Abstract

Governments tend to make agricultural policy changes to address immediate problems rather than create long term holistic solutions. This results in one problematic area being addressed at the expense of another. This paper provides a comparative analysis of the agricultural policies put in place by the United States, Europe, and China since the 1930s, which highlights the major actions taken by each government to address the major issues of food security, sustainable income for farmers, environmental concerns, and international trade.

The analysis proves that putting too much emphasis on one of these issues can lead to problems in the other areas. Using these comparisons, the paper supports the need for governments to consider all of the major concerns of agricultural policy. The paper specifically concludes that the United States should take the actions of the European and Chinese governments into consideration when making changes to its agricultural policy so that proper laws can be implemented to promote market based solutions that address the need for food security, stable farm incomes, and proper environmental stewardship while also considering world trade obligations.

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Chapter 1: Introduction

The United States government has created and changed various policies to influence the American agricultural economy since President Franklin D. Roosevelt’s New Deal in the 1930s. While the policies have taken various forms, including price supports, subsidies, conservation programs, energy programs, and feeding programs, the goal has always been a change in the economic well-being of agriculture producers and the cost of food for consumers. The reason behind these programs was to keep farmers on the land to provide Americans with food regardless of the economy.¹ Whether these policies have been effective or overly burdensome on taxpayers has been a contentious issue since the inception of the first price support programs. Additionally, there has been a never-ending debate on who the programs support, large farmers, small farmers, consumers, or the companies that process and sell agriculture products to the public. Understanding the evolution of the governmental policies that control our agricultural economy is necessary to make informed decisions in the future that will have long lasting impacts on the overall American economy, environmental quality, and food security.

This paper provides an overview of how American agricultural policy originated as income support for farmers and how it has changed over the years to meet new demands from a growing and more selective population that looks for more than just quantity in agricultural products. Additionally, this paper provides a comparative analysis of the agricultural policies that have been implemented in the European Union and China, as they are world powers that offer both contrasts and similarities to the American system. Comparing these systems and analyzing the major successes and failures will help the reader understand the pros and cons of agricultural policies that intend to control food and fiber supplies in different forms of government. Finally, the paper concludes with an argument for policies that are more holistic than what has been historically implemented, focusing on strategies that are market based, yet sustainable for farmers, consumers, and the environment.

Much of the existing research covers every change in farm policy in great detail, while others only focus on the top highlights. This paper will include information to appropriately support the thesis stated above, but the reader should be aware that there is an abundance of information available to support a variety of viewpoints. For example, many changes to agricultural policy were amendments that changed the inclusion or exclusion of specific commodities in a particular program, or made some adjustment to payment calculations.
Chapter 2: Developmental History of American Agriculture Policy and Its Future

Introduction

This chapter will focus on the historical development of agricultural policy since the beginning of the Agricultural Adjustment Act of 1933 to present day. The major developments and changes in agriculture policy will be discussed, arguing that the system has been excessively expensive and not highly effective. First, this chapter will provide a history of the agricultural economy in America leading up to government’s involvement. Second, this chapter will follow the timeline of new and major changes to agricultural policy and discuss the positive and negative outcomes of these changes. The timeline section will draw information from credible experts that have written about American agricultural policies. Finally, this chapter will compare prominent ideas that have been recently introduced to make changes to current policies and conclude with analysis and recommendations by the writer.

Farming in America Before 1933

According to Iowa State University, Native American agriculturalists arrived in the Western hemisphere as early as 5,000 B.C., and “over the next 6,000 years, Indian farmers domesticated squash, sumpweed, marsh elder, sunflower, chenopod, and maize
We also know that the first European settlers were taught to grow several staple crops by Native Americans. This laid the foundation for the agrarian based society that dominated the American economy until the twentieth century.²

Historically, a majority of Americans were farmers before the economic transformation of the twentieth century. According to the United States Department of Agriculture’s Economic Research Service, nearly half of the American population was employed in agriculture in 1900.³ Prior to the twentieth century, many American farmers produced food for their own family's consumption and sold the remainder. As cities grew, farmers began producing specific items to sell to the growing population, both domestically and internationally. Like any other market, this worked well as long as there were enough consumers to buy the products. Specifically, the period between 1910 and 1914 were considered the golden years of American agriculture where production and domestic and international demand were most in harmony, and became the years that future public policy attempted to recreate.⁴

However, the American agricultural economy began to decline in 1920,

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well before the Great Depression, when America moved from a “debtor to
a creditor nation after World War I, resulting in a continued loss in the
volume and price of exports.”¹

As world prices continued to fall for all commodities, farmers and
other industries lobbied for tariffs to protect their income. The “Smoot-
Hawley” tariffs went into effect in 1930. While the intentions were to
protect income for Americans, trading partners implemented their own
tariff systems around the world. This international trade war resulted in
agricultural exports dropping by over 20 percent between the 1920s and
1930s.² Farmers were limited to selling their products domestically due
to the tariffs, resulting in too much product for too few consumers.³

Prior to the implementation of the Smoot-Hawley tariffs, farm
organizations had begun to recognize the sinking exporting market for
agricultural commodities, and recommended various steps to stop
overproduction. Various plans were discussed by the agricultural
community and Congress. Some plans would set prices according to
what was exported as excess versus sold domestically while taking into
account the cost of production. Others would tax exported products,
then return the funds to farmers based on production acreage and

¹. United States Department of Agriculture, Agricultural Price-Support, 1.
³. History Learning Site, “Farmers and the New Deal”, History Learning Site,
http://www.historylearningsite.co.uk/New_Deal_farmers.htm.
location. Some of these ideas gained more traction than others, but none succeeded in the 1920s.¹

The McNary-Haugen plan garnered Congressional support, but was twice vetoed by President Coolidge. This plan, introduced in 1924 by Senator Charles McNary of Oregon and Rep. Gilbert Haugen of Iowa, would have provided for “a segregation of surplus, which was to be sold abroad at world prices; a distribution of operating costs and losses among growers by an equalization fee; a script device to collect equalization fees; and a price-ratio provision to determine fair prices. Provisions were to be applied to eight basic agricultural commodities...”² While this legislation did not succeed, it did build momentum necessary to encourage government involvement in agricultural economics that would use tax funded subsidies and production controls.³

The federal government’s failure to find a solution to the trade war, and the onset of the Great Depression resulted in farm income dropping by over thirty percent,⁴ leading to widespread bankruptcies.⁵ By 1933, building on the momentum started by the McNaury-Haugen plan, the Administration and Congress were pressured to take action regarding the economic failure of the American agricultural economy, resulting in the American government’s first implemented efforts to control the supply

¹ United States Department of Agriculture, Agricultural Price-Support, 1-2.
² Ibid., 2.
³ Ibid., 1-2.
⁴ United States Department of Agriculture, 20⁰ Century Transformation, 9.
⁵ History Learning Site, “Farmers and the New Deal.”
and demand of agricultural products through the *Agricultural Adjustment Act of 1933*.¹

**Farming in America after 1933**

The *Agricultural Adjustment Act of 1933* (AAA), which was part of the larger “New Deal” package lead by President Franklin Roosevelt, was designed to increase farmer income to be on par with the incomes of those working in other industries, based on the 1909-1914 economic levels.² As directed by the 1933 AAA, the Department of Agriculture created formulas to find the proper parity price of agricultural products relative to other industrial products. Specifically, the Secretary of Agriculture took the following steps:

1. to secure voluntary reduction of the acreage in basic crops through agreements with producers and use of direct payments for participation in acreage control programs;
2. to regulate marketing through voluntary agreements with processors, associations of producers, and other handlers of agricultural commodities or products;
3. to license processors, producer associations, and others handling agricultural commodities to eliminate unfair practices or charges;
4. to determine the necessity for and the rate of processing taxes; and
5. to use the proceeds of taxes and appropriated funds for the cost of adjustment operations, for the expansion of markets, and for the removal of agricultural surpluses.

Congress simultaneously declared its intent to protect the consumers' interest by readjusting farm production to a level that would not increase

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² Ibid., 3.
the percentage of consumers’ retail expenditures above the percentage returned to farmers in the prewar base period.”¹

The 1933 AAA marked the first time that the government used general tax funds and taxes assessed on the companies that processed and marketed the agricultural products deemed “basic commodities”² to pay farmers not to plant certain commodity crops and slaughter livestock en masse to control supply. In addition, the Federal Surplus Relief Corporation began supplying food to the needy through schools and various community outlets. According to the Department of Agriculture’s Food Nutrition Service, “In March 1937, there were 3,839 schools receiving commodities for lunch programs serving 342,031 children daily. Two years later, the number of schools participating had grown to 14,075 and the number of children had risen to 892,259.”³

These actions by the federal government, combined with the droughts of the mid-1930s resulted in higher prices for commodities and higher farmer income. However, only landowning farmers received payments. Sharecroppers, which were abundant in the South, were

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¹ United States Department of Agriculture, Agricultural Price-Support, 3.
employed by farmers to plow up crops and slaughter animals to qualify for 1933 AAA payments, then left with nothing. ¹

In 1936, many provisions of the 1933 AAA were ruled unconstitutional by the Supreme Court in *United States v. Butler* because “the Federal Government had no right to regulate the local business of farming and that the processing tax was for the benefit of a particular group rather than to promote the general welfare.”²,³ Prior to being struck down, the 1933 AAA did have an impact on farmers’ income. According to the United States Department of Agriculture’s Economic Research Service, “farm income in 1935 was more than fifty percent higher compared to 1932, due in part to the farm programs.” Twenty-five percent of the income difference is attributed to programs in the 1933 AAA.⁴

The Supreme Court ruling ended both the processor tax and production controls. However, two important provisions, including a 1935 amendment to the 1933 AAA, were upheld that continue to impact agriculture policy in America. First, thirty percent of customs receipts were earmarked to promote domestic and international consumption of agricultural products by “encouraging the use of surplus commodities by diverting them to industrial or other use and financing adjustments in

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³ Ibid., 2.
⁴ Ibid., 3.
the production of agricultural commodities."\(^1\) Second, the Administration maintained the power to enforce import quotas to prevent imported products from causing economic harm to farmers.\(^2\)

Wary of farm prices plummeting again following the ending of the programs in the 1933 AAA, Congress quickly replaced the 1933 AAA in 1936 with the *Soil Conservation and Domestic Allotment Act* (SCDA), which linked soil conservation and commodity programs.\(^3\) The SCDA was designed to address the erosion issues that became a top priority as result of the “Dust Bowl” caused by the poorly managed farming practices and horrific multi-year droughts while increasing the income of farmers. Unlike the 1933 AAA, which used the price of commodities to find parity with non-farm industries, the SCDA attempted to put individual farmer income on the same level as non-farmers, based on 1909-1914 income levels.\(^4,5\) President Roosevelt added a consumer protection goal to the SCDA, “the protection of consumers by assuring adequate supplies of food and fiber.”\(^6\)

The soil conservation goals of the 1936 legislation were thwarted by a drought, which resulted in farmers electing to not participate in the conservation programs, and instead planting more acres of crops that are detrimental to the land. In 1937, fair weather returned and farmers

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2. Ibid.
6. Ibid.
continued to overplant, resulting in sharp price drops and negative opinions of the program.\(^1\) However, it is important to note as an example of farm lobbying power that cotton farmers demanded, and received, taxpayer subsidies for each pound of cotton up to three cents when the market price fell below twelve cents per pound.\(^2\)

In 1937, Congress passed legislation to “clarify the legal status of marketing agreements and orders.”\(^3\) Marketing agreements were intended to be voluntary programs, while orders are mandatory.\(^4\) According to the Department of Agriculture’s Agriculture Marketing Service, the Orders “help to maintain the quality of produce being marketed, standardize packages or containers, and authorized advertising, research and market development. Each order and agreement is tailored to the individual industry’s marketing needs.”\(^5\) Marketing orders still exist in agriculture policy today, and more have been formed over the years. They are often a point of contention because orders are seen by many as a tax that is passed on to consumers.\(^6\)

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2. Ibid., 11.
3. Ibid., 12.
Congress addressed agriculture policy again in 1938. To address oversupply issues and avoid another battle with the Supreme Court, the Agricultural Adjustment Act of 1938 created production quotas that directly limited production by farmers instead of manipulating markets through taxes on processors. Farmers that stayed within the quotas received tax payer subsidies. Additionally, farmers were eligible for continued payments to ensure income parity. Loan programs were also developed that would allow farmers to take out operating loans against commodities that were stored until market prices improved. The first crop insurance program to protect against uncontrollable crop losses was also included in the legislation.\(^1,2\) The crop insurance proved to be unstable due to loss payments far exceeding premiums between 1939 and 1942, but the Administration and Congress created a much more robust crop insurance program that could absorb the losses.\(^3\)

The AAA of 1938 is considered to be the first permanent farm bill legislation, as many of the programs did not include program expiration dates.\(^4\) Many new agriculture policies are created as amendments to this legislation. In addition to supply controls, the bill continued conservation efforts by linking eligibility to fallowing land. These programs had a dramatic impact on farm incomes, as taxpayer subsidies help many farms survive the twenty percent decline in farm prices.

between 1938 and 1940. In 1939, subsidies accounted for the thirty-five percent of farm income.¹

Agricultural legislation following the AAA of 1938 made changes to existing programs, such as the Steagall Amendment of 1941 that expanded subsidies to include more commodities. Others changed the parity rate for various commodities and created or renamed agencies, such as the Commodity Credit Corporation (CCC), to carry out the government’s expanding role in agriculture. Additional changes were made to be sure the high demand for commodities during World War II was met. Government involvement and market distortion during World War II grew rapidly, with support programs extending to over 100 agriculture products compared to the eight basic crops in the 1930s.²

Additionally, the government set subsidy price levels for several commodities much higher than the actual market price.³

Following the high demand created by World War II, Congress debated whether agricultural policy should maintain the high fixed price support subsidies or return to the flexible system that based subsidy program payments on removing excess products from the market and parity income levels based on the 1909-1914 timeframe. Congress also had to decide whether to contract the number of commodities supported and the amounts paid out to 1938 AAA levels. Congress compromised

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¹. United States Department of Agriculture, Agricultural Price-Support, 15.
². Ibid., 16.
³. Ibid.
on the issues with the 1948 AAA. The 1948 AAA extended higher support prices for most commodities until 1950, at which time support prices would begin using the previous ten years as the base for parity. This was in response to the changing economy and increased per acre output that had occurred since the 1909-14 timeline was established. However, the AAA of 1949 superseded the previous legislation and continued high subsidy support programs.¹

The AAA of 1949, which made parity based subsidy supports for non-basic commodities mandatory, became another piece of permanent legislation along with the AAA of 1938.² The 1949 AAA was passed following intense debate regarding the continued necessity of high subsidy supports. Secretary of Agriculture Charles Brennan authored “The Brannan Plan”, which

“would have allowed prices to be determined by the marketplace while protecting farm income through payments...” The Brannan Plan proposed: (1) the use of an income standard, based on a 10-year moving average beginning with the years 1938-1947, rather than parity as a method of computing price-support levels for farm products; (2) support for major products, called Group I commodities, at full income standard levels; (3) support for the incomes of growers of perishable commodities by direct Government payments equal to the difference between the prices received in the market and the support prices established; (4) restriction of supports to large-scale farmers to what an efficient family farm unit could produce; and (5) requirement of compliance with approved conservation practices and production or marketing controls in order to receive benefits. The Brannan Plan, though widely debated, was not adopted by Congress largely because of its

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¹ United States Department of Agriculture, Agricultural Price-Support, 18.
projected cost and because of the opposition of larger farmers to limits on supports.”

The Brannan Plan was not only rejected by large farmers, but their lobbyists were also successful in extending high support price subsidies for many commodities for another year in the 1948 AAA. While several non-basic commodities lost their prices supports at the end of 1950, basic commodities had wages paid to farm laborers and the high prices received during World War II added to the income parity scale used to determine the support prices. The debate surrounding whether larger farmers should receive subsidies continues today.

The Korean War called for full production of agricultural products and again postponed any attempts to move away from the high support prices to a more market based system until 1954 for basic commodities. In fact, the Defense Production Act of 1950 increased the price support levels while maintaining a quota system. Similar to the end of World War II, the ramped up production for the war effort meant surpluses immediately following the end of the war. The Eisenhower administration made efforts to move toward a flexible support system that would discourage farmers from overplanting by tying supply to the amount of subsidies received while also improving export programs.

2. Ibid., 19.
Eisenhower also wanted to separate government owned surpluses from the market to avoid increased price depression.¹

The *Agricultural Trade Development and Assistance Act* passed in 1954. The Act allowed excess agricultural products to be sold for foreign currency, emergency relief, and for trading for “strategic material.”²,³ The efforts to export surplus products were successful, but moving towards flexible support programs was much more difficult to pass through Congress. Members of Congress representing agricultural interest preferred the high support prices that had continued since World War II. However, the *Agricultural Act of 1954* passed to make substantial changes to the parity levels used to determine price support amounts for basic commodities.⁴ These changes were commodity specific, and parity levels decreased or increased according to supply. Quota limits on planting were also changed.⁵

In addition to the *Agricultural Trade Development and Assistance Act of 1954*, further supply reduction and conservation efforts were made through the *Agricultural Act of 1956*’s Soil Bank.⁶ The Soil Bank, funded by the general fund, paid farmers to not plant wheat, cotton, corn,

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2. Ibid.
tobacco, peanuts, and rice. However, the Soil Bank was discontinued in 1958 due to high cost and little success at reducing acreage planted.\(^1\)

Continued increases in per acre production of crops due to technological advancements meant growing surpluses, regardless of lower price supports and taking land of production. When President John F. Kennedy came into office in 1961, surpluses of several crops were at all-time highs. The Kennedy administration reversed the steps taken by the Eisenhower administration to tie subsidies to surpluses, believing that “tighter production controls and higher levels of support were necessary to raise income and reduce surpluses.”\(^2\) The first emergency measure was also taken to address the grain surplus under the Kennedy administration. Secretary of Agriculture Orville Freeman was given the authority to issue “payment in kind” (PIK) certificates to farmers who agreed to plant less acres. The farmers would redeem the certificates to the Commodity Credit Corporation and receive surplus grain, held by the government, in lieu of grain they would have harvested.\(^3\) These programs were continued in the *Food and Agriculture Act of 1962*, providing “payment in kind” certificates in addition to price supports.

The *Food and Agriculture Act of 1965* was the first omnibus four year bill, which has been the general format for farm bill legislation to

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2. Ibid., 23.
3. Ibid.
present day. In addition to extending the “payment in kind” certificates and support price subsidies, the 1965 legislation also gave the Secretary of Agriculture the authority to “make 5 to 10 year contracts with farmers who agreed to convert cropland into uses which would conserve water, soil, wildlife, or forest resources; or establish or protect open spaces, natural beauty, wildlife or recreational resources; or prevent air or water pollution.”

In addition to the Food and Agriculture Act of 1965, President Lyndon Johnson signed the Food Stamp Act of 1964. The Food Stamp Act’s purpose was “strengthening the agricultural economy and providing improved levels of nutrition among low-income households.”

Participation in the Food Stamp program grew from over 500,000 in 1965 to more than fifteen million by 1974. This expansion far exceeded the estimates of the Administration and Congress, which expected 4 million participants at a cost of $360 million annually. While the Food Stamp Act provided nutrition to millions of Americans, it was supported by taxes, in addition to the various other programs used to increase income for farmers. This multi-prong approach to subsidize agriculture with tax funds is another point of contention that continues to be debated, and will be discussed later in this paper.

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4. United States Department of Agriculture, Supplemental Nutrition Assistance.
The *Agricultural Act of 1970* continued subsidy programs with some changes as to what commodities would be eligible for the various programs. Reductions in planted acres were continued in the bill, but the Nixon administration was given more flexibility regarding which crops would see reduced acreage. Additionally, a $55,000 cap per crop per farmer was implemented to address concerns about the overall cost of farm subsidy programs and the large sums of money being received by some farmers.¹,² Tax funds from the general fund spent on agriculture programs reached $3.8 billion in 1969.³

Unlike all previous farm bills, the *Agriculture and Consumer Protection Act of 1973* was approved during a time of high demand and low supply, as “grain exports nearly doubled between 1972 and 1973 and total agricultural exports increased by over 25 percent.”⁴ Because of forecasts for several years of strong exports, the 1973 farm bill intended to encourage production growth, and did so by replacing all price supports with target prices. Deficiency payments were made when crop price fell below target prices. Unlike price support payments, which would be distributed in addition to the other crops programs, including loan programs, deficiency payments only paid the difference between target prices and available price support loans. Target prices for 1976 and 1977 were based on 1975 prices, instead of the parity formula that

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4. Ibid., 29.
had been used for decades, while future target prices would be based on the previous three year and take production costs into account.\textsuperscript{1} Additionally, payment caps were reduced to $20,000 per crop per farmer for most crops.\textsuperscript{2} The high market prices of agricultural commodities combined with lower caps on payments resulted in taxpayers funding $530 million in 1974, the lowest amount since 1955.\textsuperscript{3}

The prosperous years of the early 1970s did not last through the decade. High agricultural commodity prices caused increases in farmland values. Additionally, the dependency on export markets put farmers at the mercy if international political and economic unrest. American consumers also faced increase food prices and demand lower subsidy programs, which resulted in pressure on the government to reduce agricultural subsidies.\textsuperscript{4} These combined challenges resulted in farm income dropping to $19.8 billion in 1977, 42 percent below the all-time high set in 1973.\textsuperscript{5}

President Jimmy Carter and Congress responded to falling agricultural commodity prices with the \textit{Food and Agriculture Act of 1977}, which brought back higher support levels, but maintained a target price approach. No payments were made when price were above target prices, which were based on the five month national average for each commodity.

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\textsuperscript{1} United States Department of Agriculture, \textit{Agricultural Price-Support}, 29, 30. \\
\textsuperscript{2} Library of Congress, \textit{Farm Commodity Legislation Chronology, 1933-2002}, 3. \\
\textsuperscript{3} United States Department of Agriculture, \textit{Agricultural Price-Support}, 30. \\
\textsuperscript{4} Ibid., 31. \\
\textsuperscript{5} Ibid. \\
\end{flushright}
or the national loan level.\textsuperscript{1,2} Additionally, the administration reinstated acreage allotments, and the 1977 bill gave the Secretary of Agriculture the authority to start a set aside program to limit the planting of crops if surpluses became excessive.\textsuperscript{3} The 1977 farm bill also included authorization of the farmer owned grain reserve, which would store grains until better market condition existed.\textsuperscript{4} The legislation increased limits on payments allowed per farmer, per crop from $20,000 set in the 1973 farm bill to $40,000 in 1978, $45,000 in 1979, and $50,000 for 1980 and 1981. These limits did not include “payments for disaster loss, CCC purchases, commodity loans, or payments for public access for recreation.”\textsuperscript{5} Finally, the 1977 farm bill incorporated the Food Stamp program as a title in the farm bill, and expanded eligibility for the program.\textsuperscript{6,7}

Agricultural commodity prices were strong from 1978 until 1980, as exports and consumer prices increased. Again, consumers pressured Congress to reduce funding for the agriculture subsidy programs. Simultaneously, interest rates and inflation increased while a severe drought lower crop yields in 1980 an embargo was placed on exporting

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\item United States Department of Agriculture, \textit{Agricultural Price-Support}, 32.
\item United States Department of Agriculture, \textit{Agricultural Price-Support}, 32.
\item Ibid., 33.
\item Ibid.
\item United States Department of Agriculture, \textit{20\textsuperscript{th} Century Transformation}, 10.
\item United States Department of Agriculture, \textit{Supplemental Nutrition Assistance}.
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grains to Russia. These combined events resulted in net farm income dropping by one third.¹

Of specific interest is the impact of the export embargo placed on American grains being sold to Russia. In December of 1979, Russia began an occupation of Afghanistan, against the United States’ wishes. As punishment, then President Jimmy Carter put the embargo into place.² Russia, and much of the world, had endured a lower grain production year in 1979, while the United States had been highly productive. Contracts were in place that would send over twenty-five million tons of grain to Russia in 1980, but the embargo enacted in January of 1980 would limit the exports to no more than eight million tons. This eight million ton number was guaranteed in a 1975 bilateral agreement between Russia and the United States.³ The impact of this lost market to the exporting firms and farmers was drastic, both economically and politically. This embargo lasted until President Ronald Reagan lifted it in January of 1981.⁴

The Agriculture and Food Act of 1981 was written with these conditions in mind, as farmers’ top concerns were export embargoes and farm income. However, the 1981 farm bill was also the first to be written

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with implication on the federal budget considered an issue.  

President Ronald Reagan and Secretary of Agriculture John Block had hoped to minimize the government’s role and expenditures on agricultural programs by promoting increased exports, but the 1981 farm bill was essentially “a less expensive version of the 1977 Act.” While the bill did provide higher subsidy levels for farmers in the case of export embargoes, the bill claimed to reduce cost by setting target prices rather than tying them to inflation. Additionally, target price subsidy payments were limited to $50,000 per person, while disaster payments were limited to $100,000. Disaster payments were also limited to farmers not eligible for crop insurance programs, unless emergency circumstances prevailed. Control of production through managing the number of acres planted continued in the 1981 farm bill. Exports were promoted through the creation of a revolving export credit fund administered by the CCC to help develop markets. The Federal Crop Insurance Act of 1980 had “expanded crop insurance to many more crops and regions of the country” before the 1981 farm bill.

Following passage of the 1981 farm bill that attempted to reduce government spending, a major farm income crisis struck in 1982 that increased taxpayer subsidies to early 1960s levels. Record production,

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2. Ibid., 36-37.
international economic recession, and a strengthened American dollar reduced farm income, “in constant dollars, dropped to its lowest levels since 1933.”¹ The Department of Agriculture once again implemented production controls to remove surpluses. This was done by requiring farmers to plant less to receive subsidies, as directed in the *Omnibus Budget Act of 1982*.²,³ In addition to reducing acres planted for 1983 by linking production acres to subsidy support payments, the Secretary of Agriculture reinstated payment in kind certificates (PIK), which compensated farmers for more crops and at higher levels that past PIK programs. PIK resulted in farmers reducing planted acres by a total of one third (82 million acres) for the 1983 crop year. High participation in the program resulted in the largest planted acreage reduction ever, cost $9 billion of commodities from government stores that were previously purchased with tax dollars, and raised concerns by agricultural input and equipment manufacturers that their market would also be hurt.⁴

The PIK plan did not work as expected, due to severe drought in the Midwest. Market prices increased for the eligible crops, except for wheat which was not impacted by the drought, and farmers that enrolled substantial amounts of acreage in the PIK program did well. However,

⁴ Ibid., 42.
farmers that had not enrolled considerable portions of their acreage did not have enough grain to sell and were negatively affected.¹

The Agricultural Programs Adjustment Act of 1984 continued the Reagan Administration’s efforts to reduce the cost of agricultural subsidy program to taxpayers. The legislation did so by continuing to set target prices as the 1981 farm bill instead of connecting target prices to inflation. The law also provided for crop reduction and a PIK program for wheat, capped at $50,000.²³

The Food Security Act of 1985 was similar to the 1981 farm bill, with some changes. In an effort to decrease government expenditures on farm subsidies, the Secretary of Agriculture was given the authority to decrease subsidy payments and lower loan rates for major commodities to promote exports.⁴⁵ The 1985 farm bill also compensated farmers for taking “highly erodible lands” out of production through the Conservation Reserve Program (CRP). The CRP is the “largest private-lands conservation program in the United States.”⁶ By 1989, the CRP had retired 30 million acres of farmland.⁷ Regardless of steps taken to remove land from production and promote exports, the 1980s were a

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¹ United States Department of Agriculture, Agricultural Price-Support, 43.
² Ibid.
⁴ Ibid., 5.
time of financial crisis for farmers as many held high debt loads and land values declined until 1987.¹

The *Food, Agriculture, Conservation, and Trade Act of 1990* continued to connect agricultural programs to market controls. The legislation kept target prices and the same levels and “limited total acreage eligible for deficiency payments but allowed more planting flexibility, changed price support formulas for many commodities, and altered rules or operation of grain reserves.”² Additionally, the 1990 farm bill continued to promote exports and “authorized the Secretary of Agriculture to establish a nationwide definition for organic food.”³ However, a recession kept farm income low in the early 1990s.⁴

The *Federal Agriculture Improvement and Reform Act of 1996* represented the biggest shift to more market oriented agricultural policies than farm legislation to date.⁵ Following the recession of the early 1990s, farm income hit an all-high of $54.9 billion in 1996.⁶ When the 1996 farm bill was written in these better economic times, provisions were implemented to phase out target prices by 2002.⁷ In lieu of target prices and price support subsidy payments, the farmers were paid based on production since 1986. Additionally, the government

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4. Ibid.
6. Ibid., 1.
scaled down its role in commodity storage and management and ended most planting restrictions.¹

While the phase out efforts of the 1996 farm bill were meant to connect farm programs more closely to the market, several emergency appropriations bills were passed leading up to the *Farm Security and Rural Investment Act of 2002* to keep farmers viable when the recurring problem of oversupply again reduced farm income.² These emergency appropriations bills “tripled the sum authorized in 1996 to ease the transition to the free market”, totaled $92 billion by 2002, and accounted for 32 percent of farmer income between 1996 and 2002.³

The 2002 farm bill returned to increased government subsidy involvement in the agricultural economy. The bill continued the direct payments instead of ending them as intended in the 1996 farm bill.⁴ Additionally, the 2002 farm bill implemented a counter cyclical payment program that paid subsidies to farmers when prices fell below a specified price, marking a return to target prices and subsidy support payments.⁵ The bill included the first ever energy title, expanding the biomass products eligible to be used for fuel and creating another outlet for

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2. Ibid., 6.
4. Ibid.
5. Environmental Working Group, *Farm Subsidy Primer*. 

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surplus agricultural products.¹ Following a short recession in the early 2000s, farm income set record highs for the crop years 2004, 2007, and 2008.²

The Food, Conservation, and Energy Act of 2008, was expected to cost $284 billion over five years.³ The 2008 farm bill continued the direct and counter cyclical subsidies included in the 2002 farm bill, but added yet another subsidy program. The new program was called the Average Crop Revenue Election Program (ACRE). Farmers could elect to enroll in the ACRE program in lieu of the counter cyclical payments to have subsidies based on revenue instead of trigger prices. Farmers were still eligible for direct payments, but at a reduced amount. The ACRE program paid farmers when yield and prices were low based on past production, where counter cyclical payments subsidized farmers when nationwide price targets were hit.⁴

The 2008 farm bill also expanded and created several conservation programs, predicted to cost over $55 billion over ten years.⁵ Additionally, changes were made to crop insurance that would require the Secretary of Agriculture make “premiums equal indemnity payments

⁵ Ibid., 5.
over time.” However, no changes were made to the amount of funding that will be paid farmers. It should be noted that crop insurance was intended to help farmers in times of disaster so ad hoc appropriations would not continue to be necessary. To date, disaster funding is a regular occurrence.¹

The 2008 farm bill was finalized just as the worst international economic recession in decades took hold. However, because American agriculture had been in a stronger position than most other industries leading up to the recession, it is expected to recover more quickly.² Strong export markets for American agricultural products also continued to be a bright spot through the recession, helping to soften the blow to farm income, as exports only dipped 2 percent in 2009 before increasing 18 percent in both 2010 and 16 percent in 2011.³ This strong growth meant the most recent 2014 farm bill was written in a time of high farm income and high federal deficits, which lead to pressure by taxpayers to lower the subsidies paid to farmers.

In February of 2014, the 2014 farm bill passed Congress and was signed into law by President Barack Obama. As mentioned above, the bill was written during times of high agricultural commodity prices, and reflects the demand by many Americans to lessen the subsidies supplied

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³ Ibid., 8.
to farmers. The newest farm bill completely eliminated direct payments and previous crop insurance programs, and instead created two new crop insurance programs. The new programs allow the farmers to choose insurance based on past production levels or past revenue levels.\(^1\)

The insurance program based on past production (Price Loss Coverage or PLC) pays farmers when trigger prices, set by the Department of Agriculture, fall below a certain point. This program is decoupled, which means insurance is paid on historical acres and yields, not what is planted.\(^2\) This design intends to prevent farmers from overproducing each year, which would drive down prices and increase the amount spent on insurance claims. The new form of insurance that pays claims based on revenue (Agriculture Risk Coverage or ARC) will pay a percentage of historical revenues.\(^3\) Additionally, insurance called the Supplemental Coverage Option (SCO) will become available in 2015, which will allow farmers to buy more insurance for the potential losses not covered by other insurance programs.\(^4\) While these insurance programs are not direct or cyclical subsidies, the premiums are heavily subsidized by taxpayer money, which will also be used to pay claims when there are not enough premiums to cover costs. Some argue that

\(^1\) Tara Smith, e-mail message to author, September 17, 2014. Smith is a former United States Senate Agriculture Committee staff member and agricultural lobbyist.
\(^2\) Ibid.
\(^3\) Ibid.
the crop insurance programs are simply a more “politically palatable” way to subsidize farmers and agribusiness.¹

The 2014 farm bill requires farmers to meet certain conservation standards to be eligible for subsidized crop insurance. Specifically, farmers must comply with the Highly Erodible Land Conservation (HELC) and Wetland Conservation (WC) program requirements administered by the Department of Agriculture’s Natural Resources Conservation Service.² This linking of conservation plans and financial assistance received by farmers is important to note, as this is similar to efforts in Europe that will be discussed in the second chapter of this paper.

The 2014 farm bill process also attempted to separate the Supplemental Nutrition Assistance Program (SNAP), also known as food stamps, from the rest of the farm bill. The House of Representatives, led by a Republican majority, successfully passed a version of the farm bill without SNAP funding, but Democratic President Obama and a Democratic majority in the Senate opposed the bill.³ This was the first attempt to separate nutrition programs from agricultural subsidies since they were combined to garnish broad support, as previously discussed.

The Republican majority promised to bring up a separate bill to address the food stamp issue, but this was not enough to move the bill in the Senate.¹ This failed attempt suggests that nutrition and agriculture policy will be linked in the foreseeable future.

**Arguments For and Against Agricultural Subsidies**

After tracing American farm policy through history, it is clear that the hundreds of billions of dollars that have been spent on various subsidy programs and the multiple efforts to reduce surplus commodities have only resulted in a few years of stable income for farmers while thwarting the free market rules of supply and demand. For decades, government policies were put in place to replicate the conditions that existed 1909-1914. However, the issue of oversupply due to technological advances and ever-changing market dynamics has continued to plague farmers except for brief periods in the decades since the first Agricultural Adjustment Act was introduced.

Opposition to, and support for, agricultural subsidies tends to be bipartisan. A 2009 report by World Public Opinion, a nonpartisan think tank, conducted a poll of Americans across the country that concluded that “Opposition to subsidies for large farms was not substantively or statistically different among Republicans (62 percent), Democrats (60

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¹ O'Keefe, “Farm Bill Passes Narrowly In House, Without Food Stamp Funding,”
percent), and independents (59 percent).” However, farm bills that continue the subsidy programs have continually received bipartisan support in Congress. A probable reason for this bipartisan support is that nutrition programs, including the School Lunch program and food stamps, are under the jurisdiction of the farm bill, and receive a majority of the funding in the bill. This means that Members of Congress that may represent an area that does not have a large agricultural presence, but a large population of lower income people would be inclined to pass a farm bill.

The Cato Institute, a conservative think tank in Washington, DC, argues that the main arguments against agriculture subsidies critics is that taxpayers, or consumers, are spending more than they are gaining from the policies because of subsidies going to large farms and overall waste in the government bureaucracies that administer the program. Additionally, many see the farm bill as a subsidy for wealthy mega-farmers, or corporate farmers. According to the conservative website Townhall.com, “two out of every three farms with income exceeding $1 million annually received an average of $54,745 in government payments

in 2011."¹ The more liberal Environmental Working Group (EWG) is also highly critical of subsidies, including those that offset crop insurance premiums in the 2014 farm bill. According to EWG, “The final bill increases crop insurance subsidies by nearly $6 billion by allowing farm businesses to guarantee revenue and creating new, supercharged insurance programs for peanut and cotton farmers. The bill also locks in subsidies for insurance companies and agents.”² In addition to the admonition imposed upon the farm bill by think tanks, an academic analysis conducted by Julian Davis, Professor in the Department of Agricultural and Resource Economics at the University of California, Davis, predicts that prices and production levels of American agriculture would only fluctuate between 2 and 10 percent if all agricultural programs were phased out over ten years.³

Subsidy proponents counter the above arguments with claims that farm subsidies have succeeded in keeping farmers on the land and meeting the needs of American consumers. Republican House Agriculture Committee Chairman Frank Lucas is often quoted as saying the farm bill is necessary to provide “America’s farmers and ranchers with the necessary tools and certainty they need to produce the safest,

most affordable, most abundant food, fiber, feed and fuel supply in the history of the world.”¹ Democrats also support subsidy programs, but as necessary to pass nutrition programs.²

Conclusion

The American government has spent decades and hundreds of billions of dollars attempting to make farming economically viable and to provide Americans with food and fiber. While the goals have been good, the process has been inefficient and not highly effective. Over the years, the various subsidy programs have done little to curb the sharp ups and downs that have impacted the American agricultural economy. Additionally, technological advances that have resulted in continually increasing crop yields have adversely impacted any attempt by the government to reduce supply. At the same time the increases in yield and high supply have resulted in lower priced foods. Efforts by the government to insure a viable income to farmers while supplying consumers with food and fiber are conflicting goals. Additionally, policies that encourage more production regardless of demand lead to increased use of environmental resources and negative environmental impacts. The government has attempted to control supply and demand by using tax funds to pay the farmers more than their products are

² Feulner, “Another Fallacious Farm Bill.”
worth while allowing consumers to pay less than food is worth in the grocery store. Environmental conservation programs are becoming more of a priority with them being linked to the new insurance programs, but they must be economically possible. This will be interesting to watch in the future, as Europe has put tremendous focus on environmental issues in recent years, which will be discussed in the next chapter.

To bring production levels in line with demand, the government should look to more market driven policies that look at the long term economic impacts and urge farmers to produce what consumers want in proper quantities. This could be accomplished by dismantling all subsidy payment programs and instead only offer crop insurance products that pay when natural or manmade disasters ruin crops. While crop insurance itself is heavily subsidized, farmers do pay premiums and only receive payments when a catastrophe takes place. However, insurance against revenue loss is not the answer since it is similar to target prices and payments.

Farmers would also benefit from educational programs to better understand international agricultural markets. As long as American agriculture is an exporting industry, as mentioned earlier, there will be opportunities for farmers to take advantage of the world markets. To that end, the American government will need to enforce policies that do not violate international trade agreements.
The possibility of these changes happening in the near term is unlikely because it is not politically popular. As discussed earlier, urban and rural delegations in Congress have a symbiotic relationship to fund nutrition and agricultural programs, of which lobbyists are able to take advantage.
Chapter 3: Agricultural Policy Development in the E.U. and Future Plans

Introduction

This chapter will give an historical and critical overview of the European Union’s (E.U.) agricultural policy and whether it has met its various goals of food security, farm income stability, and environmental protection for citizens of the member nations of the E.U. since the mid-1950s. The 1950s is when six European nations, including France, Germany, Italy, Belgium, Luxembourg, and the Netherlands, first united for various economic benefits, including agriculture, and began the period of modern agricultural policy in Europe.1 Following a review of the E.U.’s agricultural policy development through to the present, an argument supporting more free market policies that consider all issues face by modern agriculture will be made. Finally, the E.U.’s agricultural system will be compared to that in the United States.

Like the previous chapter on American agricultural policy, this chapter will not delve into deep discussion of every agricultural policy of the E.U., as that would require multiple volumes and is not necessary to understand whether the E.U. has generally succeeded in meeting its agricultural goals, and how it compares to other national agricultural systems. The E.U. is of particular interest because it is a group of

twenty-seven different countries working together in a communal, yet independent, fashion, while China is one large country with a very strong central government and the United States seems to be in between these two with a large central government and a different view of how the government should intervene in agricultural markets.

**Origin and Evolution of the Common Agricultural Policy**

Modern agricultural policy in the European Union dates back to the years immediately following World War II. As a developed group of countries, Europe has made changes to agricultural policies in order to meet the objectives laid out by the first six European nations to join the European Union’s predecessor, the European Economic Community (E.E.C.) in 1958. The original six member countries of the E.E.C. prescribed five objectives, and the types of policy tools available to meet these objectives, for European agriculture, which would become known as the Common Agriculture Policy (C.A.P.). The objectives and policy tools are listed in Articles 39 through 47 of the Treaty Establishing the European Economic Community, commonly called the Treaty of Rome:

1. To increase the agricultural productivity by promoting technical progress and by ensuring the rational development of agricultural production and the optimum utilization of the factors of production, in particular labor;

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2. thus to ensure a fair standard of living for the agricultural community, in particular by increasing the individual earnings of persons engaged in agriculture;
3. to stabilize markets;
4. to assure the availability of supplies;
5. to ensure that supplies reach consumers at reasonable prices.¹

To meet these objectives, the Treaty of Rome tasked the central government with regulating agricultural prices and production levels of specific commodities, administering marketing programs, controlling exports and imports so European markets are not negatively impacted, providing agricultural commodity storage and carryover assistance, and educating farmers to increase production.²

Prior to the birth of the E.E.C. and C.A.P., the European countries controlled their agricultural markets independently. According to Henrik Zobbe of the Royal Veterinary and Agricultural University in Demark, all six of the original E.E.C. members were using various agricultural pricing regulations, which focused on increased production for the small scale family farms that were most common at the time.³ The governments of Belgium, Luxembourg, France, and Germany used market organizations to administer programs that kept market prices higher than the rest of the international market. For example, the Netherlands government only intervened when necessary to stabilize markets, while the Italian government controlled all trade of agricultural

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³ Zobbe, “Economic and Historical Foundation,” 8.
products.\textsuperscript{1} The below table, assembled by Zobbe, provides a summary of policies the original members of the EEC used to regulate agricultural prices in the 1950s.

Table 1. The situation of agricultural policy in member countries before membership of the CAP.

<table>
<thead>
<tr>
<th>Country</th>
<th>Policy Objectives</th>
<th>Policy Regime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belgium</td>
<td>Make farm income secure primarily through migration of farm labor.</td>
<td>(High) price policy and import controls.</td>
</tr>
<tr>
<td>France</td>
<td>Increase farm production to maintain farm incomes and balance of payments equilibrium.</td>
<td>(High) price policy through market organization with import controls and export subsidies.</td>
</tr>
<tr>
<td>Germany</td>
<td>Increase farm production through higher efficiency to maintain farm incomes and ensure fair food prices for consumers. Improve rural infrastructure.</td>
<td>(High) price policy combined with structural policy.</td>
</tr>
<tr>
<td>Italy</td>
<td>Increase farm production, raise productivity and promote land reforms to maintain farm income.</td>
<td>State engaged in both domestic and international trade. Structural policy in a broad sense including credit facilities for all farmers but especially those in the south.</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>Increase productivity and production maintain farm income.</td>
<td>(High) price policy (certain price levels could not be exceeded) through market organization with import controls. Structural policy.</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Creation of such conditions would enable agriculture to contribute in the largest possible way to the national wealth. Price stability.</td>
<td>Price policy and import controls export support. Structural policy in the broad sense.</td>
</tr>
</tbody>
</table>


Current members of the E.U. that were not part of the original six to form the E.E.C. also had various policies in place to control the prices of agricultural products.\textsuperscript{1}

\textsuperscript{1} Zobbe, “Economic and Historical Foundation,” 8.
These earlier policies implemented by individual countries are largely attributed to price volatility caused by the influx of cheap grain to Europe from America.\(^2\) Kevin O’Rourke, Economics Lecturer at the University College Dublin, claims that the European countries responded to cheap imported grain in various manners due to the different roles agriculture played in each of their overall economies. According to O’Rourke, the countries were reacting to the likelihood that cheaper grain would mean lower food cost, less farmer income, and less demand for farm labor. This would mean farm labor from the countryside would move to the manufacturing sector in towns, which would lead to more manufactured goods being exported to offset the economic impact of the cheaper grains and landowners losing money while the continent would not have its own secure food supply.\(^3,4\) In addition to the cheap grains flooding the European markets, the Great Depression along with infrastructure destruction caused by World Wars I and II had a very negative impact on Europe’s agricultural markets.\(^5\)

Prior to the enactment of the Treaty of Rome, following the end of World War II, seventeen European nations discussed an integrated approach to agricultural policy that would “ensure the security of food and supplies” and address “the question of security of income for

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3. Ibid., 9-10.
farmers.”¹ The discussions ended without any agreements due to disagreements on how much control of agriculture programs the individual countries were willing to relinquish to a centralized government.² However, the conversations did spur the formation of the Ministerial Committee for Agriculture and Food, which led to the policy objectives included in the Treaty of Rome and resulting C.A.P.³

Following the signing of the Treaty of Rome, a meeting of agricultural administrators and stakeholders was held in 1958 in Stresa, Italy to produce a plan that would meet the five objectives for the agricultural policy as prescribed by the E.E.C. in the Treaty of Rome.⁴ After much discussion, a proposal was presented to the European Parliamentary Assembly in June, 1960 to:

Establish unity of the market based on the free movement of agricultural products, abolish barriers to trade, organize markets by product with prices being progressively unified and guaranteed, ensure Community preference, enable common invention, set up a European Agricultural Guidance and Guarantee Fund and establish financial solidarity.”⁵

Piece by piece, the implementation of the C.A.P. began in the E.E.C., with tariffs on commodities traded between members of the E.E.C. being

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2. Ibid., 4.
3. Ibid.
5. European Commission. “The Early Years: Establishment of the CAP.”
removed.\(^1\) All agricultural products were assigned common marketing organizations, which determined prices for cereal grains, sugar, and dairy products. Prices were adjusted to a common price across the nation through various forms of government intervention, such as price adjustment and production quotas.\(^2,3\) Import tariffs on agricultural products not made in the member nations of the E.E.C. were used to help keep agriculture prices high, while exporters of agricultural products received refunds.\(^4,5\) Lastly, the European Agricultural Guidance and Guarantee Fund (E.A.G.G.F.) was set up to pay for the C.A.P. policies, and supported by all members of the E.E.C.\(^6\)

Interestingly, the E.E.C. recognized the problems with the programs before they were even put in place, but moved forward with the most politically expedient policies, which haunted the C.A.P. for many years, as will be outlined below. The following quote from Rosemary Fennell, lecturer in the Institute for Agricultural Economics at Oxford University and research staff for the original C.A.P. policies in the 1950s, explains these problems:

O.E.E.C. listed five factors which inhibited the efficiency of price support policies. It referred, firstly, to the political character of agricultural prices which required governments to intervene and arbitrate between the rival claims of consumers and producers. Secondly, there were limitations on effectiveness brought about through natural conditions. Thirdly, farmers themselves prevented

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2. Ibid.
4. Ibid., 362.
price policy from achieving its goals because of the unwillingness to change certain practices or to take new risks, and the inability to implement changes individually which required collective effort. Fourthly, there was the inhibit effect of the inelasticity of consumer demand and inadequate purchasing power, even with food subsidies. Also, tastes were changing and price policies did not respond quickly enough, so that products in declining demand continued to receive more support than was warranted. Lastly, it was quite clear that, although price policy had prevented market collapse during times of oversupply and undoubtedly helped to maintain or improve farm incomes in absolute terms, it had not been able to stop the deterioration of farm incomes relative to those of other sectors.¹

The results of these changes were evident by 1967, as hard wheat prices in the member countries was 200 percent higher than world market prices, corn was 160 percent higher, white sugar was 438 percent higher, beef was 175 percent higher, and butter was 397 percent higher.² These exorbitantly high prices were a result of efforts of the policymakers and agricultural lobbying groups making sure that small scale farmer would be economically viable.³ The cost of the C.A.P. to the E.E.C to support these high prices was growing quickly, absorbing over 80 percent of the total E.E.C. budget as production was outpacing demand, which resulted in new proposals as soon as 1968.⁴,⁵

Soon after initiating the first wave of policies and seeing the unexpectedly high cost of supporting the C.A.P., and the overproduction

5. European Commission, “The Crisis Years I.”
of various agricultural commodities Agriculture Commissioner Sicco Mansholt put forth a proposal that would encourage up to five million farmers to quit farming for early retirement or other occupations.¹,² This proposal, known as Agriculture 80, was not well received by the agriculture community and “provoked violent opposition in farming circles throughout the Community.”³,⁴ The political power of the farmer lobbying groups was too powerful to allow this type of structural reform measures, and instead were able to convince the E.E.C. ruling body that agricultural pricing policy was still the best solution.⁵ Commissioner Mansholt objected to the use of price controls because it would not stem the growing problem of overproduction and accused the Commission of bending to political will instead of economic rational.⁶ The final policy produced by the discussions was a very watered down version of Mansholt’s original plan that would encourage farmers to learn new skills, divert farmland to other uses, and modernize farming operations.⁷

Failing to deal with the issue of overproduction in the infant stages of the development of the C.A.P. was a missed opportunity. The section of this thesis discussing American agricultural policy proves that

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¹. European Commission, “The Crisis Years I.”
³. Ibid.
⁵. Ibid.
⁶. Ibid., 35.
⁷. Ritson, Common Agricultural Policy, 34.
it is very difficult to end a government agricultural program once it starts. As stated above, the prices set by the governments to keep small farms operational were extraordinarily high. Forcing inefficient small farms to be profitable, then trying to take them completely out of the markets will obviously cause much anger. Still, the Commission had a chance to fix this problem in the early stages before multiple generations of farms began to plan for the future based off artificially high prices.

In addition to the problems caused by the artificially high prices, monetary policy changes within the member E.E.C member nations began causing trade imbalances between the nations. Specifically, France made changes to the franc in response to social unrest due to low wages in various employment sectors. To help smooth the transition of the change in the value of the franc, the Commission created the Monetary Compensatory Fund (MCF).\(^1\) Although it was designed to be temporary, the Monetary Compensatory Fund became a permanent fixture in the C.A.P, and caused problems between the E.E.C. member nations due to it constituting a new set of tariffs.\(^2\)

In 1973, the E.E.C. gained three new members, the United Kingdom, Ireland, and Denmark.\(^3\) The United Kingdom, being politically powerful and a large importer of food, immediately began pushing for a

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\(^1\) Ritson, *Common Agricultural Policy*, 35.
\(^2\) Ibid.
\(^3\) Ibid., 36.
complete reform of the C.A.P. As a net importer of food, the United Kingdom’s consumers saw higher prices as a result of the C.A.P. Because they were paying high food prices, and a substantial amount of the E.E.C. budget was being spent on the C.A.P., they wanted to lower their contribution to the E.E.C. The Commission recognized the concerns of the British and released a study that showed many of the problems with the inequality of how member nations were treated under the C.A.P. stemmed from a failure by the E.E.C. to move forward in unifying other parts of the European economies and societies. Additionally, the report maintained that the C.A.P. did follow the five goals laid out in the Treaty of Rome, but highlighted four major problems in the C.A.P. that needed reform:

1) the failure of price policy to reflect the market situation;  
2) the failure of structural policy to increase productivity and reduce regional disparity;  
3) the continued threat to market unity posed by the MCA system; and  
4) the growth in budgetary expenditure und the C.A.P.

This report described the problems and the need for reform, but failed to make any policy recommendations. Like the issue of overproduction that Mansholt attempted to tackle earlier, the need for C.A.P. reform was not politically expedient, and nothing happened.

1. Ibid., 43.  
2. Ritson, Common Agricultural Policy, 35.  
3. Ibid.  
4. Ibid.  
5. Ibid., 43.
Following the report issued in 1974, no action was taken in regards to C.A.P. reform until 1979, when it became an economic reality that the cost of maintaining the C.A.P. would bankrupt the E.E.C.\(^1\)

Following the addition of Greece, Spain, and Portugal to the E.E.C. in the early 1980s, the economic viability of the C.A.P. was on the verge of collapse, finally forcing an attempt at real reform.\(^2\) In 1987, the European Council was unable to agree to agricultural prices for 1988, which would lead to monthly payments being the same as 1987.\(^3\) Price matching the previous year would not be feasible, as the funds would run out in the middle of the year without serious reforms. What was put in place were Maximum Guarantee Quantities (MGQs), which would pay farmers up to a production level for each commodity based off of the previous year’s production.\(^4\) Monies paid out for commodities produced over the MGSs would be deducted from the next year.\(^5\) In addition to the MGQs to limit production, the Council agreed to reforms that included:

- voluntary set-aside, extensification and diversification schemes, designed to facilitate the adjustment of supply to demand whilst compensating farmers or the loss of income, and raising the profile of environmental protection. On the revenue side, the Council agreed to increase the Community budget by enlarging the

\(^1\) Ritson, *Common Agricultural Policy*, 44.
\(^3\) Ritson, *Common Agricultural Policy*, 50.
\(^4\) Ibid.
\(^5\) Ibid.
resource base to include a proportion of the gross national product of each member state.¹

Whether these steps were successful in the short term is not certain, as improving world market prices did much to improve European prices.² However, experts claim these stabilization methods did fail in the end because it did not disconnect production from subsidies, which means farmers continued to produce as much as possible.³

In 1992, the world markets had softened and a pending budgetary crisis once again spurred an attempt to reform the C.A.P.⁴,⁵ This time, however, the policymakers understood the absolute necessity to make a more stable program that would not encourage overproduction. Additionally, the Uruguay Round of General Agreements on Tariffs and Trade were underway, and pressure from various countries was being applied to reduce price controls because of the impact of artificially inflated prices on world prices and trade.⁶ What became known as the MacSharry reforms was the first real attempt to curb the continued overproduction of agricultural products and increase environmental protections.⁷ The plan reduced payments for grains by 35 percent and beef prices by 15 percent, while introducing direct payments to farmers

¹. Ibid.
². Ritson, Common Agricultural Policy, 51.
³. Ibid.
⁵. Ritson, Common Agricultural Policy, 85.
⁶. Ibid., 97.
⁷. Ibid.
based on historical amounts of land in production for crops and per head of animals.\textsuperscript{1} These reductions would bring prices much more in line with world market prices.\textsuperscript{2} Additionally, the plan included payments for farmers to set some land aside, which would reduce the amount of land in production while improving the environment and promoting afforestation.\textsuperscript{3} The MacSharry reforms were approved in 1992, and the reductions in payments began a three year phase-in in 1993, the same year the E.E.C became the European Union.\textsuperscript{4} As written below, the 1992 reform began a rapid series of reform efforts to decouple subsidies from production, while taking the environment and rural communities into account.

**C.A.P. in the 21st Century**

In the late 1990s, discussions began around the need to further link the C.A.P. to actual demand for agricultural products and societal demands, as the E.U. continued to expand its membership and take more than just food production into consideration, including stewardship of the countryside, environmental quality, food safety, and food quality.\textsuperscript{5} The original goals for agricultural policy in the Treaty of Rome were reinterpreted to meet these new demands as follows:

\begin{itemize}
  \item Ritson, *Common Agricultural Policy*, 97.
  \item Ritson, *Common Agricultural Policy*, 97.
  \item Hill, *Understanding the Common Agricultural Policy*.
\end{itemize}
1) Increase competitiveness internally and externally in order to ensure that Union producers take full advantage of positive world market developments;
2) Food safety and food quality, which are both fundamental obligations towards consumers;
3) Ensuring a fair standard of living for the agricultural community and contributing to the stability of farm incomes;
4) The integrations of environmental goals into the C.A.P.;
5) Promotion of sustainable agriculture;
6) The creation of alternative job and income opportunities for farmers and their families
7) Simplification of Union legislation.¹

To meet these newly defined goals, the E.U. agricultural commission divided agricultural policy into two pillars in the “Agenda 2000” set of reforms, which were produced in 1999, the same year the Euro currency came into existence. In this set of reforms, Pillar 1 consisted of direct payments, included in the 1992 MacSharry reforms previously mentioned, and funds used to artificially increase market prices.² These direct payments, which immediately accounted for three-fourths of the total E.U. budget, played an increasingly important role in reducing the amount of total funds spent on agricultural subsidies by limiting the amount of acreage and land for which farmers would receive money while lowering the total amounts. However, the common marketing organization still existed, and depending on the commodity, still had various tools to manipulate the markets, such as production quotas.³ According to Berkeley Hill, Emeritus Professor of Policy

². Ibid.
³. Ibid.
Analysis at Imperial College of London, transitioning to direct payments and lowering support levels helped to bring agricultural market prices in the E.U. more in line with world prices, and, in fact, would begin the process towards a safety net only scheme.\textsuperscript{1} A safety net, which is described as crop insurance in the chapter on American agriculture policy, would provide funds to farmers in times of financial or environmental disaster.

The second pillar that was introduced in the reforms of 2000 focused on rural development and environmental stewardship.\textsuperscript{2,3} To accomplish these tasks, the second pillar introduced programs to assist elderly farmers to retire from agriculture while helping younger people to enter the sector, with a budget of €195 billion for the period 2000-2006. It also created educational and loan programs to assist farmers in modernizing their equipment and diversifying their operations to include activities outside of simply growing one product to other sectors such as forestry and tourism. Finally, the second pillar put a priority on environmental conservation by creating a program to annually pay farmers to leave land uncultivated for wildlife habitat and by supporting one time capital expenditures that maintain certain biological conditions, such as stone wall repair.\textsuperscript{4} In addition to the changes to subsidies, the

\textsuperscript{1} Hill, \textit{Understanding the Common Agricultural Policy}.
\textsuperscript{2} Ibid.
\textsuperscript{4} Hill, \textit{Understanding the Common Agricultural Policy}.
inclusion of this second pillar in the reforms of 2000 and the real attempts to make changes to European agricultural policy are another drastic change from how policymakers understood what the E.U. constituency expected from agriculture and rural Europe.

In 2003, another set of reforms was implemented, based upon the substantial changes made in 2000. The C.A.P. moved a larger portion of the support programs towards direct payments in Pillar 1 and replaced the common marketing organizations with a Single Payment Scheme.\(^1\) The reforms also expanded the programs in Pillar 2, began a cross-compliance requirement between the two Pillars, and created a modulation program.\(^2\) The Rural Development Regulation (Council Regulation (E.C) No. 1698/2005) was created to implement these goals, which has continued to be the guidelines for how individual member nations implement the 2003 reforms.\(^3\)

The Single Payment Scheme, referred to as the Single Farm Payment or Single Area Payment, made direct payments to farmers based on subsidy payments distributed 2000-2002. The E.U. supplied the funds, but the individual nations were made responsible for distributing the money to the farmers. The farmers were allowed to plant whatever crop they wanted, linking production more closely with market demands. This system streamlined the process by largely eliminating the common

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marketing organizations, which controlled prices and productions quotas for individual commodities. While direct payment decoupled from production became the majority of farm support, it should be noted individual countries could add subsidies coupled to production to encourage production of certain commodities.¹ ²

In addition to the conversion to a single payer system, the 2003 reforms required farmers to adhere to environmental, animal welfare, food safety, food quality, and human health requirements.³ These requirements were intended to further bring European agricultural policy in tune with the demands of the constituents’ growing concern for the environment.

Modulation also came into being with the reforms of 2003, which allowed member nations to use Pillar 1 funds, the larger portion of the C.A.P. funds, to support Pillar 2 efforts.⁴ These efforts progressively reduced the funds available for direct payment subsidies from 3 percent in 2005 to 5 percent in 2005, and diverted these funds to rural development programs in Pillar 2.⁵ According to Berkeley Hill, each farmer received €5,000 for the programs in Pillar 2, and money from modulation was combined with funds contributed by each member nation to work towards the goals laid out in Pillar 2.⁶

². Hill, Understanding the Common Agricultural Policy.
³. Ibid.
⁴. Ibid.
⁵. Ibid.
⁶. Ibid.
Beginning in 2007, the same year the E.U. expanded to the present
day twenty-seven member nation, the E.U. Commission began a “Health
Check” to make adjustments to the reforms put in place in 2003.¹ This
“Health Check” led to policy adjustments being implemented in 2008,
which continued to streamline the processes of the C.A.P. by further
diminishing the role of the remaining common marketing organization
while also increasing the funds modulated from Pillar 1 to Pillar 2.² The
2008 reform ended the set asides previously implemented and increased
the amount of funds directed at Pillar 2 to help offset the lost funding.
The reforms required an increase in modulating of funds from five
percent to 10 percent by 2012.³ Additionally, the 2008 reforms provided
up €70,000 for young farmers to use for capital expenses.⁴

Following the reforms of 2008, the European Union undertook a
three year study, beginning in 2010, which reviewed all aspects the
C.A.P.⁵ The result of these studies was a set of policies agreed upon in
2013, which will guide agriculture from 2014 through 2020. The new
reforms are based on three priorities, including “viable food production,
sustainable management of natural resources and climate action and

¹. European Commission, “The 2008 C.A.P. Health Check,” Agriculture and
index_en.htm.
². Hill, Understanding the Common Agricultural Policy.
³. Ibid.
⁴. Ibid.
Policy Perspectives Brief, no. 5 (Luxembourg: The Publications Office of the European
Union, 2013), 2.
balanced territorial development.”¹ It is important to note that climate action was not specifically mentioned in previous policy, nor is it mentioned in American or Chinese agricultural policies.

The new policies are possibly even more drastic than any implemented since the beginning of the 1992 reforms. Before the reforms of 1992, subsidies linked to production accounted for more than 90 percent of the C.A.P.’s annual budget. With the transition towards direct payments and the introduction of the two pillar system, that percentage had dropped to only 5 percent. The reforms implemented for 2014 through 2020 will continue to use direct payments, while allowing flexibility for member nations to use production based subsidies in times of crisis. However, all direct payments are based on farmland, not historical subsidies. Additionally, the reform increases the percentage of funds that may be transferred from Pillar 1 to Pillar 2 to 15 percent, providing member nations even more flexibility in planning for their individual needs.²

In an attempt to keep the costs of the C.A.P. in check, the annual budget through 2020 was frozen at 2011 prices, which means a continual decline when corrected for inflation. The C.A.P. will be nearly 38 percent of the entire E.U. budget, which is a substantial portion when considering that the E.U. has also combined for defense and other policy

². Ibid, 2.
areas.\textsuperscript{1} The budget levels for the two Pillars for the entire 2014-2020 timeframe are in the below table:

**Table 2. MFF Ceiling 2014-2020 (in billion EUR)**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pillar 1</td>
<td>312.74</td>
<td>277.85</td>
</tr>
<tr>
<td>Pillar 2</td>
<td>95.58</td>
<td>84.94</td>
</tr>
<tr>
<td>Total C.A.P.</td>
<td>408.31</td>
<td>362.79</td>
</tr>
</tbody>
</table>


In addition to the ongoing move toward direct payments, the new reforms also make environmental concerns a priority by taking steps to go beyond the cross-compliance requirements previously discussed and incorporate climate change tools. To receive direct subsidies, farmers must perform “maintenance of permanent grassland, ecological focus areas, and crop diversification.”\textsuperscript{2} While the Commission’s briefing paper frames this “Green Direct Payment” requirement, which is defined as 30 percent of the direct payments each farmer receives, as a new reward for farmers playing an important role in mitigating climate change, it appears to simply place more burdens on farmers.\textsuperscript{3} However, it could be argued that it works congruently with Pillar 2 in assuring the rural countryside continues to be maintained.

The new reforms also take more steps to support young and small farms. Under the new policies, young farmers under forty years of age are eligible to receive additional subsidies for up to five years. Small

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\textsuperscript{2} Ibid., 7.
\textsuperscript{3} Ibid.
farmers do not have to do the paperwork or consider the various layers of the direct payment, as the new framework allows up to €1,250 per year per farmer.¹

**Arguments For and Against the C.A.P.**

Similar to American agricultural policy, there are experts that support and oppose the C.A.P. Also like the United States, the issue of direct payment subsidies is a point of contention in Europe. Alan Matthews, Professor Emeritus of European Agricultural Policy in the Department of Economics at Trinity College in Dublin, Ireland, claims that “If 70 percent of your income is coming as a cheque in post there is less incentive to innovate to grow the remaining 30 percent.”² Matthews is specifically addressing the issue of direct payments, and this particular quote refers to the fact that Irish farmers receive 70 percent of their income from direct payments, and only 30 percent from selling their products.³ The subsidies to sales levels were even higher in 2007, when Irish farmers received 98 percent of their income from subsidies.⁴ When the C.A.P. absorbs such large amounts of taxpayer funding, as discussed throughout this paper, those paying the taxes will likely not be satisfied with their money going to farmers regardless of what food is produced.

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³ Ibid.
Another negative critique of the C.A.P. is that it simply gives more money to wealthy agribusinesses. George Manbiot, a contributor to *The Guardian* and political activist, complains that the latest reforms did not include a proposed subsidy limit of €300,000 per farmer, instead giving individual countries to apply their own limits. Manbiot says the 174 largest landowners in England, where he is based, received £120 million, which could have been reduced by £70 million if the €300,000 cap had been accepted.\(^1\) This is a different viewpoint than Alan Matthews presents above, as he is more opposed to government expenditures, while Manbiot favors government spending, just not for the wealthy landowners.

There is also disbelief by some in the E.U.’s efforts to protect the environment. A poll conducted by the World Wildlife Federation in December of 2013 shows that 90 percent of Europeans believe subsidies should be dependent on compliance with environmental and human health requirements.\(^2\) It is common knowledge that the World Wildlife Fund has a specific agenda to increase environmental awareness, but it should be noted that more than 6,000 Europeans were polled, making the information likely accurate. Of course, with the changes taking place over the last two decades linking subsidies more closely with

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environmental efforts and rural decades, this may simply be an indication of the lack of knowledge regarding the C.A.P.

Those favoring the C.A.P. include farmers, their lobbying groups, and European politicians. The National Farmers Union, a large farm lobby based in the United Kingdom, argues that the C.A.P. has been successful and that direct payments are necessary to guarantee food production and farmer income unless the E.U. is able to create another scheme that guarantees farmers income regardless of market volatility. The market conditions of 2008 through 2009, when European farmers received 90 percent of their income from subsidies is used as an example of the need to continue support for farmers.\(^1\) Additionally, the National Farmers Union disagrees with modulation and too much flexibility for member nations in implementing Pillar 2. They believe the individual restrictions and payments schemes set up by the various countries will lead to unfair competition between the member countries.\(^2\)

Copa-Cogeca, the lobbying group that represents more than 13 million farmers and 33,000 agriculture cooperative throughout the E.U., is supportive of a strong C.A.P. and its goals, but is not happy with the reforms set for 2014 through 2020. Copa-Cogeca agrees with the E.U. Commission that viable food production, sustainable environmental practices, and rural development are essential objectives of the C.A.P.

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2. Ibid.
going forward, but are concerned that the financial reforms are not going to support farmers in meeting these goals. Specifically, they are concerned that new involuntary environmental requirements to receive direct payments will hurt farmer income because the cost to implement the environmental requirements will cost more than the subsidies.\(^1\) Additionally, they point to the fact that even in a good market year with direct payments, the average farmers in come is half that of average earnings and three-fourths of that comes from subsidies.\(^2\) As previously mentioned, the recent C.A.P. reforms require farmers to perform environmental maintenance tasks, yet does not increase the funds made available to farmers. The Commission simply labeled 30 percent of the direct payments received by farmers as a reward for environmental stewardship.

**Similarities and Differences between European and American Agricultural Policies**

The prominent similarity between American and European agricultural policies are the overall objectives of supplying farmers with secure incomes and maintaining food security. Additionally, the methods applied by the different countries have been the same in some

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2. Ibid., 4.
aspects. For example, the U.S. also linked production to subsidies for several years, which constantly led to overproduction.

The U.S. has also adopted policies that take the environment into concern. Conservations programs have been part of U.S. agricultural policies since the beginnings of the “farm bills” in the 1930s. In addition to conservation programs, the farm bills have addressed rural development through various programs, such loans for rural businesses, young and beginning farmers, and increased infrastructure.

An immediately noticeable difference between the policies created by the two different governments is the U.S. farm bills all have sunset provisions, or expiration dates, typically of five years, that give an opportunity for policy changes. The E.U. C.A.P. is reformed on an as needed basis, usually ignited funding issues for the C.A.P. programs.

Another major difference between the C.A.P. and farm bills is that the U.S. has recently ended direct payments in the 2014 farm bill. Insurance programs to protect farmers have become the dominant form of safety net in the U.S. As previously mentioned, U.S. farmers now choose between insurance programs that provide a safety based on market prices, or agricultural risks, such as weather issues.1

Another difference between the C.A.P. and the farm bills is that the farm bills include nutrition programs, such as school feeding programs and food stamps. In fact, these programs consume 79 percent of the

The C.A.P. does not yet to include these, which may be attributed to the E.U. being made up of member nations that have their own nutrition programs.

**Observations and Conclusion**

The E.U. has undertaken a massive challenge since the 1950s by bringing the various member nations together into one community, which now totals twenty-seven. Using agriculture as a primary tool to bring the countries together appears to have been successful, as farmers in all of the countries must deal with market volatility and all people must have food.

U.S. and E.U. policymakers should compare policies U.S. to see how the effective they have been in meeting their objectives. Specifically, the E.U. should closely monitor whether the U.S. move to crop insurance in lieu of direct payments is successful in the coming years. If so, it could be useful when planning for the next set of policy changes following the 2014 through 2020 timeframe if the E.U. truly wants prices to be more reflective of the world market while providing a safety net for farmers.

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Likewise, the U.S. should closely monitor how the more strict environmental stewardship requirements being implemented for the 2014 through 2020 C.A.P. plan impact farmers in the E.U. As previously mentioned, the U.S. already has programs to promote conservation of the environment, and has linked some environmental requirements to participate in the new crop insurance programs. It will be interesting to see how the new environmental policies will impact farmers, as environmental concerns will likely be a part of every U.S. farm bill going forward.

In conclusion, studying how the E.U. has conducted farm policy and how it plans to face challenges in food demands, market prices and environmental concerns in future is good comparison to agricultural policy in the U.S. Both have large economies and populations, and will face similar challenges in the future that must be addressed. Similar to agricultural policy America, Europe over the years has made policy to tackle the issue at hand, currently environmental concerns, instead of planning for the bigger picture.
Chapter 4: Chinese Agricultural Policy from the Chinese Civil War to Present

Introduction

This chapter will give an historical overview of China’s agricultural policy and its impact on the Chinese farmers’ ability to provide food and fiber for the Chinese people since the 1950s. The 1950s is when the agricultural system in China first moved away from a landlord base, which set in motion the changes that have led to present day Chinese agricultural policy. After giving an overview of Chinese agricultural statistics and policy history, a comparison to American agricultural policy will be made, which began taking form in the 1930s.

Focusing on China gives comparative insight into agricultural policies of a large world market ruled by a communist government. This contrast with the government structures in America and Europe will provide another example of agricultural policies to draw upon when studying the success and failures of agricultural policy in the United States.

Current Statistics

According to 2009 estimates by the Central Intelligence Agency, agriculture currently employs over thirty-nine percent of China’s
workforce, making it the top employment sector.\(^1\) Comparatively, the
industrial sector employs roughly twenty-seven percent, and the service
industry employs just over thirty-three percent.\(^2\) While agriculture
employs a large sector of the population, agriculture only accounts for
ten percent of China’s gross domestic product.\(^3\)

China’s top agricultural products are rice, wheat, potatoes, corn,
peanuts, tea, millet, barley, apples, cotton, oilseed, pork, and fish.\(^4\)
According to the United States Department of Agriculture’s Foreign
Agriculture Service, China produced 134.3 million metric tons of rice in
the 2008-2009 crop year.\(^5\) Comparatively, India was the second largest
producer with 99.2 million metric tons.\(^6\) China produced over 419
million metric tons of total grain in the same year, with the United States
placing second at 400 million metric tons.\(^7\) However, the population of
China is more than four times that of the United States.\(^8\)

While these current production levels are impressive, problems
may be on the horizon as the Chinese population continues to grow while
arable land and water becomes scarcer. According to the online

library/publications/the-world-factbook/geos/ch.html
\(^2\) Ibid.
\(^3\) Ibid.
\(^4\) Ibid.
\(^5\) United States Department of Agriculture, Foreign Agriculture Service, *Table 01 World Crop Production Summary*, http://www.fas.usda.gov/psdonline/
\(^6\) Ibid.
\(^7\) Ibid.
\(^8\) Central Intelligence Agency, *The World Factbook*.
business magazine BusinessJournal.com:

Facing a rising population, the central government plans to boost China's annual grain output to more than 550 million tons by 2020, an increase of 50 million tons over 2007. By contrast, figures from the National Bureau of Statistics show the cultivable land in the country sharply decreased from 130.04 million hectares in 1996 to 121.72 million hectares in 2008 due to rapid urbanization and natural disasters. Also, the current per capita cultivated farmland is about 0.092 hectares, which is only about 40 percent of the global average. Less than 4.7 million hectares in the country can be considered reserve farmland...

These statistics are important to understand because the population in China is higher than any other country, and continuing to grow. Policies formed today will greatly impact the ability of China to provide food and fiber to its citizens in the future.

**Chinese Agriculture before the Chinese Civil War**

The oldest signs of agriculture in the parts of Asia now inhabited by China can be traced back over six thousand years B.C. Because China was largely closed off to the rest of the world before the twentieth century, little is known about the origins of China’s agriculture. We do know that the land was owned by landlords that allowed peasants to

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farm the land in exchange for rent. In 1949, following the end of the Chinese Civil War, the land was distributed to the peasants to farm.¹

**Great Leap Forward (1957-1960)**

Following the Chinese Civil War, the ruling Communist Party of China implemented policies beginning in 1957 to bring China’s industrial sector up to world standards.² China’s ruler, Chairman Mao Zedong, engineered the Great Leap Forward, claiming that China would beat Britain in steel production in just fifteen years.³ Chairman Mao later moved the timeline to just one year, causing extreme stress on the Chinese workforce. Mao believed China could catch up to the developed world in a short period of time by focusing solely on industrialization, and forced the same views on the Chinese people.⁴

By distributing land from the landlords to the peasants for farming in 1949, the Communist Party and Mao gained substantial support from the peasantry. However, when Mao decided to rapidly increase China’s industrialization ten years later, he took the land back and decided to make fewer farmers responsible for feeding more people. Peasants were divided into collectives of roughly twenty families that would collectively produce agriculture goods which the government would redistribute.

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3. Ibid.
4. Ibid.
Raw products not used for industrial purposes were meant for food, and the population was allowed access to unlimited amounts of food at no charge. This proved to be unsustainable within a year because so much of the workforce and raw agricultural products were diverted to the industrialization goals of Mao.¹ The reallocation of labor and agriculture production to industrial output led to famine that resulted in an estimated thirty million deaths.²

The reallocation of agricultural workers to industry was not the only policy that led to the famine. Mao worked closely with the Soviet Union government on policy decisions, and adopted faulty agricultural methods that were promoted by Soviet scientist Trofim Lysenko.³ For example, Lysenko claimed that crops of the same species would not compete for resources, so it would be more productive to double or quadruple the amount of seeds planted per acre. This plan, in addition to other unproven ideas advocated by Lysenko, contributed to the widespread famine. Mao also initiated goals of ridding the country of four agricultural pests, determined by him to be rats, mosquitoes, flies and sparrows. Promoting the extermination of sparrows led to a large

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¹ Harms, “China’s Great Leap Forward.”
locust infestation, which did much more damage to the crops than the sparrows.\textsuperscript{1,2}

Mao’s agricultural policies also established quotas for farmers to meet, which were reported by Communist Party personnel. Due to fear of punishment for not reaching quotas, reported agriculture production numbers were often inflated. In addition to the various other bad policies put in place by Mao, this incorrect data exacerbated the problem because Communist Party personnel did not make party leaders aware of the failed policies.\textsuperscript{3}

These Communist Party personnel were also responsible for implementing Mao’s plan for farming peasants to build furnaces throughout rural China so they could contribute to the lofty steel production goals described above. Mao wanted the farmers to produce their own farm utensils so that steel production would not be diverted to farming equipment or imported. The peasant farmers did not have the proper knowledge or equipment to carry out this task, which led to the melting down of useful products into useless, brittle metal balls.\textsuperscript{4}

Throughout the short lived policies of the Great Leap Forward, nothing was accomplished other than the deaths of tens of millions of Chinese. Mao’s three years of agricultural and other economic policies

\textsuperscript{2} McIntosh, “Trofim Lysenko.”
\textsuperscript{3} Watkins, \textit{Great Leap Forward Period}.
\textsuperscript{4} Ibid.
proved ill fated, and led to his relinquishing control of China to his subordinates within the Communist Party, at least formally. However, the damage was already done. The international community did not know the extent of the famine until years later, as Mao refused to admit that his Communist principles failed.\footnote{Watkins, \textit{Great Leap Forward Period}.}

\textbf{Cultural Revolution (1966-1976)}

Mao technically relinquished control of Chinese agriculture policy when it became clear that the Great Leap Forward would continue to devastate the country and his reputation to Liu Shaoqi, Deng Xiaoping, and others that he trusted to maintain his efforts to promote communist principles.\footnote{Asia for Educators, \textit{Three Chinese Leaders: Mao Zedong, Zhou Enlai, and Deng Xiaoping}, http://afe.easia.columbia.edu/special/china_1950_leaders.htm.} However, Mao soon became suspicious that the new leaders he picked in the Communist Party were creating inequalities in the classes of society. Mao’s solution to this problem was to pit his wife, Jiang Qing Liu, and other radical communist allies, Zhang Chunqiao, Yao Wenyuan, and Wang Hongwen against the Communist Party establishment.\footnote{Chinese Politics: Gang of Four, http://secondchina.com/Learning_Modules/CHN_main/content/index.html.} This group of rulers, known as the Gang of Four, and their politically extreme followers, known as the Red Guard, continued to advocate Mao’s goals. They manipulated the government and

\begin{itemize}
\item[1.] Watkins, \textit{Great Leap Forward Period}.
\item[3.] Chinese Politics: Gang of Four, http://secondchina.com/Learning_Modules/CHN_main/content/index.html.
\end{itemize}
Communist Party leaders to continue Mao’s policies during the “The Great Proletarian Cultural Revolution” between 1966 and 1976.\(^1\)

The group used their power of persuasion, stemming from their relationship with Mao, to purge China and the Communist Party of opponents to Mao’s policies. The result was the death or shunning of any and all opposition, including those with potential to lead China out of the failed Great Leap Forward policies that cause the death of so many Chinese. The Gang of Four held political power until Mao’s death in 1976, at which point they were tried and given extensive prison sentences.\(^2\)

As a result of the policies implemented by Liu, Chunqiao, Wenyan, and Hongwen, China’s agricultural economy did not improve, and the agricultural and industrial sectors were decimated. These destructive policies included efforts to move educated professionals and students away from their areas of expertise and schools to the countryside to be laborers with peasants while loyal extremists were given jobs for which they were not properly prepared.\(^3\)

Although the Cultural Revolution only lasted ten years, the impacts were felt long after. Closed universities and industries ran into the ground by unqualified political allies meant a shortage in education

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1. *Chinese Politics: Gang of Four.*
2. Ibid.
and production that would set the country back for years, and require extreme measures to make up for lost time and progress.¹

**The Four Modernizations**

Shaoqi Zhou Enlai, who had been a leader in the Communist Party and an ally of Mao that worked to maintain peace between the Red Guard and the established Communist Party, drafted the Four Modernizations to make China a more developed country and member of the international community.² These modernizations were opposed by the Gang of Four, and Enlai was too weak with cancer to promote his ideas against the Gang. However, Deng Xiaoping promoted the Four Modernizations by publishing them for the masses in 1975. This led to his political destruction and imprisonment due to efforts by the Gang of Four. Once Mao and Enlai died in 1976, Deng gained enough political support to be reinstated and became China’s new leader. He removed the Gang of Four from power and began promoting the Four Modernizations in a speech to the Eleventh Party Congress in 1977.³

In 1978, the new Communist Party leaders began implementation of the Four Modernizations. These new policies focused on agriculture, industry, national defense, and science and technology to make China economically self-reliable. China opened its doors to imported

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technology to improve overall production, including agricultural, and began focusing on exports to build the economy.¹

The Chinese agricultural sector was revived with the implementation of four agriculture specific policies contained in the Four Modernizations:

(1) the collective system of communes was transferred to the household responsibility system (HRS), (2) price incentives to farmers were improved, (3) mandatory production planning was abolished and the scope of mandatory state procurement reduced, and (4) rural township and village enterprises (TVEs) were condoned and free markets reopened.²

These policies encouraged farmers to produce more efficiently, as they could grow what they would eat and sell.

The Family Production Responsibility System encouraged families to produce for their own needs, while contributing crops to their government organized communal groups government in exchange for supplies and equipment. The government reforms allowed farmers to produce what they wanted, and encourage higher yields through government sponsored irrigation projects and mechanization. This was much different than Mao’s system, in which farmers were producing to meet a quota for the government with no expectations of improving their livelihood.³

³ Ibid.
In addition to the changes described above, Deng’s administration also opened doors to foreign trade and investment. Deng was the first People’s Republic of China leader to visit the United States and establish a relationship to promote cultural understanding and trade.¹

Research on how much these reforms improved the efficiency of Chinese agriculture production has varied widely, with figures ranging from twenty percent to sixty percent.² Disagreements are based on arguments about what data is used from which region of China, and if weather patterns are taken into consideration.³ Regardless of the argument and production increase estimates, an improvement of yields and the ability of Chinese farmers to produce food for the most populated country on Earth serves as evidence that the more liberal agricultural policies implemented in the late 1970s were much more positive for China than the policies contained in the Great Leap Forward. This is evident by the fact that over thirty million Chinese died under the policies of the Great Leap Forward, but China is now the top grain producer in the world and has been able to feed its large population for many years.

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² Oden, *The Deng Xiaoping Era*.
³ Ibid.
The Continued Liberalization of Chinese Agriculture Markets and Participation in the World Markets

Most farmers participated in the Family Production Responsibility System by 1984, and the government stopped forcing farmers to sell their crops and buy supplies through the government quota system. Instead, farmers could sell to the government voluntarily. The government allowed farmers to begin selling their grains on the free market in 1994, and artificially inflated grain prices through economic policies to encourage production growth. Additionally, China joined the World Trade Organization in 2001, which has had a dramatic impact on its agricultural economy.¹

Chinese total agriculture trade increased substantially from the time China joined the World Trade Organization in 2001 to 2005, largely due to increases in imports.² In fact, agricultural imports surged 136 percent from 20015 to 2005, while agricultural exports only increased 55 percent.³

This rapid expansion in agricultural trade presents opportunities and challenges both for the China’s agricultural sector and others

³. Ibid., 52.
around the world. It is expected that China will become more of an exporter of labor intensive crops, such as fruits, but will likely be a long term importer of land intensive crops such as grains.\textsuperscript{1}

China’s intensive manufacturing sector is also increasing the need for agricultural products, though they are not foodstuffs. Products such as leather and wool are required for specific products, and China is unable to keep up with demand. Additionally, the increasing wealth of individuals due to the growing manufacturing segment allows them to demand more imported goods, while China continues to export more manufactured goods than it imports in agricultural products.\textsuperscript{2}

While China may see a competitive advantage in production of some labor intensive products, there are, and will continue to be, barriers to export markets due to food safety concerns. China must be able to meet international product standards if it plans to continue to increase exports of agricultural products.\textsuperscript{3}

**Introduction of Agricultural Subsidies**

Similar to the United States, China has implemented subsidy systems to improve farmer income and encourage production of crops deemed critical to the population. While the American subsidy system has evolved since the 1930s through various price controls, production

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2. Ibid., 53.
3. Ibid.
controls, crop insurance, direct and indirect payment systems, China recently began subsidizing agriculture in the 1990s.\(^1\) Previously, the Chinese government used agriculture as a source of tax revenue for centuries, so the move to subsidies is a full reversal from previous policies.\(^2\)

The first subsidy system put in place during the 1990s was meant to increase income for farmers by buying, storing and exporting grain, but it had little success.\(^3\) The system is similar to the previous American direct payment experiments in that it is based on historical production.\(^4\) Beginning in 2004, the Chinese government created its first direct subsidy programs. The following chart from the United States Department of Agriculture’s Economic Research Service shows how the money was directed in 2004, and the predicted results.\(^5\)

<table>
<thead>
<tr>
<th>Policy</th>
<th>Estimated cost</th>
<th>Description</th>
<th>Probable effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain subsidies</td>
<td>$1.4 billion</td>
<td>Direct payments of roughly $7.33 per acre planted in grain.</td>
<td>Modest income gains for farmers. Effect on grain production is uncertain.</td>
</tr>
<tr>
<td>Agricultural tax reduction</td>
<td>$5-7 billion</td>
<td>Elimination of agricultural tax within 5 years. Elimination of tax on</td>
<td>Modest income gains for farmers. May encourage planting of specialty crops,</td>
</tr>
</tbody>
</table>

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2. Ibid.
3. Ibid., 3.
4. Ibid., 4.
5. Ibid., 3.
Like American subsidization of agriculture, there are varying opinions regarding the success of the Chinese programs, as they have grown since inception. In fact, the Chinese subsidy system has grown from about 7 percent of total agricultural receipts in 2004 to nearly 17 percent in 2012. By contrast, the United States has reduced the amount spent supporting farmers over the same timeframe from roughly fifteen percent in 2005 to nearly seven percent in 2012. This discrepancy appears to be caused by China’s intense efforts to improve the livelihood of its rural population, which is still developing. The

<table>
<thead>
<tr>
<th>Specialty Crops</th>
<th>Somewhat offsetting effect of grain subsidy (except for tobacco).</th>
<th>Somewhat offsetting effect of grain subsidy.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed subsidies</td>
<td>Subsidies for high-quality grain and soybean seeds of $7-$10 per acre planted.</td>
<td>May encourage planting of certain crop varieties.</td>
</tr>
<tr>
<td>$193 million</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Machinery subsidies</td>
<td>Subsidies for purchase of machinery in targeted areas.</td>
<td>Increased mechanization but little effect on output. Frees labor for off-farm work.</td>
</tr>
<tr>
<td>$5 million</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural infrastructure spending</td>
<td>Improvement of irrigation facilities, electricity generation, roads, testing facilities, other rural infrastructure</td>
<td>Improve productivity and marketing efficiency</td>
</tr>
<tr>
<td>$18 billion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: United States Department of Agriculture, *China’s New Farm Subsidies*, 3.

3. Ibid.
United States has been decreasing its total subsidy payments due to record high commodity prices making them unnecessary.¹

China’s rapidly expanding subsidy system is largely through direct payments to farmers, which are considered to have less market distorting impacts and negative trade implications than production controls. However, China is continuing to subsidize inputs, such as fertilizers, which can distort markets by artificially raising prices on the world market.² China’s expansive subsidy system will be an ongoing topic of interest as trade negotiations take place with international partners.

**Crop Insurance**

Like the American agricultural system, China has used crop insurance as a way to mitigate the impacts of natural disasters and lost profits. The first crop insurance program was introduced in 1950 by the People’s Insurance Company of China (PPIC), but ended when the communist government took the land back from the citizens and became communally owned.³ Crop insurance was attempted a second time in 1982, as the government turned more control of production over to farmers. This attempt included government owned insurance programs

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2. Ibid.
which collected premiums in line with indemnity payments. However, beginning in 1992, the government replaced the government managed insurance programs with market based insurance programs. Due to the high pay-out to premium ratio experienced since the crop insurance program began in 1982, and decreasing year over year revenue growth for Chinese farmers, privately owned insurers were not as inclined to enter the crop insurance market.

Various other insurance programs supported by the government, communities, and individual farmers were attempted through 2006, but high loss ratios proved every attempt to be unsustainable.

Beginning in 2007, a third attempt to provide crop insurance was made by the Chinese government. The program includes subsidized premiums by the central and provincial governments, and according to a recent article in the *International Journal of Disaster Risk Science*, operates according to three guidelines:

1) The program covered seven natural disasters: rainstorms, floods, waterlogging, windstorms, hail, ice storms, and droughts. Certain diseases in crops and livestock were also covered.

2) Premium rates varied from 3 percent to 10 percent of insured amount, according to region, crop, and peril.

3) Low premiums were coupled with moderate insured amounts. Crop insurance only covered the basic cost of crops, including costs of seeds, fertilizers, pesticides, irrigation, machinery, and mulching film. Labor costs were excluded.

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2. Ibid.
3. Ibid., 13.
Since the implementation of this new insurance program, of which the premiums, subsidized over fifty percent, participation by farmers soared over six hundred percent between 2006 and 2007.\(^1\) Interestingly, policymakers in America are attempting to move farmers away from direct subsidy payments into crop insurance programs while the Chinese government is rapidly expanding both. This contrast is a result of the free market and independent mindset of the American culture and form of government compared to the communist government of China. The success or failure of this crop insurance will be important to the long term economic growth and viability of China’s rural population.

**Potential Problems for Chinese Agriculture Going Forward**

China is now the world’s largest producer of grain,\(^2\) but is beginning to see the consequences of encouraging mass production through heavy fertilizer and irrigation usage. A major problem is the depleting supply of fresh water. Fresh water is needed to grow crops and for people to drink. Pollution caused by over fertilization and industrial runoff, and water mismanagement due to heavy government water subsidies are the main causes of this problem.\(^3,4\)

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2. United States Department of Agriculture, “Table 01 World Crop Production Summary.”
Chinese agriculture is beginning to fail to meet the needs of the country’s population, which continues to grow in both number and wealth. As the middle class in China gets larger, so does the demand for higher value agriculture products such as animal products. This continued strain on the food supply leads to an increased need for food imports, which raises the cost of food worldwide.¹

China has begun using methods to combat the food shortage and revitalize the land. By pursuing organic production and new technologies, China is hoping to improve its situation. In addition to environmental destruction, China continues to place more emphasis on manufacturing industry, which is leading to the urbanization of farmland and farmers moving to the cities to work in factories. This exacerbates the problem with food production.

In addition to increasing supply problems for the future, food safety continues to be a problem for China’s agricultural system. It is commonplace for food safety issues to make international headlines ranging from illegal and dangerous additives used to make food appear fresher than it really is to deadly bacteria infecting agricultural products not properly handled and stored.²

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According to Yaozang Huang, a professor at Seton Hall and Senior Fellow for Global Health at the Council on Foreign Relations, the reason for the numerous food safety issues in China is due to rapid expansion of the Chinese population and failure of the government to provide proper oversight.\textsuperscript{1} While the government continues to make attempts to fix the issue with new regulations, Huang claims that corruption within the food safety regulatory body prevents it from being effective.\textsuperscript{2}

**Comparison to American Agriculture and Conclusion**

China’s agricultural policy has seen drastic changes over the past sixty years. In this time, it has gone from a private land ownership and rental system, to an absolute communal system, to more liberal system in which farmers can lease the land from the government long term and even trade the property rights as if they own the land.

Outside of the famine caused by the Great Leap Forward, China has successfully fed its population. The quality of food may not be as high as more developed countries, but demand for these products will grow with China’s wealth accumulation and expansion of its middle class.

China and America are similar in that the two will face great challenges in attempting to sustainably produce enough food for growing populations. While food prices appear to be cheap in America, much of

\textsuperscript{1} Huang, “China’s Corrupt Food Chain.”
\textsuperscript{2} Ibid.
this is because the largest crops, soybeans, corn, and cotton, are largely subsidized through tax dollars. These crops are grown with large amounts of chemical fertilizers and irrigation, much like the methods currently used in China, and the same problems with fresh water depletion and pollution are beginning to become evident.¹

China’s agriculture policy history is quite different than what has taken place in America. American agriculture has been based on private land ownership throughout its history, with the first signs of strong government pricing intervention appearing in the 1930s to counteract the economic impact the Great Depression had on the American agricultural economy and farmers’ ability to feed the population. China’s policies development is quite different than the American agricultural policies described in the first section of this paper.

Going forward, China will need to implement policies that promote proper land stewardship and appropriate uses of agriculture technologies to feed its people. With the continued loss of arable land to urbanization and depletion, China will likely increase food exports drastically from surplus producers, such as America. Either way, China’s population is growing rapidly, as is the people’s demand for better food, and these needs must be met.

Chapter 5: Conclusions and Hypothetical Solutions for the Future

Evaluating the similarities and differences of the agricultural policies of the United States, the European Union, and China over the last century proves that the goals of these world powers are becoming more congruent overtime. Primarily, they are all concerned with food supply and environmental risks. Accordingly, their policies are also becoming more similar. All three governments are making changes to address the need to be better stewards of the environment, maintain healthy international trade relations, and to become more agriculturally efficient by setting policies that put productions more in line with consumer demand.

These policy changes are designed to meet the needs of the future, but may not be the correct course of action. The governments must not focus too much on one policy area, as they seem to being doing in recent reform actions. The United States has made what appear to be drastic changes by moving away from direct payments to an insurance based system, with some environmental requirements, to appease political pressures. However, as previously described, they may simply be shifting subsidy funds from direct payments to crop insurance products that are simply giving money to farmers in a different fashion without forcing them to produce what the consumer demands. Additionally, these changes to farmer support appear to be entirely about farmer
income. Considering the farm bills contain both farmer support and nutrition programs for Americans, making the two programs work together to meet demand may help ease the pressure on the federal budget to subsidize farmers and nutrition programs. This could be done by reducing the insurance products that insure farmer income levels at previous years, which have been exceptionally high, so that farmers must grow what is demanded. Subsidizing against losses from environmental disasters and possibly against total economic collapse would likely be beneficial without manipulating the national and international free market like other policies have done over the years. Additionally, linking farmer support and nutrition programs more closely may lead to more biodiversity, which many environmental organizations and government bodies claim is better for the environment.¹,²

The European Union also appears to be highly focused on one problem each time it makes another attempt to reform the C.A.P. In earlier years its sole focus appeared to farmer income levels, which it would then take extreme measures to fix with the measures previously described, such as tariffs and production limits. In recent years, the E.U. government appears to be putting more of a priority on environmental concerns and the aesthetics of the European countryside. While environmental concerns are of high importance, these appear to

have surpassed Europe’s previous priorities of both the farmers’
economic stability and Europe’s agricultural independence by requiring
substantial investments of money and time be made for promises of
subsidy monies, as described in the evolution of the two C.A.P. pillars.
Like the United States, Europe should do a better job of considering the
overall agricultural picture. Educating farmers on the long term rewards
of better environmental management, such as less need for expensive
chemical inputs and increased consumer awareness of the conservation
role that agriculture play would likely help reach their goals.
Additionally, using methods to promote better environmental practices
that do not involve monetary rewards would help reduce the cost of the
C.A.P. to the European Union member nations, which has been a major
concern.

China’s area focus is on improving the economic conditions of its
farmers and rural population. As previously discussed, China has
serious challenges ahead regarding food supply for it large population
and its deteriorating natural resources. Similar to the United States and
Europe, China would likely benefit from taking a more inclusive
approach in its agricultural policies. The agricultural policies
implemented in 2004 include direct payments for crops, seed subsidies,
equipment subsidies, and money for more efficient infrastructure. None
of this money is assigned to farmer education regarding economics,
sustainable environmental practices or general farming techniques.
Additionally, the Chinese government does not appear to put a high priority on food safety and general food quality, as previously noted, but more so on quantity. If the Chinese government would create policies that address environmental, economic, and food quality concerns simultaneously, the country would likely be better equipped to handle its growing population. This could be done through education and more stringent environmental and food quality regulations. Currently, China’s agricultural policies appear to be decades behind that of the United States and Europe, which is likely due to the Great Leap Forward errors and a formally unstable government.

China is taking an interesting stance on crop insurance. Its government run program that makes payments specifically due to the disasters previously listed and requiring farmers to pay programs run by the government may prove to an effective tool. Instead of subsidizing premiums for insurance products owned by private companies, it may be more cost effective for the government to manage the programs. However, the Chinese government may not be efficient at managing the program, as its shortcoming in the environmental and food quality areas have not been successful. The successes and failures of the Chinese insurance program should be monitored by the American government, as it could be helpful in future discussions for changes to the crop insurance products used in the United States.
America, Europe, China, and all other governments will need to adjust their agricultural policies for future challenges to be prepared for a growing world population and international market, evolving consumer demands, and new environmental challenges. Taking a holistic approach on future policy changes will be necessary to be sure finite monetary, time, and environmental resources are used efficiently and effectively. America, specifically, is in a good position as a superpower and food producer to help a growing world population meet its dietary needs while being a leader on environmental, food quality, and farmer income issues. To take advantage of its unique position, American policy makers should evaluate the histories of the agricultural policies implemented in the United States and around the world to understand what has failed and succeeded in past. Unfortunately, the political environment around the world is not currently conducive to making long term decisions regarding agricultural policies. Without proper planning for the longer term, a catastrophic event, such as a famine due to rapid climate change, economic collapse, or geopolitical unrest may take place before action is taken. Understanding the failures and successes discussed in this paper will lead to better policies that address the issues that will challenge the agricultural sector now and in the future.
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Curriculum Vita

Will Telligman was born April 27, 1984 in Chester, SC. Will has had a life-long interest in agriculture, as both his parents’ families have been farmers for multiple generations. His baby car seats were fitted with brackets to attach to the tractors.

Will began his professional career on Capitol Hill in the office of former Congressman John Spratt. Since that time, he has worked in government affairs for various agricultural trade associations, including the International Dairy Foods Association, Organic Trade Association, and the Southeastern Lumber Manufacturers Association.

Prior to attending the Master of Arts in Government program at Johns Hopkins University, Will obtained a Bachelor of Arts in Philosophy and Religion with minors in Political Science and History from Winthrop University in Rock Hill, SC in 2007.