the different production and market needs of sustainable farmers (Ibid, p.24[A]).
Some of the study's other findings indicated that sustainable farms are likely to be smaller than conventional farms, but sustainable farmers are likely to own a greater portion of the land they farm. In addition, it was found that conventional farmers are discouraged from adopting sustainable agriculture primarily from fear of reduced yields, more labor, and lower income. But those who had converted reported that many of these concerns were reduced as their experience with sustainable agriculture grew (Ibid, p.26[A]).

During the late 1980s, a Department of Agriculture study examined a possible transition from conventional to sustainable agriculture. The findings indicated that a widespread shift to sustainable farming would increase net farm income, lower farm debts, reduce soil erosion and nutrient depletion, meet domestic food needs, reduce oil imports, and lower the environmental impact of agriculture. However, such a switch would also lead to a sharp reduction in the sales of fertilizers and pesticides; thus, it would be strongly opposed by the politically powerful agricultural chemical industry (Miller 1988, p.259).

In addition to sustainable farming being touted as a new direction for agriculture, much has been written about organic farming. This segment of agriculture has posted sales increases of more than 20 percent a year for six straight years, making organic farming the fastest growing segment of the food industry. The U.S. organic industry
racked up sales of $2.3 billion in 1994, an all time high. But organic foods still represent only a tiny—if growing—slice of the $600 billion spent annually on food in the United States (Henkes 1995, p.12).

At this point it might seem that there are some trends which give hope to potential family farmers. Although federal policies offer little, in this regard, there have been reactions at other levels. The ensuing segment explores a number of these responses.

Alternatives Generated by the State and Private Sector

The diminished role of the federal government, in terms of policies to aid family farmers, has created a vacuum wherein state and local governments have intervened. Additionally, in regards to farmland preservation, the U.S. lacks a clear national policy. Therefore state and local governments have stepped in an attempt to protect long-term interests in farmland and, in some cases, assist potential family farmers (Nelson, 1992 p.484).

As of 1995, every state has enacted laws which seek to ease the tax burden on farmers by granting preferred treatment to agricultural land. Unfortunately, to expect differential, property-tax assessment alone to contribute a great deal to the preservation of farmland has proven unduly optimistic (Santana, 1995 p.1).

For example, the state of Colorado created a task force to examine agricultural land conversion and develop
recommendations for state action. The commission found that since 1978, Colorado farmland has declined by 90,000 acres a year, equivalent to a path one mile wide and 140 miles long (Colorado Department of Agriculture, 1995 p.1).

The study *What lies Ahead for Colorado's Ag Lands?* recommended many possible courses of action. On the federal level, the commission recommended that the federal government increase incentives for conservation easements. It was also suggested that expanded assistance be given to beginning farmers and ranchers (Ibid, p.3). However with the passage of the "freedom to farm" bill, Colorado can now expect no help from the federal government.

Yet, there is still hope at the state level. Oregon's statewide land use program is described as the most fully integrated and comprehensive in the country. Oregon has mandatory planning standards. Agricultural lands must be preserved and maintained for farm use. Additionally, soils classified as I-IV, the top half of a soil scale, have to be zoned for agricultural use (Santana, 1995 p.3). Another facet of Oregon's effort to preserve prime farmland has been aimed primarily at preventing the occupation of those lands by hobby farmers (Nelson, 1992 p.473).

The results have been viewed favorably. Data from the United States Department of Agriculture, in its 1987 Census of Agriculture, strongly suggests that Oregon's prime farmland preservation policies seem to work (Ibid, p.475).
Within the private sector a new development has unfolded, known as a conservation easement. A conservation easement is a written agreement between the landowner and a land trust. It protects the special features of the property and places restrictions on certain uses of their land (primarily subdivision) in exchange for either federal tax benefits or remuneration. At the same time, the land remains in private ownership and the land trust assures the terms of the agreement are followed in perpetuity (Bay, 1996 p.17).

By 1994, there were over 1,000 land trusts in the nation, with a growth rate of about one a week. Using conservation easements primarily, over four million acres of farmland was protected from development by local trusts (Ibid, p.17). Ironically enough, the first local land trust was established in 1980 in California (Santana, 1995 p.3).

Thus, it seems fair to conclude that private land trusts, in conjunction with policy changes at the state and local level, have created some opportunities for aspiring family farmers. However, while these developments are promising, they only affect a small percentage of the overall farmland inventory. Unfortunately, at the federal level, the passage of the 1995 farm bill demonstrates that there will be no such change in national policy in the foreseeable future.

At this point the future of the family farm seems fairly well defined. The ensuing chapter offers some final
remarks on the overall standpoint of the family farm in the late twentieth century
The purpose behind writing this thesis was to obtain a better understanding of the events that have unfolded that make it almost impossible for younger people to gain entry into agriculture as an owner/operator. If previous generations could become farmers, why was entry almost completely denied to current and future generations? Of course the obvious answer was because one lacks the necessary capital to make the investment. However, people attempting to gain entry into agriculture in the late twentieth century do not have the same opportunity as previous generations dating all the way back to the Revolutionary era. Why had this changed?

In turn it seemed as if a fundamental freedom had been lost, the freedom to farm. Previous generations had this option, future generations do not. How did this all happen and what did it mean? This thesis set out to answer these questions.

In order to begin answering the question the focus turned to the late 1970s. At that time, agricultural policy had become the focus of attention as a result of the deteriorating economic situation many farmers were finding themselves in. The federal policies of the mid 1970s sought to maximize production. Concurrently the federal government had encouraged farm debt by extending credit at rates lower
than those found in the private sector. However, by the late 1970s, the combination of overproduction and deteriorating export markets were creating business conditions disastrous for many farmers. In response to this, President Carter commissioned a study to examine this situation and make recommendations for future policymakers. Unfortunately, this happened at the end of his Presidency and Carter was unable to implement any of the recommended policy changes.

However the one point that the study did make clear was that there was a choice to be made. Continuing past programs and policies, largely unchanged, would lead to massive changes in the structure of agriculture. It would lead to a small number of producers, largely corporations, controlling nearly all agricultural output. In contrast to that, implementing new policies, recommended by the report, would encourage a return to small scale farming in the Jeffersonian vision.

President Reagan continued past agricultural policies, largely without change, until 1986. For example the PIK program solved a short term overproduction problem, but it was the same Depression-born policy of paying farmers not to produce with a new wrinkle, paying farmers from already existing commodity stockpiles rather than cash.

At the same time, the high dollar, high interest rate situation, created by Reagan’s deficit spending, spelled doom for many farmers who had borrowed extensively in the
1970s. Thus farmers, who were encouraged to borrow by the government in the 1970s, were devastated by the economic situation of the early 1980s. When Congress implemented policy changes to react to this predicament, it took a court order to force Agriculture Secretary John Block to comply.

The 1980s drastically altered the face of agriculture, as predicted in *A Time to Choose*. The family farm had managed to last longer than other decentralized forms of production, but in the end, that just seemed to make its demise more sudden.

Following the Reagan years, agricultural policy was not much of an issue in either the 1988 and 1992 presidential elections. Thus, not surprisingly, the trends established in the 1980s continued largely unchanged. Farms proceeded to grow in size and their ownership continued to consolidate. At the same time, industrial agribusiness extended its control over agricultural production and output.

The ramifications of the transition from family farming to industrial agribusiness are far-reaching and numerous. Perhaps the most disturbing trend has been the problems associated with the chemicals considered essential to industrial agribusiness. The fertilizers, insecticides, herbicides, and pesticides have contributed mightily to nonpoint source pollution. Not only are these chemicals being discovered in well water, they have also been found in streams and rivers. Because megafarms rely on larger and
larger machinery to till their ever-growing farms. The
dependence on these petroleum based chemicals to control
unwanted pests and weeds has grown as well. Furthermore,
the huge machinery and associated petrochemicals all are
dependent on the finite resource oil.

The livestock industry faces similar issues. Huge
feedlots for cattle, giant barns for chickens, and enormous
hog operations have all created additional concerns. The
tremendous amounts of animal waste create odor problems for
surrounding neighbors. Furthermore, water pollution, both
in groundwater and streams, has plagued these entities.

An even greater concern involves the soil essential to
all agriculture. Industrial agribusiness farming methods
are the most conducive to soil erosion. By using the
farming methods employed by agribusiness, soil is
effectively being mined. Obviously this can only go on for
so long.

At the same time, government policy has exacerbated
this situation. In the 1930s soil erosion was a top
priority and government policy encouraged farmers to adopt
tillage techniques to prevent it. In the 1970s these
procedures were discarded as government policy changed to
courage maximum production. Then, in the 1980s, soil
erosion rates once again became a concern and the CRP was
implemented to eliminate farming on land with high soil
erosion rates. Now in the 1990s, the CRP has been abandoned
and federal policy encourages production, once again, on
land just recently taken out of cultivation. Of course what the future holds is a mystery, since with the passage of the 1995 farm bill the government will no longer be involved in agriculture as of 2002.

Another outgrowth of the transition from family farming to industrial agribusiness evolved as well. Borrowing from the model established in the poultry sector, the cattle, hog, and grain industries have all come to be dominated by a handful of corporations. Documented extensively in *A Time to Choose*, the backward and forward integration in the poultry trade, by these corporations, has been reported to be occurring in these other industries as well. Concurrently, the cattle markets are being investigated to determine if laws concerning monopolies have been violated.

Additionally, the effects, predicted in a number of studies, have been demonstrated concerning rural poverty. The overall economic impact of the industrialization of agriculture has been felt by both individuals and communities. The Jeffersonian landowner/farmer has been replaced by a low wage hourly employee who has little hope of owning a farm. At the same time, the communities formerly made up of small farmers have slowly dissipated in conjunction with the disappearance of the former landowners.

Meanwhile, there have been a number of reactions to the transition from family farming to industrial agribusiness. One of these developments involves what has come to be called sustainable farming. Sustainable farming offers many
answers to the problems associated with industrial agribusiness. These farms tend to be smaller, wholly or partially owned by the farmer, and resource conserving. They rely on less of the petrochemicals so essential to industrial agribusiness and, in turn, do not suffer from the associated problems. The farming methods rely on rotating crops and other traditional techniques which have been shown to be soil conserving, instead of erosive. Additionally, the researchers found that these farms contribute to the economic revitalization of rural communities.

Organic farming is another option to industrial agribusiness. Representing the fastest growing segment in agriculture, these farms have much in common with sustainable farms. They tend to be small, owner-operated, resource conserving operations. However both organic farms and sustainable farms would need substantial assistance in the form of redirected agricultural policy to begin to compete for a major share of overall agricultural output. Unfortunately, the 1995 farm bill did not provide this support.

Yet there has been a small ray of hope for family farmers. It has appeared in the private sector as well as at the state and local government level. Either through state land-use planning laws, or conservation easements, some farmland has been preserved. Because the land cannot be developed, it is not likely to attain a value greater
than can be paid for it by being farmed. Consequently, potential family farmers can buy these properties and have a reasonable chance of making it. Obviously, corporations can compete for these lands as well, but often the easements, or state laws, favor the family farmer.

Thus, it seems fair to conclude that at the federal level the Jeffersonian model of a country founded on the notion of the yeoman farmer has reached it's demise. During Jefferson's time he warned the new American republic against the unequal distribution of land. Jefferson argued that "the consequences of this enormous inequality producing so much misery to the bulk of mankind, legislators cannot invent too many devices for subdividing property" (Strange 1988, p.274).

In contrast to that, federal policy now resembles the policy Jefferson forewarned against. Perhaps the most powerful observation concerning agricultural policy comes from farmers themselves: "In effect, the farm community is admitting that if farm policies were designed to preserve the mid-sized operator—that "family farmer" who has been central to the American experience since Thomas Jefferson's time—it has failed" (Margolis 1994, p.1[A]).
REFERENCES

Books


Magazine Articles


Carter, Dave. 1994 Corporate Farms are not the Answer for Producers or Consumers. The Prairie Star. October, 14.


Newspaper Articles


Bullard, Charles. 1986. Half of Cities’ Water Tainted by Pesticides. Des Moines Register. 17 September. 4

Cohn, Meredith. 1994. Water Threat Downplayed. State News Service. 19 October. 6 [A].


______. 1985. Farm Subsidies grow like Weeds. 4 November, 18 [A].


Government Publications


