ABSTRACT

A HISTORICAL REVIEW OF THE FORCES
THAT CONTRIBUTED TO THE FORMATION OF THE
COOPERATIVE EXTENSION SERVICE

By

Charles Louis Lang

The purpose of this study was to explore the development of the Cooperative Extension Service, a nation-wide agency of non-formal education, up to its establishment as a federal system with the passage of the Smith-Lever Act of 1914. Specifically, the study examined the contextual setting--the economic, social, political, educational, and agricultural conditions at the turn of the century, and the vested interests which contributed to the formation of a national policy on extension.

Historiography was the method used. The first procedure was to review previous research pertaining to the formation of the Cooperative Extension Service, which primarily focused on the agricultural sector of the country. The second step was to examine the forces in the larger contextual setting as they related to the development of a national extension policy.

The findings were:

1. The dominant force in the development of the United States during 1880 to 1910 was its economic growth and power, and its subsequent impact on social, cultural, and educational development.

2. Near the end of the 19th century, the business sector alone could no longer control the unwieldy and

unstable nature of unrestricted capitalism, and sought federal protective legislation. By 1900 the administrative side of government had become involved in defining a national policy which contributed to economic stability and predictability.

3. Supporters and investors of foreign trade were collectively a major force that advocated increase in agricultural production, in order to increase agricultural exports on the world market. Such an increase would assist in directing the balance of payments in favor of the U.S., which during business recessions suffered losses from a decline of nonagricultural exports.

4. Many of the early and some of the current educational methods used by the Cooperative Extension Service were originated by general university extension programs of the late 1880's to 1900.

5. Voluntary organizations, even those whose influence did not generally extend beyond the state level, comprised a major force contributing to the development of extension education programs at the college and community level at the turn of the century.

6. During the last two decades before 1900 the land-grant colleges were experiencing financial stress, and in part resolved this by establishing research and extension education which served as a basis for successfully requesting federal funding.

7. Home economics became a part of extension legislation in 1909 largely because of the strong support by the Association of American Agricultural Colleges and Experiment Stations.

8. The major forces prompting the establishment of a national extension policy were: a) the economic sector, b) the land-grant colleges via AAACES, and c) the various farmer-oriented programs of the United States Department of Agriculture.

9. Vocational education, as such, was eliminated from extension legislation for two reasons. Primarily it was considered incompatible with the objectives of many of those who backed extension legislation. Additionally, inclusion of the complex vocational education proposal in the extension legislation would produce a bill which would either fail to pass or fail to function effectively after enactment.

10. Cooperative funding became a part of extension legislation in order to assure the continued autonomous nature and the continued supportive funding to already established programs favored by various special interest groups.

Based on these findings several conclusions are drawn relevant to the forces involved in developing federal legislation which established the Cooperative Extension Service as a national system of non-formal education.

Extension was enacted during the golden age of agriculture, 1910-1914, a time of general agricultural

prosperity. Many extension programs at the growing land-grant colleges were already established. In effect extension was compromised into existence not just as a giant education program for farmers and their families, but as an agency that would guarantee programs that were desired by the backers of Farmers Cooperative Demonstration Work, the Office of Farm Management, industrial leaders, and supporters of foreign trade who favored big production and low costs, and eventually the backing by the Association of American Agricultural Colleges and Experiment Stations, and several national agricultural organizations.

These backers saw to it that vocational education legislation was compromised out of extension bills. Some of the same Congressmen a few years later, convinced that the vested interests in Cooperative Extension were accounted for, renewed their efforts to support other educational legislation such as the Smith-Hughes Act of 1917.

The Cooperative Extension Service was but one of several measures of educational legislation at the federal, state, and county levels of government. With all due respect to the many dedicated men and women of this agency of non-formal education it is not the summit of federally supported education, but one of several products (and a good one, too) of the emerging forces that were shaping a national policy on education.

A HISTORICAL REVIEW OF THE FORCES THAT CONTRIBUTED TO THE FORMATION OF THE COOPERATIVE EXTENSION SERVICE

By

Charles Louis Lang

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF EDUCATION

College of Education

Department of Administration and Higher Education

1975

DEDICATION

To a family of extension workers:

Dad R. W. "Bob" Lang

Uncle C. C. "Cha" Lang

Uncle C. P. "Chaunce" Lang

My wife Grace Lang

Her Grandfather Henry Paul Miller

who collectively served with the Cooperative Extension Service for over 113 years.

ACKNOWLEDGMENTS

The writer is deeply indebted to the chairman of his Doctoral Committee, Dr. Floyd G. Parker. The careful and wise guidance he provided as well as his generosity with his precious time and patience are particularly appreciated.

Grateful acknowledgment is also due the members of the Doctoral Committee: Professor Russell J. Kleis who patiently and thoroughly assisted with the formation of the research topic, and Drs. Fred J. Peabody and Margaret J. Bubulz for their advice and encouragement.

He wishes to express appreciation to Doctor Madison Kuhn, Professor of History, Michigan State University, and Ms. Velma Bruno, Documents Librarian, National Agricultural Library, Beltsville, Maryland, for their valuable assistance and services.

Most importantly, the writer wishes to express gratitude to his wife Grace for her support, encouragement, and sacrifice. He also wishes to thank John, Bill, and Sue for their patience while Daddy "went to school."

TABLE OF CONTENTS

CHAPTER Page

LIST OF FIGURES

CHAPTER I

THE SUBJECT AND PURPOSE OF THIS STUDY

The subject of this study is the Cooperative Extension Service, an educational agency formally established with the passage of the Smith-Lever Act of 1914. Throughout its history it has multiplied knowledge, knowledge that has contributed richly to the development and, in some cases, the survival of this nation. Its structure is the product of the many stresses and aspirations that were woven into a public policy that contributed to its establishment over sixty years ago.

Definition of the Cooperative Extension Service

The Cooperative Extension Service can be defined briefly by further examination of the three words in its name. Structurally it is based on the "cooperative" funding agreements among three levels of governments: federal, state, and county. Most of the federal and state appropriations are allocated for staffing, while most of the county funds support the operational costs of their respective county offices. The agency is primarily an "extension" of the land-grant university of each state; extending university staff called extension agents into each county of the state

via county offices. The "service" provided is continuing, non-formal education, intended to meet the needs of the people in the county.

The educational programs of this agency vary slightly from state to state. For the purpose of illustration, Michigan programs will be described because the writer is more familiar with them, having been employed by the Michigan Cooperative Extension Service for over 15 years.

There are currently four program areas within the Michigan Cooperative Extension Service. These program areas intentionally and frequently overlap, depending on the audience to be reached and the results to be desired. Agricultural Production provides much of the information related to the techniques and management of all types of agricultural production and marketing. Family Living encompasses the skills and knowledge needed for today's family growth. 4-H and Youth, through the media of the project, provides many of the developmental skills for the young. Resource Development is concerned with the planning, policies, and utilization of land and related material and human resources.

The first extension programs were developed primarily in rural farming areas. Yet Extension is not limited to any specific audience. In Michigan the Extension Service estimated that in one year, 1973-74, 2,9333,693 contacts were made with people, and provided information via personal contacts, meetings, mass media and other means. Of this

number, only 759,259 were estimated as contacts with farmers.[1]

The Rationale for the Study

The function of this study is to assess in depth the evolutionary process of the extension educational model in order to assist agencies or programs that are attempting to meet certain critical needs here in the United States and throughout the rest of the world. Historically, Extension has had viable roles in numerous programs affecting the cultural and economic development of this country. Some of its more dramatic involvements occurred during World Wars I and II when its programs contributed to the increase in agricultural production to meet wartime needs. Extension also has been credited with programs that contributed to the big crop productions of the 1950's and 1960's.

The successes of Extension are not limited to its agricultural programs. Youth development and family living programs had been a major part of extension programs for over a decade before the Smith-Lever Act of 1914. Through the years these programs have encompassed such areas as value formation, domestic skills, problem solving, vocational skills, management, and other subjects utilizing experiential learning in the affective domain. The successes are there, but perhaps not as easily illustrated in mass media as crop production.

---

[1]Cooperative Extension Service, Michigan State University, "Staff Time Use Profile 1973-1974." East Lansing, 1974 (Mimeographed).

A significant number of developing countries are establishing extension-type programs in an attempt to resolve domestic problems usually related to the world food crisis. Although these countries in general have a large percentage of their population in the agrarian farming sectors, there are not enough resources and knowledge about supplies, labor, capital, markets, processors, political support, and trained personnel to implement major agricultural increases. Therefore these countries believe that an extension-type agency could help them cope with these deficiencies.

The food crisis is only one example of a critical and immediate need. Many leaders of these same countries are equally concerned and committed to improve the general quality of life of their populations as well.

If the extension model is to be duplicated then it is essential to examine not only its current structure and programs, but how and why it was established as it was. Specifically what forces and processes contributed to its evolution into a federally established and federally assisted agency of non-formal education.

Beyond the academic, there is a much more personal reason for this study. As an experienced extensioner, with family members who were similarly employed, I have a nagging curiosity to see how this agency came about. It has been my good fortune to work with and to meet former extension workers who had developed a missionary zeal and

allegiance to their work. I have often admired this quality and wondered what kind of agency attracts this kind of a person. Additionally, what kind of agency receives such strong, spontaneous support from the people it serves, especially when the establishment of the agency in each state is not required or delegated by federal law?

The Problem

The purpose of this study, stated in very broad terms, is to find out how the Cooperative Extension Service came about as established by the passage of the Smith-Lever Act of 1914. To achieve this broad purpose, there are several specific areas of concern which should be considered.

1. What kinds of economic, social, political, educational and agricultural conditions existed at the turn of the century which might have prompted the formation of extension-type programs? For example why was the Cooperative Extension Service established during a period (1910-1914) that some historians have referred to as the golden age of agriculture?

2. What kinds of political processes were generated or encouraged by these conditions to initiate a national policy from which the numerous extension programs and subsequent legislation could emerge?

3. What role did the various voluntary organizations contribute to the formation of extension programs and the passage of extension-type legislation?

4. Who advanced, supported, and opposed the various extension legislative proposals? What did the proponents of extension expect it to do? What were the objectives of the proposed extension legislation?

5. What compromises, modifications, and/or coalitions occurred as Congress dealt with the 32 proposed pieces of extension legislation during the period between 1909 and 1914? Since extension was advocated as agricultural education, why were the areas of home economics and club work included in the Smith-Lever Act of 1914, and why was the teaching of vocational agriculture in the schools excluded?

6. Why was cooperative rather than straight federal funding advocated in the proposed extension legislation. What did this mean to those involved?

7. What was the time frame and sequence of events of the emerging forces? What was the nature of the relationship of these events to each other, if any?

These questions focus on the evolutionary process of Extension in context with other developments occurring during this time. This information could be helpful to those who intend to design and implement extension type programs. Such information would not be a plan of action for a duplication of Extension, but rather an explanation of the kinds of forces and components that had to be recognized and resolved during Extension's formative years.

The GI Bill is an example of the formulation of national policy and the different reasons for supporting it. While the Veterans' Readjustment Act provided educational

assistance to many returning veterans after World War II, it served more than an educational function. It was also an effort to deal with thousands of returning veterans who would have flooded the labor market and contributed to the numerous problems associated with mass unemployment in a nation whose postwar economy was still in readjustment.[1]

The Historical Approach

Historical research as employed in this study uses empirical principles: namely, the selection of the subject, the review of related literature, the definition of the problem, the gathering of data and its interpretation, as described by Barzun and Graff.[2]

The key to historical research is to develop a plan that defines specifically the information to be sought. Without such a plan the researcher risks spending too much time floundering in a sea of historical data which is unrelated to the subject.

The next step is the task of researching and recording the facts. Previous research in related subjects can help provide data about the contextual setting and its chronology and identify possible primary and secondary sources that could be helpful in the new research.

---

[1]Carl T. Pacacha, "Floyd Wesley Reeves: Pioneer in Shaping Legislation in Support of Adult Education". (Unpublished Ph.D. dissertation, Michigan State University, 1970), pp. 154, 156.

[2]Jacques Barzun and Henry F. Graff, The Modern Researcher (Revised; New York: Harcourt, Brace, and World, Inc., 1970).

The researcher then reviews and records the data and begins to apply several tests for verification. These include the collation of other sources, labeling data as to the probable and false, identifying the source, explication or detailed accounts of primary sources for more data, disentanglement of the assembled data, clarification of facts and legends, and ascertaining the value of each datum to the study.

The recorded and verified data are assembled and reviewed. The researcher then attempts to establish generalizations and tests for any doubtfulness about what is found. If there is question as to credibility of a source, additional research must be undertaken before the doubt can be resolved.

The writing of the material is generally done in chronological order. If the material is extensive the writer may elect to describe the development of each component in chronological order. Barzun and Graff are also reluctant to encourage frequent use of direct quotes when writing because it may make the reading stilted and difficult to comprehend. More importantly they believe that the use of too many quotes indicates that the writer may have overlooked and neglected more generalized issues. To these researchers the interpretation of the data is the author's contribution to historical research and direct quotes should primarily be used to clarify the data.[1]

---

[1] Ibid., p. 317.

There are some necessary limitations in any kind of historical research as Wilcox suggests:

> Studying a particular fragment of it (history) out of context falsifies the nature of the fragment, and studying the entire context is impossible. Between the two extremes the researcher must find his own mean, by setting such limits as his interests and sense of feasibility suggest; but these limits are his own. They are not determined by any logic inherent in his problem, and they are likely to change as his investigation progresses and grows toward an end that he may never have anticipated.[1]

This implies a certain flexibility. Although the subject (to find out what caused Extension to be established) has been defined, the specific problems to be researched may need to be redefined occasionally as more data is obtained via the research process. This flexibility can be attributed to three characteristics of historical research. First, the problem cannot be fully perceived in advance; secondly the problem is never tidily solved; and finally, the subject has no inherent limits.[2]

The researcher can expect to search for more information than will be used and perhaps build on previous verified research. In this study an attempt will be made to add to what already has been researched about Extension.

---

[1]William B. Willcox, "The Psychiatrist, the Historian, and General Clinton: The Excitement of Historical Research," Michigan Quarterly Review, VI (Spring, 1967), 123-30. Reprinted with permission in The Historian as Detective, Robin W. Winks, ed. (New York, Harper and Row, 1968), pp. 500-501.

[2]Ibid., p. 500.

> In most cases it (historical research) leaves the accepted views intact, but suggests their inadequacy by introducing alongside them some ingredient that they do not cover. Any subsequent interpretation of the events in question, if it is to include this new ingredient, must be a more complex synthesis than its predecessors, and hence may be expected to approximate more nearly the infinite complexity of the events themselves. The aim of historical research is not to upset the scholarly applecart, in short, but to go on adding to the number of apples in it, until someone is forced to design a bigger cart.[1]

The methodology used in this research is outlined below.

1. Establish a basis for the research by reading several other research articles about the Cooperative Extension Service.
   a. The data from these readings was recorded on five by eight file cards with the name of the author, subject, page number, year of event, and recorded notes on the subject.
   b. These cards were filed chronologically under temporary headings.
2. Define and outline the purpose of the study, and information to be sought. The data collected thus far was reviewed in order to define those forces that had been accounted for and to

---

[1] Ibid., p. 502.

suggest those forces that had been overlooked or lightly treated, all of which are outlined as follows:

a. The specific economic forces of major industries, agriculturally related industries, and marketing.

b. The emergence of social and cultural forces associated with this country's growth such as labor, development of agriculture in the midwest, west and southwest, community development, and rural reform movements.

c. The development of, and influence by, the non-agricultural sections of higher education.

d. The resultant forces caused by the interaction of the above forces as the development of extension was launched into the legislative process.

3. Research and record information about the above areas. Because the study is a more generalized study covering thirty-five years it was important to incorporate many secondary sources that offered the more macro account of historical events. Primary sources like hearings, proceedings, and personal articles were used in conjunction with some of the secondary sources.

4. Make a viable outline of the recorded data. The outline was transferred to file dividers, and the data cards were filed correspondingly.

5. A summary outline of the data was made attempting to establish cause and effect relationships and to account for the forces involved.
6. Missing information had to be researched again and accounted for by recording it on new data cards.
7. The data was assembled and from this was developed an outline for its presentation. Then the writing began.

While this was the general plan used in this study, it was not followed as concisely as indicated. Throughout the entire research new information was found and added to the base data. The filing system of recording data on cards made it possible to constantly collect data from many different sources as well as make decision on what data should or should not be used.

Overview of the Study

Chapter II is the review of literature which examines the major research that has been made about the formation of the Cooperative Extension Service. This chapter will also suggest a model that explains the formation of educational policy.

Chapter III examines the contextual setting from which emerged the social, cultural, and economic forces that influenced the development of this country during the period 1800 to 1880.

Chapter IV assesses the antecedent movements and political action between 1880 and 1910 which helped to formulate extension education prior to its actual legislation. Specifically this chapter examines national economic development, western expansion, educational development, and the formation of agricultural policy.

Chapter V discusses the process of legislative enactment which occurred during the five year period of 1909 to 1914.

Chapter VI presents the summary and conclusions of this study.

CHAPTER II

THE REVIEW OF LITERATURE

While there are several excellent studies that have contributed to the understanding of the formation of the Cooperative Extension Service, one of the inherent problems confronting the researcher is the sheer multiplicity of sources offered. Here is an educational agency whose beginnings can be traced to the land-grant colleges, the United States Department of Agriculture (hereafter referred to as the U.S.D.A.), the rural organizations, the business interests, and to numerous legislative processes of state and federal governments. Each of these sources covers years of development, and it becomes difficult to offer a total historical account of Extension's growth.

The material used in the review of literature serves two purposes. To begin with, it was the first step in the methodology from which the design of the study was launched. Secondly it provides the reader with a condensed general view of previous accounts of the development of the Cooperative Extension Service.

There are numerous other valuable studies that are incorporated in later chapters. But the writings of Baker, Brunner and Yang, Martin, Morgan, Shannon and Schoenfeld,

and Scott form the background for the study, and they are reviewed in this chapter.[1]

Material later in the chapter will focus on the process by which policy becomes a legislated reality. This includes a discussion on the process for the formation of educational policy, followed by a review of the formative process for creating agricultural policy, and finally a candid view of how legislation is dealt with in Congress.

Baker, Brunner and Yang, and Scott indicated that Extension resulted from numerous societal inputs, some of which can be traced back to the early nineteenth century. While there was no indication then that an extension program or agency had ever been seriously considered, these early developments may well have been the foundation upon which Extension grew.

---

[1]Gladys Baker, The County Agent (Chicago: The University of Chicago Press, 1939).

Edmond de Brunner, and E. Hsin Pao Yang, Rural America and the Extension Service (New York: Columbia University, 1949).

O. B. Martin, The Demonstration Work (Boston: The Stratford Co., 1921).

Barton Morgan, A History of the Extension Service of Iowa State College (Ames, Iowa: Collegiate Press, Inc., 1934).

Theordore V. Schannon, and Clarence A. Schoenfeld, University Extension (New York: The Center for Applied Research in Education, Inc., 1965).

Roy V. Scott, The Reluctant Farmer (Urbana: University of Illinois Press, 1970).

The agricultural societies of the mid 1800's had members who were for the most part successful farmers. The purpose of these socieities was to promote agricultural products and to encourage supportive kinds of programs and legislation. Morgan described how the various Iowa societies specialized their services to assist horticulturists, beekeepers, fruit growers, florists, etc., advocating then, educational programs to advance their special interests.[1]

All of the authors who mentioned the Morrill Land-Grant College Act of 1862 referred to it as the first major effort by the U.S. Government to actively support public education for the farmer. The Act granted huge amounts of land to each state, which had the authority to accept or reject the grant. Iowa in 1862 became the first state to accept the grant under the provisions of the new law.[2] The land-grants could be transferred to cash with the stipulation that any resulting investment would assist in the teaching of agricultural, mechanic arts, and military science via a college level program.

The Land-Grant Act of 1862 in general, had little immediate impact on agricultural education and agriculture as a way of life. The Civil War had brought the farmer a short-lived prosperity, and after the war the gross farm income

---

[1]Morgan, Iowa, p. 4.

Scott, Reluctant, p. 27.

[2]Ibid., p. 8.

declined steadily for 30 years: Scott reported that the average gross farm income of $945 in 1870 dropped to $674 by 1900.[1]

The land-grant colleges had a difficult time in starting. Their enrollments were small and their programs were ridiculed by the more academic and established faculties. Not only was there a shortage of agricultural teachers, but the future offered to its graduates was that of an unstable agricultural economy.[2] The farmers themselves were skeptical of the colleges' value.

During the late nineteenth century there were decreasing farm prices and income, and mounting expenses, causing a general feeling of discontent among the agricultural population. Many of the agricultural organizations such as the Grange, Alliance, Farmers Union and numerous regional and state organizations tried to alleviate these problems but usually were unsuccessful. However, their combined forces caused the formation of the Populist Party in the 1890's which achieved national recognition and spurred a growing sensitivity to the problems confronting the farmer.[3]

---

[1]Scott, Reluctant, p. 31.

[2]Ibid., pp. 27-29.

Morgan, Iowa, p. 7.

[3]Scott, Reluctant, pp. 40-42.

Baker, County Agent, pp. 12-14.

The area of adult education had several successful programs of non-formal education. The American Lyceum of pre-Civil War days and the two Chautauqua movements of the 1870's and 1900's attracted many people.[1] Gradually numerous programs in non-formal extension-type education began to emerge in the agricultural areas of the country during the last half of the nineteenth century. Of these programs, the most well-known and popular appeared to be the Farmers' Institute.[2]

---

[1]The American Lyceum was started by a young Yale graduate, Josiah Holbrook, in 1826 as a lecture system and public forum for the small towns of Massachusetts. The lyceum movement gathered momentum rapidly. By 1839 some 3,000 lycea existed throughout the country, their purpose self-culture, instruction in "rational and useful information," and discussion of current issues...By 1860, most had disappeared.

Shannon and Schoenfeld, p. 9.

Tent Chatauqua was a combination of the more respectable instructions of the Lyceums and the traveling comedy shows, both of which had their ups and downs ever since the Civil War. In 1904 Keith Vawter named it Chautauqua after the institution in Lake Chautauqua in New York. From then until the depression of the 1930's it became a popular traveling missionary comedy show to the states south and west of the Alleganies.

Harry P. Harrison, Culture Under Canvas (New York: Hastings House, 1958), pp. xvi-xvii.

[2]Morgan, Iowa, pp. 11-15.

Shannon & Schoenfeld, p. 10.

Baker, County Agent, p. 6.

Scott, Reluctant, pp. 64-102.

The Association of American Agricultural Colleges and Experiment Stations (hereafter referred to as AAACES) recorded several forms of agricultural extension education, including rural schools, farmers institutes, agricultural trains, school gardening, demonstration plots, movable schools, exhibits at fairs, young peoples' contest work, and reading courses.[1] Agricultural education occurred in many forms, and much of it was supported by the agricultural colleges.

The U.S. government became involved again in agricultural education with the Hatch Act of 1889, which funded agricultural experimental research at the land-grant colleges.[2] Some of the rural organizations supporting this bill asserted that the funding should be limited to agricultural research.

Another area of U.S.D.A. involvement focuses on the Farmers Cooperative Demonstration Work and its efforts to control the cotton boll weevil which entered the country from Mexico in 1892. During the ten years which followed, the boll weevil spread throughout the South, causing extensive crop reductions, and posing a real threat to the southern agricultural economy. In 1902, Secretary of Agriculture James Wilson and his assistant Beverly T. Galloway toured the

---

[1]Baker, County Agent, p. 7.

[2]Scott, Reluctant, p. 58.

Brunner & Yang, p. 5.

affected areas and were impressed by the work of Dr. Seaman A. Knapp whose teaching methods were providing much assistance to the troubled farmers. In 1903, Secretary Wilson requested and received $250,000 for a boll weevil control program via the Bureaus of Plant Industry and Entomology. These federal funds were earmarked for boll weevil control, however, and could not be used to support Knapp's other work in demonstrating improved general farm practices.[1]

Seaman A. Knapp had developed an effective method of teaching utilizing strong community support. He and his staff, which included many former railroad farm agents, took on the task of convincing the hard pressed farmers to experiment with new methods, not yet proven, and possibly financially risky. Knapp and his staff had persuaded local businessmen to financially guarantee payment for any losses to the farmers, and with the risk covered, the farmers were willing to experiment and did so successfully.[2] Since Knapp's program received federal support only if it pertained to boll weevil control, the General Education Board, a foundation privately endowed by John D. Rockefeller, supported the Knapp program in the other general farming areas during the period of 1906 to 1914. The funding was made to the U.S.D.A. through a series of agreements known as "memoranda of understanding."

---

[1]Scott, Reluctant, p. 213.

[2]Baker, County Agent, p. 29.

This U.S.D.A. program became known as the Farmers' Cooperative Demonstration Work. Its focus was primarily local, and encompassed such areas as general agricultural education, home economics, youth work, and agricultural schools.[1]

The agricultural situation in the north during the late nineteenth century had its own kinds of problems. Farms were smaller and more diversified in the crops raised. The farmers practiced continuous farming which contributed to the depletion of soil nutrients, causing low agricultural production. The agricultural colleges responded to this situation through lectures, tours, institutes, and other extension-type programs. Many of the university farms, which had originally been used only as teaching aids for the students, became research farms for gathering basic data about farming in the area and were federally sanctioned to do such by the enactment of the Hatch Act of 1887, known as the experiment station legislation. W. J. Spillman in the newly organized Office of Farm Management in 1904 encouraged the development of diversified farms to be used as demonstration and observation centers.[2] Later he referred

---

[1] Ibid., pp. 26, 28.

Scott, Reluctant, pp. 223, 227.

Martin, Demonstration, p. 4.

Brunner & Yang, pp. 8-11.

[2] Baker, County Agent, p. 3.

Morgan, Iowa, pp. 11, 35.

Scott, Reluctant, pp. 58, 258, 261.

to these farms as failures because he believed too few farmers were convinced to try the demonstrated farming practices.

The Office of Farm Management also conducted research investigations into methods of successful management, which provided a wealth of useful data used in bulletins.

The Association of American Agricultural Colleges and Experiment Stations was organized in 1885 after it had been encouraged by the Secretary of Agriculture to solicit support for the Hatch Act. AAACES continued to grow in number and strength. In 1904 it formed a subcommittee on extension with Kenyon Butterfield as chairman.[1]

Four years later, President Theodore Roosevelt appointed several AAACES members to his Country Life Commission, which quickly recommended, in 1908 and 1909, that there should be a national program to improve the quality of rural life. The AAACES subcommittee prepared a similar report and a proposal in 1909, which was given to Representative J. C. McLaughlin of Michigan, who introduced the first extension bill in 1909.[2] Five years and an additional 31 pieces of legislation later the Smith-Lever Act was made law.

---

[1]Scott, Reluctant, p. 288.

[2]Ibid., pp. 288, 291.

Baker, County Agent, p. 36.

Brunner & Yang, pp. 11-13.

Limitations of the Literature

The research of the previous authors listed was extensive and proved to be valuable as well as interesting reading. The authors occasionally utilized firsthand accounts which not only documented specific events but illustrated the reasoning of the time. However there are certain limitations to the literature, and these are summarized below in four areas.

1. The material tends to focus on the rural and agricultural sectors. Certainly this was the area of major concern, but it is doubtful that rural development occurred in isolation from the rest of the country. What influences were there from capital, government, labor, and education, and what impact did the industrial revolution have on agriculture? The tariffs? Educational policies? If the extension model is to be duplicated, then all the major forces, rural and nonrural, must be taken into account.

2. The circumstances surrounding the development of the land-grant colleges raise a similar question. Most of the literature emphasizes the agricultural programs of these colleges, and little is mentioned of the engineering programs and what influence they had on these colleges struggling for survival. In another area, home economics emerged as a college program and became more aligned to agriculture than to the mechanic arts. Little was written as to why home economics and agriculture were so closely related in colleges, institutes, and the various proposed extension legislation.

3. The writings appear to focus again on the agricultural extension bills in the legislative processes. Certainly Congress, especially those committees in both houses which dealt with extension legislation, had more issues facing them than the establishment of an agricultural extension service. The same can be said for the Country Life Commission and the Association of American Agricultural Colleges and Experiment Stations. Further examination of this area, including other subjects of legislation such as tariffs, trade bills, budgets, vocational education, etc., may explain why it took five years and 32 pieces of legislation to lead to the passage of the Smith-Lever Act of 1914.

4. Not much has been written regarding the timing of the Smith-Lever Act, and this is a major concern in this study. 1910 to 1914 has been referred to as the golden-age of agriculture. It was this period of time that was used to determine the first farm parity price program. If agriculture was doing so well then why was Extension established. It is doubtful that rural organizations, much less militant by 1910 than before 1900, could have caused the passage of the Smith-Lever Act. Their strongest effort was associated with the Populist movement in the 1890's. Somewhat related were the problems associated with the control of the cotton boll weevil. It seems doubtful that the issues related to this problem could have had direct effect on the passage of the Smith-Lever Act a decade later. It appeared that extension legislation was enacted during a non-crisis situation.

The underlying theme of these four concerns then is to examine the total context from which the Cooperative Extension Service emerged. Perhaps extension education may be a part of national policy on adult education, and not "...the end of a long search for that effective teaching technique," as indicated by Scott.[1] The justification for this implication is the application of the extension model. If the extension model is to be duplicated then national and/or state policies on education should be examined in addition to the immediate area of concern.

The Formation of Educational Policy

The studies used in the review of literature indicate that the extension concept traces back to post-Civil War agricultural movements. While this does not imply that the agricultural organizations of the 1870's and 1880's were designing a Cooperative Extension Service, their actions may have set the groundwork for a national policy from which extension could later evolve. There was a process by which the concept of extension was created, shaped, and eventually legislated.

Roald Campbell has developed a simple model (see Figure 1) which can be used as a general illustration of the

---

[1]Scott, Reluctant, p. x.

I	II	III	IV
Basic Forces	Antecedent Movements	Political Actions	Formal Enactment
Social, economic, political, and technological forces, usually national and worldwide in scope	Usually national in scope such as the National Manpower Commission, Rockefeller Bros., studies, Conant studies, etc.	By organizations usually inter-related at local, state, and national levels such as U.S. Chamber of Commerce, AFL-CIO, & NEA	May be at local, state, and national levels; & through legis-lative, judicial, and executive agencies

Figure 1: A flow chart on policy formation in education.[1]

[1]Roald F. Campbell, Luvern L. Cunningham, Roderick F. McPhee, Raphael O. Nystrand, The Organization and Control of American Schools. (Columbus, Ohio: Charles E. Merrill Publishing Company, 1970), p. 247.

process.[1] It should be noted that Campbell's model is usually applied to public supported educational systems. His model is employed as a tool to aid in the examination of the formation of the educational policy which eventually fostered the Cooperative Extension Service. Examination of Campbell's model shows that he included specific components in each stage of the process.[2]

1. Basic Forces. Policies for education begin with the basic movements in society. These include social, economic, political, and technological developments, which are not local in character, but national and sometimes worldwide in scope. They include wars, international tensions, economic interdependence of all people, population mobility, widespread communication, technological advancement, growth of knowledge, and the human drive for self-improvement.

   Part of the difficulty in identifying a basic force is in measuring its scope. The locus of the basic force could be anywhere but its effect is nationwide. For example, employment conditions in industrialized communities are localized but the economic results of these employment conditions affect many other communities.

---

[1]Roald F. Campbell, John E. Corbally, Jr., John A. Ramseyer, Introduction to Educational Administration (2nd ed.; Boston: Allyn and Bacon, 1962), pp. 241-246.

[2]Ibid., pp. 241-246.

2. Antecedent Movements. These movements are in direct relationship to the basic forces, and may arise "non-officially", through privately endowed efforts, movement groups, etc., or "officially," through legitimizing organizations such as government units or corporate policy. Sometimes an antecedent movement comes from regional or national organizational leadership which is capable of dealing with, and expected to respond to, a problem situation. By the time an antecedent movement has reached national scope, it has been articulated and is easily recognized, and it is much easier to study than an antecedent movement which is in its early stages and only locally based. Unless a local movement succeeds to the point of regional or national recognition, the history of its development is usually ignored or dismissed and remains unrecorded.
3. Political Action. The antecedent movements and their related programs provoke political activity and it is at this point that the policy begins to be formulated and tested. Polarization by supporters begins to appear. Devices for study and investigation are a recognized part of the governmental process used by local, state, and national policy-making units. Most of this kind of action is employed after issues have been raised, debated, investigated, and perhaps

polarized by lay citizens and educators. Ordinarily, governmental studies merely formalize what vigorous proponents have already said. Legislators seldom are opposed to conducting a study of an issue as a prelude or substitute for action on it. A legislative study will usually provide the decision-makers with needed data, allow them to have more time to study the policy and its related issues, and examine the polarization.

Political action on a policy is usually more than local. To assume that most problems are purely local issues is, in Campbell's words, "sheer nonsense." Few movements, if any, are so isolated in nature. Policy producing movements may be limited in the early beginnings but eventually they become state and/or national in scope.

4. Formal Enactment. The process of the previous three stages often culminates with the formal enactment of policy by some sort of legislation. It is in this stage that the policy goes through its final metamorphosis, as those who are to approve or disapprove of it can also amend the proposed policy. When formal enactment is recorded in the media, there is generally the erroneous impression that the policy is also originated and designed there, which is an

> interesting point because the final form and capacity of a policy, could very well be quite different from what was intended back in the early stage of the antecedent movements. This is not surprising considering the number of different inputs that are made. This could alter drastically its final form found in formal enactment from what its designers had originally intended, and this is the uniqueness of the policy formation process.

Thus we have Campbell's process model for the formation of educational policy. There are two important limitations about its use. First, the various stages of policy formation seldom occur in easily observed steps of one, two, three and four. Normally this is a continuous process of one stage of evolution blending into the next. It is only after the data are researched and laid out that they can be examined with the model.

Secondly, the model does not account for the recycling of ideas and the interrelatedness of events. Antecedent movements may reappear under many different labels, and a movement which is in phase III or IV of Campbell's model in one area might prompt phase I or II in another area.

The Legislative Process

Whenever proposed legislation is brought to Congress, it is subjected to a political process that will inevitably

alter its structure, in order to account for all those who have vested interest in its enactment. Benedict, in his review of agricultural policy, described four characteristics relating to the enactment of agricultural policy.[1]

First, national agricultural policies result only after many years in the formative and developmental stage. For example, it took many years before official action occurred on issues related to the greenbacks, homesteading, agricultural tariffs, and rural credit.

Second, nearly all national agricultural policies are established after a series of strategic compromises. The Pure Food and Drug Act of 1906, the meat inspection laws, and the tariffs, are examples of policies which have resulted only after much alteration in order to reconcile all the self-interest groups involved in its passage.

Third, agencies or organizations which were created to promote or implement policy may well outlast their assigned task. The Association of American Agricultural Colleges and Experiment Stations is a classic example, as the original objective which brought this group together was to support the Hatch Act in the 1880's.

Fourth, Congress has a tendency to enact "watered-down" legislation because of the difficulties encountered when attempting to enact effective legislation regarding

---

[1]Murray R. Benedict, Farm Policies of the United States 1790-1950 (New York: American Book, Strafford Press, Inc., 1953), p. xil.

agricultural problems. Usually there is mutual agreement regarding identification of the problem but the differences are great regarding the actual methods of resolution. A number of the ineffectual marketing and tariff bills serve as good examples of the excessive compromising which can occur, and which can render the resulting bills less effective than intended.

Bills have been introduced into Congress and then amended so many times that it appears doubtful that the bill can do whatever its original intent had been. Some Congressmen have admitted that it is easier to pass an incomplete bill and rework it later, than try to enact a complete perfect bill. This situation is known as legislation generating legislation.[1] For example, the Morrill Act of 1862 was followed by the Hatch Act of 1887, the Second Morrill Bill in 1890 and the Adams Act of 1906. The current G.I. Bill is another example of legislation being altered several times in the years following its original adoption.

In order to enact legislation, the person or group responsible will no doubt become aware of the slow step-by-step procedure. But more important than this legislative road map is an understanding of the major hurdles which must be passed on the way. In the first place, at least one organization or special interest group must develop and

---

[1]Robert Bendiner, Obstacle Course on Capital Hill (New York: McGraw-Hill Book Company, 1964), p. 39.

present the proposal to a representative or senator who is willing to introduce the measure, such as the case of AAACES recommending extension legislation to Representative McLaughlin. This initial organization may also serve as a "legislative watchdog" during the process of legislation, protecting their original proposal from undergoing too much amending and compromising by other special interest groups.[1] In the case of extension legislation, these other groups included the Crop Improvement Committee, Soil Fertility League, marketing groups and educational interests, to mention a few.

The next step is the introduction of the bill. All congressmen may introduce bills, but the important bills are introduced either by the chairman of a committee who is the ranking majority committee member or by the ranking minority member. The bills introduced by these persons are high priority on the committee's agenda. Low priority generally indicates that no action will be taken on a bill and it will "die" in committee.[2] Only about 10% of the bills introduced are reported out of committees.

There is considerable power vested in the chairman of a committee. In the Senate, committee chairmen are appointed by the majority party leaders, and in the house, chairmen are assigned by the house rules committee. Generally this

---

[1] Ibid., pp. 40-41.

[2] Ibid., p. 17.

powerful position goes to the majority member with the longest tenure. Many southern Democrats have the longest tenure and usually end up being chairmen for years.

In general, bills are acted upon within the committees and seldom by floor discussion. Within this committee structure are certain rules for handling legislation most of which are determined by the committee chairman, who determines priorities for the bills to be discussed, appoints subcommittees, postpones meetings, recognizes certain members for discussion, and has complete control over releasing records of committee proceedings. About the only function left to the committee members is to vote and to invite guests who will sit in on the hearings.[1]

Such legislative power held by the committee chairmen can assist the passage of legislation. Representative Hatch was chairman of the House Committee on Agriculture when he introduced and maneuvered the Hatch Act of 1887 to its adoption. Senator Dolliver was chairman of the Senate Committee on Agriculture and Forestry until his unexpected death in late 1910, Senator Smith and Representative Lever were chairmen of their respective agricultural committees when the final Smith-Lever Bill was actively considered during 1913 and 1914. Smith had much power while in the Senate for he was also chairman of the new Committee on

---

[1] Ibid., pp. 54, 59-63, 65.

Education and Labor, and member of the Post Office and Post Roads Committee and the powerful Finance Committee.[1]

---

[1]Dewey W. Grantham, Jr., Hoke Smith and the Politics of the New South (Baton Rouge: Louisiana State University Press, 1958), pp. 240-241.

Scott, Reluctant, p. 302.

CHAPTER III

THE SETTING: DEVELOPMENT OF THE UNITED STATES FROM 1800 TO 1880

This chapter is an examination of the major forces that contributed to the first century of growth of this country, and which fostered the antecedent movements and political actions that are described in Chapter IV.

Early Land Use and Monetary Policies

The United States in its early history had a great and unique asset that few other countries had: an over-abundance of land. Land use played a major role during the development of the United States in the 19th century. Land disbursement policies affected farming, colleges, transportation, industrial development, and capital investment.

The first census in 1790 showed that 90 percent of the people were farmers, indicating that most of this country's early problems were agriculturally oriented.[1]

After the revolutionary war, the U.S. economy was close to bankruptcy. Secretary of the Treasury, Alexander

---

[1]Benedict, Farm, p. 3.

Hamilton, felt that the country should develop investment opportunities, using land resources that would encourage capital investment, even from wealthy European investors. Observing that the U.S. had no credit, was poor, and could not afford to levy taxes, he felt that such a plan was its only recourse. Thomas Jefferson, the idealist, feared that this kind of policy might encourage a development similar to the aristocratic land policies common in Europe.[1]

The Hamilton and Jefferson factions continued to battle over this issue for the next several decades. It was Hamilton who did successfully influence the early formation of land policy legislation.

The Land Ordinance of 1785 was the first official statement of U.S. land policy and dealt primarily with the surveying and systemized recording of land. Townships were surveyed rectangularly with 36 sections, of which sections 8, 11, 26, and 29 were reserved for future sale by the U.S. government. Section 16 was set aside for the maintenance of public schools.[2]

The Land Act of 1796, specified credit terms for purchasing land from investors and typified the kind of aristocratic land ownership policy which Jefferson had opposed. It required a five percent down payment, the remainder of the

---

[1] Ibid., p. 4.

[2] Ibid., p. 11.

first half in 30 days, and the balance to be paid in one year. Such stiff repayment could only be afforded by the wealthy investors.

The Harrison Act of 1800 attempted to alleviate this situation, but with limited success, extending the credit only to three years. The land remained inaccessible to the poor farmer who was forced either to rent his farm land from the landowner or move west to clear his own land.[1] The landowner became a powerful person in many communities. Money was already scarce and the landowner and local banks controlled most of it.

Jefferson's followers, including the frontier settlers, remained suspicious of the Hamilton faction, or the eastern landowners and bankers, and another issue arose which continued the conflict. In the early 1800's, the monied easterners wanted to establish a national bank in order to secure a stable economy. This effort failed, meeting strong resistance by the frontier settlers, who preferred the establishment of state banks. These state banks issued their own notes, and the rates of exchange among these banks became unreliable. The unstable economy caused a decrease in the U.S. purchasing power overseas. Then came the bad depression of 1840. Land sales dropped and the settlement of the west slowed down considerably. The shortage of money and credit

---

[1] Ibid., p. 14.

Richard Hofstadter, The Age of Reform, From Byron to F.D.R. (New York, Alfred A. Knopf, 1955, p. 55.

caused financial disaster to many farmers, local bankers and businessmen.[1] Economic recovery was slow. Congressmen believed that the economy could be spurred by the issuance of land grants to railroads and canal builders which would encourage local development and the flow of money.[2]

Settlement Policies

Land policies of the middle 1800's began to shift from those which had favored investment and speculation to those which would encourage settlement. The Homestead Act was passed in 1862, after many years of legislative struggle. The purpose of the act was to encourage settlement as fast as possible. The south opposed such legislation because it would give the northern states more territory for expansion and power.[3]

The Homestead Act did encourage settlement but little else. There was no plan for land use. The new settler had the liberty to choose his type of farming and use those practices he preferred. Unfortunately most of the practices he used also included careless cultivation which subsequently contributed to soil depletion.[4]

---

[1]Benedict, Farm, p. 28.

[2]Paul Wallace Gates, The Illinois Central Railroad and Its Colonization Work (Cambridge: Harvard Illinois Press, 1934), pp. 21-22.

[3]Benedict, Farm, p. 19.

Russell Lord, The Agrarian Revival, (New York: George Grady Press, 1939), p. 27.

[4]Hofstadter, Reform, p. 40.

The Homestead Act along with the numerous land grants to the railroad and canal companies during the middle 19th century did much to encourage speculation and settlement.[1]

The Morrill Land-Grant College Act which passed the same year as the Homestead Act, also contributed to land speculation. The granting of so much land to settlers, railroads, and colleges flooded the land market, causing a decrease in land prices, and the early land-grant colleges had difficulty in developing capital from their huge land grants.

Prior to the Civil War farmers were mostly interested in local banking and credit. But the war raised prices for farm products and suddenly the farmer became aware of the importance which state and national policies could have on his well-being. The Greenback issue is a good example of the farmer's new political consciousness. Greenbacks, a form of paper currency backed by western banks, were used in the war as standard currency. After the war, prices fell and money was scarce. The eastern bankers wanted to return to the stability offered by the gold standard, which would mean retiring Greenbacks. To take money out of circulation was a threat to most farmers, who were debtors and needed cash to pay their debts.[2] Farmer organizations arose to advance

---

[1]Gates, Illinois, pp. 46-50.

[2]Benedict, Farm, p. 33.

this issue, and the farmers were now involved in state and national politics.

Industrial and Capital Growth

Industrial growth in this country took a big jump during the Civil War and continued at an accelerated pace. Many of the bigger industries were involved in foreign trade and favored the gold standard. Most eastern banks which used the gold standard were making large profits, and were able to extend credit which did contribute to the general growth of the economy. However the supporters of the Greenbacks opposed the gold standard because it tended to deflate the value of the Greenbacks.[1]

During 1870-1875 U.S. imports and exports balanced each other. By 1876 the exports exceeded imports for the first time and continued to do so until the middle of the 20th century. The American manufacturer, already profiting from protective tariffs, was now profiting from the unsaturated higher priced markets.[2]

The opportunities for profits in industrial expansion were appealing. The period from the Civil War to the beginning of the 20th Century was an economic free-for-all. Businesses started, many failed, economic expansion was usually quick, and generally uncontrolled by government policies. It was during this same period that many crucial

---

[1] Ibid., p. 39.

[2] Ibid., p. 41.

issues arose which directly and indirectly affected agriculture and education and the subsequent development of their policies. The economic issues of the 1880's to 1914 will be discussed more thoroughly in Chapter IV.

Educational Development

The development of the educational system of this country underwent considerable change since its early beginnings. Knowles summarized the results of the colonial period:

> The period between the American Revolution and the Civil War stands out like a beacon in the history of education, since it was during this time that the basic pattern of our national system of state-supported elementary and secondary schools, state universities, and normal schools took shape.[1]

Knowles states that adult education started as the settlers landed at Jamestown in 1607, and attempted to develop a foothold on their new environment.[2] No one thought of it as "adult education." In fact whatever form it took at this time, adult education was essentially unorganized and primarily vocational. Knowles claims it was during this period that the concept of the "American Dream"

---

[1]Malcolm S. Knowles, "Historical Development of the Adult Education Movement in the United States," in Handbook of Adult Education in the United States, ed. by Malcolm S. Knowles (Chicago: Adult Education Association of the U.S.A., 1960), p. 12.

[2]Ibid., p. 7.

arose--the notion that every American can get ahead if willing and hard working.

The concept of public-supported education can be traced to the New England colonies of the 1600's where colonial theocracy was practiced. The churches urged their communities to establish reading schools, where the students could learn to read the bible. Massachusetts enacted the compulsory education laws of 1642 and 1647 which compelled the communities to establish schools with strong parental support for their children to attend.[1]

The middle colonies were so heterogeneous in nationality and religious backgrounds that there was little collective effort to encourage schooling. Elementary education was left to the decisions and directions of the local communities. Schooling in the southern colonies was directed by missionary efforts of the Anglican Church.

While adult education was never known as such, some of its basic notions came from the Colonial period. Ben Franklin's Friday night discussion group, the Junto, had several spinoffs, one of which was the concept of the human compulsion for self-improvement, the searching mind. Four other adult educational concepts trace their beginnings to this period: the subscription library, the museum, the "play house" or theater, and the newspaper.[2]

---

[1]Campbell, Organization, p. 48.

[2]Knowles, Historical, p. 8.

The concept of statewide public schools was formally presented twice (1779 and 1817) to the Virginia assembly by Thomas Jefferson.[1] While both proposals failed to get adopted, Campbell felt the concept of state supported schools had been further established.

There was much controversy over the issue of taxation for public education, a controversy though still current had some of its bitterest arguments during 1825 to 1850. Strong feelings and bitter antagonism were engendered, second in intensity only to the issue of slavery.[2] The issue subsided somewhat after 1850 as more communities established tax supported schools. Kalamazoo established a high school in 1858 supported by taxes. Thirteen years later a group of citizens challenged the legality of collecting taxes for high schools and lost. The reluctant taxpayer continued to pay more for education.[3]

By the middle of the 19th century two important cornerstones then were deeply intrenched in America's educational perspective: First, the need of taxation to support the schools and second, the need of tight community control for these tax supported schools. This second concept has

---

[1]Campbell, Organization, p. 50.

[2]Knowles, Historical, p. 12.

[3]Robert E. Potter, The Stream of American Education (New York: American Book Company, 1967), p. 314.

been so strong that state governments have been very reluctant to act arbitrarily in the alteration of existing units or in the establishment of new districts.[1] Local community school control was alive and well, and here to stay.

Change in Higher Education

Higher education underwent considerable change in content during the first 100 years of the Republic. In the early history of American colleges, religious and academic principles dominated college curricula.[2] Gradually the curricula began to reflect the growing needs of the local communities, and the colleges began to respond to the changing demands of the American life style.

Throughout the country and especially in the midwest, there was a gradual yet firm rejection of the exclusive focus upon classical and theological studies. Some of this rejection may have been fostered by the apparent successes of "ill-schooled" people like Ben Franklin, George Washington, Henry Clay, Steven Douglas, and Andrew Jackson, the poorly-schooled popular frontier hero who became president.[3] A classical education did not appear needed in order to attain the "American Dream." A practicality toward education was

---

[1]Campbell, Organization, p. 98.

[2]Edward Banforth Eddy, Jr., Colleges for our Land and Times (New York: Harper and Brothers, 1956), p. 1.

[3]Allan Nevins, The State Universities and Democracy (Urbana: University of Illinois Press, 1962), pp. 16-18.

Eddy, Colleges, p. 2.

assumed, and curricula began to change to include and favor the sciences and mechanical fields. Vocational education was believed to be more important to one's future success than studying the classics. During the 1830's and 40's there was an increased demand for scientifically trained people. Many college presidents, looking for bigger endowments, were willing to offer the new studies and not unexpectedly received strong opposition from the classical scholars.[1]

The Land-Grant College Act of 1862, introduced by Senator Justin S. Morrill, was another form of federal legislation that continued to grant land for the support of education. However this time the government restricted the instruction to the subject related to agriculture, mechanical arts, and military science.[2] Morrill's first land-grant bill was proposed in 1859, passed by Congress, but was vetoed by Buchanan, who feared that such a bill would trigger the south to secede. Morrill's second land-grant bill of 1862 did pass because the southern opposition had in fact seceded from the union. This second act granted eleven million acres, about twice the size of the state of Vermont. The act provided

---

[1]Eddy, Colleges, p. 8.

Nevins, State Universities, pp. 2, 16-18.

[2]Frederick Rudolph, The American College and University, A History (New York: Random House, 1962), pp. 249-261.

each state with land or script equivalent to 30,000 acres for each U.S. Senator and Representative in Congress.[1]

In initial practice, most states had difficulty in profiting from their land grants. There was a surplus of land on the market, and very few buyers. Loan money cost about 7 percent, high for the time. There were accounts of mismanagement and questionable deals. Land was being sold below cost, for unless colleges could find buyers quickly, the cost of holding the land, such as loss of potential interest, would soon exceed any increment in land value.[2]

Several of the existing state universities wanted to receive the land-grants in order to add to their existing systems. Supporters of the agricultural and mechanical interests feared that the Land-Grant College Act would be usurped by the academic and liberal arts scholars. They argued that since the state universities had not been interested in the land-grants earlier, this later change of interest must be an ulterior impulse.

Throughout the early years of these land-grant colleges there were many problems involving land swindles, price fixing, log rolling, speculation, disappointed advocates,

---

[1]Eddy, Colleges, p. 33.

Lord, Agrarian, pp. 31-32.

[2]Nevins, State Universities, pp. 23-35.

and meager endowments. In retrospect it is amazing that the land-grant colleges did survive.[1]

The mechanical studies in the early A & M colleges expanded. The growing industrial economy offered many employment opportunities for the college graduate with an engineering degree. Industry wanted trained people to plan, operate, and supervise mining operations, railroads, and factories. In contrast agricultural graduates had few employment opportunities. The prospects of future employment in the engineering fields looked so advantageous, that many agricultural students redirected their studies to engineering.[2]

During the 1870's the agricultural colleges were experiencing a difficult start. Professional engineering societies flourished while the field of agriculture suffered. There were only a few great agricultural teachers, even fewer with the combined assets of organizing ability, scientific training, and farm experience.[3] Most colleges had few if any agricultural students. President E. O. Porter of the University of Minnesota abolished agricultural classroom instruction. The Grange countered his action by threatening to get the agricultural department and its

---

[1] Ibid., p. 35.

[2] Nevins, State Universities, p. 59.

[3] Ibid., p. 56.

appropriations removed unless he reinstated the agricultural studies.[1] It was at this time that the Grange-college relationship became firmly established. Through the mid-west the Grange became a quick defender of the agricultural colleges and challenged anybody who threatened their existence.

Businessmen began to support the technical and mechanical schools, which they felt were preferable to the liberal "do nothing" schools, as they referred to the classical oriented college.[2]

There were many other forms of education that developed during the later 19th century, which directly and indirectly contributed to the concept of extension education. Except for a few pages by Schannon and Schoenfeld little or nothing was discussed about the growth of education concerning the land-grant colleges, trade schools, and general university extension.

Josiah Holbrook is credited with the formation of the American Lyceum in 1826. This community-oriented lecture series grew to about 3,000 lycea, mostly in the northeastern United States, before it all but died out in the 1850's.[3]

---

[1] Ibid., p. 56.

[2] Edward Chase Kirkland, Dream and Thought in the Business Community 1860-1900 (Ithaca: Cornell University Press, 1956), pp. 87, 101.

[3] Schannon and Schoenfeld, p. 9.

The Chautauqua movement, started in 1874, was characterized as education with a missionary zeal, Chautauqua became something of a folk university with a variety of educational programs which included such activities as scientific conferences, temperance conferences, and a church congress.[1] Tent Chautauqua, gestating for years in rural communities came rushing across the country side during the 1900's.

During the 1880's many adult education programs developed throughout the U.S. via farmers institutes, short courses, farm agents, correspondence courses, libraries, reading circles, and lectures which will be discussed more thoroughly in Chapter IV. The concept of education for adults beyond the formal school and college setting had been firmly established.

---

[1]Shannon and Schoenfeld, p. 11.

CHAPTER IV

THE FORMATIVE YEARS, 1880-1910

The preceding chapter described the contextual setting for movements which led toward extension policy formation. This chapter will describe the emergence of the forces that were part of or contributed directly to the antecedent movements of the Cooperative Extension Service. The material is extensive and is presented in four sections: national economic development, western expansion, development of extension programs, and the formation of agricultural policy. This format permits a comprehensive examination of the process of extension policy formation, the inherent forces at work, and the continuous interactions of these forces.

Economic Development: 1880 to 1910

This period of economic development was characterized by the growth of new competition, new centers of economic power, and eventually during the progressive era of the 1900's, the increased amounts of legislation directed at the economic sector. It became a period when the legislative side of government attempted to deal with the economic forces, which in turn sought the help of executive government to ward off these challenges. Agricultural production and related industries became a part of this scene. The purpose of this

section is to identify the economic forces and subsequent policies and to appreciate the extent of their influence on subsequent educational and agricultural policies, for from the economic sector came some of the support that directly advocated agricultural extension.

Knowles perceived the period between the Civil War and World War I as the developmental transition of this country from adolescence to maturity. The U.S. population had grown from 30 million in 1860 to well over 100 million by 1920, mostly by immigration. With colonization and commerce developing everywhere, the United States had become a world economic leader. Knowles summarized the period as follows:

> The most phenomenal expansion of all was the economic life. Indeed, during this period the character of the nation changed from essentially an agrarian society to a predominantly industrial and urban society.[1]

Prior to the Civil War most of this country's industrially produced goods were marketed locally. In the decades following the Civil War, industrial activity and flow of capital occurred in enormous proportions, and by 1900 these markets had expanded to national and international levels.[2] This economic activity became so intense that the government became in some cases, an instrument of big business in an effort to stabilize the economic forces.

---

[1]Knowles, Historical, p. 15.

[2]Hofstadter, Reform, p. 168.

Kirkland, Dream, p. 7.

Some of the industrial growth was altered by the two major economic recessions of 1873 and 1893. Kirkland related that an estimated 95 percent of the businesses failed during both recessions. After the 1873 panic, many of the surviving large businesses fearing financial losses, merged into pools which secretly established prices in order to secure profits on a more predictable basis for investors. However the smaller and newer businesses reacted against the industrial pools by seeking legislative help. In 1887 the Government enacted the Interstate Commerce Act which declared price-fixing illegal. For the first time the government was involved with a regulatory economic policy which directly affected business affairs. Prior to this business leaders had not sought governmental influence or control.[2]

Unexpectedly the Interstate Commerce Act also contributed to many industries forming giant monopolies. Since price fixing was illegal, price wars resumed as each industry competed for the bigger share of the market. The result of this competition caused much fluctuation and unpredictability in the market and investors were hesitant to make major

---

[1]Philip S. Foner, History of the Labor Movement in the United States (New York: International Publishers, 1955), p. 12.

[2]Gabriel Kolko, The Triumph of Conservatism (New York: Free Press of Glenco, 1963), p. 59.

Kirkland, Dream, p. 101.

investments. Businessmen, fearful that the threats to profits would discourage potential investors, continued to make mergers via trusts, holding companies, and monopolies, in an effort to stabilize and to guarantee constant earnings. Most of the mergers occurred after the recession of 1893, especially 1899 to 1904.[1]

Earnings prior to the mergers of the 1890's were high but risky. Kolko reported profits one-fifth higher prior to 1890 than during the years of consolidations in 1893 to 1904. Despite the large number of mergers, poor business judgment caused many to fail. Of the 328 mergers of 1888-1905 studied by Shaw Livermore, only 49 succeeded.[2]

These surviving mergers had created new pools of wealth and power which were used to create further new and competing industries.[3] The mergers, however, even with their size, efficiency, and shrewd capitalization were unable to stem the tide of rampant competition. Both new and established firms found it difficult to hold onto markets. The United States economy had become huge, diverse, decentralized, and difficult to predict.[4]

---

[1]Benedict, Farm, p. 92.

Kolko, Triumph, pp. 51, 145.

[2]Kolko, Triumph, pp. 27, 54.

[3]Ibid., p. 54.

[4]Benedict, Farm, pp. 90-91.

The industrial community was unable to control the economic forces with mergers of any sort, and the business interests sought governmental involvement to obtain conditions of stability, predictability, and security. With governmental involvement, the economy entered a period of new but limited competition, with new centers of economic power, mostly monopolistic, and a series of administrative enactments to support the progressive era.[1]

The Federal government's role in industrial growth appeared to be dichotomous. On the one hand was the legislative side of the government; the congressmen who were strongly influenced by their constituents and in many cases by the reform movements that will be discussed later. On the other side was the administrative and judicial branch of government, which responded to the economic forces, and this relationship contributed much to the concept "big government for big business."

President Theodore Roosevelt, in his first term following McKinley's assasination in 1901, moved cautiously on the big business trusts. One reason for his caution was the attitude of his inherited Attorney General, Philandor Knok, who had been an attorney for the House of Morgan.[3]

---

[1]Hofstadter, Reform, pp. 242-244.

Kolko, Triumph, pp. 3, 7.

[2]Kirkland, Dream, pp. 135-136.

[3]Kolko, Triumph, p. 65.

Throughout most of Roosevelt's administration most of the antitrust suits were against the "bad" trusts like Standard Oil while the "good" trusts were seemingly overlooked. For example during the recession of 1907, when Morgan wanted to expand his investments into the Tennessee Coal and Iron Company, via his U.S. Steel Corporation, he needed the promises of President Roosevelt and Commerce Commissioner Garfield not to investigate the millionaire's new trust. Both men were criticized later for allowing this action.[1]

President William H. Taft continued the conservative economic policies started by Roosevelt. In 1909, as a newly elected president, he attempted unsuccessfully to reform the protective tariff.[2] By 1910 he had become, according to historian Kolko, less of a reformer and more of a conservative. A case in point concerns the tax exemptions granted to railroads by Secretary of the Interior Ballinger who was charged by the reformers with showing favoritism to industry. One of the spokesmen for the reformers was Gifford Pinchot, Chief of the Division of Forestry, and former member of Roosevelt's Country Life Commission. The dispute between Ballinger and Pinchot became so polarized that Taft settled it by firing Pinchot. This incident convinced the reformers that big business influenced government, and encouraged voters

---

[1]Kolko, Triumph, pp. 114-115.

[2]Thomas Leslie Riley, "The Development of Extension in the Land-Grant Universities, 1862-1914." (Unpublished Ph.D. dissertation, University of Chicago, 1965), pp. 273-274.

in 1910 to end the conservative influence and elect more reform congressmen.[1]

Woodrow Wilson, like his predecessor Taft, started his administration by seeking tariff reductions and he succeeded much to the objection of the Grange. The immediate effect of the lowered tariffs was free trade and depressed prices. Wilson's desired long-range goal was to encourage foreign countries to reduce their tariffs, thus increasing world trade, and thus increasing the demand and prices of American goods, including farm commodities.[2] The shortages caused by World War I made Wilson's policies look like a huge success.

Foreign trade had a large impact on agriculture production and will be discussed more thoroughly in the next section.

Starting with the Interstate Commerce Act of 1887 and continuing through 1915, governmental administration of economic policy implemented two different kinds of controls on erring businesses. The first method was that of issuing a warning to the business in question, and this might involve a whole series of arguments and detentes between the business and government. The second and stronger method of governmental control was that of outright intervention, usually

---

[1]Ibid., pp. 273-276.

Kolko, Triumph, pp. 159-161, 192.

[2]Benedict, Farm, p. 143.

effected by the creation of an administrative commission to regulate the situation.[1]

An important case involving government intervention in corporate policy occurred with the Nothern Securities Case of 1902. This involved several railroads with the holdings of Hill, Morgan, and Harriman. While the case did little to actually damage monied interests, the biggest surprise to the business community was the government's attempt to redistribute wealth, and the threat to the previous autonomy of the business decision-making process.[2]

However in spite of this type of intervention the federal government was still regarded as a source of economic protection and support. The railroads for years had received many land grants and subsidies from federal and local governments. During 1906 and 1907 at least five railroads were also granted business and property tax exemptions.[3] Many other industries had received the benefits of protective tariffs, direct subsidies in a few cases, use of government-owned natural resources, and monopolistic privileges possible in certain federal charters or regulations.[4]

---

[1]Hofstadter, Reform, p. 230.

Kolko, Triumph, p. 6.

[2]Kirkland, Dream, p. 101.

Kolko, Triumph, p. 68.

[3]U.S. Congress. Senate. Committee on Territories, Copper River and Northwestern Railway Company, S. Rept. 873 to accompany S. 6316 61 Cong., 2d sess., 1910, p. 3.

[4]Kolko, Triumph, p. 59.

The giant industries formed their own national public lobby when they created the National Civic Federation in 1907. The purposes were quite clear; encourage businesses to support federal policies that would counter state and anti-trust legislation, and attempt to put current business and government detente arrangements on a more firm footing.[1] Big business was very intent on establishing a firm positive relationship with federal government, a position that could be identified with today's relationships.

About the only place big business feared controls was at local and state levels where the democratic process might truely actualize with local movements and local legislation. Corporations, already deterred by the fluctuating forces of uncontrolled competition, turned again to the federal government for protection from local and state regulations.[2]

The Federal government was not anxious to interfere with local and state legislation on these matters. However when pressured, it would usually establish a commission which in addition to specified functions, served as a buffer between the hostile local adversaries on the one hand, and the corporations on the other.[3]

The Department of Commerce, established in 1903, generally fulfilled this buffer role, mostly through the

---

[1] Ibid., p. 132.

[2] Ibid., p. 161.

[3] Ibid., p. 179.

efforts of its first commissioner James R. Garfield, son of former President Garfield. The Federal Trade Commission, enacted under Wilson's Democratic administration in 1915, served a similar function. Generally commissions identified and recommended action, but Congress or the executive branch would initiate action.[1]

International Trade

The economic policies which grew out of this rapid industrial development were also affected by international trade and commerce. Agricultural production was greatly affected because of the large amount of agricultural goods involved in international trade. McFall, agricultural economist from Massachusetts Agricultural College, reported that the agricultural products constituted over one-half of the value of all U.S. exports.[2]

Throughout most of the nineteenth century much of the capital used in the United States came from major European investors. Because of the huge growth of industry in the U.S. and expanding markets, American banking was growing large enough to replace the European investments in this country, and the United States was fast becoming the financial capital of the world according to Pratt, Chief of

---

[1]Ibid., p. 274.

[2]Robert J. McFall, "The Farmers Foreign Market," Annals of the American Academy, Vol. 117, January 1925, p. 152.

the U.S. Bureau of Foreign and Domestic Commerce.[1] American banking interests, seeking a bigger share of the world market, competed with the European capitalists who much earlier had established strong positions of reciprocal trade. For example, English and German banks made major investments in South American resources such as railroads, harbor works, public utilities, and warehouses. It was assessed that England and Germany had invested four billion dollars in Argentina, Brazil, and Uruguay over a twenty-year period and in return received 46 percent of the trade from those countries.[2] If American banking, then, was to increase and establish more control over its trade, it would have to make foreign investments, remain on the gold standard (the international currency) and establish policies of low tariffs and free trade with its competitively priced products. This was the policy stated by Kies of the National City Bank of New York.

In 1915 Howe, Commissioner of Immigration at the Port of New York, described the opportunities for economic growth:

> The free port would offer great opportunity for financial operations, now made possible by the recent currency act (Federal Reserve Act). It would stimulate international banking, and would tend to shift the financial center of the world to this country. And America, by the logic of events, has

---

[1]Edward Ewing Pratt, "The Attitude of Business Toward Foreign Trade," Annals of the American Academy, Vol. 59, 1915, p. 296.

[2]William S. Kies, "Branch Banks and Our Foreign Trade," Annals of the American Academy, Vol. 59, 1915, p. 301.

> become the natural center for the world's financing, just as London became that center several centuries ago, when it shifted from the cities of the Netherlands. But the financial center will only move to this country when it becomes a clearing-house of goods as well as of money. For credit the world over is created by currently created wealth in transit or change, so that even our financial expansion is dependent upon the opening up of American ports to the clearance of the wealth of the world.[1]

Tariffs are a tool in international trade policy. The post Civil War tariffs on U.S. imports were designed to protect the American industries from the competition of foreign imports. These tariffs did not include taxes on agricultural imports, which in effect made free trade in the agricultural commodities at a time when agricultural prices were decreasing. The Populists and Greenbackers were convinced that the only way to improve farm income was to restrict imports with tariffs. With strong rural representation, they made a political issue of the need for tariffs in 1880. The Republicans, having narrowly escaped defeat in 1872 and 1876, established protective tariffs on certain agricultural commodities as a means of attracting the farmers' votes.[2] It apparently worked since there was no significant recurrence of farmer opposition to tariff policies until 1934.

---

[1]Frederic C. Howe, "The Free Port, An Agency for the Development of American Commerce," Annals of the American Academy, Vol. 59, May 1915, p. 239.

[2]Benedict, Farm, pp. 56, 57.

Due to their low prices American agricultural products sold very quickly on the international market from 1870 to 1890. By the turn of the century, however, U.S. agricultural prices began an upward climb which continued until after World War I. There was a growing demand for agricultural products, specifically from a growing U.S. consuming public and an increasing number of processing industries: the producer was delighted. But the dissatisfied processors reacted by encouraging programs which would contribute to an increase in agricultural production in hopes that the increased supply would decrease the prices.[1]

To the processor's benefit, the foreign producer was attracted to the higher American prices, and foreign produced commodities started to flood the U.S. market. The issue of protective tariffs rose again. But with the advent of World War I, the tariff issue was overshadowed temporarily. Prices for agricultural products went even higher. American

---

[1]Hofstadter, Reform, p. 110.

Charles W. Holman, "The American Farmer and the Tariff," The Annals of the American Academy, Vol. 117, January 1925, p. 167.

Theodore Saloutos and John D. Hicks, Agricultural Discontent in the Middle West, 1900-1939 (Madison: University of Wisconsin Press, 1951), p. 22.

agriculture experienced a brief golden age; brief, because the postwar surpluses quickly caused a price drop.[1]

Cotton had been a major part of foreign trade ever since the Civil War, with U.S. raw cotton in the 1890's accounting for about one-half of the world's production. Prices for cotton prior to 1900 began a general increase which continued until after World War I. The higher prices stimulated an increase in production which had a difficult time meeting the demand. There was an increased number of cotton mills ordering cotton and secondly the supply was considerably diminished by the damage caused by the boll weevil. The cotton millers, foreign and domestic, supported policies of free trade and insect control, in order to assist in the availability and production respectively of cotton and to thus lower prices.[2] It was clear that cotton had been established as an essential commodity in international commerce, as well as the prime raw material for New England's textile industry and an indispensible asset to the southern economy.

---

[1]Benedict, Farm, pp. 113, 120.

Hofstadter, Reform, p. 110.

Holman, Tariffs, pp. 166-177.

Pratt, Foreign Trade, p. 296.

[2]McFall, Foreign Markets, p. 144.

Edwin G. Nourse, American Agriculture and the European Market, (New York: McGraw, 1924), p. 41.

Wheat and corn were very active commodities that sold well on the international market. There was competition however from Argentina and Canada, who could grow and sell corn and wheat more cheaply. This temporarily depressed the exporting of these products until World War I, when the demand, and prices, for U.S. wheat and corn rapidly increased.[1]

Throughout the thirty-year period 1880 to 1910, agricultural products had become a major part of this country's trade, and the agricultural producers became increasingly aware of the need to take an active part in the decision-making process regarding any trade or financial policies which were to be formulated.

Agricultural Related Industries

American agricultural production was also affected by the economic policies directed at their related industries such as the machinery manufacturers, food processors, and railroads. These agriculturally related industries responded to the economic forces in a similar manner as did other companies, as they maneuvered to stay fiscally sound. Their mergers and other forms of consolidations led to increased need for government intervention and contributed to the formation of local and state policies.

The International Harvester Company, controlled mostly by the interest of J. P. Morgan, was formed in 1902 by merging several smaller companies and it became the

---

[1]McFall, Foreign Markets, pp. 145-146.

largest U.S. tractor manufacturer. This giant company controlled a large part of the market with 96 percent of all tractors sold in 1902 to 87 percent ten years later. McCormick and Deering merged about the same time and attempted to establish a trust with control of ore lands and milling operations, but inadequate profits forced them to withdraw. Most smaller companies were intentionally left out of such mergers in hopes for their quick collapse. Deere and Co., J. I. Case and Co., Oliver Farm Equipment Co., were some of the 640 smaller companies struggling to stay in business in 1909. By 1915 some of the auto companies entered the tractor and implement industry. This large amount of manufacturing competition caused many companies to make reckless fiscal policy decisions and many became bankrupt.[1]

Within the auto industry, there is a classic example of how fundamental technological innovations led to a proliferation of wealth in new hands effecting new centers of power in the economy. The case in point was the success of Henry Ford who started with only $28,000 in capital and the internal combustion engine. In contrast, the Electric Vehicle Company with its battery operated cars invested 20 million dollars and failed.[2]

The meat packing industry is another of the early trusts in the agricultural industry. During the 1880's a

---

[1]Kolko, Triumph, pp. 45-47, 74.

[2]Ibid., pp. 42-43.

number of meat packing companies (Armour, Swift, Albertos, Hammond, Morris, Cudahy, St. Louis Dressed Beef, and Provision) met regularly to divide the market and adjust prices. They used their combined influence to procure railroad rebates for their large orders. Whenever new and serious competition arose it was merged into the group of packers. These mergers succeeded for a few years but were still unable to get complete control of the market, for it was easy for new packers to begin the business at the community level. Local packers received local trade in spite of several attempts at price adjustments by the big packers. A court injunction in 1902 dissolved the meat packing pool, which appeared to be failing anyway because of internal conflicts and poor management by the second generation owners.[1] The corporate mergers of these companies truly earned some of the suspicions put forward by organizations such as the Grange and the Populists, who disliked their monopolistic policies.

The Pure Food and Drug Act of 1906 was intended by its original supporters to standardize the quality of food, specifically meat. However by the time the bill was enacted it had set standards so strict that it also had the effect of controlling the competition from the smaller packers. This legislation was similar to other conservative policies of

---

[1] Ibid., pp. 51-53.

the time and illustrates the extent of industrial influence on legislation affecting the formation of economic policy.[1]

The railroads were a major factor in the formation of certain agricultural policies. Much of the railroads' corporate actions influenced and were influenced by the land-granting policies of the middle 1800's. Railroads required high capital investment per mile of construction. In order to acquire capital, the railroads attempted to sell their huge land grants to big investors from Germany, England, and Eastern American banks. Some of these land grants extended 20 miles, in a checkerboard pattern, on either side of the right of way.[2] Some of the land was even exempt from local taxes. Post-Civil War land sales by the Illinois Central Railroad for example carried a provision of local tax exemption until the last payment was made.[3] Local governments were denied tax bases and became furious at the railroads for their special privilege.

Railroad construction continued faster than the railroads could get investments or sell land. In order to get

---

[1]Ibid., pp. 108-110.

Benedict, Farm, pp. 119, 132.

[2]Benedict, Farm, p. 69.

[3]Gates, Illinois, p. 306.

additional money railroads were writing off construction costs with the tonnage shipped.[1] Seeking new business and more cargo to haul, they offered rebates to potentially large shippers, offered free railroad passes to preferred customers, started farm demonstration trains in Iowa, offered excursions to state fairs, encouraged railroad officials to get into community politics, assisted with the development of grain elevators, and hired farm agents to encourage farmers to grow and harvest bigger crops that could be shipped by rail. The competititive wars of the iron horse were in full fling.[2] There were few legal controls imposed on these railroad policies before 1900.

The cotton industry illustrates well the interrelatedness which is vital to industry. At one end were the big cotton producers with their manual labor forces; then the railroads that hauled cotton to the textile industries; the processors who made the goods; the marketing systems and international market mechanisms, including stores and mail orders; and finally the consumer.

Even the lowly sewing machine incited huge profits in the textile industry. Walter Hunt invented it in 1830,

---

[1]Benedict, Farm, p. 70.

[2]Ibid., pp. 69, 71-72.

and Elias Howe and Isiac Merritt Singer fought for its patents in 1859.[1] Its impact on mass produced clothing can be measured by the fact that in 1880 less than one-half of the population had store-bought clothing. Twenty years later nearly everyone had at least one article that was ready made and store-bought. When one realizes the whole network of industries which both support and depend on the cotton industry for survival, one can understand the destructive impact of the boll weevil's entry in 1892, causing a vast reduction in cotton production, thereby causing shortages and high prices.

Capital and Credit

Banking, prior to 1900, was as competitive as were manufacturing and transportation which were involved in the industrial mergers. By 1900 most of the nation's new capital was controlled by the New York banks. It was during this time also that many new businesses further west were being financed by the state and local banks, which depended on the Eastern banks for lending capital. Eventually these local banks ran short of cash, and the Eastern banks could not supply enough money; the bankers persuaded the government to float money into circulation. Consequently this deflation of the dollar contributed to a period of inflation followed by the Panic of 1907.[2] After the panic, major bankers sought

---

[1]Daniel Boorstin, The Americans, The Democratic Experience (New York: Random House, 1973), pp. 92-96.

[2]Kolko, Triumph, pp. 153-158.

legislation which would inhibit the recurrence of recessions in the future. There was much debate as to what kinds of controls should be used, and Congress finally passed a watered down compromise bill that provided little control of capital flow, but did permit Congressional intervention into banking policies by the Congressional National Monetary Commission.

The proposed Aldrich Bill of 1910 was the first attempt to establish the federal reserve system. This bill offered many of the measures which the bankers desired: central control which would stabilize banking policies, authority to control state banks, and a plan to establish overseas branches, which would strengthen the position of U.S. banks in foreign markets. However the bankers disliked this bill because there was too much presidential control entailed. When Aldrich removed this clause, Congress then defeated the bill in 1912 because it lacked control stipulations. Finally in 1913, the Glass Bill, which contained similar provisions to the Aldrich Bill, but did include more governmental control measures, was passed by Congress.[1]

One can observe that the government at the national level was beginning very definitely to direct economic policy, and it responded favorably to the capitalists. The conservative decision-makers in Congress believed that helping the capitalists was doing the country some good.

---

[1] Ibid., pp. 181-189, 253.

Even the intellectuals who advocated the growth of newer and smaller businesses urged that such growth not be permitted at the expense of upsetting the economy. Most intellectuals acknowledged that big business was essential, misguided at times, perhaps, but never to be eliminated.[1]

Western Expansion; 1880 to 1910

The forces of the industrial expansion and international trade not only affected agricultural production, as discussed in the preceding section, but had a profound effect on the various facets of western development and rural living. The United States was being settled with hundreds of new and growing communities out of which came new centers of wealth and influence.

From the western expansion also came the reform movements articulated by many groups such as the Grange, Farmers Union, and other rural groups which constantly sought to reform the seemingly insensitive actions of big business. Of special note were the efforts of labor and the populists. Labor and industry had tangled with each other for over a century. The Populists have come and gone as a political party, but they successfully challenged the conservatives and may have contributed indirectly to the mood of the country to elect a more liberal and reform oriented congress in 1910 and 1912.

---

[1] Ibid., pp. 214-215.

The early development of the Standard Oil Company illustrates the unique relationship between industrial growth and western expansion.

Development of an Oil Industry

Colonel Drake drilled this country's first successful oil well in 1859, near Titusville in northwestern Pennsylvania. Oil was so plentiful and near the surface that the well only had to be dug a mere 69 feet. The discovery of this well occurred at a time when oil was believed to have only medicinal value, consequently the event did not receive much public acclaim. However, once oil's many industrial, mechanical, and more profitable uses were discovered in the 1860's, the oil boom and land speculation shifted into high gear.[1] The mineral rights of farm land were often sold to speculating companies. These land exchanges occurred so quickly that they were regarded with suspicion by the rural population.

The discovery and location of oil, coal, and other minerals usually contributed to a sequence of events that required legal decisions on land use and settlement, industrial development, labor growth, and issues related to transportation and commerce. For example when John D. Rockefeller invested heavily in oil production the burgeoning railroads competed to haul it and many new refineries were established near the railway lines. There

---

[1]Boorstin, Americans, p. 50.

was a big business in hauling crude oil from the oil fields near Titusville to the refineries near Cleveland. Land investment business became brisk and included many legal transactions associated with corporate law.

Oil prices during the 1860's fluctuated frequently and extensively. Rockefeller saw this price fluctuation as the result of destructive competition. In his effort to control this fluctuation and assure more predictable earnings he established the Standard trusts in 1872. This had the effect of controlling the costs of oil production from the well head to the railroad, to the refineries, and eventually to the consumer.[1]

The Standard Oil trusts were a financial success despite the fact that they were declared illegal by the Interstate Commerce Act of 1887 and the Elkins Anti-Rebating Act of 1903. Standard's share of the market reached 95 percent by 1879, a combination powerful enough that it forced out the newer and smaller competing companies with various methods of price cutting and dealt with the federal legal cases and laws.[2]

Standard used its large market volume to pressure for shipping rebates from the railroads. It had controlling interests not just on petroleum but in the American Cotton Oil Trust, National Linseed Oil Trust, Distillers and

---

[1] Ibid., p. 50.

[2] Ibid., pp. 50, 418.

Foner, Labor, p. 12.

Cattle Feeders Co., Sugar Refining Company, and the National Land Trust.[1] These rebates became an issue among the critics of the giant monopolies. A legal suit charging Standard with receiving unfair and illegal rebates was settled in the courts with the Rebate Case of 1907. Judge Landis fined Standard 29 million dollars on 1,462 counts. But a year later Judge Grosscup upheld an appeal, the case was retried and Standard won. Significantly, a giant industry had been sufficiently challenged on its control of rebates, and the courts, not the companies, had to settle the matter. The rebate issue was raised again in later cases involving transportation of agricultural products.[2]

The growth of the Standard Oil Company was among other things an example of a huge industrial complex that dealt with and endured the forces of competition. It illustrates how the actions of one company affected other business interests, and required governmental intervention in corporate affairs. But the forces of industry reached beyond the manufacturing world and into the area of community development. Wherever a new industry began, it involved capital, labor, transportation of raw materials and manufactured goods, and the formation of legal statutes on local and state levels, especially laws governing land use and transportation.

---

[1]Foner, Labor, p. 12.

[2]Kolko, Triumph, pp. 40, 122-125.

State and Local Law

Each state created its own legislation to enforce controls on instate industries as well as interstate oriented industries such as the railroads. Generally there were two legal considerations: laws governing the common carrier which controlled the establishment of rates, and laws governing the right of public domain. The states used the latter to determine which railroads would get the right of way and the conditions under which the railroads would function.[1] The railroads disliked operating under the many and variant state laws and sought federal assistance to alleviate this situation. The railroads, like major industry, preferred national legislation that would supercede state regulations.

However the new states and communities wanted to protect their rights to govern locally the railroads and canals, and the diversification of giant industries. In order to assert and strengthen their rights to legislate on a state and local level, they needed legal training in the areas of governmental and corporate law. The number of law schools reflected this growing demand with an increase from 51 law schools nationally in 1880 to 102 schools in 1900. The new communities and states employed lawyers to develop legislation that would protect and enhance local

---

[1]Boorstin, Americans, p. 56.

Hofstadter, Reform, p. 17.

conditions. According to Boorstin these laws were legally sound if not just.[1]

The Consuming Middle Class

The rapid increase in urbanization was a consequence of the industrial and commercial development of this country. The urban population was 22,100,000 in 1890 and more than doubled to reach 54,000,000 in 1920. The agricultural population was 5,737,000 in 1890, but only increased by 711,000 in the same time period for a total of 6,448,000.[2] The American population was fast becoming predominately urban. Out of these growing populations rural and urban emerged a middle class that contributed two basic and vital forces: a consumer oriented public capable of purchasing goods and services, and a public that had active participation in voluntary, especially reform, movements.

The middle-income class became a major consumer of goods and services, responding to the appeal of the department stores, five and dimes, and mail order houses. It became very easy to purchase goods, especially ready made clothes that could be afforded by nearly everyone. Even the Europeans were shocked to see commoners dressed like the more important people, for what was a one-of-a-kind businessman's suit in Europe, stated Boorstin, was mass produced here.

---

[1]Boorstin, Americans, p. 62.

[2]Hofstadter, Reform, p. 116.

"Consumer palace" was the term used by Boorstin to describe the large department stores located in major cities.[1] These stores extended credit to customers, encouraged spending, and lobbied successfully to get major transporters, like street car lines, to bring customers to their doors.[2] The middle class was becoming a vital force to this country's economy.

Over a period of time, the rural and newer communities were also drawn into the consumer process by mail order companies: the Wards mail order business provided goods to these communities via catalogue sales. In order to encourage the rural population to use mail orders, Wards pictured Grange hats, showed Grange endorsements, and offered special credit arrangements to Grange members.[3] Indirectly Wards had an adult education program that contributed to the formation of the farmers' expected standard of living.

The general store owners had their share of problems in competing for the consumers' money. These small businessmen had to buy from middle men whose prices were usually higher. The small store owners generally opposed the big department stores, mail order firms and the proposed legislation of enacting Rural Free Delivery that would have benefited

---

[1]Boorstin, Americans, pp. 101-107.

[2]Ibid., p. 107.

[3]Ibid., pp. 118-120.

their mail order competition. Small stores favored those policies that would help local business such as increased population in the community, lower cost freight charges, and easier credit.

The Labor Movement

By 1865, the labor movement had started to formally organize itself, mostly in the industrial centers. By 1870 labor organizations had demonstrated a critical concept, the ability of a movement or action group to induce change.[1] As the industrial revolution progressed with large scale methods of production, the skilled handicraftman became an adjunct to the machine. When these artisans protested and challenged management with strikes, immigrant workers were hired to fill their places. Immigrant labor broke the strikes in the cotton textile, mining, iron and steel, cigar, and railroad industries.[2]

The stronger trade unions wanted to protect the employment of their skilled union members, so refused membership in general to Negroes, women, and foreign born. This exclusion was opposed by the farmers, storekeepers, rural professionals, the Grange, and the Greenback Labor Party,

---

[1]Knowles, Historical, p. 17.

Foner, Labor, pp. 32-33.

Hofstadter, Reform, p. 165.

[2]Foner, Labor, pp. 14-17.

who believed the unions had too much control over the availability of labor. The unions did not yield and the issue remained unresolved.

Each of the new labor groups were usually organized at the local level around a common cause and composed of laborers of the same skill or trade. The Central Labor Union started in 1882 and developed the boycott. The Jewish Socialist started in 1885 and fought the sweatshops. The International Working Peoples Association started in 1882 under the fiery leadership of Johann Most, August Spier, and Albert Parsons. Parsons was later indicted in the Haymarket Bombing of 1886. The American Federation of Labor was started in Columbus, Ohio in 1886 by Samuel Gompers as a counter move to the Knights of Labor. The railroad unions developed additional unions around their specialty jobs such as the locomotive engineers in 1863, the conductors in 1868, firemen in 1873, brakemen in 1883, and the switchmen in 1886.[1]

The unions were generally autocratic, with closed membership policies. They easily attracted the devoted laborer and later, when permitted to join, attracted many immigrant workers who shrugged off the idelogical leadership of the reform movements and became devoted followers of the union autocratic leadership. The growing unions became actively involved in the national elections of 1884, but

---

[1]Ibid., pp. 33, 39-40, 141.

the results were disappointing for them. Not only did their preferred candidates lose, but they also failed to legislate a shorter working day.

The Haymarket bombing for which labor was blamed, killed three Chicago policemen on May 1, 1886, and was a major event in the history of the labor movement. Four labor leaders were later tried, convicted, and hanged on November 11, 1887, for their alleged part in the event. These "Haymarket Martyrs" offered an emotional charge that united many of the labor movements for several years.[1]

The labor movement would appear at first glance to have only a distant relationship to rural development. Yet during the 1880's to 1900 the Populist movement caused labor and agriculture to join forces. The rural population had many reasons for feeling discouraged. They were dissatisfied with the decreasing farm prices throughout the last half of the 19th century, the unequal railway rate structure, the land and tax policies that favored the railroads, ruthless mortage foreclosures and land repossessions and resentment of the methods used by grain elevators to set prices and grades. In general the rural population experienced a feeling of helplessness in their being situated in a monopolistic consumption framework that appeared to have little if no interest in their welfare, and the newly

---

[1] Ibid., p. 114.

formed populist movements appeared to be the means for correcting these inequities.[1]

The Populists

The leaders of the populist movement, as with labor, came from the rank and file of the followers. Most of the followers were agrarian but the movement also attracted some industrial laborers, social reformers, and intellectuals, but few people competent in conducting political activity.[2]

The Populist Party was the first effective political movement to insist that the U.S. federal government take some responsibility for solving the problems created by industrialism.[3]

The Populist Party was not successful in creating a third party, comparable to the Democratic or Republican parties, but it did manifest a number of concepts that characterized the positions of many reform movements. First, the Populists cherished the "good old days," and felt threatened by the future shock posed by the industrial revolution and growing capitalism. Secondly they held a

---

[1]Norman Pollach, The Populist Response in America (Cambridge, Mass.: Harvard University Press, 1962), p. 7.

Hofstadter, Reform, pp. 7, 111.

[2]Pollach, Populist, p. 9.

Hofstadter, Reform, p. 101.

[3]Hofstadter, Reform, p. 61.

dualistic, good vs. evil, perspective of social struggle, and did not support any middle ground or compromise position. Their third belief was in the conspiracy theory, which implied that plots were continuously being planned against their efforts. Finally they were appalled by industry's priority of capital gain, and its lack of sensitivity to the humanistic values they cherished.[1]

The populist and labor movements almost officially joined forces in the early 1890's. Both advocated public ownership of railroads and were apparently agreeable on other issues. However Samuel Gompers, leader of the growing A.F. of L., disapproved of the merger stating that the farmers, some of whom belonged to the Populists, were employers too. There were several other reasons which indicated that any merger would have experienced difficulty. The Populists and labor also differed on such issues as skilled vs. unskilled membership in labor unions; and the agricultural leaders did not want Gompers to share any of the leadership in the party. Also, many immigrant laborers were skeptical of the idealism of the populists, and preferred

---

[1] Ibid., pp. 62-64.

the practical, if autocratic, leadership of the shop foreman.[1]

The Farmers' Alliance and the Knights of Labor united briefly for a reform program via the Peoples' Party. In 1891 their convention called for sweeping social reforms: to abolish national banks (in favor of the Greenbacks), to regulate the railroads, to establish a graduated income tax, and to adopt universal suffrage. The Peoples' Party of 1892 elected several representatives to Congress, but the disappointing losses in the elections of 1894 and 1896 caused many of the followers to drop out, and by 1900 this third party movement was all but dead.[2]

During the elections of the 1890's human rights had become a big issue, but was shelved by the more powerful supporters of property rights. As stated by Pollach, man could not control his society because he could not control industrial capitalism. Individualism, competition, and self-help, qualities especially characteristic of the many social reform groups, were ironically the major factors that served to fractionize this reform movement.[3]

---

[1]Ibid., p. 183.

Benedict, Farm, p. 107.

Foner, Labor, p. 320.

Nourse, European Market, pp. 179, 194.

Pollock, Populist, pp. 45, 64.

[2]Foner, Labor, pp. 300-333.

[3]Polloch, Populist, p. 16.

Labor's political activity in the 1890's was a history of power struggles which experienced some local success, but usually failed at the national level. According to Foner, industrial management made numerous clandestine attempts to subvert the labor parties by inciting internal conflicts as a means of keeping the opposition occupied and at bay. This according to Schattschnider was an example of conflict management. To most authorities, pressure groups like labor, the populists, Grange, etc., were usually perceived as small and weak, and those who controlled conflict in the 1890's let the reform parties conflict with each other until their issues became adopted by one of the strong and established parties, either Republican or Democratic.[1]

By 1900 the efforts of the social reform groups appeared to have lost whatever power they might have had at the national political party level. However they still offered local impact and continued to exert much influence on their congressmen, and state and local governments. As the economic conditions began to settle in the early 1900's and farm prices began to rise, the movement groups shed their militancy and concentrated on goals attainable by self-help and educational assistance, out of which

---

[1]Hofstadter, Reform, pp. 104-105.

E. E. Schattschnider, The Semisovereign People (New York: Holt, Rinehart and Winston, 1960), pp. 53-56, 71, 73.

evolved many of the successful educational movements at the community level.[1]

Development of Extension Programs: 1880 to 1910

The educational development of this period included numerous efforts by schools and colleges to expand education beyond the four walls of the formal institution. This was when the concepts of non-formal and adult education became well established via the pioneering efforts of educators within the schools, colleges, and community organizations. Once these extension programs had proved their value, several national organizations became involved and offered help and direction. Three of these became quite active in the support of cooperative extension work. They were the Association of American Agricultural Colleges and Experiment Stations, the General Education Board, and the Country Life Commission.

It was during these years that many colleges developed their own versions of extension programs. It should be noted here that none of the literature suggested that colleges were trying to design a national "agricultural" or "cooperative extension service." Instead these programs were earnest efforts to extend educational programs of any form to the non-student population. One common task for

---

[1]Benedict, Farm, p. 114.

Hofstadter, Reform, pp. 94-95, 265.

Riley, University Extension, p. 136.

all of these committed colleges, however, was to make the programs worthy of continued funding.

Extension Education

Extension education, that is education beyond the formal school or colleges for non-students, started in many places and appeared in many different forms. The general theme behind these educational efforts was the drive for self improvement, to better one's life and earning power. Practical or vocational education was also regarded as essential to the growth of the country for it was generally believed that such training would make young people more employable and productive.

This general theme of self-improvement via education had emerged in two major areas. The first area included the very general spectrum of the extension of college education from which later would come agricultural extension and general university extension.

The second area referred to the various programs started at the community level. This included the development of agricultural secondary schools and the various self-improvement programs created by many voluntary organizations such as the reading programs of the labor unions, lectures sponsored by the farm organizations, the "Tent Chautauqua," and others.

The program accomplishments both at the college and community levels many times complemented each other. In some cases, such as the farmers institutes, this dual effort

of cooperation was essential to the growth and success of the programs.

University extension had one of its early beginnings in Philadelphia in the late 1880's. The University of Pennsylvania had created two extension programs. It offered a lecture series for the surrounding communities, and encouraged by the efforts of Morrison I. Swift, resident of the first settlement house in Philadelphia, involved the university in community improvement via the settlement houses. Neither was regarded as a resounding success but successful enough to cause, in 1890, the formation of the American Society for the Extension of University Teaching, initially known as the Philadelphia Society.[1]

During its first year of establishment, the Society sent George Henderson to England to review firsthand the highly successful university extension system that had been in operation there since 1867. The society in England, and as copied in Philadelphia, was responsible for recruiting the lecturers, scheduling facilities, soliciting funds, and generally administering the program. This concept of an

---

[1]Riley, University Extension, pp. 182, 192.

George M. Woytanowitz, University Extension, The Early Years in the United States 1885-1915. (National University Extension Association, and American College Testing Program, 1974), pp. 3, 35-38.

established society directly involved in the mechanisms of university extension was also tried by several colleges throughout Ohio and Michigan. However, due to weak commitment most of these groups died out.[1]

The University of Chicago and Johns Hopkins University developed their own version of university extension in the 1890's with little or no help of a society. The University of Chicago was a successful pioneering institution in extending the university into the community. John D. Rockefeller when he invested heavily in the university saw to it that William Rainey Harper became its president, where he served from 1892 to 1900. The University of Chicago, founded almost overnight in 1892, was successful primarily because of the driving force of Harper, a former Baptist layman, Hebrew Scholar, Yale University Professor; and perhaps most significantly a former Chautauqua superintendent.[2] He also was a motivator of his staff and firmly convinced that the university should and would serve the community.

While at Chautauqua Harper started the Chautauqua Literary and Scientific Circle which was a successful type of correspondence school. Several years later as founding president of the University of Chicago he developed a highly

---

[1]Woytanowitz, Early Years, pp. 38, 50.

[2]Ibid., p. 35.

Riley, University Extension, pp. 115-116.

successful correspondence program which was to serve as a model for other universities.[1] Many colleges were developing extension departments and several, such as Pennsylvania State University, Michigan Agricultural College, New Hampshire, and Cornell, added correspondence courses in 1892, and checked closely the progress at the University of Chicago.[2]

Other universities established extension departments in the 1890's out of which came more correspondence courses, teachings in agriculture, institutes, and a variety of other programs for non-traditional students. Some of these early colleges were the University of Wisconsin, University of Wyoming, and the State University of Iowa in 1890, the Universities of Kansas and California in 1891, the University of Oklahoma and University of Nebraska in 1892, the Oregon System of Higher Education and Pennsylvania State University in 1893, University of New Hampshire in 1894, Indiana University in 1895, and the University of Kentucky in 1899.[3]

Most of these extension programs consisted of courses offered on an enrollment basis. Woytanowitz reported that in the 1892-93 school year nationwide there were 710 courses that enrolled 51,000 people for instruction in

---

[1]Riley, University Extension, pp. 163-164.

[2]Ibid., p. 169.

[3]Ibid., p. 187.

history, literature, social science, natural science, and philosophy. The University of Kansas, in 1891, offered a lecture series on very current, practical, and popular concepts such as agricultural economics and the silver issues. Even the Kansas City Board of Trade offered financial help for more courses on similar subjects. However, the effort lasted but a few years, and by 1898 the program had all but died, mostly because of the lack of faculty commitment and fiscal resources.[1]

Short term courses of several weeks in length were another form of university extension developed during this time. These developed powerful popular support which in turn contributed to separate, much more liberal budgets for the governing colleges. Cases in point were the Wisconsin short course on testing milk-fat developed by Stephen M. Babcock in 1890 and the Michigan Agricultural College short courses begun in 1894.[2]

Most of these programs were held at the university which pleased the faculty not only because of less travel but because it might influence participants to become full-time students or to be more supportive of the university.

There were other forms of university extension that literally extended education beyond the campus. These were the correspondence courses similar to those developed by

---

[1]Woytanowitz, Early Years, pp. 70, 75.

[2]Riley, University Extension, pp. 173-175, 177.

Harper, reading groups, and institutes, all three having a profound effect on communities seeking self-improvement and betterment.[1] This was an ideal matchup with the universities supplying information on one side and the community accepting in part at least, the knowledge provided to them. Extension programming was a key opportunity for universities to develop community support, and some educators, like Charles R. Van Wise of Wisconsin, were keen enough to develop it, as will be discussed later.

Reading circles, like the correspondence courses discussed earlier, can trace their ancestry to such programs as the Chautanqua Literary and Scientific Circle and the reading courses for farmers developed in 1882 at the Agricultural College of Ontario. Agricultural subjects became part of the correspondence courses of American colleges offered through Pennsylvania State College and Michigan Agricultural Colleges in 1892. The program at Penn State was entitled not surprisingly the Chautanqua Course of Home Reading. Michigan's program was called Michigan Farm Home Reading Circle and offered studies in soils and

---

[1] Ibid., pp. 170-171.

crops, livestock, garden and orchards, women's courses, and political science.[1]

Liberty Hyde Bailey of Cornell University did much to further another area of university extension. By using experiment station funds appropriated in 1896 by the state he expanded the reading circles in New York. By 1902 he reported 29,792 enrolled in the farmers' reading courses, 9,500 in the farmers' wives program, 1,800 in the home nature study course for teachers (teacher training), 26,000 in the junior gardener course, and 20,000 in the naturalist course.[2]

Bailey started his correspondence courses in 1896 with the naturalist courses on nature study materials. His purpose was to encourage the organization of local nature study groups. Here again was an example of a university establishing a relationship with community organizations.

The farmers' institutes played a unique role in university extension. They are described in more detail beginning on page 99 , but are mentioned here to illustrate the concept of extension education. These three and four day community based "schools" were considered a successful

---

[1]U.S. Department of Agriculture, Office of Experiment Stations, Farmer's Institute Courses, by Liberty Hyde Bailey. Bulletin No. 72 (Washington, D.C., Government Printing Office, 1889), pp. 5, 8, 10.

Alfred Charles True, A History of Agricultural Education in the University States 1785-1925 (U.S. Department of Agriculture Miscellaneous Publications, No. 36, Washington, D.C.: Government Printing Office, 1929), p. 277.

[2]True, Agricultural Education, p. 277.

phase of university extension. They started as early as 1867 and grew rapidly in the 1880's and 1890's. These institutes depended heavily on local groups, not university faculty alone, to plan the institute programs. Since most of the planning groups were in rural communities, most of the programs utilized agriculture information from the agricultural colleges, primarily midwestern land-grant colleges. A close supportive educational relationship was thereby solidified between the agricultural colleges and many rural communities. Institutes had so completely left general university extension that when the latter declined in activity in the late 1890's, the institutes still prospered with the growing agricultural colleges.

Herbert Baxter Adams in 1901 offered five reasons for the continued decline of general university extension activities: (1) lack of lecturers from the faculty, (2) lack of financial support from the university, (3) vast distances causing travel problems, (4) the necessity and greater importance given to campus based matters, and (5) the public had discovered less expensive means of adult education, such as free public lecturers, public libraries, education clubs, and of all things the reading circles which ironically had been organized through the support of university extension.[1]

---

[1]Woytanowitz, Early Years, p. 140.

University extension declined but it was far from dead. Wisconsin University's Charles R. Van Hise revitalized the idea, challenging the university to meet the needs of the citizens of the state in five media of education: The lyceum type of extension including the lecture series, correspondence courses, off-campus courses, agricultural extension, and a general consulting role to government agencies and other institutions of society.[1]

The Wisconsin idea gained enough momentum that it helped the University of Minnesota in 1911 and Indiana University in 1912 to follow similar patterns, and contributed to the formation of the National University Extension Association in 1915, the year after the Smith-Lever Act formally and separately established the Cooperative Extension Service.[2] Van Hise was a key figure in the formation of this national group. Since most of Van Hise's concepts about general university extension had not been in the Smith-Lever Act, it became imperative that NUEA be organized to at least protect as well as promote general university extension. Of course Van Hise also had support from a Progressive-Party Governor, La-Follette, who encouraged Van Hise to use

---

[1]Nevins, State Universities, p. 86.

Woytanowitz, Early Years, p. 152.

[2]Nevins, State Universities, pp. 96-97.

Riley, University Extension, p. 257.

Woytanowitz, Early Years, p. 140.

university officials in state government in advisory capacities.

University extension throughout most of the rest of the country did not grow with such spectacular results. Wherever it was established it remained secondary to the main teaching and/or research function of the university. It was in the realm of university extension that many techniques of extension education were tested and developed, and not within the struggling colleges of agriculture. It must be noted that agricultural colleges were not developing in the usual academic mold. The various forms of extension education seemed to adapt well to the agricultural studies, particularly in the land-grant colleges. Many of the programs that were spawned in general university extension, like reading circles, institutes and correspondence courses, became part of growing extension programs in the agricultural colleges.

Development of the Land-Grant Colleges

Land-grant colleges struggled to maintain their existence from their meager beginnings in 1862 to the 1880's. During 1880 to 1900 the colleges developed their programs and attempted to establish a firm support base. By 1900 most of the colleges had attained form and substance and were expanding their respective programs of study.[1]

---

[1]Eddy, Colleges, pp. 111-112.

During the period of industrial expansion and diversification there was a shortage of skilled labor.[1] Most unemployed people had little technical training to make them employable. The business community wanted schools to provide technical knowledge, and they believed that the common (elementary) schools did just this. They could not understand the value of high school which they felt was a waste of time, and mostly college preparatory in nature. They believed that high schools, if they were to exist, should at least teach "character", "gumption", and practical skills.[2]

Businessmen extended this disapproval to the classical and liberal arts curricula in many of the colleges, and gradually a few colleges and professors began to respond to the business community. Eliot of Harvard for example offered legal advice to businessmen, and revolutionized the study of law by requiring law students to study and observe real court cases, instead of pouring through volumes of court proceedings.[3]

Many of the attempts to establish practical education met with strong opposition from the academic community who defended the teaching of the classics, and who did not want the direction of higher education to change its course.

---

[1]Kirkland, Dream, pp. 57, 59, 63,

[2]Ibid., pp. 65, 68, 70, 71.

[3]Ibid., pp. 104, 106.

The business community sought vocational type training and most traditional oriented colleges refused to teach it. The business community then turned to the land-grant colleges who were more responsive to their request. These colleges were already geared to teaching practical education with their programs in agriculture and mechanical arts, and they sought a strong supportive political base, which the business community might well provide.[1]

The business and industrial community understandably preferred the mechanical studies to the agricultural curriculum, and as the number and variety of industrial jobs increased, the mechanical studies programs expanded into new fields of engineering. State universities that offered engineering studies also took part in the same growth of their curriculums.[2]

Engineering at the college level was sometimes lucrative, for there were opportunities for private profit in the development and sales of patents. Professional engineering societies also benefited the colleges because they solicited funds from industry for commercial research at the college. Engineering programs here were hardly an economic burden for college administrators.[3]

---

[1] Ibid., pp. 72, 75, 81.

[2] Eddy, Colleges, pp. 121.

[3] Ibid., p. 127.

Without the lucrative benefits which encouraged growth of the engineering sciences, the agricultural colleges had a more difficult time in obtaining funds and personnel to expand their programs. First, there was a shortage of experienced teachers in agriculture. Some of those who were teaching agriculture were either successful farmers or scientists recruited from other backgrounds. College administrators were at a loss, and were receptive to any kind of experimentation which might offer positive growth in their agricultural programs.

The Farmers Institutes

The farmers institutes were by all measures a very popular form of extension education from the late 1880's through the passage of the Smith-Lever Act of 1914. Their early beginnings can be traced to the 1860's.[1] Institutes were held in rural communities and were planned to give helpful agricultural information to the people who lived there. The resource people who lectured were college teachers, successful farmers, and scientists. Many of these institutes became a semi-social event that lasted several days. By the 1880's and 1890's most of the institutes had taken form and substance, characterized by institute

---

[1]Morgan, Iowa, p. 11.

Liberty Hyde Bailey, Farmers Institutes: History and Status in the United States and Canada, Bulletin No. 79 (Washington, D.C.: Government Printing Office, 1900), pp. 5-7.

speakers and a whole series of programs covering a variety of topics, for both men and women.[1]

The early institutes were administered in one of two ways. Some, as in the eastern states, were governed by the state board of agriculture, an administrative agency of state government, most of which were concerned with agricultural regulatory policies rather than educational programs. In other states the boards of agriculture had inadequate funds, so the institutes sought aid from the agricultural colleges. In 1900 forty-seven states reported institute events in which the sponsorship was about equally divided between the land-grant colleges and the state boards of agriculture.[2]

As the institutes grew so did the appropriations made by state legislators. True reported that $400,000 was appropriated by the states in 1910 and $1,000,000 by 1913.[3]

The midwestern colleges appropriated money for institute operations to cover salaries, transportation, and facilities. Ohio went so far as appropriating money directly to the community organizations that sponsored the

---

[1]Scott, Reluctant, p. 117.

[2]Ibid., p. 92.

Bailey, Institutes, p. 31.

[3]True, Agricultural Education, p. 279.

institutes and let them pay the expenses.[1] This direct payment of state funds was an important example of cost-sharing at the state and local level, which is similar to the current structure of the Cooperative Extension Service.

The institutes grew quickly in number, forming a national association by 1896. There were, 2,772 institutes reported in 1902, and by 1914 there were 8,861 institutes with over 3,050,151 participants.[2]

The institute movement made several important contributions to the land-grant colleges. By providing a successful extension activity that had support of the clientele, college administrators, and legislators, it helped to promote the value of the college's function.[3] Colleges were convinced of the institute's value and some continued to appropriate funds for institute programs even after the Smith-Lever Act was made law.

The institutes occasionally served as a meeting ground, in some cases as battle ground between irate farmers and the colleges. For example, the Grange and Farmers Alliance used the institute format to charge the University

---

[1]Scott, Reluctant, p. 75.

Morgan, Iowa, p. 15.

[2]Scott, Reluctant, pp. 91, 105.

[3]Ibid., p. 80.

Baker, County Agent, p. 6.

of Minnesota with misuse of land-grant funds and subordination of agricultural education. Both rural organizations became so dissatisfied with the University's policy that they threatened to lobby for the removal of agricultural studies. This incident illustrates the real feelings of possessiveness that the agricultural groups had towards the land-grant colleges.[1]

The Hatch Act

The Hatch Act of 1887 provided federal funding for conducting agricultural research at the land-grant colleges. The antecedent movements of this act can be traced to those colleges which in the 1860's and 1870's had developed their own teaching farms. While the original intent of these university farms was for teaching purposes and not for experimental use, they in part illustrated a commitment to solve the complex problems of low agricultural productivity.[2] The concerns included soil depletion which was associated with the increased number of abandoned farms. Also the farmers who settled under the provisions of the Homestead Act of 1862 wanted the colleges to teach them how to increase crop productivity. Increased productivity would also benefit the business interests. For example the railroads wanted more products to ship to

---

[1]Scott, Reluctant, pp. 81-82.

[2]Saloutos and Hicks, p. 67.

the eastern markets, and the grain elevator dealers wanted more grain for their markets.[1]

The scientists who were teaching college agriculture questioned the original intent of training college students to be farmers and sending them back to the farm, especially when many of them did not return to their home farms. These scientists preferred a plan of training scientists and specialists who would in turn train the farmer. The university farm could be transferred from a teaching aid for the agricultural student to a research center for experimentation, and this was the principle issue which prompted the Hatch Act of 1887.[2]

The first draft of this experiment station act was made in 1882, supposedly with the assistance of Dr. Seaman A. Knapp, then president of Iowa State College, according to historians Morgan and Scott. Eventually William Hatch, U. S. Representative of Missouri, and Chairman of the House Committee on Agriculture, guided it through Congress in 1887, with much support,[3] especially from the United States Department of Agriculture. Many of the scientists of the Department needed more research

---

[1]Eddy, Colleges, p. 94.

[2]Ibid., pp. 87-88.

[3]Ibid., p. 94.

data than was currently available in Washington, and they were aware of the valuable experiments, research, and data available at the land-grant colleges, since most of them had worked at a state college before coming to Washington. To many of these U.S.D.A. staff scientists reliable information about a particular product came from former colleagues in the states where the product was grown.

There were three significant implications of the Hatch Act and the coalitions which supported it. First, the colleges had established research and not just teaching as a basis for requesting federal funds. Secondly the Federal government was for the first time involved with the direct appropriation of funds for the colleges, and not indirectly as with its issuance of land grants.[1] This direct fiscal support would reoccur in the Second Morrill Act of 1890, The Adams Act of 1907, and the Smith-Lever Act of 1914. Third, the colleges and the U.S.D.A. had collectively created the Association of American Agricultural Colleges and Experiment Stations (AAACES). This group would eventually become a strong lobby for seeking Federal funding for programs beneficial to the colleges.

Association of American Agricultural Colleges and Experiment Stations

The beginnings of AAACES can be traced to 1885 when the Commissioner of Agriculture, Norman Coleman, invited

---

[1] Ibid., pp. 99-100.

Nevins, State Universities, p. 103.

the presidents of the various land-grant colleges to come to Washington and testify before Congress in support of the proposed Hatch Act. By 1887 the group officially organized itself into AAACES and began its annual meetings. One of its early accomplishments was the successful lobbying in 1890 for the Second Morrill Act.

Throughout the first ten years of the new century AAACES and their colleges "matured," according to Nevins. In the midwestern states the colleges were regarded as community service centers for governmental units. The colleges benefitted from this popularity and sought to continue it. Typical of some of the universities' efforts to this end, Wisconsin encouraged its staff to be consultants and serve on community and state advisory committees.[1]

AAACES appointed Kenyon Butterfield, then Director of Farmers' Institutes at Michigan Agricultural College and a strong advocate of extension programs, to chair a committee on the study of extension. Its first report in 1906 recommended that each college of the association organize a department of extension. In 1908 the same committee recommended that extension be broadly based with full recognition of the economic and social phases of agriculture as well as the productive. It recommended expansion in the field of home life on the

---

[1]Nevins, State Universities, p. 78.

farm.[1] While the report recommended a broad program, it did not specify the source of funding. The report was accepted and AAACES would eventually lobby for extension.

By the time of Butterfield's second report most of the land-grant colleges, especially those in the midwest, had established successful extension programs and enjoyed reasonable support from their state governments and communities. The colleges realized that if Extension was to expand, then the Federal government, already committed to the support of agricultural research, would be the logical source of funding. Furthermore, AAACES, having successfully lobbied for the Second Morrill Act would be the logical organization to develop and promote the Extension proposal.

The General Education Board

The General Education Board was a philanthropic foundation that funded various educational programs in the south. It was privately endowed, mostly by grants from John D. Rockefeller. During the years of its existence, 1902 to 1914, it appropriated over 15 million dollars to programs including the southern agricultural schools,

---

[1]Eddy, Colleges, p. 130.

Alfred Charles True, U. S. Department of Agriculture, A History of the Agricultural Extension Work in the United States 1785-1923, Miscellaneous Publication No. 15, U. S. Department of Agriculture (Washington, D.C., Government Printing Office, 1928), pp. 30, 100.

medical colleges, agricultural colleges, and the Farmers' Cooperative Demonstration Work which was directed by Dr. Seaman A. Knapp.[1]

The activity of the General Education Boards had been preceeded by other philanthropic foundations including the Peabody Foundation, Slater Foundation, Carnegie Foundation, and the Southern Education Board, from which some of the trustees were persuaded to join the General Education Board.[2]

The philosophy upheld by the members of the General Education Board was that education was important for everyone because it would help people become more employable and raise the general standard of living. Generally these benefactors felt that their contributions were not charity for relief, but philanthrophy for reform.[3]

The General Education Board was convinced that agricultural education was the crucial key to uplift the

---

[1]The General Education Board, (New York: The General Education Board, 1915), p. 17.

Lord, Agrarian, p. 68.

[2]General Education Board, p. 8.

Rudolph, American Colleges, p. 431.

Riley, University Extension, p. 206.

[3]Kirkland, Dream, pp. 146, 148.

southern agricultural economy, and it was greatly impressed with the demonstration education programs set up by Dr. Knapp with federal funds, to combat the boll weevil. Dr. Knapp, however, wanted to establish more widely based agricultural programs, and his federal funding stipulated that his work focus exclusively on boll weevil control programs. The General Education Board supported Dr. Knapp to this end by appropriating $925,750.00 to the Farmers' Cooperative Extension Work from 1906 to 1914.[1]

Commission on Country Life

In May 1907, President Theodore Roosevelt addressed the presidents, deans, principal professors of the land-grant colleges who were assembled in Lansing, Michigan, in observance of the semi-centennial celebration of the United States agricultural colleges. It was here that he announced his intentions for forming a commission to look at the problems associated with rural living.[2] A year later he appointed seven prominent men to the Commission on Country Life and charged them to review and recommend programs that would improve the quality

---

[1]General Education Board, pp. 17, 22.

[2]Joseph Cannon Bailey, Seaman A. Knapp, Schoolmaster of American Agriculture. (New York: Columbia University Press, 1945), pp. 245-246.

of rural life. All the members of the commission were sympathetic to agricultural concerns.

Liberty Hyde Bailey, named chairman of the commission, had already successfully demonstrated in New York the value of Extension education, at least with bulletins and correspondence programs. Kenyon L. Butterfield, graduate of Michigan Agricultural College, was like Bailey a member of AAACES. More importantly he was at the time chairman of the Association's committee on extension, appointed in 1904, and would in a few years become president of AAACES. "Uncle Henry" Wallace was a popular journalist and author from the midwest, who had for years agitated that government take a more serious look at rural living. Charles Barrett was a respected lobbyist for agriculture, President of the Farmers Union, and quite familiar with the marketing problems facing the midwestern and southern producers.[1]

Gilford Pinchot was a close friend of President Roosevelt, and at the time head of the U.S. Forest Service. Walter Hines Page was one of the charter members of the General Education Board, and before that a trustee of the Southern Education Board. While serving on the General

---

[1]Theodore Saloutos, Farmers Movements in the South, 1865-1937, (Lincoln: University of Nebraska Press, 1960), p. 191.

Education Board, Page met and befriended Knapp. Page kept Roosevelt informed of Knapp's work.[1]

The last member of the committee was W. A. Beard, from California and about whom little was written.

The Commission conducted 30 hearings and received testimony from 100,000 people. Their final report offered three recommendations; the government should inventory rural resources, develop a nationwide campaign for rural programs, and organize a national extension program through the colleges of agriculture.[2] By the end of 1909, which was about the same time that the first extension bill was proposed in Congress, there were three important groups actively supporting extension-type programs: The Association of American Agriculture Colleges and Experiment Stations, The General Education Board, and the Country Life Commission. Indeed it was an impressive group of supporters.

---

[1]Bailey, Knapp, pp. 245-246.

Eddy, Colleges, p. 138.

The General Education Board, p. xiii.

Lord, Agrarian, p. 52.

[2]Hofstadter, Reform, p. 3.

Lord, Agrarian, p. 53.

Saloutos and Hicks, p. 62.

U.S. Congress, Senate, Report of the Country Life Commission, S. Doc. 705, 60th Congress, 2d sess., 1909, p. 94.

Home Economics

The last quarter of the 19th century was the incubating period for college level home economics. The field of home economics as a science emerged quickly and, like agriculture, expanded greatly under the guidance and nurture of the land-grant colleges. In its early development during the 1870's, the teaching of home economics, or domestic science, was vocationally oriented with a practical rather than theoretical focus. By 1900 the area of home economics included many facets of home life studies and emerged as a major curriculum in the land-grant colleges.

Bevier reported that at the end of the century, two of the more effective programs were started at the colleges of Kansas State and Iowa State.[1] Initially, the home economics curriculum at Kansas State College (1873, 1874) included only sewing courses. However the students enrolled in these classes also received lectures on chemistry as it related to cooking and nutritional values of foods.[2]

---

[1]Isabel Bevier and Susannah Usher, The Home Economics Movement (Boston: Whitcomb and Burrows, 1906), p. 24.

[2]Ibid., p. 24.

The Mount Holyoke[1] plan at Iowa State College (1875) was very successful. In a plan similar to the agricultural programs which encouraged field experience on college farms, the home economics students were required to work several hours a day preparing meals for the students. By 1883 the curriculum had expanded to include "lectures on hygiene, laws of good breeding, and things that make a home beautiful."[2]

The home economics studies in the midwestern land-grant colleges became popular and the enrollments thrived. This was, of course, politically beneficial, and it is interesting to observe that the home economics curriculums were initiated by Iowa State and Kansas State at a time when both these colleges were still in their early years and struggling to survive.

In contrast to the popularity it experienced in the midwest, home economics was hardly considered an appropriate field of study by the eastern colleges for two reasons. First, most of the eastern colleges were not coeducational, and to offer such a curriculum at that time would have been

---

[1]Mount Holyoke Female Seminary, Massachusetts, was founded in 1837 by Mary Lyon, similar to several other eastern academies for girls. The seminary sought to keep costs as low as possible by having the girls do all the domestic work at the school. Teachers for girls in the newer land-grant colleges were graduates from some of these eastern schools.

Robert E. Potter, The Stream of American Education (New York; American Book Company, 1967), p. 249.

[2]Bevier and Usher, p. 24.

unfeasible. Secondly these established and strictly academic colleges disapproved of including in their curriculums the teaching of vocational studies such as agricultural, mechanical and domestic arts.[1] There were many women's academies, in the east, that offered a liberal arts program.

The rejection of home economics by the eastern colleges did not in any way diminish its growing popularity in other environments. Privately operated cooking schools were founded on the east, the first in New York in 1879. These schools, however, were designed primarily for the training of domestic servants. Also, by the 1890's sewing and cooking classes were taught in the public secondary schools.[2]

The beginnings of many of the county extension home economics study groups can be traced to home reading circles started with the university extension program. A case in point is in New York state, when Martha Van Rensseler was hired in 1900 by the College of Agriculture to take care of the large amount of correspondence from study groups associated with the college's growing reading programs. Some of the groups became known as Cornell Study Clubs and in some cases home bureau units.[3]

---

[1]Isabel Bevier, Home Economics in Higher Education (Philadelphia: J. B. Lipponcott Co., 1924), pp. 134, 156, 160.

[2]Bevier and Usher, p. 44.

[3]Eunice Heywood, "Home Demonstration Clubs and Councils," The Cooperative Extension Service. H. C. Sanders, ed., (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1966), p. 252.

The early groups had many names and followed different formats. In Illinois they were known as domestic science clubs as early as 1898. Other names included Farm Women Clubs, Homemaker Clubs, and Extension Clubs, with programs on canning of home grown foods, better baking, and egg grading.[1]

By the early 1900's some of these groups became movement groups and organized community efforts to get hot lunches for school children, rest rooms for women, cleaned up landscapes, road side markets, and establishment of community libraries, representing perhaps the heritage to the earlier reading circles. In 1908 many of these groups sent statements to the Country Life Commission recommending programs on labor saving equipment, running water, household management, nutrition and sanitation education, and attention to comfort and beauty.[2] Indeed these organizations were active and moving.

Two major developments occurred during the late 1890's that illustrate this expansion and direction of the field of home economics. First the practical home economics programs in the colleges and their affiliated farmers' institutes had become viable and were steadily growing. Secondly home economics studies expanded from the practical to include the theoretical disciplines

---

[1] Ibid., pp. 252, 254.

[2] Ibid., p. 255.

associated with family life.

As mentioned earlier, the farmers' institutes as they expanded began offering programs to meet the interests of the farmers' wives, and the institutes eventually sought the assistance of the college home economics departments.[1] Agriculture and home economics had what could be called a symbiotic relationship in the institutes and colleges during this time. In 1897 the new Secretary of Agriculture, James A. Wilson, former professor of agriculture at Iowa State College, when Knapp was president, publicly endorsed this growing relationship of agriculture and "domestic science," and Dr. Alfred C. True seconded this position of support in 1905. Both men had recognized the popularity of these two areas of study evidenced by their growth in the institutes, and the growing demands from the public schools for bulletins related to agriculture and home economics.[2]

This recognition was vital support for home economics. Not only did it indicate the interest and general acceptance by the U.S.D.A., but also the potential support by the Association of American Agricultural Colleges and Experiment Stations since True was one of its active members.

---

[1]Bevier, Home Economics, pp. 207-208.

True, History of Extension, pp. 35-38.

[2]Bevier, Home Economics, pp. 128, 131.

The theoretical aspects of home economics were established primarily during the Lake Placid Conferences of 1899 through 1908. The delegates to these conferences attended lectures and discussions on a variety of subjects within the realm of daily home life and its personal application to the family.[1] There was much concern about the forces that contributed to the degeneration of the family. By the close of the Lake Placid Conferences, the field of home economics had expanded much beyond a curriculum of cooking and sewing.

Mrs. Ellen M. Richards was a powerful leader at the Conferences; she may well have been to home economics what Seaman A. Knapp was to southern agriculture. She promoted the Rumford Kitchen, a popular plan for dietary teaching that was first used at the 1893 Chicago Exposition. The Rumford Kitchen, as part of the Massachusetts exhibit at the Chicago Worlds Exhibition, permitted those in attendance to watch the preparation of recommended nutritious foods. The kitchen was named for Massachusetts born Benjamin Thompson, Count Rumford of Bavaria, who supported these demonstration kitchens because they dealt with the direct application of science and nutrition. In

---

[1] Ibid., pp. 153-163.

its earlier days, starting in 1890, Mrs. Richards called it the New England Kitchen.[1]

Professor Atwater of the U.S.D.A. was impressed with the nutritional emphasis and together with Mrs. Richards launched a series of nutritional investigations in 1894 in the Office of Experiment Stations.[2]

Mrs. Richards was the first president of the American Home Economics Association from 1909 to 1911, and she helped to expand public awareness of the necessity of education for the home which later became a major reason for the development of extension home economics.[3]

Mrs. Richards successfully urged the Lake Placid Conferences to expand into collaboration with national organizations. In 1903 the delegates had a joint session with the Manual Training Section of the National Education Association. By 1908 Mrs. Richards and her Lake Placid delegates had received formal support for home economics programs from the U.S.D.A. During 1908 the American Home Economics Association was formally organized, and one

---

[1]Caroline L. Hunt, The Life of Ellen H. Richards (Washington, D.C., The American Home Economics Association, 1958), pp. 124-125.

[2]Hunt, Richards, p. 134.

[3]Ibid., pp. 141, 150.

Jeanette Lee and Paul L. Dressell, Liberal Education and Home Economics (N.Y.: Institute of Higher Education, Teachers College, Columbia University, 1963), p. 24.

year later it met concurrently with the American Association for the Advancement of Science.[1]

By the end of the first decade of the 1900's the field of home economics had become firmly established side by side with agriculture at the land-grant colleges. Strongly supported by the U.S.D.A. and several national college affiliated organizations, its inclusion in the extension work was secure.

Formation of Agricultural Policy: 1880-1910

The purpose of this section is to examine agricultural expansion from two perspectives. First, the macro approach will be used in order to generally review agricultural history as it was affected by economic and governmental policies. The second approach will be the micro perspective, to examine the sectionalized farming within the country, and the associated special interest groups, such as the Grange, and various agricultural producer trusts.

Agricultural Expansion In General

Farming in the early days of this republic was the livelihood of over one half of the population. As the country expanded in land area and population, agriculture

---

[1]Bevier, Home Economics, pp. 152-154, 162.

Lee and Dressell, p. 25.

and rural living underwent much change. The midwest had become the farming center of the country after the Civil War for a whole series of reasons. Homesteading had induced midwestern population growth, a better system of credit assistance was offered to its farmers, and midwestern soil was conducive to diversified farming. Other areas of the country had experienced serious agricultural setbacks. New England soil had been depleted, and post-Civil War southern agriculture experienced its own problems: a slow rehabilitation due to lack of capital and insufficient assistance from the federal government. Slavery had been abolished, and the blacks remaining to farm the land needed assistance to learn effective farming techniques. Further, the "Cropper" credit system had been established, in which the farmers could use their growing crops for collateral for loans.[1]

The midwestern settlers brought with them New England values of self-determination and established family-sized and self-supporting farms. These farmers preferred the concept of local public taxation for schools and local control and were generally suspicious of industrial or Federal "interference." Figuratively speaking these farm

---

[1]Benedict, Farm, p. 89.

Saloutos and Hickes, p. 31.

settlers supported "state rights" as strongly as the south had done, but without carrying the point to secession.[1]

Agricultural production increased steadily during the period 1880 to 1914 as shown in Figure 2. Prices for these same commodities decreased until 1896 and then started a general increase that continued for the next twenty-five years.[2]

Farmers of the 1880's and 1890's were confronted with continual indebtedness, and decreasing prices and their organizations were no longer content with social and educational programs. Instead they became more militant in their efforts to better the farmers' financial position.[3]

There was a high risk for anyone who remained in farming. Many of the immigrant farmers, who were attracted by the prospects of homesteading free land on new fertile

---

[1]Benedict, Farm, pp. 76, 81.

Hofstadter, Reform, pp. 30, 127.

[2]Frederick Strauss and Louis H. Bean, Gross Farm Income and Indices of Farm Production and Prices in the United States 1869-1937 (U.S. Department of Agriculture, Technical Bulletin No. 703, Washington, D.C.: Government Printing Office, 1960), p. 4.

John D. Black, Agricultural Reform in the United States (New York: McGraw Hill Book Company, Inc., 1929), p. 34.

[3]Black, Agricultural Reform, p. 34.

Hofstadter, Reform, p. 3.

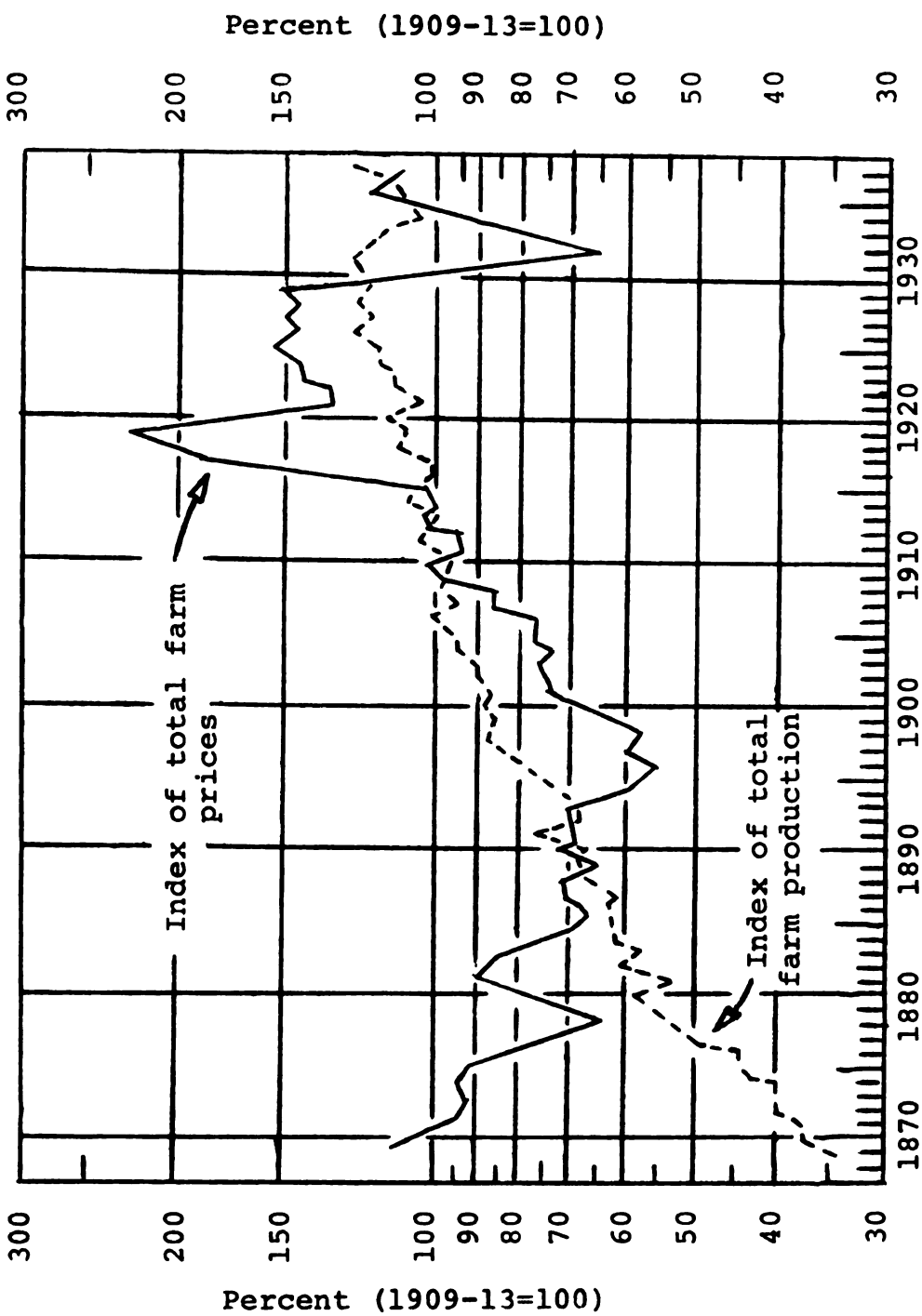

Figure 2.--Index of total farm production and farm prices, crop years, 1869-1937.

U.S.D.A., Gross Farm, p. 4.

soils, failed to produce enough to overcome the low market prices. To many of the agriculturalists the only way to survive low cost farming was to increase volume. As a result the larger and more commercialized farms began to displace the smaller independent farmers.[1]

By 1900 the commercial large-producing farms had been firmly established, and the crops had become geographically sectionalized: Cotton and tobacco dominated the south, small grains were grown mostly in the plain states, corn in the upper midwest, fruit near the water protected regions, dairy near the metropolitan and in the northeastern states and beef cattle in the open ranges. As the sectionalized farming became more established in each of these regions, special interests groups arose, such as the cotton growers, and cattlemen's associations, etc., and these groups will be discussed later.[2]

In contrast to these large farms, the smaller farms diversified their crop production in order to hedge on their investments. They could not afford to risk their meager investments in one crop only.[3]

---

[1]Black, Agricultural Reform, p. 50.

Lord, Agrarian, p. 72.

[2]Ross M. Robertson, History of the American Economy (New York: Harcourt, Brace, and Company, 1955), p. 221.

[3]Lord, Agrarian, p. 68.

By the turn of the century the country had entered the Progressive Period, a time of relative economic stability. As the prices for farm products rose, a brighter outlook was promised the farmer, and a new set of forces began to influence agricultural production, some positive and some negative.

The positive forces included: greater demand and higher prices for agricultural products in the domestic and foreign markets; improved credit for farmers; protective tariffs; better mail service; communication and transportation; efforts by the government to help check animal diseases; encouragement for the rapid settlement of land (which appealed to the immigrant and commercial farmers); research and dispersement of new seed varieties; and fulfilling the demands by the farmers for more information on how to increase production.[1]

The government's involvement with agricultural problems started two or three decades before the prosperous early 1900's. However this involvement had been initiated at the insistence of commercial and not farmer interests. For example, Italy stopped importing U.S. pigs in 1879 because of diseased carcasses from the U.S. France did the same two years later. The government, prodded by exporters and processors finally passed a meat inspection law in 1891 which reopened many of the foreign markets.[2]

---

[1]Black, Agricultural Reform, p. 50.

[2]Kolko, Triumph, p. 100.

The severity of the grasshopper plagues of 1872 to 1876 contributed to the federal establishment of the U.S. Entomological Commission. Usually if an agricultural problem became severe, the government would create a new agency or commission within the U.S.D.A.[1]

This was only a beginning of governmental involvement in agricultural policy. The tariffs on raw materials as earlier discussed (pp. 60 to 65) continued to evidence that American agriculture was not autonomous, but an integral part of this nation's economy and subject to the economic forces therein.

As the farmers became more subjected to economic forces and more organized in their special interest groups, they became more informed. A survey conducted in 1913 with 3,698 farmers interviewed indicated that one in every 1.5 farmers received farm newspapers, one in every 2.3 received farm bulletins, one in every 3.3 went to farmers' institutes, and one in every 6.5 belonged to an agricultural organization. Then the contacts decreased significantly: only one in 14.5 went to agricultural institutions seeking advice, and only one in every 23.8 owned farm books. Rather surprisingly, while one farmer in 11.0 in the south reported receiving instruction from farm agents, the northern proportion was only one in every 159.0. The farm agents of the south played an active part in Dr. Knapp's Farmers Cooperative Demonstration Work and no doubt made many direct contacts

---

[1]Benedict, Farm, p. 116.

with the southern farmers. The northern states did not have such an active farm agent program.[1]

Agriculture of the early 1900's was also affected by negative forces, mostly from industrial policies established in the late nineteenth century. The urban industries had expanded their production and markets, and by their power had prompted the introduction of protective import tariffs, some of which were as high as 40 percent of the face value of the product. Yet, the raw materials used in many industries were, to the benefit of industry, duty free, forcing the American farmer to compete with foreign producers.[2]

However the growth of industrial need for agricultural commodities was so prolific just prior to 1900 that it soon created a demand for the raw materials, which in turn raised prices. This increase in prices was so encouraging that it sparked an expansion in farming activity, much of it so hurried and unplanned that many natural resources were unwisely exploited and much land was dangerously exposed to over production and soil erosion. In addition, there arose problems of unequal transportation rates, rapid expansion of corporate laws that usually did not benefit the producer-farmer, and taxation policies that subsidized urban expansion.[3]

---

[1]B. T. Galloway, The Bureau of Plant Industry, Its Functions and Efficiency (U.S. Department of Agriculture, Bureau of Plant Industry, Miscellaneous Papers, Circular No. 117, Washington, D.C.: Government Printing Office, 1913), p. 25.

[2]Black, Agricultural Reform, p. 51.

[3]Ibid., pp. 52, 177.

The increase in farm prices was also caused by forces within agriculture. The cost of farm land had increased, partly because there was no more land available for homesteading. In one case 50,000,000 acres of potential farm land could not be homesteaded and subsequently farmed because of the coal rights on the land. However President Roosevelt, in a move to increase agriculture production, secured legislation in 1908 that permitted homesteading while protecting the coal rights.[1]

The increased costs to farming were attributed also to the rise in labor costs, as many of the farmers were now competing for labor with the urban industries. To paraphrase an old saying, it was difficult to keep them down on the farm. Also these same farmers had to make heavy financial investments in farm machinery in order to accomplish large volume production.[2] While prices for farm commodities increased the production costs, the proportion of prices received compared to the cost of farming was still sound enough for agriculture to arrive at that period of time (1910 to 1914) known as the golden age of agriculture. In years to follow this five-year period would be used as the basis for establishing parity price supports.

---

[1]U.S. Congress, Senate, Committee on Public Lands, Agricultural Entries on Coal Lands, Report No. 703, 61st Congress, 2nd Sess., 1909-1910, Senate Reports Vol. III (Washington: U.S. Government Printing Office, May 20, 1910), p. 3.

[2]Saloutos and Hickes, pp. 22-25.

The combination of high prices, increased demand for food, and strained production methods of 1900 to 1910 concerned some people who feared that agricultural food production could not keep pace with the population growth. Some publicists began to voice a demand for more effective agricultural education that would assist the farmers to increase crop production.[1]

While many industries affected agriculture as discussed earlier (pp. 65 to 70), in the eyes of the farmers and developing western communities, the railroads were the big powers to confront. The railroads had more occasion to come into local contact with these people and their complaints. These people suspected the railroads' policies on many counts: commission charges, dockage, methods of grading, reports of poor service, attempting "short weights," and high marketing costs. The railroads were even blamed for the low prices for farm products on the eastern markets, although they were if anything, only remotely responsible.[2]

The railroads had a major interest in American agriculture and had invested heavily in rail construction in order to secure shipping privileges. One of the railroads main concerns in the grain producing areas was to gain control of the grain markets by establishing a type of

---

[1]Saloutos and Hickes, pp. 27-28.

[2]Ibid., p. 58.

trust called commercial line companies. This meant that railroads, with abundant capital from exporters and commission firms, could often purchase and influence the location of grain storage elevators. This control opened the door to cheaper rates for the favored elevators, and forced the independent operators to comply with their policies. Often the managers and large investors in these commercial lines were stockholders and directors of the railroads.[1] They became a very powerful force in determining agricultural policy especially in matters pertaining to grain marketing.[2]

The marketing of grain became such a problem that Congressmen representing the grain states tried unsuccessfully to get the issue resolved in 1908. Farmers and businessmen of the midwest accused the owners of railroads and elevators of buying wheat at one price, shipping it east, and selling it at a lower price. The loss was passed back to the original buyer forcing him to either buy at a lower price or get out of the business. The lower grades were blamed on shipping damage. The lower prices on the

---

[1]Saloutos and Hickes, p. 75.

[2]U.S. Congress, Senate. Committee on Agriculture and Forestry. Bill to Provide for the Inspection and Grading of Grain Entering Into Interstate Commerce and to Secure Uniformity In Standards and Classification of Grain, And For Other Purposes, Hearings. Senate Bill 382. 60th Congress, 1st Session, 1908, pp. 54, 155, 157, 162.

True, History of Extension, p. 101.

east coast made American wheat competitive on the world market. Grain inspectors at the time (and for years to follow) were employed by the Boards of Trade of the exporting cities on the east coast, much to the disapproval of the midwesterners. To them the solution of the problem was to have grain inspectors and graders employed by the U.S.D.A. A series of hearings was held on the bill to establish the desired changes, with personal endorsements from midwestern bankers, newspapers, and Boards of Trade from Chicago, St. Louis and other areas.[1] The bill was reported out of committee but defeated by the Senate.

Many times prior to 1900 the grain farmer was at the mercy of these large companies. Since little could be done by any one farmer, the farmers organized into large special interest groups to collectively assess their economic problems, and to collectively take issue with any outside group practicing policies detrimental to the farmer's financial survival.

Development of Special Interest Groups

Many of these farmer organizations were effective in bringing issues to the surface especially during the post-Civil War period. These groups contributed to the sectionalization of agricultural interest; i.e., the corn

---

[1]U.S. Congress, S. 382, pp. 157, 161, 186, 187.

belt, cattle states, fruit areas, etc. Eventually many of these groups became active in the formation of policy and legislation at the state and national level.

The cattlemen's association is an illustration of a special interest group in the western United States exercising its influence on other systems. Beef cattle farming was very profitable in the mid-1800's. Cattlemen bought cattle inexpensively from the settlers who did not want to drive their herds over the mountains. Labor was available and cheap, grass land ranges were free and open, the markets were available, and the animals had only to be delivered live for payment.[1] Some cattlemen recorded purchasing cattle at $4 per head and selling them at $40 per head with little overhead costs. During the 1880's many other farmers and businesses arrived on the cattle ranges, and cattlemen were forced to put in long, expensive fences, pay land taxes, legal fees, and conform to new local laws. Added to these expenses were the two hard winters of 1885-86 and 1886-87 which killed many of the cattle.[2] The cattlemen organized themselves into groups called associations to protect and further their interests by confronting the new local laws. The cattlemen's association was typical of many other special interest groups. Some of these organizations became

---

[1]Boorstin, Americans, p. 10.

[2]Ibid., p. 27.

part of the political action that demanded government assistance.

While the founders of the Grange envisioned the establishment of a cultural and self-improvement organization, the people who joined it used it to better their economic and political plight. The 1870's were ripe for farmers to form militant organized groups, as there was growing unrest, increasing antagonism of the special interests by the railroads, the immense and dominating power of the corporations and banks, plus a general new class awareness. The farm communities, recognizing this lack of powerful local leadership and secondarily the scarcity of organized recreation accepted the Grange as filling a long-felt need.[1]

The Grange's political and economic power in rural communities rose to over 800,000 members in 1875. However by 1880, disenchanted members left the group and its size dwindled to 100,000. Many other rural organizations had similar histories. But the Grange's political efforts of the 1870's had several significant accomplishments. One worth noting for the purpose of this study was the Grange's court case against the Illinois Central Railroad Company which the Grange finally lost before the Illinois Supreme Court. But it set a precedent, as it forced the government to settle a rate case of a privately owned utility company.

---

[1] Ibid., p. 95.

Scott, Reluctant, pp. 43, 46.

The railroads were quite disturbed, and justly so. As a result of this case five midwestern states passed rate laws in the 1870's that signaled the involvement of state governments into utility control. These laws usually varied from state to state, and industry considered these varying laws such a nuisance that they asked federal assistance to standardize them. To the rural people this was another example of federal control that superceded local control and confirmed their suspicions that federal governmental control did not favor local interests.[1]

After the turn of the century, when agricultural production and prices seemed to be stabilizing, the farm organizations became less militant. The American Society of Equity, founded in the Northcentral states, split its membership over internal economic issues in 1907. One side favored control of the market by withholding the products. The other faction was more characteristic of an emergent cooperative movement. Encouraged by better prices and increasing markets there was every reason to believe that agricultural commodity cooperatives could and would succeed. These cooperatives supported the one man, one vote form of group determination, and equal distribution of earnings: The equality issue was a typical belief which was considered attainable by the

---

[1]Benedict, Farm, pp. 98-100.

Gates, Illinois Control, p. 307.

cooperatives during the relatively prosperous times of the early 1900's.[1]

Southern agriculture experienced a different history. It had large farms and fewer agricultural organizations, and the two major influences directing the growth of its agriculture were the cotton industry and the Federal government.

By 1890 Southern agriculture had regained much of its economic strength, mostly by the growing of cotton and tobacco. As in the rest of the country the 1880's and 1890's were difficult economic times. In order to secure better control of their situation, especially to raise prices, many southern producers, processors, and distributors formed trusts. Of the eleven trusts formed during 1881 to 1903 the only three that were successful were the cane sugar, tobacco, and cotton seed oil trusts.[2]

The cotton producers first attempt to control cotton prices occurred in 1898 when a group, referred to as the reductionists, urged other growers to withhold cotton from the market. Only a few responded and the effort failed as production went up and prices went down in 1898-1899.[3]

The growers, led principally by politician Harvie Jordan, organized the Southern Cotton Growers Protective

---

[1]Benedict, Farm, p. 145.

[2]Saloutos, Farmer, p. 167.

[3]Ibid., p. 154.

Association in 1900, later changed to the Southern Cotton Association (SCA).[1] The SCA attempted unsuccessfully to withhold cotton from the market in 1905 in order to force a rise in prices. However the SCA could not control enough of the variables, such as the poor tenants and immigrant farmers who could not afford to hold out for a higher price. Instead of selling at 15 to 16 cents per pound, as encouraged by the SCA, they sold at the 11 and 12 cents price, depressing prices again.[2]

The SCA also attempted to sell directly to the European spinners, in order to bypass the expensive commission interests. But the spinners surprised the SCA by defining the terms of marketing cotton: The growers would have to ship it to England, have it inspected there, and then have it sold. This was too much of a risk for the SCA and they withdrew.[3]

The Southern cotton industry continued to grow, including its many interdependent companies, employing over 4,000,000 people in 1914. This included the producers, ginning, warehousing, processors, and marketing. But even during this time of relative prosperity the producers were

---

[1] Ibid., p. 156.

[2] Ibid., pp. 160-161, 166.

[3] Ibid., p. 162.

unable to establish significant control of the market by themselves.[1]

The Farmers' Union also involved itself in the cotton market dilemma after the SCA had failed. Their attempts appeared a little more successful in 1907 with cotton selling at 13 cents per pound. However, one year later the price dropped to 8 cents per pound. Once again like the Grange, SCA, and others, the producer-oriented groups could not control or determine effectively desirable marketing conditions without outside help.

The SCA and other producers turned to their southern congressmen for help. The government sponsored cotton warehouse storage facilities, the first congressional attempt to keep cotton off the market and to raise prices. The law makers rationalized this as an essential action taken to prevent the collapse of the giant cotton industry.

There was opposition to the storage plan since it would cost the government ten and eleven cents a pound for cotton, plus storage and insurance expenses. The business leaders, which included financiers, ship owners, and members of the Federal Reserve Board, suggested unsuccessfully a different proposal, in which the Secretary of the Treasury could deposit large amounts of money in international market exchanges in order to encourage cotton purchases.

---

[1] Ibid., p. 238.

However the Southern Congressmen stood firm with their warehouse plans saying that if any money were to be deposited it would be better to deposit it in southern banks to assist the credit needs of the cotton producers. This is an indication of the influence and power that the southern Congressmen had and used. Since many were chairmen of their committees they were usually effective in protecting the southern agricultural interests.[1]

To the south came Dr. Seaman Asabel Knapp, about whom much has been written. With all due credit to Dr. Knapp, the purpose of this part of the review is not to list his life-time accomplishments, but to focus on the formation of national agriculture policy as Dr. Knapp was involved with it. This naturally includes a partial historical review of Dr. Knapp's work.

By the time he was 53, Knapp had been a school teacher, pastor, editor, writer, part-time farmer, professor (of experiments in stock raising and farm products) and President of Iowa State University. Knapp moved to Louisiana at the request of the North American Land and Timber Company, which with English and German capital had purchased over a million and half acres of land at prices that ranged from twelve and one-half cents to $1.25 per acre. Knapp's job was to discover which crops would yield well and then to develop successful crop demonstrations for

---

[1]Ibid., p. 222.

prospective land buyers. By 1889 Knapp had a strong understanding of southern capital and agriculture, and formed his own Southern Loan and Guaranty Co.[1]

Knapp's company prospered for a short time then lost money via the sugar industry, which was experiencing a recession in 1892. He then invested in banking the same year and successfully invested in a mill.

James Wilson, a former colleague of Knapp's at Iowa, became Secretary of Agriculture in 1897, and appointed Knapp as special agent for the U.S.D.A. to find rice varieties in the Orient which could be used successfully in the South. By 1902, after two trips to the Orient he set up three government owned demonstration farms. These, however, were unsuccessful in convincing the farmer of the new rice varieties. By this time the cotton boll weevil, had nearly crippled the cotton textile industry, and Wilson hired Knapp to show the farmers weevil control methods.

The best known control at the time called for changes in agricultural practices. The farmer was encouraged to start an earlier cotton season in order to harvest before

---

[1]Lord, Agrarian, p. 59.

Rodney Cline, The Life and Work of Seaman A. Knapp (Nashville: Cullam and Chartner Co., 1936), pp. 24, 28, 33-37.

Allen G. Bogue, "The Administrative and Policy Problems of the J. B. Watkins Land Mortgage Company 1873-1894," Bulletin of the Business Historical Society, XXVII (March, 1953), pp. 26-57.

the boll weevil reached the destructive phase of its life cycle. This meant planting earlier bearing varieties, wider rows to encourage faster maturing plants, crop rotation, frequent cultivation, and weed control. Other measures included increasing the quail population, that ate the weevil, and burning old stalks in which the weevil laid its eggs.[1] Most farmers hesitated to take such risks of trying untested practices: credit was tight, economic conditions were shakey and one wrong move could incur financial disaster.

In 1903 Knapp persuaded the Porter farm to try his recommended practices by guaranteeing coverage for any losses; he raised this money from the businessmen from Terrill, Texas. At this now famous farm, the recommended practices were used successfully.[2] One of the key parts of Knapp's strategy was the solicitation of local funds to underwrite expenses and guarantee to the demonstrating farmer that he would experience no financial losses. Knapp usually sought and received such community financial support for

---

[1]O. F. Cook, A New System of Cotton Culture (U.S. Department of Agriculture, Bureau of Plant Industry, Miscellaneous Papers, Circular No. 115, Washington, D. C.: Government Printing Office, 1913), pp. 15-17.

[2]Scott, Reluctant, pp. 210-211.

Cline, Life, pp. 58-60.

his demonstration work, and he also established a considerable following of people who supported his programs.[1]

The railroads and other businesses supported Knapp's work because it was in keeping with their efforts of promoting agriculture production. Railroads were so committed to stimulating the production of transportable cargo that they hired farm agents to advise farmers on crop production. Knapp invited some of these railroad farm agents to join his staff of farm demonstration agents. When some were assigned to a county then they were known as county farm demonstration agents.[2]

Secretary of Agriculture Wilson took a high interest in Knapp's Farmers Cooperative Demonstration Work (FCDW) as did the business community. Knapp received support from bankers, railroads, and the cotton producers. This support was manifested by southern congressmen in later hearings on various agricultural bills: they wanted assurance that any proposed legislation would not interfere with Knapp's work. By 1903, cotton prices and production were rising together after a ten year slump, and the cotton industry appeared to be on firm ground again. Knapp's efforts in helping the cotton farmers increase

---

[1]Scott, Reluctant, p. 220.

[2]Ibid., pp. 29, 182, 183.

cotton production during a time of rising cotton prices were well recognized.[1]

As discussed earlier, Knapp desired to improve the general economic conditions of all southern agriculture. But the U.S.D.A. had stipulated that the federal funding be directed exclusively toward the control of the cotton boll weevil. Federal funding was not made available for his other agricultural programs until 1908.[2] However before such funding was available, Knapp's other programs expanded with the assistance of the General Education Board as discussed on pages 106 to 108.

Knapp incited some controversy on a number of matters. On several occasions he had criticized the entomologist at the U.S.D.A. and additionally criticized the research at the land-grant colleges for being narrow in vision and fault-finding regarding his own research. Also he felt some degree of opposition posed by another powerful agricultural figure, William J. Spillman.[3] While Spillman could not be considered an opponent to Knapp's work, his philosophy, and supporters, differed so widely from Knapp's, that their efforts appeared to be polarized later.[4] Spillman came to the U.S.D.A. Office

---

[1]Strauss and Bean, Technical Bulletin 703, p. 2.

[2]Scott, Reluctant, pp. 217, 216, 227.

[3]Ibid., pp. 218-220.

[4]Lord, Agrarian, p. 61.

of Grass and Forage Plant Investigations in 1902 having been successful in developing demonstration farms at Washington State College. He firmly believed that the best procedure for furthering agricultural innovations was by establishing demonstration farms so that farmers could observe various experiments and receive the latest information regarding current research, without taking any kind of personal financial risk.[1]

Both Knapp's and Spillman's efforts were sound and gained support. Spillman's early programs at the U.S.D.A. included cooperative research projects with several land-grant colleges. When he became head of the Office of Farm Management in 1905 his work concentrated more on the establishment of federal funded demonstration farms. The land-grant colleges became concerned over their decreasing involvement and stated their objections on this matter later in the hearings during the proposed Smith-Lever Bills. At the time of Knapp's death in 1911, and Wilson's resignation in 1913, the controversy remained unresolved, and became part of the legislative compromising in the extension hearings in Congress.

The issue was ignited again in 1914 when Spillman requested that the General Education Board withdrew its

---

[1] Ibid., p. 78.

Scott, Reluctant, pp. 254-255.

support from the U.S.D.A. programs it had funded. Supporters of Knapp's work feared that this was an attack upon the former leaders programs, and quickly discredited Spillman's comments.[1] Such an argument only served to underline the differences between the northern and southern extension programs.

By 1910 American agricultural production had become a dominant factor in the economic health of this country as well as the world's leader in food production. Like any other major industry, agriculture had become subjected to social, cultural, and economic forces that would not only affect the production of the agricultural commodities but the lives of thousands of people who made up the rural population. The farmer was no longer isolated from his city cousin.

The Farm Bureau

The first recorded Farm Bureau was organized in Broome County, Bingham, New York, on March 1, 1911, two years after the first extension bill was introduced into Congress. Actually many community organizations, including the Grange, had attempted for years to develop such an organization composed of businessmen and rural leaders.

Seemingly Farm Bureau would not appear to be involved with the creation of the extension service. Yet the reasons

---

[1]Lord, Agrarian, p. 82.

True, History of Extension, pp. 110-111.

for and how it was established reflected the mood of the communities, for in the space of a few short years, farm bureaus would be one of the key organizations behind the establishment of many county extension offices.

Buyer H. Gitchell, Secretary of the Bingham Chamber of Commerce, had agitated for years the creation of a farm bureau or department in the chamber. Finally after several years work Gitchell provided enough evidence and influence to create the bureau. He utilized the report of the Country Life Commission chaired by fellow New Yorker, L. H. Bailey. Secretary of Agriculture James Wilson and W. J. Spillman of the Office of Farm Management visited Bingham to show the Chamber what such an organization could do for the community. Wilson drew heavily on the successes of the FCDW when Knapp utilized the support of local businessmen.[1]

One of the major businesses interested in the formation of the farm bureau was the Lockawana Railroad. This type of business interest was typical in many of the other communities and similar to community groups used by Knapp (pp. 138 and 139).

The farm bureaus that followed throughout the country had similar backing although they were not as spectacularly

---

[1]Lincoln David Kelsey and Cannon Chiles Hearne, Cooperative Extension Work (Ithaca, New York: Comstock Publishing Associates, 1963), p. 21.

Lord, Agrarian, p. 80.

True, History of Extension, pp. 73-75.

Riley, University Extension, p. 303.

organized with the likes of Bailey, Wilson, and Spillman. Yet here was a key organization in establishing and promoting county extension programs. In Michigan the Wexford County annual extension report of 1915 was published, with pictures, by the County Farm Bureau. Throughout much of the country, the midwest especially, farm bureaus became more and more identified as a supporter and in some cases part of the extension service. As Miller put it farm bureaus were responsible for "...pushing the roots of extension more deeply at home and spreading them more widely beyond."[1]

The Growth of Youth Work

Today this part of the Cooperative Extension Service is known as 4-H, but in its scattered beginnings at the turn of the century it was known by such names as boys and girls clubs, corn clubs, canning clubs and similar names. The clover emblem and the name 3-H appeared in 1909, followed by the present name 4-H in 1910, as part of the symbols used by the Iowa corn clubs.[2]

The development of youth work followed two directions. One approach was through the rural school teachers who used the club structure to help the students conduct experiments and demonstration plots. The second approach was developed

---

[1]Paul A. Miller, Cooperative Extension Service in the Industrial Economy (East Lansing, Mich.: Unpublished Monograph, 1959), p. 16.

[2]Franklin M. Reck, The 4-H Story (Ames: The Iowa State College Press, 1951), pp. 45, 47.

through the institutes, which usually sponsored contests for the young student provided they would use new seed varieties and recommended practices.[1]

Rural school teachers about this time were disturbed about the lack of practical education offered in their schools, as illustrated by the words of O. J. Kern in 1903.

> Why not a course of training in the country school for the country boy which shall teach him more about the country life around him? Along with his study of the kangaroo, the bamboo and the cockatoo, why not study the animals on the farm and a proper feeding standard for them? . . . Instead of all the boy's arithmetic being devoted to problems on banking, stocks, exchange, brokerage, allegation and partnership, why not some practical problems with reference to farm economics?[2]

Kern was a school teacher in Winibago County Illinois. In 1902 he organized a county-wide boys agricultural club to conduct crop experiments. One year later he enrolled 215 girls in a new venture called home culture clubs.[3]

Albert B. Graham, a school teacher in Springfield, Ohio, organized his agricultural clubs in the same year and manner as Kern. One year later both Graham and Kern were utilizing the bulletins from their respective state experiment stations. Many of the bulletins were technical and difficult for the students to read. But they were probably the only

---

[1]Ibid., p. 24.

[2]Ibid., p. 17.

[3]Ibid., p. 16.

Scott, Reluctant, p. 124.

printed material available on agricultural subjects, there was no purchase costs to the schools, and the bulletins offered suggestions for possible experiments in the school garden.[1]

The school clubs became very popular in the rural communities and continued to receive assistance from the staff of the land-grant colleges. The colleges welcomed the opportunity because the school clubs had become a new media for demonstrating new recommended crop varieties and practices, and new methods of canning and food preparation to the girls clubs. Some of the college staff that had helped these clubs were also involved in the farmer's institutes. This school-college-institute relationship became a vital linkage because these same people eventually recommended that youth work be included in the proposed extension legislation.

The more active farmer's institutes became more directly involved in the formation of youth work, usually by offering contests that were intended to find the best yield for each crop. For example institute worker W. B. Otwell could not get adults to attend institutes in Macoupin County, Illinois, in 1898. So he sponsored a corn contest for boys in 1899 which successfully recruited the adults

---

[1]Reck, 4-H Story, pp. 12-16.

Scott, Reluctant, p. 125.

U.S.D.A., History of Extension, p. 38.

because they had to bring their sons to the institutes.[1] As soon as the adults arrived the other institute workers would present their lectures.

Otwell's efforts were copied by other institutes in 1903. By 1907, youth activities including corn contests were reported by 363 institutes in eight states. Just two years later institute youth activities including contests had increased to 20 states and territories.[2]

Up till 1907 all youth work was sponsored by local schools and business groups with partial support from the land-grant colleges. In 1907 William Hall Smith was hired by the U.S.D.A.'s Farmers Cooperative Extension Work to establish corn clubs in Holmes County, Mississippi, which also marked the first effort by the Federal government to fund this type of youth work.[3]

Smith's primary purpose was not to start clubs as part of a youth movement but to use the youth groups to

---

[1]Martin, Demonstration, p. 40.

Reck, 4-H Story, pp. 20-21.

Scott, Reluctant, p. 123.

True, History of Extension, p. 38.

[2]True, History of Extension, p. 39.

[3]Ibid., p. 65.

Reck, 4-H Story, p. 48.

encourage the adoption of new recommended corn varieties. His initial efforts were successful, so a state administrative group to direct the program was formed in 1908 with representatives from FCDW, officials of land-grant college experiment station, and the state superintendent of education.[1]

By 1909 the Farmers Boys Clubs, by which most of these groups were known, had been successfully started in North Carolina, Mississippi, Louisiana, Georgia, and Arkansas, with the combined efforts of the U.S.D.A. and the land-grant colleges. To many southerners the FCDW not only meant a popular adult educational program but a valuable learning experience for rural children. The support was so strong that southern congressmen repeatedly checked to make sure that the FCDW had not been altered or withdrawn from the proposed extension legislation.

Knapp, head of the FCDW, preferred to work with county school superintendents when establishing youth work. By 1909, after his many years of successful demonstration work, as described on pages 136 to 142, Knapp was no longer so hesitant about working with colleges.[2]

---

[1]Reck, 4-H Story, pp. 48, 63.

[2]True, History of Extension, p. 65.

CHAPTER V

FORMAL ENACTMENT

On December 15, 1909, Representative J. C. McLaughlin of Michigan introduced the first extension bill to the House of Representatives, thereby initiating a prolonged legislative struggle from which finally resulted the Smith-Lever Act of 1914. This Act was signed into law on May 8, 1914, by President Woodrow Wilson, and established the Agricultural Extension Service. This legislative struggle was an interesting phase of Extension's development, for it took Congress several years to come into agreement on acceptable legislation for what had already been established as an effective and popular program, strongly endorsed by both business leaders and colleges.

This chapter will first consider the contextual setting in which extension legislation was initiated in Congress, with specific references to those special interest groups who especially supported such legislation. Second, there will be an account of the developing extension legislation itself.

The Setting

The setting, which was studied in depth in the previous chapter, included the combined roles of government,

business, capital, education, and numerous special interest groups. It was the apparent disposition of the Federal government of 1900-1910 to enact legislation beneficial to the major economic interests; certainly they were not legislating against these interests. When a liberal Democratic Congress was elected in 1910, and Woodrow Wilson in 1912, lawmakers began to pursue legislation more beneficial to the agricultural interests. During the period 1912-1916, the Congress, led by Southern Congressmen, enacted tariff reductions, the graduated income tax, the Federal Reserve Act, educational assistance from the Smith-Lever and Smith-Hughes Acts, and over 70 measures beneficial to rural-credit interests.[1] This newly raised national consciousness for agricultural welfare was not entirely altruistic. The nation's economy started to turn down in 1913, and continued to do so in 1914. Foreign trade had slowed down, causing a decline in the securities markets and bank clearings. Iron and steel production were only at 40 to 50 percent capacity. While this slowdown was not severe, it startled the economists and investors who remembered too well the panics of 1906 and 1907; and they strongly urged an increase in agricultural exports to replace the losses from sales in manufactured exports.[2]

---

[1]Saloutos, Farmer, pp. 234-236.

Saloutos and Hicks, p. 85.

[2]Saloutos, Farmer, p. 236.

This kind of pressure was indicated by the rise of many business-backed agricultural organizations to increase agricultural production. The boards of trade and chambers of commerce of a number of large eastern and midwestern cities, formed a Council of North American Grain Exchanges for the purpose, "to discuss ways and means to interest all organizations in a national movement to obtain a larger yield of better grain."[1] Members of this council represented U.S.D.A., two state experiment stations, the German government, the seed interests, seven railroads, four industrial concerns, seven newspapers, nine boards of trade, and the millers' national foundation. In 1911, the Crop Improvement Committee arose from the Council, and with advice from L. H. Bailey, E. G. Montgomery, and W. M. Hays, spearheaded numerous efforts to improve seed quality and quantity. They utilized the popular seed trains, farmers' institutes, bulletins and club work. Encouraged by this widespread effort, Julius Rosenwald of Chicago in 1912 offered $100 to 100 midwestern counties to help establish employment of county agricultural agents.[2]

---

[1]True, History of Extension, p. 74.

[2]Ibid., p. 75.

Roy W. Scott, "American Railroads and Agricultural Extension, 1900-1914: A Study of Railway Developmental Techniques," Business Historical Review, XXXIX (Spring, 1965), p. 97.

Scott, Reluctant, pp. 203, 267.

Another business-backed group was the National Soil Fertility League, which was established in 1911 and which later lobbied heavily for extension. This League was endorsed by bankers, railroads, midwestern businesses, and persons like William J. Bryan, Champ Clark, Samuel Gompers, J. J. Hill, and William H. Taft.[1]

Business interests were increasingly concerned with the rate of agricultural production including such groups as the Better Farming Association of North Dakota, started in 1911 by the Great Northern Railway; a Committee on Agricultural Development and Education, sponsored by the American Banking Association; educational programs by the National Implement and Vehicle Association; in addition to numerous efforts by other railroads, chambers of commerce, and marketing groups.[2]

The recognition of the farmer's changing status, from the "exploited yeoman" to a potential business person, was occurring, and such groups as The American Society of

---

[1]Scott, Railroads, p. 97.

Scott, Reluctant, p. 290.

U.S.D.A., History of Extension, p. 107.

[2]Hofstadter, Reform, pp. 124-125.

Scott, Reluctant, pp. 190, 201.

U.S.D.A., History of Extension, pp. 28, 73, 75.

Equity, composed both of farm and business leaders, stressed that the farmer was capable of implementing management and production policies, which would benefit the farmer's agricultural "business."[1]

By 1910, there were many forms of extension education operating in the midwestern and southern states. These included the Farmers Cooperative Demonstration Work, club work, farmers' institutes, county-wide tours, demonstration and experiment farms, short courses, reading circles, study clubs, bulletin distribution, news articles, and numerous personal contacts. The land-grant colleges as part of this educational scene were increasing their involvement in extension programs: Five colleges reported having extension departments in 1905; this number grew to twenty-seven in 1910, and to forty-three in 1912. Extension education was fast becoming a popular and financially successful educational service.[2]

Aware of the growing impact of extension-type programs, the Association of American Agricultural Colleges and Experiment Stations appointed a committee on extension in 1904. Both in 1908 and 1909, this committee issued a report to the Association, recommending the establishment of a national and federally funded extension

---

[1]Hofstadter, Reform, p. 126.

[2]Scott, Reluctant, p. 168.

service.[1] The 1908 report cited extension's growth and the overwhelming demands burdening the existing colleges, staffs and suggested that federal funding be established on a matching basis with state funding. The committee members, representing the colleges, and already aware that state funding was available, realized that federal funding on such a basis would alleviate the strain significantly. They were also aware that by requesting such, they would be tying colleges into federal funding, an unpopular concept, but they rationalized this issue by recalling previous federal support programs, such as the Land-Grant Act of 1862, the Hatch Act of 1887, the Second Morrill Act of 1890, and the Adams Act of 1906.[2]

The committee's second report (1909) was so well received by AAACES that President K. L. Butterfield and Professor Hamilton of the Office of Experiment Stations were asked by the Association to actually draft the first extension proposal. This proposal was then approved by the AAACES executive committee, and given to Representative McLaughlin for introduction to the House of Representatives.[3]

---

[1] Ibid., p. 167.

[2] Ibid., pp. 168, 289.

True, History of Extension, p. 100.

[3] True, History of Extension, pp. 101-102.

Besides the support from land-grant colleges and business interests, there was the additional endorsement for extension from the Commission on County Life, the General Education Board (see pages 107 to 110), and the U.S.D.A.[1] The support appeared unanimous, and enactment of this bill appeared secure yet it failed to even get out of committee. Passage of any federal legislation is an extremely complicated process, as will be shown in the following discussion.

Extension Legislation

The 32 different proposals regarding extension legislation which occurred during this time was in effect the typical legislative process of designing and compromising on an acceptable version of what exactly extension's function and structure would entail. By the time the first extension bill was introduced in 1909 Congress was already dealing with agricultural education legislation relating to vocational agriculture and mechanical studies in the secondary schools. There was an attempt to combine these two approaches legislatively with the Dolliver Bill in 1910 and the Page Bills in 1911 and 1912, but these measures failed. Finally, the resolution of these two approaches occurred with the passage of two separate bills, the Smith-Lever Extension Bill of 1914, and the Smith-Hughes Vocational Agricultural Bill of

---

[1]Dewey W. Grantham, Jr., Hoke Smith and the Politics of the New South (Baton Rouge: Louisiana State University Press, 1958), p. 256.

1917. There was no significant opposition to any form of agricultural education, but there were considerable differences on how it should be structured, as will now be discussed.

The Nelson Amendment of 1907 provided funding for the training of agricultural teachers at the numerous agricultural schools developing around the country. The appropriations were a disappointing $5,000 per state with a maximum increasing limit of $25,000. Willets M. Mays of the U.S.D.A., and former student of Seaman Knapp when at Iowa State, had Representative Charles R. Davis of Minnesota introduce a new bill in 1907 to support vocational agricultural training of teachers in normal school. Mays was quite experienced in this area having successfully organized a sound agricultural school system in Minnesota, before coming to the U.S.D.A.[1]

The National Education Association appeared before the committee urging the committee to pass the bill stating it would help the states already financially hard pressed with an increase in the number of agricultural students.[2]

The bill also had the support of President Roosevelt, the National Grange, the Farmer National Congress,

---

[1]Riley, University Extension, pp. 247-249.

[2]U.S. Congress. Senate. Committee on Agriculture and Forestry. Bill to Provide for the Advancement of Instruction in Agriculture, Manual Training, and Home Economics in the State Normal Schools of the United States. S. 3392, 60th Cong., 1st sess., 1908, pp. 2-3.

and the Southern Educational Congress. The opposition at that time had come from agricultural and educational interests who were skeptical of the federal control that usually accompanies federal funding. The AF of L had recommended some changes in curriculum before they would endorse it. The bill died in committee.

Before the next attempt was made at similar legislation, the AAACES committee on extension had written its recommendation for an extension proposal.

Butterfield, chairman of the AAACES committee on extension, and Bailey were wary of federal control that might be part of federal funding. Thus the AAACES report which became part of the first extension legislation included the following provisions.

1. $10,000 appropriated to each state.
2. Federal funds to be matched by state appropriations.
3. Appropriation to go only to land-grant institutions.
4. Each land-grant college was to organize an extension department.
5. Extension instruction was to be limited to agriculture, domestic science, and other phases of rural life.
6. Extension was to be granted the penalty mail privilege.

7. Recommend further appropriations increasing from $25,000 to $50,000.

Chairman Butterfield gave the proposal to his Michigan Representative J. C. McLaughlin to introduce in the house on December 15, 1909, where the bill "died" later at the end of the session. This bill included the provision for cooperative funding between the states and the federal government. The bill also indicated that the funded instruction should involve the area of domestic science as well as agriculture.[1] While this original proposal did not include any measures supporting boys' and girls' club work, this was added to later extension legislation at the insistance of the supporters of the Farmers Cooperative Demonstration Work.

True reported that the major extension legislation bills were proposed by Dolliver on June 22, 1910 (S. 8809, U.S. 61st Cong., 2d sess.), Page on April 6, 1911 (S. 3, U.S. 62d Cong., 1st. sess.) and the final bills of Smith on September 6, 1913 (S. 3091, U.S. 63rd Cong., 1st. sess.)

---

[1]Association of American Agricultural Colleges and Experiment Stations. Proceedings of the Twenty-ninth Meeting (Washington, D.C., 1915), p. 34.

Benedict, Farm, p. 153.

Grantham, Hoke Smith, p. 256.

Scott, Reluctant, p. 292.

U.S.D.A., History of Extension, pp. 102-103.

and Lever on the same day (H.R. 7951, U.S. 63d. Cong., 1st. Sess.).[1] All other legislation and related action were part of the many bills which were submitted by these and other Congressmen on behalf of their constituents, and these were very similar to the major bills. Extension was very popular and no Congressman would be hurt politically by introducing such a bill.

The second legislative proposal for vocational education was given to Senator Dolliver who introduced it on January 5, 1910, just a few weeks after the McLaughlin Bill.[2] However, in sensing the popularity of the extension bill, Dolliver withdrew his original bill in order to incorporate an extension provision, and then reintroduced it on June 22, 1910. This bill would have provided a huge vocational educational system in areas of agriculture, industrial trades, and home economics via formal schooling and extension-type programs.[3] It proposed that $10,000,000 be allocated

---

[1]AAACES, Proceedings, 1915, pp. 34-36, 41-43.

[2]Scott, Reluctant, pp. 293-295.

True, History of Extension, pp. 103-104.

[3]AAACES, Proceedings, 1915, p. 34.

U.S. Congress, Senate, Committee on Agriculture and Forestry, Cooperation with the States in Providing Vocational Education, S. Rept. 902 to Accompany S. 8809, 61st Cong., 2d Sess., 1910, p. 2.

Scott, Reluctant, p. 294.

U.S.D.A., History of Extension, p. 105.

directly to secondary and agricultural schools for instruction in trades, industries, home economics, and agricultural subjects. Additionally, $1,500,000 would be allocated to land-grant colleges with extension departments, and $1,000,000 to normal schools for the preparation of teachers. The Secretary of the Interior Department would administer the Federal funding with assistance from the Secretaries of Agriculture and Commerce and Labor. The Dolliver Bill received strong endorsements at the hearings from the National Grange, National Farmers' Congress, Farmers' Union, American Society of Equity, American Federation of Labor, American Association of Home Economics, and the National Educational Association.[1]

The proponents used three main arguments in support of the Dolliver Bill: First, it would help increase agricultural production thereby averting a possible food shortage which was a concern at the time. Second, it was felt that such a bill would help reverse the exodus of the farm population to the cities. Finally, it was believed that the federal government was in the best position to help financially.[2]

---

[1]AAACES, Proceedings, 1915, pp. 35-36.

Riley, University Extension, p. 317.

Scott, Reluctant, p. 294.

True, History of Extension, p. 105.

U.S. Senate, S. 902, p. 2.

[2]U.S.D.A., History of Extension, p. 104.

Despite all the apparent support, the bill ran into difficulty. Many members of AAACES would not support the Dolliver Bill because they could not support the lesser role placed on the land-grant colleges. AAACES did not oppose vocational education but were wary that such a bill might hinder future extension development especially if administered primarily by the Office of Education in the Department of the Interior. Rather than risk open conflict on the Dolliver Bill AAACES preferred legislation that would make extension separate from vocational education.[1] As a result of these concerns, the executive committee of AAACES in 1910 did not endorse the Dolliver Bill and stated it preferred the passage of McLaughlin's second Bill during the next session.[2] While it appeared that legislative battle was imminent, Senator Dolliver died unexpectedly in October, 1910, and the legislative process surrounding his bill came to a temporary halt.

In the Spring of 1911, Senator Carroll S. Page (no relation to Walter Hines Page) of Vermont took up where Dolliver left off by introducing the Page Bill. This bill had similar provisions to the Dolliver Bill and received much of the same support for its sections on teaching agriculture, trades and industries, and home economics.

---

[1]Riley, University Extension, p. 319.

[2]Scott, Reluctant, p. 296.

True, History of Extension, p. 106.

This bill required the establishment of a board of education in each state. However the bill soon became filled with so many provisions that the definitions and stipulations became unwildy and confusing, causing much concern among the lawmakers.[1]

The Page Bill differed little from the Dolliver Bill and AAACES found itself in a similar position favoring separate legislation.

Yet during this legislative process regarding extension, there was a growing sense of both urgency to establish such a program, and frustration that none of the proposed extension bills appeared adequate. In the spring of 1911, the National Soil Fertility League was formed (as discussed on page 152). Mr. Howard M. Gross, representing the League, indicated to Congress that the League was anxious to start a Federally funded extension program, with agents in each county, that such a program should be in cooperation with the land-grant colleges, and that the proposal had the support of President Taft.[2] When Gross appeared before the Senate Committee on Agriculture and Forestry, he told the committee that an extension program

---

[1]AAACES, Proceedings, 1915, p. 34.

U.S. Congress, Senate, Committee on Agriculture and Forestry. Bill to Establish Agricultural Extension Departments in Connection with the Agricultural Colleges in the Several States Receiving Benefits of an Act of Congress Approved July 2, 1862, and of Acts Supplementary Thereto, Hearings, S. 4563, 63d. Cong., 2d. sess., 1912, p. 41.

[2]True, History of Extension, p. 107.

as envisioned by the League would increase grain production and improve the U.S. economic position in the world markets. Apparently Gross was articulating the sentiments of those interested in American agricultural commodities and foreign trade.[1]

The National Soil Fertility League was soon to direct its support at an extension bill being developed by Asbury Lever and Hoke Smith. The Democrats were successful in the elections of 1910 and Representative Asbury Lever became a ranking and influential member of the House Committee on Agriculture in 1911. Senator Hoke Smith was ascending in power too. Both of these men and several other southern congressmen were concerned about the Farmers Cooperative Demonstration Work if it became administered too strictly under the provisions of the Page Bill. In the fall of 1911, the executive committee of AAACES, officers of the National Soil Fertility League, representatives of the Department of Agriculture, all of whom were generally becoming opposed to the Page Bill, drew up their own version of a suitable extension bill, which was introduced by Smith and Lever in their respective houses on January 16 and 17, 1912.[2]

---

[1] Ibid., p. 109.

U.S., Senate, S. 4563, p. 63.

[2] Scott, Reluctant, p. 298.

True, History of Extension, p. 108.

The concern of how any extension bill might restrict Dr. Knapp's program was so great, that Lever's bill was amended in August 1912 to guarantee that his bill in no way would interfere with the Farmers Cooperative Demonstration Work. Another related amendment assured that 75 percent of all the appropriations would be directed toward actual demonstration work thus prohibiting its use for college teaching and research.[1]

By the middle of 1911 support was mounting for a federally funded extension service. Those favoring such a system included southern Congressmen, the General Education Board (already supporting such a program), Theodore Roosevelt, President McKinley, and the National Soil Fertility League. AAACES was in a difficult position for it had always favored separate legislation. Now such legislation was about to be passed but with limited provision for the colleges.[2]

In 1912 Dean Mumford representing AAACES and B. T. Galloway of the U.S.D.A. tried to resolve the concerns of AAACES. Mumford could approve the colleges current cooperation with the Office of Farm Management and with the FCDW, but felt that college agricultural teachers should be doing some of the same work. The issue was not settled and carried over into 1913.[3]

---

[1]Scott, Reluctant, pp. 294, 298.
True, History of Extension, pp. 108-110.

[2]Bailey, Knapp, p. 260.

[3]Ibid., p. 262.

Dean Davenport at the 1913 AAACES convention leveled his criticism at Spillman's Office of Farm Management and Knapp's FCDW.[1] The concerns among the members of AAACES were very deep. For one thing there was the old fear of cooperating with a federal agency and not having the control they had enjoyed under the provisions of the Hatch Act. There was some resentment among college faculty of working with unacademic agents. But perhaps more than anything else was the concern of how to cope with the formidable backing that was supporting the current extension legislation. There was real concern that the growing college agricultural extension departments, which meant so much to the colleges might suddenly be by-passed in favor of a straight line, federally sponsored, non-college participating extension service.

Housten was the new Secretary of Agriculture and was anxious to settle the dispute between his U.S.D.A. co-workers and his former colleagues of AAACES. Housten received encouragement from his friend Walter Hines Page, who also recommended to Woodrow Wilson that Housten be appointed as Secretary of Agriculture. Wilson, former college president, also favored the college's position. It was quite imperative that the U.S.D.A. and AAACES split

---

[1]AAACES, Proceedings, 1913, p. 124.

Bailey, Knapp, p. 324.

be settled. In November 1913 Housten addressed the AAACES convention and announced that the U.S.D.A. was going to seek the formation of a national extension service and that he needed AAACES's cooperation.[1] He got it.

During the August 1912 recess of Congress, the National Soil Fertility League circulated a report which criticized the Page Bill and supported the Smith-Lever Bill. The National Society for Industrial Education and the AF of L meanwhile were just as active in their support for the Page Bill.[2]

Southern lawmakers became more concerned about the Page Bill and its potential affect on agriculture. They were convinced that a bill with so many provisions would inevitably fail, and with it would go the hope of any extension bill. The strategy seemed to be to sidetrack the Page Bill in favor of separate legislation. Smith attacked the Page Bill, calling it loosely structured and too costly, and told Page his bill would not pass the house. Despite the warning, Page pushed his bill through the Senate by a one vote margin on January 29, 1913; but it failed to win the house vote a short time later.[3]

---

[1]Bailey, Knapp, pp. 267-268.

[2]True, History of Extension.

[3]Ibid., p. 110.

Benedict, Farm, p. 153.

Grantham, Hoke Smith, pp. 258-59.

Scott, Reluctant, p. 301.

Once the U.S.D.A. and AAACES differences were settled the way seemed clear for passage except for a few hanging obstacles. Sectional differences became apparent when the lawmakers brought up the tariffs during committee hearings on extension. Representative Gilbert N. Haugen of Iowa, announcing his support of the extension legislation on May 2, 1913, attacked some of the free tariffs. He pointed out how a low sugar tariff permitted eastern processors to buy lower priced foreign raw sugar thus forcing a beet sugar processor in Iowa to file bankruptcy. Senators McCumber and Gronna of North Dakota attacked the tariffs stating that it kept U.S. agricultural commodities competitive in the world market forcing the producer to sell at depressed prices.[1] While the tariffs had little to do with the extension legislation, this type of discussion illustrates the sectionalization of American agriculture, the variety of issues before Congress, and the strong influence on Congressmen by the processors, who favored protective tariffs.

Another and unfortunate issue arose in January and February of 1914, regarding the allocation of funds at both the black and white colleges in the south. These colleges were not yet integrated, and the NAACP sought a division of

---

[1]U.S. House of Representatives, Hearings, Reports and Debates, Smith-Lever Act of 1914, Blacksburg, Virginia, Virginia Agricultural Extension Service, 1959, pp. 2450-51, 2742.

funds. Senator Clapp of Minnesota and Senator Vardaman of Mississippi sharply disagreed with each other on this issue. Finally, when the southern congressmen made it clear that they would vote against the proposal if the funds were divided, the issue was dropped.[1]

The final issue concerned the method of allocating funds proportionally to the states: The legislation would provide funds based on rural population. The larger states preferred that the funding be determined by total acreage of improved land instead of a percentage of rural population, but their attempt to establish this allocation measure failed.[2]

Lever's Bill, H.R. 7951, introduced on September 6, 1913, with amendments passed the House in January 1914. Smith's bill would need the same amendments as already incorporated into Lever's bill, so in order to hurry the process, Smith substituted his bill with Lever's bill. Lever's bill passed the Senate on February 7, and after several more amendments from both houses, it passed in final form on April 27. So about 4 1/2 years after the initial McLaughlin Bill, and after numerous attempts to change and amend proposals regarding the extension bill by various special interest groups, the bill was passed in

---

[1]Ibid., p. 2472.

Scott, Reluctant, p. 310.

[2]Scott, Reluctant, p. 310.

final form, and in actuality varied little from the original McLaughlin Bill.[1] Basically the bill stipulated that the Cooperative Extension Service would disseminate to the people of the United States information related to agriculture and home economics. Final provisions prohibited the use of extension funds for teaching classes, thus insuring that the media of non-formal education would remain intact.

---

[1]AAACES, Proceedings, 1915, p. 43.

CHAPTER VI

SUMMARY AND CONCLUSIONS

This chapter will summarize the major components prompting the development of Cooperative Extension. The summations are presented in answer to the considerations introduced earlier on pages 5 and 6. The conclusions were formulated after extensive examination of the material and prompted by a concern for potential extension programming. The summations to follow result from this study, and accordingly relate to the contextual conditions prior to Extension (Summations 1-3), the actual movements which prompted the establishment of Extension (Summations 4-8), and the legislative conflicts which had to be resolved before the final legal establishment of an Extension policy (Summations 9-10).

1. <u>The dominant force in the development of the United States was its economic growth and power</u>.

After the Civil War the United States was fast becoming the economic capitol of the world, and with this gigantic growth came the accompanying forces associated with larger investments, credit, foreign trade, increased productivity, market expansion, and greater distribution of wealth. The Federal government by its conservative

economic policies prior to but specifically during 1900 to 1910 either directly or indirectly supported all of these forces in order to continue the advance of this economic growth. Other forces were existent, such as the populist reform movement, education, and the social and cultural changes, but it was big business that had high legislative priority.

2. The Federal Government had become directly involved in defining policy that contributed to economic stability and predictability.

Unable to control the economic forces prior to 1900, major industries and capital literally pushed and pulled the government into the role of directing economic policy. The government had been only minimally involved with economic policy and up until 1900 most of the policies were of a non-intervention or hands-off nature. By 1900 however, the government was becoming directly involved with such things as tariffs, establishing transportation rates, creation of the Federal reserve banking system, and in some legal cases the actual distribution of corporate wealth.

Most of the economic decisions after 1900 had two major characteristics. First, they were national and/or international in scope and tended to supercede state and local regulations. Secondly, these decisions were usually made by the government on the advice and influence of major industries and capital, typifying the image of "big government for big business." Many state and local

communities were apprehensive of this increasing federal control.

3. Supporters and investors in foreign trade were a major force in support of increasing agricultural production.

One of the key factors in this country's economic development was the establishment of strong foreign trade policies. This country's agricultural commodities, especially cotton, tobacco, and certain small grains, were able to compete successfully on the world market and help keep the balance of gold payments in favor of the United States and minimize the risk of reducing cash reserves.

Those involved in foreign trade advocated large production, lower prices, and lower tariffs. Some of these special interests included food and cotton processors, banks, elevator operators, railroad companies, boards of trade, warehouse owners, and commission houses. The agricultural sector would have much difficulty if they attempted to adjust commodity prices against the wishes of these powerful marketing interests.

4. Most of the methods used by the Cooperative Extension Service were initially developed by general university extension programs in the period of the late 1880's to 1900.

General university extension was quite popular during the last two decades of the 19th century, during which time such programs as reading circles, correspondence courses, short courses, visiting lectures, tours, and others were successfully offered. While the popularity for

general university extension subsided in the early 1900's agriculture oriented extension grew in size and in curriculum.

5. Voluntary organizations were a major force which contributed to the development of Extension education programs at the college and community level.

Many of the extension-type programs can trace their beginnings to the community oriented activities of the lycea, Chautauqua, tent-Chautauqua, community institutes, women's study groups, and some forms of youth work. Much credit must go to groups like the Grange, Farmers Alliance, Farmers Union, the Populists movement, labor unions, schools, reading circles, and such for planning and supporting these programs. Just prior to the 1900's the interests of the various rural organizations turned to the more far reaching goals of quality of life, self-help programs, youth development, credit and protective legislation. The land-grant colleges, anxious to receive more exposure and increase their enrollments, took interest and sponsored many programs, such as the institutes, to meet this need. With the colleges supporting and expanding programs which revolved around the interests of these various volunteer organizations, the need for an extension-type department at the college level became evident. The colleges so structured were able to do what the volunteer organizations separately could not.

6. The land-grant colleges had established research and extension education as a basis for successfully requesting federal funding.

By 1910, the land-grant colleges were sufficiently well established to concentrate on expanding their agricultural extension programs. They had established a unique arrangement for federal and state funding, largely due to the efforts of the growing Association of American Agricultural Colleges and Experiment Stations. These colleges had sought and received help via the Hatch Act (1887), the Second Morrill Act (1890) and the Adams Act (1906), plus other appropriations from state funds. The Federal government, then, appeared the logical place to seek funding for proposed extension programs. AAACES started its movement for a federally supported extension service of major proportion when it created its Committee on Extension in 1904.

7. Home economics became part of extension legislation because of its strong support in AAACES.

The home economics curriculum had become so well established at the land-grant colleges that AAACES included it in all its proposed extension legislation. The leaders in the home economics area had worked diligently to expand its fields of study and to establish contacts with several national academic organizations. Home economics, like agriculture, was able to grow in two directions, the vocational area of skills and trades, and the theoretical area of fundamental knowledge.

8. The forces for the development of a national extension policy came predominantly from the economic sector, the land-grant colleges, and the U.S.D.A.

The business interests had for several decades encouraged the increase of agricultural productivity. The railroads, looking for cargo, hired farm agents to assist the farmers, and some railway lines sponsored seed and demonstration trains, and occasionally provided transportation to state fairs. The Crop Improvement Committee, an outgrowth of the North American Grain Exchanges and heavily involved in foreign trade, actively supported educational programs that would increase agricultural production. The National Soil Fertility League as well supported similar policies and lobbied vigorously for the more extension oriented bills. Also, some of the elite rich made major contributions to privately further various forms of secular education. John D. Rockefeller's contributions to the General Education Board sponsored many formal and non-formal educational programs when federal funds were not available, such as Knapp's comprehensive agricultural efforts.

AAACES became the major force representing the land-grant colleges at the national level. The Association through its own committee on extension became convinced of the need for extension education and proceeded to help draft the first extension bill, was represented at the hearings on all extension legislation, conferred with special interest groups especially the National Soil Fertility League on pending extension legislation,

consulted with Senator Smith and Representative Lever on their bills, and stated in hearings their preference for extension legislation over the multi-dimensional Page Bill. In addition, the Association had several of its members serve on the Commission on Country Life.

The U.S.D.A. by 1910 was in favor of extension education due mostly to the efforts of its own staff such as Knapp and Spillman. During the hearings on extension legislation Secretary of Agriculture Wilson and his successor Houston, and Assistant Secretary Galloway supported extension legislation, stating that such a program could provide the education needed to increase production. Indeed it had become a powerful group that earnestly sought passage of extension legislation.

9. Vocational education was eliminated from extension legislation because it was incompatible with the objectives held by those who backed extension legislation and the unclear complexity of the proposed vocational-education bills.

The primary purpose of extension legislation was to implement agricultural education so as to increase agricultural productivity, and the provisions of the giant vocational education bills proposed by Dolliver and Page overshadowed the provisions of extension education which was upsetting to those in support of extension legislation. The only politically feasible solution was to pass two separate bills, one for extension, and another for vocational education.

There are several reasons why it took four and one-half years to pass extension legislation, of which the issue over vocational education was one. For another reason, seldom is legislation ever passed on the first proposal. The extension proposal had many vested interests all of which had to be interjected, discussed, and compromised to some kind of acceptable resolution.

10. Cooperative funding became part of extension legislation in order to assure the continued autonomies of the many separate vested interests involved.

Congress really did not design the total extension program; it was already in operation in many areas of the country, and Congress, with the influence of many forces, had to guarantee that any extension legislation would not disturb the favored programs such as institutes, field days, the Farmers Cooperative Demonstration Work, Office of Farm Management, boys and girls club work, and a few others. With much already established in these on-going extension programs, it was politically sound for lawmakers not to interfere, but to guarantee their continuance. Therefore provisions had to be made to permit continued support from state legislators, the special and general appropriations from the federal government, plus options that would permit funding from counties and private sources like the Farm Bureaus.

Conclusions

One of the most unusual aspects of the Cooperative Extension Service was the unique combination of special interest groups that shaped and enacted its legislation. Congress and business actively supported the Office of Farm Management and the Farmers Cooperative Demonstration Work; AAACES carefully watched the concerns of the extension programs at the land-grant colleges; processors and marketing interests, plus allied interests of banking, credit, and shipping, wanted higher production and reduced prices. From the complex legislative process of compromise came a bill that all these groups could support.

The federal government's role in the formation of national policy followed an interesting dichotomy. On the one hand, the executive branch was guided primarily by major industry and capital. The legislative side, however, was influenced more by the forces from the home electoral areas, and by various political movements and reform groups. From macro differences to micro, even the Congressmen often differed with each other, as illustrated by complicated legislative procedures on grain marketing and tariffs. All of these various polarizations within the legislative process have to be recognized and in some way be resolved before the establishment of any kind of legislative policy.

Another issue to consider is that of governmental timing, regarding establishment of the Smith-Lever Act of

1914. Extension legislation was introduced not in bad times but in a relative period of prosperity. The boll weevil problem was at its highest twenty years before, generally farm prices were on the increase, general prosperity of the country was good, land-grant colleges were developing solid programs, and reform groups were less militant and more sophisticated in the drive for reform. There were problems but not as severe as in the late nineteenth century. To some historians extension was enacted to help the farmer. If this is the case it was not established during a time when it was most needed by the farmer but during a time of prosperity, after the various programs of the colleges, U.S.D.A., and communities had already dealt with some of the issues. In other words extension policy and programs had been in operation before federal legislation was enacted.

The Cooperative Extension Service appears to have been legislated more as a result of a series of compromises by the vested interests than as an actual new plan to establish an extension agency. Here again the supporters of the Farmers Cooperative Demonstration Work, the Office of Farm Management, and the extension programs at the colleges, all wanted to see the broadening of their respective, already established programs. Even vocational education had to be taken out of the extension legislation, not because it was not needed or desired, but because the manner in which it was proposed would have been a conflict of

interests if included in the same bill as extension. Cooperative extension legislation had to be established separately from vocational education.

When one considers the total amount of educational legislation put before Congress during the nineteenth and early twentieth centuries, extension legislation was but a spinoff in the whole developmental process of establishing a national policy on education. Congress had attempted for over a decade before the Smith-Lever Act to enact legislation that would address itself to vocational education, teacher training, higher education as well as the more directly related proposals for support of agricultural education. Congress continued to wrestle with these issues during and after the Smith-Lever Act.

Campbell's model of the formation of educational policy can be applied to the development of the Cooperative Extension Service but with difficulty. A key concern is whether the extension service was the end result or but a part of a continuing process in the establishment of a national policy on adult and higher education. To the avid extension supporters, the former, more isolated views may be preferred. But to the clientele, the decision-makers, and the people who appropriate money, the Cooperative Extension Service is only one in a whole spectrum of educational agencies.

Seemingly an agency like extension, which was established from the mixed interests of business, the land-grant colleges, the U.S.D.A., and numerous organizations, might be overburdened by internal disagreements. Yet somehow it has survived in spite of itself, and this in itself deserves more study. It is interesting to speculate that perhaps these varying vested interests are the very reason why extension has not been destroyed. Rather than channel these interests in other directions extension has attempted to meet these requests, and may have at the same time cultivated new areas of support. Some extension people have criticized extension for trying "to be all things to all people," yet this may be why it has gained the support it has, and perhaps why it has attracted the employees it has.

Implications for Further Study

The very broad nature of this study, which scanned the years of 1880 to 1914, suggested possible studies on more specific subjects. The researcher offers three suggestions, all are related to the major findings of this study.

Examine more closely the link of business influences on educational programs. While such research would be difficult, there appears to be sufficient evidence to indicate that business leaders believed the American agricultural commodities should be produced in quantity with low

prices, and that they supported educational programs that would contribute to such goals. Suggested research might include the examination of corporate policies of the food processors and clothing manufacturers, or the political activities of the National Soil Fertility League, Crop Improvement Committee, or other similar groups.

Examine more closely the relationship and influences of key people involved in the formative and legislative process of extension. Much has been written about Knapp, but just as much ought to be known about other persons involved such as Spillman, Walter H. Page, Wilson, Hayes, Butterfield, Bailey, Mumford, Cross, to mention a few. It appears that there is more than coincidence involved in the relationship of Knapp, Wilson, Hayes, a relationship that started at Iowa State. Additionally research could focus on the appointment of Butterfield and Bailey to the Country Life Commission. The request for research here is not for a biography on each individual but for research surrounding their relationships with each other, and their separate and collective influence regarding the establishment of extension.

BIBLIOGRAPHY

BIBLIOGRAPHY

Association of American Agricultural Colleges and Experiment Stations. Proceedings of the Twenty-nineth Meeting. Washington, D.C., 1915.

Bailey, Joseph Cannon. Seaman A. Knapp, Schoolmaster of American Agriculture. New York: Columbia University Press. 1945.

Bailey, Liberty Hyde. Farmers' Institute Courses. U.S. Department of Agriculture, Office of Experiment Stations. Bulletin No. 72. Washington, D.C.: Government Printing Office, 1899.

Bailey, Liberty Hyde. Farmers' Institutes: History and Status in the United States and Canada. U.S. Department of Agriculture, Office of Experiment Stations. Bulletin No. 79. Washington, D.C.: Government Printing Office, 1900.

Baker, Gladys. The County Agent. Chicago: The University of Chicago Press. 1939.

Barzun, Jacques, and Graff, Henry F. The Modern Researcher. Revised. New York: Harcourt, Brace, and World, Inc., 1970.

Bendimer, Robert. Obstacle Course on Capital Hill. New York: McGraw-Hill Book Company, 1964.

Benedict, Murry B. Farm Policies of the United States 1790-1950. New York: American Book. Strafford Press, Inc., 1953.

Bevier, Isabel. Home Economics in Education. Philadelphia: J. B. Lippincott Co., 1924.

Bevier, Isabel, and Usher, Susannah. The Home Economics Movement. Boston: Whitcomb and Barrows, 1906.

Black, John D. Agricultural Reform in the United States. New York: McGraw-Hill Book Company, Inc., 1929.

Bogue, Allen G. "The Administration and Policy Problems of the J. B. Watkins Land Mortgage Company 1873-1994." Bulletin of the Business Historical Society. XXVII (March 1973), pp. 26-37.

Boorstin, Daniel J. The Americans, The Democratic Experience. New York: Random House, 1973.

Brunner, Edmund de S., and Yang, E. Hsin Pao. Rural America and the Extension Service. New York: Columbia University, 1949.

Campbell, Roald F., Corbally, John E., and Ramseyer, John A. Introduction to Educational Administration. Boston: Allyn & Bacon, 1962.

Campbell, Roald F., Cunningham, Luvern L., McPhee, Roderick F., and Nystrand, Raphael O. The Organization and Control of American Schools. Columbus, Ohio: Charles E. Merrill Publishing Company, 1970.

Cline, Rodney. The Life and Work of Seaman A. Knapp. Nashville: Collam and Chertner Company, 1936.

Cook, O. F. A New System of Cotton Culture. U. S. Department of Agriculture. Bureau of Plant Industry. Miscellaneous Papers. Circular No. 115. Washington, D.C.: Government Printing Office, 1913.

Cooperative Extension Service, Michigan State University. "Staff Time Use Profile, 1973-1974." East Lansing, 1974 (Mimeographed).

Eddy Jr., Edward Danforth. Colleges for Our Land and Time. New York: Harper and Brothers, 1956.

Foner, Phillip S. History of the Labor Movement in the United States. New York: International Publishers, 1955.

Galloway, Beverly T. The Bureau of Plant Industry, Its Functions and Efficiency. U. S. Department of Agriculture. Bureau of Plant Industry. Miscellaneous Papers. Circular No. 117. Washington, D.C.: Government Printing Office, 1913.

Gates, Paul W. The Illinois Central Railroad and Its Colonization Work. Cambridge: Harvard University Press, 1934.

The General Education Board. New York: The General Education Board, 1915.

Grantham, Jr., Dewey W. Hoke Smith and the Politics of the New South. Baton Rouge: Louisiana State University Press, 1958.

Harrison, Harry P. Culture Under Canvas. New York: Hastings House, 1958.

Hearings, Report, and Debate, Smith-Lever Act of 1914. Blacksburg: Virginia Agricultural Extension Service, 1959.

Hofstadter, Richard. The Age of Reform, From Bryan to F.D.R. New York: Alfred A. Knopf, 1955.

Holman, Charles W. "The American Farmer and the Tarriffs," Annals of the American Academy. CXVII (January 1925), pp. 166-176.

Howe, Frederic C., "The Free Port An Agency for the Development of American Commerce." Annals of the American Academy. LIX (May 1915), pp. 236-244.

Hunt, Caroline L. The Life of Ellen H. Richards. Washington, D.C.: The American Home Economics Association, 1958.

Kelsey, Lincoln David, and Hearne, Cannon Chiles. Cooperative Extension Work. Ithaca, New York: Comstock Publishing Associates, 1963.

Kies, William S. "Branch Banks and Our Foreign Trade." Annals of the American Academy. LIX (May 1915), pp. 301-308.

Kirkland, Edward Chase. Dream and Thought in the Business Community 1860-1900. Ithaca: Cornell University Press, 1956.

Knowles, Malcolm S. "Historical Development of the Adult Education Movement in the United States." Handbook of Adult Education in the United States. Edited by Malcolm S. Knowles. Chicago: Adult Education Association of the U.S.A., 1962.

Kolko, Gabriel. The Triumph of Conservatism. New York: Free Press of Glenco, 1963.

Lee, Jeanette, and Dressel, Paul L. Liberal Education and Home Economics. Institute of Higher Education, Columbia University, 1963.

Lord, Russell. The Agrarian Revival. New York: George Grady Press, 1939.

Martin, O. B. The Demonstration. Boston: The Stratford Co., 1921.

McFall, Robert J. "The Farmers Foreign Market." Annals of the American Academy. CXVII (January 1925), pp. 129-155.

Miller, Paul A. "Cooperative Extension Service in the Industrializing Economy." Unpublished Monograph. East Lansing: Michigan State University, 1959.

Morgan, Barton. A History of the Extension Service of Iowa State College. Ames: Collegiate Press, Inc., 1934.

Nevins, Allen. The State Universities and Democracy. Urbana: University of Illinois Press, 1962.

Nourse, Edwin G. American Agricultural and the European Market. New York: McGraw, 1924.

Pacacha, Carl T. "Floyd Wesley Reeves: Pioneer in Shaping Legislation in Support of Adult Education." Unpublished Ph.D. Dissertation. Michigan State University. 1970.

Pollack, Norman. The Populist Response in America. Cambridge: Harvard University Press, 1962.

Potter, Robert E. The Stream of American Education. New York: American Book Company, 1967.

Pratt, Edward Ewing. "The Attitude of Business Towards Foreign Trade." Annals of the American Academy. LIX (May 1915), pp. 291-300.

Reck, Franklin M. The 4-H Story. Ames: The Iowa State College Press, 1951.

Riley, Thomas Leslie. "The Development of Extension in the Land-Grant Universities, 1862-1914." Unpublished Ph.D. Dissertation, University of Chicago, 1965.

Roberston, Ross M. History of the American Economy. New York: Harcourt, Brace, and Company, 1955.

Rudolph, Frederick. The American College and University. New York: Random House, 1962.

Saloutos, Theodore. Farmer Movements in the South 1865-1933. Lincoln: University of Nebraska Press, 1960.

Saloutos, Theodore and Micks, John D. Agricultural Discontent in the Middle West 1900-1939. Madison: University of Wisconsin Press, 1951.

Sanders, H. C., ed. The Cooperative Extension Service. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1966.

Schattschnider, E. E. The Semisovereign People. New York: Holt, Rinehart and Winston, 1960.

Scott, Roy V. "American Railroads and Agricultural Extension 1900-1914: A Study in Railway Developmental Techniques." Business Historical Review. XXXIX (Spring 1965), pp. 74-98.

Scott, Roy V. The Reluctant Farmer. Urbana: University of Illinois Press, 1970.

Shannon, Theodore J., and Schoenfeld, Clarence A. University Extension. New York: The Center for Applied Research in Education, Inc., 1965.

Strauss, Frederich, and Bean, Louis H. Gross Farm Income and Indices of Farm Production and Prices in the United States 1869-1937. U.S. Department of Agriculture. Technical Bulletin No. 703. Washington, D.C.: Government Printing Office, 1940.

True, Alfred Charles. A History of Agricultural Extension Work in the United States. U.S. Department of Agriculture. Miscellaneous Publication No. 15. Washington, D.C., Government Printing Office, 1928.

True, Alfred Charles. A History of Agricultural Education in the United States 1785-1915. U.S. Department of Agriculture. Miscellaneous Publication No. 15. Washington: U.S. Government Printing Office, 1929.

U.S. Congress. Senate. Report of the Country Life Commission. S. Doc. 705. 60th Cong., 2d. Sess., 1909.

U.S. Congress. Senate. Committee on Agriculture and Forestry. Bill to Provide for the Inspection and Grading of Grain Entering Into Interstate Commerce and to Secure Uniformity In Standards and Classification of Grain, and for Other Purposes, Hearings. S. 382. 60th Cong., 1st Sess., 1908.

U.S. Congress. Senate. Committee on Agriculture and Forestry. Bill to Establish Agricultural Extension Departments in Connection with Agricultural Colleges in the Several States Receiving Benefits of an Act of Congress Approved July 2, 1862, and of Acts Supplementary Thereto, Hearings. S. 4563, 62d Cong., 2d Sess., 1912.

U. S. Congress. Senate. Committee on Agriculture and Forestry. Bill to Provide for the Advancement of Instruction in Agriculture, Manual Training, and Home Economics in the State Normal Schools of the United States. S. 3392, 60th Cong., 1st. Sess., 1908.

U. S. Congress. Senate. Committee on Agriculture and Forestry. Bill to Provide for the Inspection and Grading of Grain Entering Into Interstate Commerce and to Secure Uniformity in Standards and Classifications of Grain, and for Other Purposes, Hearings. S. 382, 60th Cong., 1st Sess., 1908.

U.S. Congress. Senate. Committee on Agriculture and Forestry. Cooperation with the States in Providing Vocational Education. S. Rept. 902 to Accompany S. 8809, 61st Cong., 2d Sess., 1910.

U.S. Congress. Senate. Committee on Public Lands. Agricultural Entries on Coal Lands. S. Rept. 703 to Accompany S. 4180. 61st Cong., 2d Sess., 1910.

U.S. Congress. Senate. Committee on Territories. Copper River and Northwestern Railway Company. S. Rept. 873 to Accompany S. 6316. 61st Cong., 2d Sess., 1910.

Woytanowitz, George M. University Extension, The Early Years in the United States 1885-1915. National University Extension Association and the American College Testing Program. 1974.

Winkes, Robin W., ed. The Historian as Detective. New York: Harper and Row Publishers, 1968.

GENERAL REFERENCES

Blair, Lyle and Kuhn, Madison. A Short History of Michigan State. East Lansing: Michigan State College Press, 1955.

Blaisdell, Donald. Government and Agriculture, The Growth of Federal Farm Aid. New York: Farrer and Rinehart, 1940.

Bliss, R. K., ed. The Spirit and Philosophy of Extension Work. Washington: Graduate School, United States Department of Agriculture and Epsilon Sigma Phi, 1952.

Borgstrom, Georg. The Hungry Planet. New York: Collier Books, 1972.

Gilbert, Arthur N., ed. In Search of a Meaningful Past. Boston: Houghton Mifflin Company, 1972.

Conklin, Paul K. and Stromberg, Roland N. The Heritage and Challenge of History. New York: Dodd, Mead and Company, 1972.

Goodsell, Willystine, ed. Pioneers of Women's Education in the United States. Reprinted from 1931 edition. New York: AMS Press, Inc., 1970.

Gray, L. C. "A Domestic Market for American Farm Products." Annals of the American Academy. CXVII (January 1925), pp. 156-165.

Graven, Avery. "The Agricultural Reformers of the Ante-Bellum South." The American Historical Review. XXXIII (October 1927), pp. 302-314.

Greathouse, Charles H. Historical Sketch of the U.S. Department of Agriculture; Its Objects and Present Organization. U.S. Department of Agriculture. Division of Publications. Bulletin No. 3. Washington, D.C.: Government Printing Office, 1898.

Kelsey, Lincoln David, and Hearne, Cannon Chiles. Cooperative Extension Service. Ithaca, New York: Comstock Publishing Associates, 1955.

Kolko, Gabriel. The Roots of American Foreign Policy. Boston: Beacon Press, 1969.

Lembert, Ben F. The Cotton Textile Industry of the Southern Appalachian Piedmont. Chapel Hill: The University of North Carolina Press, 1933.

Michigan State Board of Agriculture. Michigan State Farmers' Institutes. Institute Bulletin 7. East Lansing: Agricultural College, 1901.

Pollack, Norman, ed. The Populist Mind. Indianapolis: The Bobbs-Merrill Company, Inc., 1967.

Skotheim, Robert Allen, ed. The Historian and the Climate of Opinion. Menlo Park, Cal.: Addison-Wesley Publishing Company, 1969.

True, Alfred Charles. "Agricultural Education and Agricultural Prosperity." Annals of the American Academy. LIX (May 1915), pp. 51-64.

U.S. Congress. House. Cooperative Agricultural Extension Work. H. Rept. 110, 63d Cong., 2d Sess., 1913.

U.S. Congress. House Committee on Agriculture. Bills Regarding the Cotton-Boll Weevil and Appropriations for the Department of Agriculture Hearings. H.R. 4477, 5496, 7300, 7304, 7646. 58th Cong., 1st Sess., 1903.

U.S. Congress. House. Committee on Agriculture. Hearings Before the Committee on Agriculture on H.R. 7951, Commonly Known as the Lever Agricultural Extension Bill. 63d Cong., 1st Sess., 1913.

U.S. Congress. House. Committee on Agriculture. Miscellaneous Bills and Other Matters, Hearings. 62d Cong., 2d and 3d Sess., 1912.

U.S. Senate. Committee on Agriculture and Forestry. Agricultural Appropriation Bill, Hearings. H. 19158 60th Cong., 1st Sess., 1908.

U.S. Congress. Senate. The National University, by Edmund J. James. S. Doc. 39, 62d Cong., 2d Sess., 1912.

U.S. Congress. Senate. Vocational Education. S. Doc. 845, 62d Cong., 2d Sess., 1912.

U.S. Congress. Senate. Committee on Agriculture and Forestry. Bill to Provide for an Increased Annual Appropriation for the Support of Agricultural Colleges and Experiment Stations, Hearings. S. 4676, 61st Cong., 2d Sess., 1910.

U.S. Congress. Senate. Committee on Conservation of National Resources. National Commission for the Conservation of Natural Resources. S. Rept. 826 to Accompany S. 3719. 61st Cong., 2d Sess., 1910.

U.S. Department of Agriculture. Yearbook of Agriculture, 1962. Washington, D.C.: Government Printing Office, 1962.

U.S. Department of Agriculture. Bureau of Plant Industry. Miscellaneous Paper. Leaf-Cut or Tomosis, A Disorder of Cotton Seedlings, by O.F. Cook. Circular No. 120. Washington, D.C.: Government Printing Office, 1913.

U.S. Department of Agriculture. Office of Experiment Stations. Proceedings of the Thirteenth Annual Convention of the Association of American Agricultural Colleges and Experiment Stations Held at San Francisco July 5-7, 1899, by A.C. True, W. H. Beal, and H. H. Goodell, ed. Bulletin No. 76. Washington, D.C.: Government Printing Office, 1900.

Vexler, Robert I., ed. Woodrow Wilson 1856-1924. New York: Oceana Publications, 1969.